

# Albany-Hudson Electric Trail 2022 Trail Use Report



**December 21, 2022**



## Table of Contents

<b>Trail Count Program Overview – AHET Trail</b>	.	.	.	.	.	.	3
<b>Results of Visual Surveys of Trail User Types</b>	.	.	.	.	.	.	4
<b>Site-Specific Automated Counter Results</b>							
East Greenbush Trail Counter	.	.	.	.	.	.	6
Village of Nassau Trail Counter	.	.	.	.	.	.	8
North Chatham Trail Counter	.	.	.	.	.	.	10
Village of Kinderhook Trail Counter	.	.	.	.	.	.	12
<b>Seasonal, Daily, and Hourly Trail Use Patterns</b>							
AHET Seasonal/Monthly Trail Use	.	.	.	.	.	.	14
Daily Trail Use Variation Due to Weather	.	.	.	.	.	.	15
Hourly Patterns – Visitation Over the Course of the Day	.	.	.	.	.	.	16
<b>Conclusion/Next Steps</b>	.	.	.	.	.	.	18

For additional information about the Albany-Hudson Electric Trail, go to <https://hudsongreenway.ny.gov/albany-hudson-electric-trail>, or Contact Us at [hvae@hudsongreenway.ny.gov](mailto:hvrg@hudsongreenway.ny.gov).

Detailed on-line maps of the AHET trail, including designated parking areas and nearby attractions, are available on the Empire State Trail website [www.empiretrail.ny.gov](http://www.empiretrail.ny.gov).

## **Trail Count Program Overview – Albany-Hudson Electric Trail**

The Hudson River Valley Greenway (HRVG) constructed and operates the Albany-Hudson Electric Trail (AHET), a 36-mile recreational “rail trail” in Rensselaer and Columbia Counties. The non-motorized AHET trail is 10-feet wide with gentle grades and an improved surface welcoming bicyclists, walkers and runners of all ages and abilities. The trail is open year-round from dawn to dusk. The AHET trail is part of New York State’s 750-mile Empire State Trail, which runs from New York City to Canada and Buffalo to Albany.

In 2021, HRVG initiated a formal program to collect data on the public’s use of the AHET trail. Data is being collected in two formats:

### **1. AHET Automated Counters**

- In October 2021, HRVG installed four automated trail counters along the AHET route (two in Rensselaer County and two in Columbia County). The “Pyro-Box” counters, manufactured by the company Eco-Counter, use an infrared sensor to record the number of trail users passing by the unit, and store data in hourly increments allowing detailed analysis of trail use patterns on an hourly, daily, and monthly basis.
- The units are not a camera, do not collect information about specific trail users, and don’t differentiate between bicyclists and walkers. Rather they simply record the number of people passing the counter.
- HRVG’s four trail counters were installed on off-road trail segments in East Greenbush, Nassau, North Chatham, and Kinderhook. The counters collected data for a full year.
- **The four AHET counters registered a total of 168,238 trail users during the 12-month period from November 1, 2021 to October 31, 2022:**
  - **Town of East Greenbush: 54,555 visits**
  - **Village of Nassau: 31,798 visits**
  - **Hamlet of North Chatham: 33,379 visits**
  - **Village of Kinderhook: 48,506 visits**
- **Note** the 168,238 users were counted at four distinct locations, and therefore capture only a fraction of the total number of trail visitors along the 36-mile AHET route. HRVG moved the counters to four new locations in November 2022, in East Greenbush, Schodack, Niverville, and Stuyvesant, where the counters will remain in place for 12 months to collect “year-two data.” The following year, HRVG will again move the four counters to new locations. In 2024, after three year’s data has been collected at 12 specific locations, HRVG will have sufficient data to project total annual visitation to the 36-mile AHET trail.

## 2. Visual AHET Trail Use Surveys

- HRVG’s automated counters collect highly accurate trail use numbers, but don’t differentiate between trail user types (walkers, runners, bicyclists, etc.).
- To understand how people use the AHET trail, HRVG staff completed visual surveys of trail users at varied locations during September and October 2022.
- Visual surveys were collected during 60 and 90-minute periods at eight locations along the trail in East Greenbush, Schodack, Nassau, Chatham, and Kinderhook. Data was collected over a total of 14 hours. Surveys occurred on a mix of weekdays and weekends, and at different times of the day (mid-day, afternoons, and early evenings). All counts occurred on days without rain (ranging from sunny to cloudy), with temperatures from 60 to 75 degrees – conditions amenable to all types of trail use.

### **Results of Visual Surveys of AHET Trail User Types**

This section presents the results of visual surveys of 333 AHET trail users observed at eight locations over a total of fourteen hours.

#### **Bicycle Vs. Pedestrian Use**

- **Pedestrians account for 56% of AHET visitors.**
- **Bicyclists account for 44% of AHET visitors.**

This split – slightly more pedestrians than bicyclists – is typical for rail trail visitation statewide during spring, summer, and fall months (this ratio does not apply to the winter season, when bicycle usage drops to very low levels from December through March). For both pedestrians and bicyclists, virtually all visitors were small groups of 1 to 4 people. Very few groups of 5 or larger were observed.

#### **Types of Pedestrian Visitors:**

- Walkers (without pets): 69%
  - Walkers With Dogs: 14%
  - Walkers Pushing Child Strollers: 9%
  - Runners: 5%
  - Skateboards & Kick Scooters: 3%
- 100% of Pedestrian Visitors

Walkers comprise 92% of AHET pedestrian visitors (including visitors walking dogs and pushing strollers). Dog-walking is a popular activity – one of every seven pedestrians brings a dog to the trail (dogs are allowed on the trail, but must be on leash at all times and owners must clean up

after their pets). Small numbers of runners, skateboarders, and kick scooter riders (e.g. razors) comprise the balance of pedestrians.

### **Types of Bicycle Users**

- Traditional Pedal Bikes, All Types: 92%
- E-Bikes (e.g. electric bicycles): 8%  
100% of Bicyclists

A wide range of bicyclists visit the trail, from casual/recreational riders including small children just learning to ride; to high-end gravel and road-bikes; to riders on touring bikes carrying gear for multi-day trips.

HRVG’s trail use regulations allow Class I & 2 E-Bikes (bicyclists with electric assist motors). E-Bike use is modest, accounting for 8% of AHET bicyclists.

NYS law requires bicyclists under the age of 14 to wear helmets, and HRVG strongly encourages helmet use by bicyclists of all ages. Combining regular bicycles and E-Bikes, 74% of all bicyclists wear helmets, whereas 26% do not.

### **Illegal Motorized Vehicles**

No illegal motorized vehicles (cars, ATVs, UTVs, dirt bikes) were observed on AHET during the trail surveys, which totaled 14 hours of surveys spread across seven locations along the trail route.

## **Site-Specific Automated Counter Results**

Detailed information about the four automated infrared trail counters is presented below. The sites are listed “north to south.”

## East Greenbush Trail Counter

The Albany-Hudson Electric Trail section in the Town of East Greenbush is a paved, 12-foot wide trail. It is heavily used, drawing local users from surrounding residential neighborhoods, visitors who travel to the trail from the capital district, and long-distance Empire state Trail users from across the nation and other countries.



*Above: the AHET Trail in East Greenbush, Rensselaer County.*

The East Greenbush counter was installed for twelve months on the AHET trail near the intersection with Electric Avenue:

- During the 12 months, a total of 54,555 trail users passed the trail counter.
- Average daily visitation was 150 trail users/per day.
- Daily visitation varied greatly due to seasons and daily weather conditions.
- Trail use ranged from a high of 370 people on May 29<sup>th</sup> and again on July 9<sup>th</sup>, to a low of only 8 visitors on January 28<sup>th</sup>.

**Monthly AHET Trail Counts in East Greenbush**

<b>Calendar Month</b>	<b>Monthly Users</b>
November 2021	2,767
December 2021	2,351
January 2022	908
February 2022	1,133
March 2022	2,840
April 2022	4,890
May 2022	6,800
June 2022	7,505
July 2022	7,180
August 2022	7,060
September 2022	6,058
October 2022	5,063
<b>Annual Total =</b>	<b>54,555</b>

## Village of Nassau Trail Counter

The Albany-Hudson Electric Trail section in the Village and Town of Nassau is a paved, 10-foot wide trail. It draws local users from Nassau, visitors driving to access the trail from the large trailhead parking area on John Street in the Village, and long-distance bicyclists.



*Above: trail bridge over the Valatie Kill in Nassau on a Fall day.*

HRVG installed a counter for twelve months on the AHET trail slightly north of Route 20:

- During the 12 months, a total of 31,798 trail users passed the trail counter.
- Average daily visitation was 87 per day.



**Monthly AHET Trail Counts in the Village of Nassau**

<b>Calendar Month</b>	<b>Monthly Users</b>
November 2021	1,513
December 2021	975
January 2022	282
February 2022	446
March 2022	1,522
April 2022	3,506
May 2022	4,374
June 2022	4,490
July 2022	4,539
August 2022	3,946
September 2022	3,554
October 2022	2,651
<b>Annual Total =</b>	<b>31,798</b>

## North Chatham Trail Counter

The Albany-Hudson Electric Trail section in the hamlet of North Chatham is a 10-foot wide trail with a compacted stonedust surface. While it draws local users from the community of North Chatham, most visitors access the trail from the trailhead parking area on Depot Street, or bicycle down the trail from the Village of Nassau (to the north) or Niverville and Kinderhook (to the south).



*Above: the AHET trail in North Chatham has a compacted stonedust surface.*

HRVG installed a counter for twelve months on the AHET trail slightly south of the Trolley Station on County Route 32:

- During the 12 months, a total of 33,379 trail users passed the trail counter.
- Average daily visitation was 91/per day.

**Monthly AHET Trail Counts in the Hamlet of North Chatham**

<b>Calendar Month</b>	<b>Monthly Users</b>
November 2021	1,794
December 2021	1,388
January 2022	663
February 2022	598
March 2022	1,202
April 2022	2,946
May 2022	4,283
June 2022	4,509
July 2022	4,504
August 2022	4,209
September 2022	4,154
October 2022	3,129
<b>Annual Total =</b>	<b>33,379</b>

## Village of Kinderhook Trail Counter

The Albany-Hudson Electric Trail section in the Village of Kinderhook is a paved, 10-foot wide trail. It is heavily used, drawing local users from the Village, visitors who travel to the trail from the capital district, and long-distance Empire state Trail users from across the nation and other countries.



*Above: the AHET Trail through Rothermel Park in the Village of Kinderhook.*

HRVG installed a counter for twelve months on the AHET trail where it passes through the Village's Rothermel Park:

- During the 12 months, a total of 48,506 trail users passed the trail counter.
- Average daily visitation was 133/per day.

**Monthly AHET Trail Counts in the Village of Kinderhook**

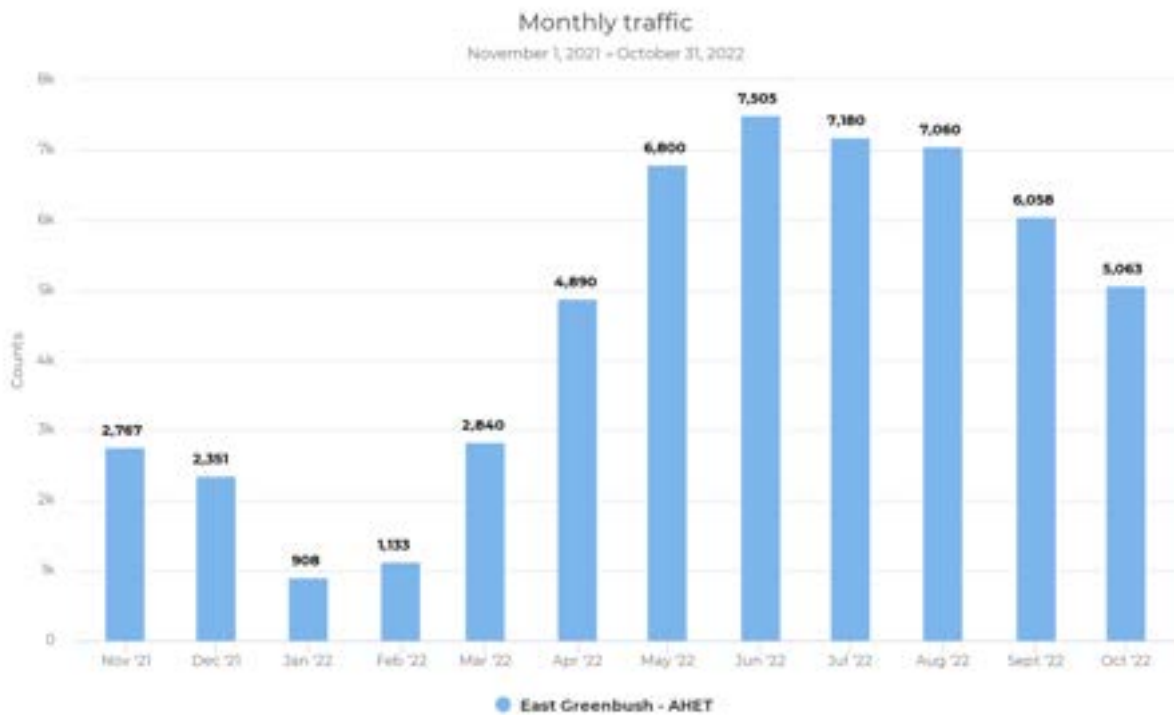
<b>Calendar Month</b>	<b>Monthly Users</b>
November 2021	3,586
December 2021	2,783
January 2022	1,140
February 2022	1,248
March 2022	2,761
April 2022	4,555
May 2022	5,402
June 2022	5,585
July 2022	6,052
August 2022	5,445
September 2022	5,067
October 2022	4,882
<b>Annual Total =</b>	<b>48,506</b>

## Seasonal, Daily, and Hourly Trail Use Patterns

HRVG's automated infrared trail counters provide continuous trail use data in one-hour, daily, and monthly increments, allowing detailed analysis of trail use patterns. This section presents data for the East Greenbush counter. The same visitation patterns occurred at the other three counters in Nassau, North Chatham, and Kinderhook.

### AHET Seasonal/Monthly Trail Use

Per the graphic below: AHET visitation in East Greenbush follows a seasonal cycle, which is typical for rail-trails in New York State.



*Above: Trail visitation by month, recorded at the East Greenbush counter. This seasonal pattern occurred at all four AHET counters, and is typical of rail-trails and canalway trails in NYS.*

Over the course of the year:

- Visitation is lowest in the winter months (only 908 people passed the East Greenbush Counter during the month of January 2022). The trail is not plowed, and visitation is very low when the trail is covered by snow and ice. Visitation increases slightly on winter days when warmer temperatures melt the trail clear of snow, which is becoming more frequent due to climate change.

- Visitation grows steadily through as spring weather arrives in March and April.
- Monthly visitation peaks during the summer, with May, June, July, and August receiving the highest numbers of trail users.
- At the East Greenbush counter, June was the busiest month with 7,505 visitors passing the counter.
- Visitation declines during the fall, dropping as the weather turns cold and daylight hours wane.

### **Daily Trail Use Variation Due to Weather**

Although AHET visitation follows a predictable seasonal cycle (lowest in winter months, highest from May through September), day-to-day weather greatly influences trail visitation. The graphic below depicts the number of trail users passing the East Greenbush counter each day during the 3-month period from June 1 to August 31, 2022, during the peak summer trail season.



*Above: daily AHET visitation from June 1 to August 31 in East Greenbush, illustrating visitation is highly impacted by daily weather conditions (sunny vs. rainy days).*

Reviewing the East Greenbush chart above:

- Visitation peaked on warm sunny days. During the three months, visitation exceeded 350 people/day on 13 dry days, of which 6 were during the weekend and 7 were weekdays.
- Conversely, trail use is low on rainy days, particularly on rainy weekdays. During the three months, less than 150 people/day people visited the trail on 9 cold/rainy days, all of which were weekdays.
- Overall, although trail use trends higher on weekends, weather plays a greater role – visitation is higher on sunny weekdays than on rainy Saturdays and Sundays. This pattern occurred at all four AHET counters.

### **Hourly Patterns – Visitation Over the Course of the Day**

The AHET trail is open to public use from dawn to dusk (the trail does not have night lighting). The graphic below shows average trail user numbers during one-hour increments in East Greenbush, averaged over an entire year.



Above: trail visitation in East Greenbush (one-hour increments, averaged over an entire year).  
("0" is midnight) ("6" is 6:00am) ("12" is noon) ("20" is 8:00pm)



Reviewing the hourly East Greenbush chart above:

- Visitors start using the AHET trail around 6:00am.
- Visitation increases steadily through the morning, peaking between 10:00am and noon.
- Trail use drops slightly during mid-day, reflecting lower use during work/school hours, as well as visitors avoiding the trail during the hottest hours during summer months.
- A second peak in visitation occurs between 5:00pm and 7:00pm. Trail use then declines through the evening hours.
- This pattern was observed at all four AHET counters.

## Conclusion/Next Steps

From November 1, 2021 through October 31, 2022, HRVG collected twelve months of AHET trail user data using automated counters installed in East Greenbush, Nassau, North Chatham, and Kinderhook. In total, the four counters registered a total of 168,238 AHET trail visits.

The 168,238 visits were counted at four distinct locations on the Albany-Hudson Electric Trail, and therefore capture only a fraction of the total number of visitors along the entire 36-mile AHET route.

HRVG moved the counters to four new locations in November 2022, in East Greenbush, Schodack, Niverville, and Stuyvesant, where the counters will remain in place for 12 months to collect “year-two data.” The following year, HRVG will again move the four counters to new locations.

In 2024, after three years of data has been collected at 12 different locations, HRVG will have sufficient data to project total annual visitation to the entire 36-mile AHET trail.

In addition, during 2023 HRVG will conduct additional visual surveys on the AHET trail, to expand the detailed data on specific types of trail users presented in this report.

