Connecticut Trail Census
Statewide multi-use trail user study

2024 Trail Use Count Data Report

March 2025

CONNECTICUT ENERGY & ENVIRONMENT

CLEAR
Center for Land Use Education & Research

NVCOG

UCONN
COLLEGE OF AGRICULTURE, HEALTH AND NATURAL RESOURCES
EXTENSION

CONNECTCUT GREENWAYS

Report Prepared by: Adelheid Koepfer, Aaron Budris, and Emily Wilson. For more information, please contact cttrailcensus@gmail.com.

Acknowledgements

UConn CT Trails Program Faculty and Staff

Emily Wilson – Geospatial Extension Educator, Center for Land Use Education and Research (CLEAR), Department of Extension, University of Connecticut
Dr. Anita Morzillo – Associate Professor, Department of Natural Resources & the Environment, University of Connecticut
Aaron Budris – Director of Environmental Planning, Naugatuck Valley Council of Governments
Laura Kelly – Connecticut Trails Program Coordinator, University of Connecticut
Adelheid Koepfer – Research Technician, Department of Extension, University of Connecticut

Volunteers

Thank you to the Trail Site Coordinators and many volunteers who have contributed hundreds of hours to monitor counters, collect manual counts, and support project staff, without whom this project would not be possible: Barbara Amodio, John Bolduc, Dan Buckley, Martha Conneely, Tom Dougherty, Karen Durlach, Maggie & Mike Fitelson, Andrea Gartner, Aaron Goode, Brady Haukom, John Horan, Mark Linehan, Adam MacCabe, Christine O'Neill, Louis Pear, Rose Peterson, Kate Rattan, Brian Sear, Joy VanderLek, and Jack Walsh.

Advisory Committee

Barbara Amodio
Kim Bradley
Dan Buckley
Aaron Budris
Clare Cain
Martha Conneely
Bruce Donald
Ryan Faulkner
Laurie Giannotti
Sourav Guha
Qian Lei-Parent
Steven Mitchell
Anita Morzillo
Louis J Pear
Michael Puglisi
Virginia Raff
Katherine Rattan
Stacey Stearns
Jack Walsh
Emily Wilson

Funders

Thank you to the Connecticut Greenways Council and the CT Department of Energy and Environmental Protection (CT DEEP) Recreational Trails Program for funding this work.

Overview

This report includes the final adjusted infrared (IR) counter data from 23 multi-use path long-term locations in Connecticut at which counts were conducted throughout 2024, as well as from three short-term locations at which counts were conducted for one or more months in 2024 (Figure 1).

This use count summary is part of a larger multi-use trail data collection effort, the Connecticut Trail Census (CTTC), which is a statewide volunteer data collection program intended to inform understanding of multi-use trail use and to make the information available to trail user groups, administrators, government agencies, and the public. In addition to this report, the Trail Census counts are published on an online data dashboard that allows users to explore count data across sites and years. The dashboard is accessible through UConn's CT Trails Program website[1].

The project is currently funded by the Connecticut Department of Energy and Environmental Protection (CT DEEP) Recreational Trails Program. Project partners include the Connecticut Greenways Council and the Naugatuck Valley Council of Governments.

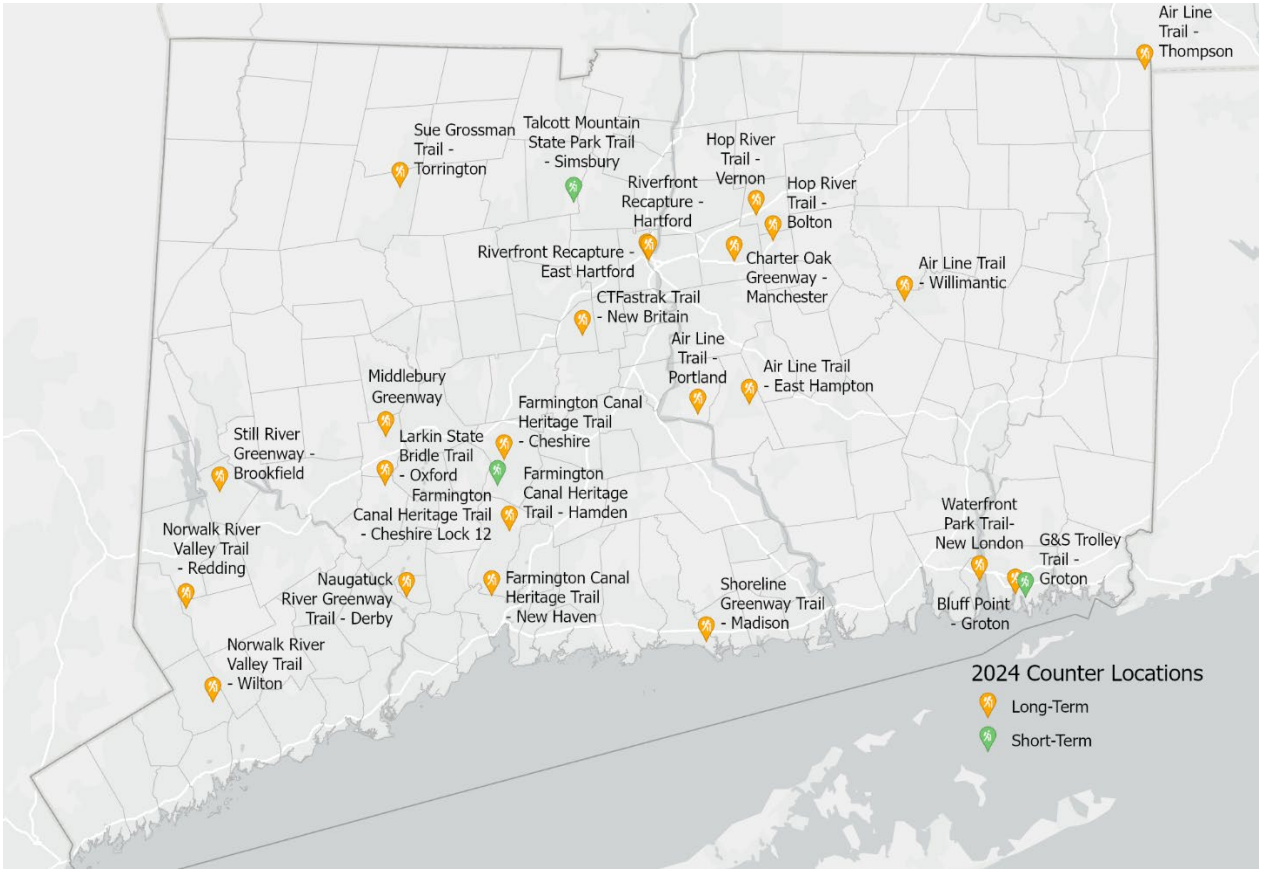

Figure 1. Long-term and short-term counter sites in 2024.

[1] The trail census website is part of UConn's CT Trails Program website https://cttrails.uconn.edu/ct_trail_census/ and the CT Trail Census Data Dashboard can be accessed at https://cttrails.uconn.edu/ct_trail_census/dashboard/.

Connecticut Trail Census Goals

1. Understand when, who, how, and why people use Connecticut's trails.
2. Educate trail user groups, administrators, state and local government agencies, and the public about trails and their impacts.
3. Obtain multi-year information about trail use, user demographics, economic impacts, and trail amenities for identification of patterns and trends.
4. Promote citizen participation in monitoring and understanding of the value of trails and to encourage data-based trail design, construction, and management.

Understanding the Data

TRAFx Infrared Counters

The CT Trail Census employs TRAFx brand infrared (IR) pedestrian counters to track trail use. The IR counters register a temperature differential between background levels and that of a person or object passing by the IR scope and compiles these "hits" into hourly totals. The counters collect data 24 hours per day for as long as they are installed. While they generally work well, the counters do have some limitations. They cannot distinguish between different types of users (e.g., pedestrians vs. cyclists), nor can they determine direction of travel. Two or more individuals passing the counter simultaneously or in rapid succession may only register as one "hit" by the counter, referred to as "occlusion error." Fast moving cyclists might not be registered by the counter. Overcounting may occur in certain instances such as when pets or wild animals pass the counter, but typically, TRAFx IR pedestrian counters undercount trail users.

Calibration Factors

To account for typical undercounting and to provide more accurate use figures, the raw count data are adjusted, or calibrated, using manual counts conducted by volunteers and CT Trail Census staff. The person is stationed at the counter location for a full hour and counts trail users as they pass by. The manual counts conducted at the trail counter location are then compared to the counts registered by the IR counter at that location for the same hour. Previously, annual correction factors were developed from manual counts conducted each year and a minimal factor was applied to trail locations where manual counts were not conducted during that year. Since 2022, the CT Trail Census team has developed calibration factors differently. To maximize the number of manual counts included in the calculation and to eliminate the application of an arbitrary minimal factor, calibration factors were developed from *all* previous manual counts conducted on each trail going back, in some cases, to 2017. This approach more accurately corrects for undercounting and helps to avoid swings in estimates caused by shifts in calibration factors from year to year.

Uses vs. Users

The count data presented in this report shows the number of *uses*, not individual visits or visitors. Trail users who travel out and back on the same route will pass the counter twice and two uses will be counted. For trails with primarily out-and-back traffic, trail visits can be estimated at half of the count total. The counts in this report only reflect uses at the point on a trail where the counter is installed. The figures are not indicative of use of an entire trail or trail network.

Missing Data

Several counters had issues that resulted in missing or corrupted data and therefore incomplete datasets for the year. Common causes of missing or corrupted data are moisture in the IR scope, solar-heated vegetation within view of the IR scope, nesting insects or vegetation obstructing the IR scope, or counter malfunction. The issues are usually very apparent in the data with either zeroes, no data, or wildly high or inconsistent numbers being recorded by the counter. In these cases, the data were eliminated from the dataset. To account for missing data on annual use estimates, the annual totals were calculated by multiplying the average daily use for days with valid data on each trail by 366 (leap year).

Short Term Count Data

In 2024, counter relocations and new installations effectively played the role of short-term counters. The counter on G&S Trolley Trail in Groton was moved at the beginning of March to the New London Waterfront Park in New London. In late October, a new counter was installed on the main trail in Talcott Mountain State Park in Simsbury. In September, the Naugatuck Valley Council of Governments (NVCOG) installed an additional counter at historic Lock 12 in Cheshire, a busy location on the Farmington Canal Heritage Trail.

Counter Location	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
G&S Trolley Trail, Groton	1/1-2/29											
Farmington Canal Heritage Trail Lock 12, Cheshire									9/07-12/31			
Talcott Mountain State Park, Simsbury										10/29-11/30		

Figure 2. Deployment periods for 2024 short-term counters. *The dates where counts were recorded are shown in green for each location.*

A minimum of four weeks of recording is a reasonable duration that provides enough data for each location to gain an initial understanding of trail use. To balance out seasonal factors, the counts (in this case from colder months) were not simply multiplied, but instead the short-term counts were extrapolated to estimate annual counts at each location. Extrapolation was done by first identifying a similar “comparison trail” location from the long-term counter locations considering trail type, surface, geographic location and use patterns and then comparing them for the same period to develop an extrapolation factor. The extrapolation factor was then applied to the annual total of the comparison trail to arrive at an estimate of annual trail use for the temporary count location.

2024 Trail Use Key Takeaways

- **Summary.** Overall, across 23 trails with consistent data, estimated trail use in 2024 was slightly lower than in 2023 but higher than 2019 pre-COVID levels.
- **Trail Specific Trail Use Patterns.** 2024 Monthly, Day of Week, and Hour of Day trail use patterns vary between trails.
- **Weather Rules!** Weather appears to have a major influence on the volume of trail use. On days with mild to warm temperatures and clear conditions, trails see higher use volumes overall. Most of the trail use occurs in the spring, summer and fall. However, 2024 also saw 13% of yearly use in the winter months of January, February, and December.

- **Monitoring.** Several counters experienced extended lapses in data collection caused by counter malfunction and other issues. The long lapses could have been prevented by more regular checks and reporting. Volunteer trail coordinators are asked to make regular checks of the counter to ensure that it is working properly and to report any issues so that the CT Trail Census team can fix the problem. With staff only visiting counters quarterly, volunteer effort is critical to uninterrupted count data collection by ensuring that issues are caught and remedied promptly.

2024 Yearly Count Estimate by Trail

Of the trails with permanently installed long-term trail use counters, the most heavily used trails during 2024 were the Naugatuck River Greenway Trail in Derby (281,633 uses), Bluff Point State Park in Groton (240,344 uses), and the Still River Greenway in Brookfield (214,513 estimated uses). Counters on the Air Line State Park Trail in Portland, the Norwalk River Valley Trail in Redding, the Larkin State Bridle Trail in Oxford, and the Air Line State Park Trail in Thompson recorded the lowest number of uses. A total of 2,301,460 counts were recorded in 2024 across the 23 sites included in the report. Filling in average daily counts to account for missing data, the 23 sites had an estimated **2,409,248 total uses in 2024** (Table 1). For comparison, 2023 had an estimated 2,411,819 uses over 23 trails (1% lower than 2024).

The New London counter was initially installed on March 1 so counts prior to that are unavailable. Other counters missed up to three months of data due to malfunction (Norwalk River Valley Trail in Wilton, Sue Grossman Trail in Torrington), moisture infiltrating the IR sensor (Sue Grossman Trail in Torrington, Riverfront Recapture in Hartford), or occlusion by insects (Farmington Canal Heritage Trail in New Haven). The numerous lengthy periods of lost data in 2024 show the importance of regular counter monitoring by volunteers. CTTC staff visit counters quarterly and rely on local coordinators to report issues in the interim so that they can be remedied. Regular monitoring by coordinators and other volunteers is critical to avoid long-term data lapses.

Among the short-term counters, Lock 12 on the Farmington Canal Heritage Trail in Cheshire saw a total of 65,384 counts over a recording period of 117 days with 235,139 extrapolated total uses in 2024, while the counter on the main trail in Talcott Mountain State Park recorded 10,901 counts over 33 days with 109,389 extrapolated total uses, and the G&S Trolley Trail in Groton saw 2,789 counts over 60 days with 33,107 extrapolated total uses in 2024 (Table 2). It should be noted that all three short-term counters were recording during colder months.

***Table 1: Counts and estimated yearly use - permanent counters**. A summary of total IR counts, days with data available, daily averages and estimated annual use by trail location for 23 permanently installed counters in 2024. Total counts are adjusted with trail specific calibration factors. Red values indicate sites where fewer than 366 days of data were collected so that the annual estimate is derived.*

Counter location	Total Count (adjusted)	Days with Data	Average Daily Total	Estimated Total Use
Air Line State Park Trail, East Hampton	89,098	366	243.4	89,098
Air Line State Park Trail, Portland	17,732	366	48.4	17,732
Air Line State Park Trail, Thompson	23,710	366	64.8	23,710
Air Line State Park Trail, Willimantic	31,462	366	86.0	31,462
Bluff Point Trail, Groton	240,344	366	656.7	240,344
Charter Oak Greenway, Manchester	68,604	366	187.4	68,604
CTFastrak Trail, New Britain	28,530	366	78.0	28,530
Farmington Canal Heritage Trail, Cheshire	184,719	366	504.7	184,719
Farmington Canal Heritage Trail, Hamden	157,277	365	430.9	157,708
Farmington Canal Heritage Trail, New Haven	73,781	333	221.6	81,093
Hop River Trail, Bolton	86,748	366	237.0	86,748
Hop River Trail, Vernon	149,466	366	408.4	149,466
Larkin State Bridle Trail, Oxford	22,901	366	62.6	22,901
Middlebury Greenway, Middlebury	64,292	366	175.7	64,292
Naugatuck River GW Trail, Derby	281,633	366	769.5	281,633
New London Waterfront Park, New London	129,137	305	423.4	154,964
Norwalk River Valley Trail, Redding	21,398	366	58.5	21,398
Norwalk River Valley Trail, Wilton	81,740	262	312.0	114,186
Riverfront Recapture, East Hartford	72,093	366	197.0	72,093
Riverfront Recapture, Hartford	103,519	294	352.1	128,871
Shoreline Greenway Trail, Madison	98,930	366	270.3	98,930
Still River Greenway, Brookfield	213,927	365	586.1	214,513
Sue Grossman Trail, Torrington	60,419	290	208.3	76,253
Total Use (23 trails) in 2024	**2,301,460**		**286.2**	**2,409,248**

***Table 2: Counts and estimated yearly use - short-term counters**. Trail use counts for short-term counters, along with the number of days with data, daily average uses, the comparison trail used for extrapolation, and extrapolated annual total use.*

Counter Location	Short-Term Count	Days with Data	Average Daily Uses	Comparison Trail	Total Use (extrapolated)
G&S Trolley Trail*, Groton (adjusted)	2,789	60	46	Shoreline Greenway Trail, Madison	33,107
Farmington Canal Heritage Trail, Lock 12, Cheshire (adjusted)	65,384	116	564	Farmington Canal Heritage Trail, Cheshire	235,139
Talcott Mountain State Park**, Simsbury, (*not* adjusted)	10,901	33	330	Bluff Point State Park, Groton	109,389

**Adjustment factor from previous years applied.*

***No manual counts available, and no adjustment factor applied.*

2024 Yearly Counts Compared to Previous Years

Fifteen trail counter locations have had consistent data recorded since 2019. Their monthly trail use counts each year since 2019 are shown in Figure 3, and average daily trail use is shown in Figure 4. The fifteen trails counter locations are:
the Air Line State Park Trail in East Hampton, the CTFastrack Trail in New Britain, the Farmington Canal Heritage Trail in Cheshire, Hamden, and New Haven, the Hop River Trail in Bolton and Vernon, the Larkin State Bridle Trail in Oxford, the Middlebury Greenway Trail in Middlebury, the Norwalk River Valley Trail in Wilton, the Riverfront Recapture Trail in Hartford and East Hartford, the Shoreline Greenway Trail in Madison, the Still River Greenway Trail in Brookfield, and the Sue Grossman Trail in Torrington. For a yearly comparison of trail counts between pre-pandemic levels and recent years for individual trails, visit the online CT Trail Census Data Dashboard[2].

Key Takeaways

- **Compared to previous years**, monthly use in 2024 followed the general curve of most years with a plateau in June, July and August. 2024 showed unusually high use in October (Figure 3).
- **There was a slight increase in average daily trail use in 2024 compared to 2023.** The average daily total of counts in 2024 for 15 trails with continuous data was slightly higher than in 2023 (Figure 4).

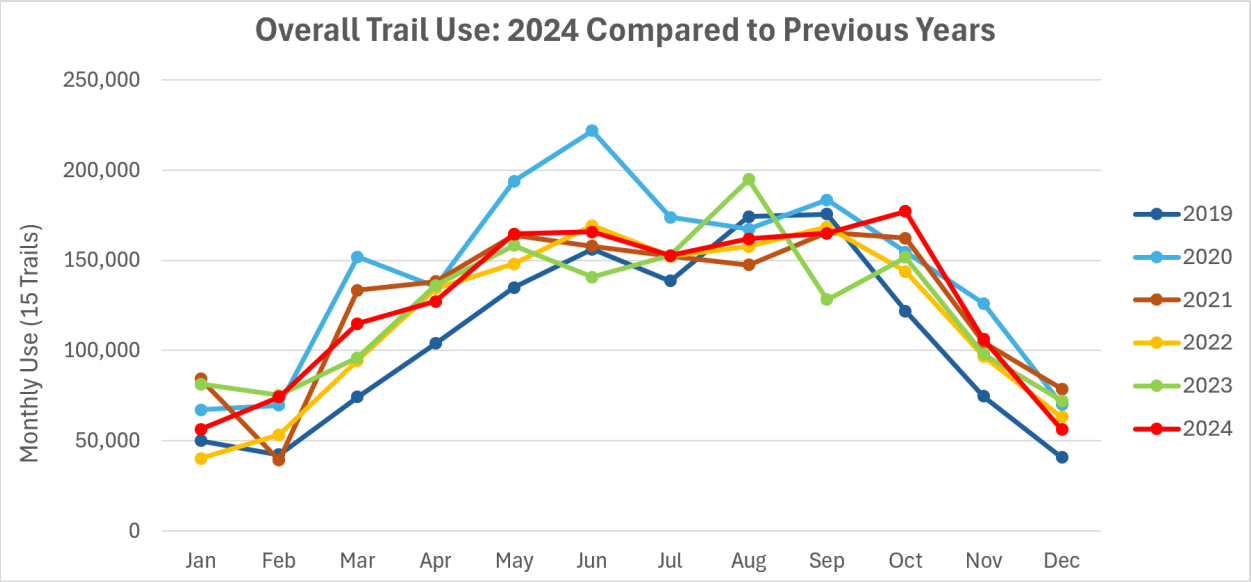

Figure 3. Aggregated trail use comparison by month for 2019-2024. *Total trail use across fifteen trails are based on adjusted counts collected from trail sites with data available consistently from 2019 through 2024*

[2] https://cttrails.uconn.edu/ct_trail_census/dashboard/

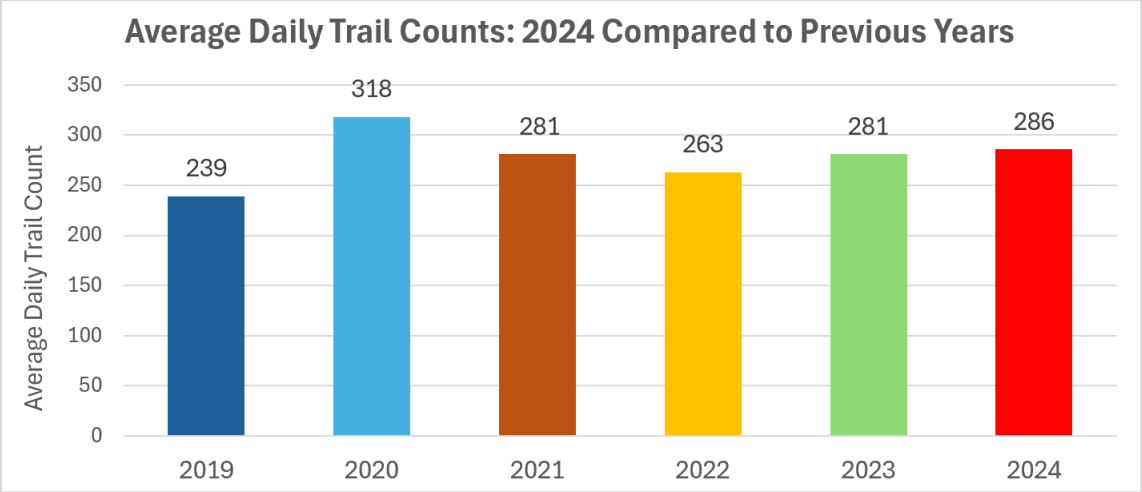

Figure 4. Aggregated trail use comparison by average daily trail counts for 2019-2024*. Yearly averages are based on adjusted counts collected from fifteen sites with complete count data from 2019 to 2024.*

2024 Counts by Month

The 2024 CT Trail Census count data and percentages by month are shown in Tables 3 and 4 for the 23 permanently installed trail counters. Due to the short recording window, monthly counts and percentages for short-term locations are not summarized.

Key Takeaways

- **Year-round trail use.** While trails were more heavily used in the warmer months, all trails were also used in the winter.
- **Summer peak.** As observed in previous years, the heaviest trail use during 2024 occurred, in general, between the months of March and October. May and June had the highest total recorded trail use statewide with 12% in 2024 followed by October with 11% and July, August and September each with 10%.
- **Patterns are trail specific.** The percent of total annual trail use by month (Table 4) shows that trail use patterns varied by trail in 2024. Exceptionally high counts coincided with trail-specific events like Bike Blessing on May 19 and Sailfest on July 13 in New London where 4,976 and 8,731 counts, respectively, were recorded at the Waterfront Park location on a single day. Other examples are the Dragon Boat Festival on August 17 (8,728 counts), the Head of the River event on October 6 (6,846 counts), and the Hartford Marathon on October 19 (2,462 counts) at the Riverfront Recapture Trail in Hartford.
- **In 2024, there were unusually high trail uses in October.** For nine out of 23 trails, October showed the highest or one of the highest percentages of monthly use. Potential reasons could be warmer-than-normal temperatures as well as the two large events in Hartford (see also Figure 3 above for a comparison to previous years).

Table 3. Counts by month - permanent counters. *Pink shading with red numbers indicates months with some missing data. Monthly totals are calculated by "filling in" missing days with daily averages for that month. Red shading indicates months with no data due to counter malfunction.*

Counter location	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Air Line State Park Trail, East Hampton	3,516	4,089	6,520	7,640	10,096	11,100	6,071	6,890	11,029	11,188	7,573	3,386
Air Line State Park Trail, Portland	923	1,080	1,815	1,818	1,961	2,019	1,963	1,632	776	1,369	1,397	979
Air Line State Park Trail, Thompson	1,363	1,818	2,296	2,722	2,624	2,458	1,057	1,339	1,767	2,765	2,374	1,127
Air Line State Park Trail, Willimantic	965	1,382	2,011	2,784	3,376	3,586	2,768	3,716	3,725	3,487	2,506	1,156
Bluff Point Trail, Groton	12,714	16,392	23,452	19,584	28,703	36,557	10,810	12,594	14,576	30,483	21,871	12,608
Charter Oak Greenway, Manchester	1,736	2,616	5,228	8,371	11,900	11,622	6,362	5,575	5,458	4,918	3,422	1,396
CTFastrak Trail, New Britain	1,487	1,567	1,865	2,311	2,789	2,741	2,525	2,905	2,499	3,283	2,550	2,008
Farmington Canal Heritage Trail, Cheshire	4,864	6,569	12,036	14,594	20,279	24,363	22,252	22,992	22,710	18,143	10,763	5,154
Farmington Canal Heritage Trail, Hamden	3,552	5,969	9,805	12,091	16,102	20,297	19,656	19,574	19,735	16,738	9,896	4,539
Farmington Canal Heritage Trail, New Haven	4,655	6,016	7,215	7,855	7,332		5,418	8,151	8,814	7,660	6,554	4,635
Hop River Trail, Bolton	2,433	2,462	5,478	7,348	9,393	9,242	9,111	10,361	11,859	9,802	6,788	2,471
Hop River Trail, Vernon	5,215	6,111	10,680	12,616	15,196	14,569	16,317	18,182	18,113	14,957	11,283	6,227
Larkin State Bridle Trail, Oxford	1,119	1,591	2,086	2,194	2,430	1,958	1,467	1,763	2,143	2,737	2,243	1,170
Middlebury Greenway, Middlebury	2,913	3,714	6,544	7,063	8,242	7,611	4,952	6,060	5,421	5,347	4,434	1,991
Naugatuck River Greenway, Derby	11,378	15,245	22,288	26,609	30,642	31,365	28,813	28,872	30,671	27,364	17,712	10,674
New London Waterfront Park, New London			7,781	9,208	22,908	19,434	26,727	13,868	11,755	10,095	5,590	2,022
Norwalk River Valley Trail, Redding	1,322	1,243	1,939	2,024	2,237	1,938	1,672	1,708	1,831	1,955	2,034	1,495
Norwalk River Valley Trail, Wilton	7,157	6,915	10,911	10,143	12,078	11,969	4,622			12,617	10,596	6,559
Riverfront Recapture, East Hartford	1,931	3,438	3,168	4,670	8,365	9,037	7,385	7,946	8,991	9,504	5,256	2,402
Riverfront Recapture, Hartford	2,480	4,003	3,208	5,019	11,785	12,672	14,958	21,718	12,018	24,270		
Shoreline Greenway Trail, Madison	3,998	4,336	7,306	7,249	10,513	12,811	12,229	14,090	10,033	7,893	5,364	3,108
Still River Greenway, Brookfield	8,412	12,096	20,696	19,123	22,124	20,362	18,333	21,343	24,073	23,363	15,994	8,676
Sue Grossman Trail, Torrington	2,629	5,353	7,312	7,362	7,939	7,069	7,482		7,568	9,585	6,941	3,821
Total per month	86,762	114,005	181,640	200,398	269,014	274,780	232,950	231,279	235,565	259,523	163,141	87,604
Percentage of yearly use	4%	5%	8%	9%	12%	12%	10%	10%	10%	11%	7%	4%

***Table 4. Percent of counts by month - permanent counters**. Darker greens indicate higher percentage. Red text and frames indicate months with some missing data. Monthly totals are calculated by "filling in" missing days with daily averages for that month. Red shading indicates months without data.*

Counter location	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Air Line State Park Trail, East Hampton	4%	5%	7%	9%	11%	12%	7%	8%	12%	13%	8%	4%
Air Line State Park Trail, Portland	5%	6%	10%	10%	11%	11%	11%	9%	4%	8%	8%	6%
Air Line State Park Trail, Thompson	6%	8%	10%	11%	11%	10%	4%	6%	7%	12%	10%	5%
Air Line State Park Trail, Willimantic	3%	4%	6%	9%	11%	11%	9%	12%	12%	11%	8%	4%
Bluff Point Trail, Groton	5%	7%	10%	8%	12%	15%	4%	5%	6%	13%	9%	5%
Charter Oak Greenway, Manchester	3%	4%	8%	12%	17%	17%	9%	8%	8%	7%	5%	2%
CTFastrak Trail, New Britain	5%	5%	7%	8%	10%	10%	9%	10%	9%	12%	9%	7%
Farmington Canal Heritage Trail, Cheshire	3%	4%	7%	8%	11%	13%	12%	12%	12%	10%	6%	3%
Farmington Canal Heritage Trail, Hamden	2%	4%	6%	8%	10%	13%	12%	12%	12%	11%	6%	3%
Farmington Canal Heritage Trail, New Haven	6%	8%	10%	11%	10%	--	7%	11%	12%	10%	9%	6%
Hop River Trail, Bolton	3%	3%	6%	8%	11%	11%	11%	12%	14%	11%	8%	3%
Hop River Trail, Vernon	3%	4%	7%	8%	10%	10%	11%	12%	12%	10%	8%	4%
Larkin State Bridle Trail, Oxford	5%	7%	9%	10%	11%	9%	6%	8%	9%	12%	10%	5%
Middlebury Greenway, Middlebury	5%	6%	10%	11%	13%	12%	8%	9%	8%	8%	7%	3%
Naugatuck River Greenway, Derby	4%	5%	8%	9%	11%	11%	10%	10%	11%	10%	6%	4%
New London Waterfront Park, New London	--	--	6%	7%	18%	15%	21%	11%	9%	8%	4%	2%
Norwalk River Valley Trail, Redding	6%	6%	9%	9%	10%	9%	8%	8%	9%	9%	10%	7%
Norwalk River Valley Trail, Wilton	8%	7%	12%	11%	13%	13%	5%	--	--	13%	11%	7%
Riverfront Recapture, East Hartford	3%	5%	4%	6%	12%	13%	10%	11%	12%	13%	7%	3%
Riverfront Recapture, Hartford	2%	4%	3%	4%	11%	11%	13%	19%	11%	22%	--	--
Shoreline Greenway Trail, Madison	4%	4%	7%	7%	11%	13%	12%	14%	10%	8%	5%	3%
Still River Greenway, Brookfield	4%	6%	10%	9%	10%	9%	9%	10%	11%	11%	7%	4%
Sue Grossman Trail, Torrington	4%	7%	10%	10%	11%	10%	10%	--	10%	13%	10%	5%

2024 Counts by Day of Week

The weekly summary presents trail use by day of the week, averaged over all weeks in 2024 for permanent counters (Table 5, counts and Table 6, percentages) and for short-term counters (Table 7, counts and Table 8, percentages).

Key Takeaways

- **Overall, studied trails saw heavier use on weekends.** This trend has been consistent every year since 2017. In 2024, Saturdays and Sundays each accounted for approximately 18% of use on trails statewide, followed by Monday and Tuesday with 14% each, Friday with 13%, Wednesday with 12%, and Thursday with 11% (Table 5). The Air Line State Park Trail in Thompson and the Hop River Trail in Bolton saw the highest proportional Sunday use with 24% and 23%, respectively.
- **Some trails saw heavier use during the week than on weekends.** Most notably, the CTFastrak trail which runs parallel to the CTFastrak Bus Rapid Transit line saw heavier use

on weekdays than on weekends likely indicating higher levels of commuter use than recreational use. Similarly, the Riverfront Recapture Trail in East Hartford saw higher use on Monday through Wednesday than on the weekend.

- **For short-term counters**, it is more difficult to draw conclusions as the counters were out for only a few weeks, meaning that a couple of rainy days could disproportionately affect the weekly patterns. Weekends see higher use in general, although the counter at Lock 12 in Cheshire saw a slightly more uniform use throughout the week (Tables 7 and 8).

***Table 5. Average counts by day of week in 2024 - permanent counters**, rounded to the nearest whole number. Day-of-week counts per counter are summed over the entire year and divided by 52 (the number of weeks in a year) to reveal the pattern of average day-of-week count per trail and in total. The percentage of weekly use is the day-of-week count divided by the total average count.*

Counter Location	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Air Line State Park Trail, East Hampton	241	220	200	184	212	319	328
Air Line State Park Trail, Portland	45	48	44	42	47	53	61
Air Line State Park Trail, Thompson	63	51	41	41	56	94	108
Air Line State Park Trail, Willimantic	84	88	75	69	77	105	104
Bluff Point Trail, Groton	645	583	494	414	557	925	980
Charter Oak Greenway, Manchester	197	185	165	141	158	254	212
CTFastrak Trail, New Britain	87	85	83	75	81	69	64
Farmington Canal Heritage Trail, Cheshire	477	474	405	387	448	666	677
Farmington Canal Heritage Trail, Hamden	382	401	350	313	378	599	594
Farmington Canal Heritage Trail, New Haven	222	230	206	203	215	241	234
Hop River Trail, Bolton	215	199	164	163	186	346	387
Hop River Trail, Vernon	416	379	355	305	395	498	511
Larkin State Bridle Trail, Oxford	59	53	53	52	56	79	85
Middlebury Greenway, Middlebury	197	187	162	144	157	188	194
Naugatuck River Greenway, Derby	856	817	757	663	704	788	799
New London Waterfront Park, New London	378	368	334	306	448	588	538
Norwalk River Valley Trail, Redding	61	54	51	49	58	64	72
Norwalk River Valley Trail, Wilton	303	286	272	239	279	374	432
Riverfront Recapture, East Hartford	215	239	211	180	159	199	174
Riverfront Recapture, Hartford	286	324	291	289	249	608	418
Shoreline Greenway Trail, Madison	251	229	217	203	241	369	384
Still River Greenway, Brookfield	635	591	540	499	538	624	672
Sue Grossman Trail, Torrington	226	226	186	180	210	206	224
Total by day-of-week over 23 trails	**6,542**	**6,317**	**5,658**	**5,142**	**5,907**	**8,255**	**8,254**
Percentage of weekly use	14%	14%	12%	11%	13%	18%	18%

***Table 6. Percentage of counts by day of week in 2024 - permanent counters**. Darker green indicates a higher percentage. The percentages are the average counts by day of week (Table 5) divided by the week's total.*

Counter Location	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Air Line State Park Trail, East Hampton	14%	13%	12%	11%	12%	19%	19%
Air Line State Park Trail, Portland	13%	14%	13%	12%	14%	16%	18%
Air Line State Park Trail, Thompson	14%	11%	9%	9%	12%	21%	24%
Air Line State Park Trail, Willimantic	14%	15%	12%	11%	13%	17%	17%
Bluff Point Trail, Groton	14%	13%	11%	9%	12%	20%	21%
Charter Oak Greenway, Manchester	15%	14%	13%	11%	12%	19%	16%
CTFastrak Trail, New Britain	16%	16%	15%	14%	15%	13%	12%
Farmington Canal Heritage Trail, Cheshire	13%	13%	11%	11%	13%	19%	19%
Farmington Canal Heritage Trail, Hamden	13%	13%	12%	10%	13%	20%	20%
Farmington Canal Heritage Trail, New Haven	14%	15%	13%	13%	14%	16%	15%
Hop River Trail, Bolton	13%	12%	10%	10%	11%	21%	23%
Hop River Trail, Vernon	15%	13%	12%	11%	14%	17%	18%
Larkin State Bridle Trail, Oxford	14%	12%	12%	12%	13%	18%	20%
Middlebury Greenway, Middlebury	16%	15%	13%	12%	13%	15%	16%
Naugatuck River Greenway, Derby	16%	15%	14%	12%	13%	15%	15%
New London Waterfront Park, New London	13%	12%	11%	10%	15%	20%	18%
Norwalk River Valley Trail, Redding	15%	13%	12%	12%	14%	16%	18%
Norwalk River Valley Trail, Wilton	14%	13%	12%	11%	13%	17%	20%
Riverfront Recapture, East Hartford	16%	17%	15%	13%	12%	14%	13%
Riverfront Recapture, Hartford	12%	13%	12%	12%	10%	25%	17%
Shoreline Greenway Trail, Madison	13%	12%	11%	11%	13%	19%	20%
Still River Greenway, Brookfield	15%	14%	13%	12%	13%	15%	16%
Sue Grossman Trail, Torrington	15%	16%	13%	12%	14%	14%	15%

***Table 7: Average counts by day of week in 2024 - short-term counters**, rounded to the nearest whole number. To calculate the average count by day of the week, the day-of-week counts were summed over the recording period and then divided by the number of weeks. The percentage of weekly use figures are calculated by dividing the day-of-week counts by the total average count. Due to their short duration, several days of rainy weather can impact patterns.*

Counter Location	Mon	Tue	Wed	Thu	Fri	Sat	Sun
G&S Trolley Trail, Groton (adjusted)	50	33	25	28	38	86	74
Farmington Canal Heritage Trail, Lock 12, Cheshire (adjusted)	479	473	495	396	492	778	821
Talcott Mountain State Park, Simsbury (*not* adjusted)	226	175	243	120	327	573	701
Total by day-of-week	**755**	**681**	**763**	**544**	**857**	**1,437**	**1,595**
Percentage of weekly use	11%	10%	11%	8%	13%	22%	24%

Table 8. Percentage of counts by day of week in 2024 - short-term counters. *Darker green indicates higher percentage. The percentages are the average counts by day of week (Table 7) divided by the week's total.*

Counter Location	Mon	Tue	Wed	Thu	Fri	Sat	Sun
G&S Trolley Trail, Groton (adjusted)	12%	10%	7%	8%	11%	26%	22%
Farmington Canal Heritage Trail, Lock 12, Cheshire (adjusted)	12%	12%	13%	10%	13%	20%	21%
Talcott Mountain State Park, Simsbury, (*not* adjusted)	10%	7%	10%	5%	14%	24%	30%

2024 Counts by Hour of Day

The Hour of Day summary presents trail counts by time of day. Total hourly counts over all 23 trails with permanent counters averaged over 366 days are shown in Table 9 while Table 10 shows the percentage of daily counts by hour-of-day for each trail. Hourly patterns from all three short-term counter locations are shown in Table 11, and Table 12 shows the corresponding hourly percentages of daily use.

Key Takeaways

- **Most trail use (76%) takes place between 9am and 6pm,** which is consistent with findings throughout the Connecticut Trail Census data collection. The busiest hours in 2024 overall were 11am-3pm and 4-6pm, followed by 3pm-4pm.
- **Peaks for the noon hour in Hartford and East Hartford** likely reflect the popularity of lunchtime walks by workers in nearby office buildings.
- **Some trails show a peak past 4pm.** They are the Charter Oak Greenway in Manchester, CTFastrak in New Britain, and New London Waterfront Park. Late day peaks may be due to other activity near the trail counter location. In Manchester, the counter is in Charter Oak Park and park users are likely counted in addition to through-hikers/bikers. The counter in New London is on the waterfront and adjacent to the commercial center of the city likely counting park users, anglers, and visitors to shops and restaurants. And in New Britain, the later peak may be commuters returning from work.

Table 9. Average counts by hour of day – permanent counters*, rounded to the nearest whole number. Counts for each hour of the day were summed over the year and divided by 366. The percentages represent how much that hour contributed to the total count.*

	12AM	1AM	2AM	3AM	4AM	5AM	6AM	7AM	8AM	9AM	10AM	11AM	12PM	1PM	2PM	3PM	4PM	5PM	6PM	7PM	8PM	9PM	10PM	11PM
Average Hourly Total	13	10	9	8	5	27	111	219	346	472	537	569	597	580	565	559	572	563	427	254	102	38	23	15
Percent of all hours	0%	0%	0%	0%	0%	0%	2%	3%	5%	7%	8%	9%	9%	9%	9%	8%	9%	9%	6%	4%	2%	1%	0%	0%

Table 10. Percentage of daily use by hour of day - permanent counters*. Numbers are percentages and darker green indicates a higher percentage. Hourly counts per trail were summed over the entire year and divided by 366 to see the pattern of average hourly count per trail.*

Counter Location	12AM	1AM	2AM	3AM	4AM	5AM	6AM	7AM	8AM	9AM	10AM	11AM	12PM	1PM	2PM	3PM	4PM	5PM	6PM	7PM	8PM	9PM	10PM	11PM
Air Line State Park Trail, East Hampton	0	0	0	0	0	0	1	2	4	7	8	9	10	10	10	11	10	8	5	2	1	0	0	0
Air Line State Park Trail, Portland	0	0	0	0	0	0	2	5	5	7	9	9	8	8	8	9	9	9	7	3	1	0	0	0
Air Line State Park Trail, Thompson	0	0	0	0	0	0	1	3	4	6	9	10	10	11	11	10	9	7	4	3	1	1	0	0
Air Line State Park Trail, Willimantic	0	0	0	0	0	0	2	3	4	6	8	10	9	10	10	10	10	8	6	4	1	0	0	0
Bluff Point Trail, Groton	0	0	0	0	0	0	1	2	3	5	7	9	10	11	11	12	11	9	5	2	1	0	0	0
Charter Oak Greenway, Manchester	0	0	0	0	0	0	1	2	4	6	7	7	7	7	7	8	10	11	10	7	3	1	0	0
CTFastrak Trail, New Britain	1	1	0	0	0	1	4	4	5	5	5	6	6	6	7	9	12	10	6	4	3	2	2	1
Farmington Canal Heritage Trail, Cheshire	0	0	0	0	0	0	1	3	4	7	9	10	10	10	9	8	9	8	6	3	1	0	0	0
Farmington Canal Heritage Trail, Hamden	0	0	0	0	0	0	2	4	7	8	8	8	9	9	9	9	9	9	6	3	1	0	0	0
Farmington Canal Heritage Trail, New Haven	1	1	1	0	0	0	2	5	7	7	7	7	7	6	6	7	7	9	7	4	2	2	1	1
Hop River Trail, Bolton	0	0	0	0	0	1	1	3	5	8	9	9	9	9	10	9	10	8	6	3	1	0	0	0
Hop River Trail, Vernon	0	0	0	0	0	0	1	4	6	10	10	9	9	8	8	8	8	8	6	3	1	0	0	0
Larkin State Bridle Trail, Oxford	0	0	0	0	0	0	1	3	5	7	9	10	10	10	9	9	11	9	5	3	1	0	0	0
Middlebury Greenway, Middlebury	0	0	0	0	0	0	3	5	8	10	10	9	8	8	7	7	7	8	6	3	1	0	0	0
Naugatuck River GW Trail, Derby	0	0	0	0	0	1	3	5	7	8	8	8	7	7	7	7	7	8	8	5	3	1	0	0
New London Waterfront Park, New London	1	1	0	0	0	1	3	3	3	4	5	6	7	8	8	7	7	9	8	7	5	3	2	1
Norwalk River Valley Trail, Redding	0	0	0	0	0	0	1	5	8	7	7	8	8	8	9	9	11	10	6	2	0	0	0	0
Norwalk River Valley Trail, Wilton	0	0	0	0	0	0	1	3	5	8	10	10	10	9	10	10	9	7	4	2	0	0	0	0
Riverfront Recapture, East Hartford	0	0	0	0	0	0	1	3	4	7	6	7	13	11	8	7	7	8	8	5	2	1	1	0
Riverfront Recapture, Hartford	0	1	1	1	0	1	2	4	4	7	7	7	11	9	7	7	7	7	7	6	2	1	0	0
Shoreline Greenway Trail, Madison	0	0	0	0	0	0	1	3	5	7	10	11	10	9	9	9	9	8	5	2	1	0	0	0
Still River Greenway, Brookfield	0	0	0	0	0	0	1	3	6	7	8	9	9	8	8	8	9	10	8	4	1	0	0	0
Sue Grossman Trail, Torrington	0	0	0	0	0	1	3	4	6	8	9	10	10	9	8	8	8	6	5	3	1	0	0	0

Table 11. Average counts by hour of day - short-term counters, *rounded to the nearest whole number. Counts for each hour were summed over the recording period and divided by the respective number of days. The percentages represent how much that hour contributed to the total count.*

	12AM	1AM	2AM	3AM	4AM	5AM	6AM	7AM	8AM	9AM	10AM	11AM	12PM	1PM	2PM	3PM	4PM	5PM	6PM	7PM	8PM	9PM	10PM	11PM
Average Hourly Total	0	0	0	0	0	2	6	19	34	56	75	94	105	110	117	113	103	75	25	4	1	0	0	0
Percent of all hours	0%	0%	0%	0%	0%	0%	1%	2%	4%	6%	8%	10%	11%	12%	12%	12%	11%	8%	3%	0%	0%	0%	0%	0%

Table 12. Percentage of daily use by hour of day - short-term counters*. Numbers are percentages and darker green indicates a higher percentage. Hourly counts per trail were summed over the recording period and divided by the respective number of days to see the pattern of average hourly count per trail.*

Counter Location	12AM	1AM	2AM	3AM	4AM	5AM	6AM	7AM	8AM	9AM	10AM	11AM	12PM	1PM	2PM	3PM	4PM	5PM	6PM	7PM	8PM	9PM	10PM	11PM
G&S Trolley Trail, Groton (adjusted)	0	0	0	0	0	0	0	1	3	5	9	11	12	11	12	11	12	9	4	1	1	0	0	0
Farmington Canal Heritage Trail, Lock 12, Cheshire (adjusted)	0	0	0	0	0	0	1	3	5	7	9	10	10	11	11	11	10	8	3	1	0	0	0	0
Talcott Mountain State Park, Simsbury (*not* adjusted)	0	0	0	0	0	0	0	1	2	4	7	10	13	13	16	14	12	8	2	0	0	0	0	0

2024 Counts by Day and Weather

Weather is an important factor when looking at trail use data. Daily count totals across all trails are compared with daily high temperature (Figure 5), precipitation (Figure 6), and snow cover (Figure 7) as recorded at Bradley International Airport in Windsor Locks, CT.

Key Takeaways

- **Weather is an influential factor impacting levels of daily trail use.** Even on cold and/or rainy days, people still use trails (Figures 5 and 6).
- **Snow cover limits trail use.** Winter trail use was higher on days without snow cover. For example, February 2-12 were unusually warm days and had greater use than many other winter days (Figures 5 and 7). In contrast, days with 2-3 inches of snow cover recorded at Bradley International Airport (January 17-25 and January 29-February 1) saw lower trail use (Figure 7).
- **Rainy and/or hot days decrease trail use.** In 2024, counts during the summer months were lower in July and August than in in May and June. This coincides with a period of many hot days, often around or above 90 degrees Fahrenheit (F) (Figure 5). Days with heavy rainfall and storms (for example, July 31 with 2.04 inches of rainfall, August 18 with 1.68 inches at Bradley Airport and 7.37 inches in Woodbury) had very low counts (Figure 6).
- **Spring Fever!** On unseasonably warm days in winter and early spring, trail use spiked. For example, the total trail uses across all count locations spiked to 16,632 compared to 4,388 or less on the days before and after March 3, a dry 67-degree day between multiple rainy

days (Figure 5). Trail use also spiked on February 10, a 62-degree day before a snow event, to 9,971 compared to fewer than 6,000 on the days before and after.

- **August 17, 2024 saw the highest uses recorded** across all trail count locations with 18,079 uses coinciding with the first day of the Hartford Dragon Boat Festival and a dry, 84-degree day. In Hartford alone, 8,728 counts were recorded on the Riverfront Recapture Trail counter. The following day, August 18, had 1.7 inches of rain and only 74 counts were recorded in Hartford and only 2,632 counts on all 23 trails.

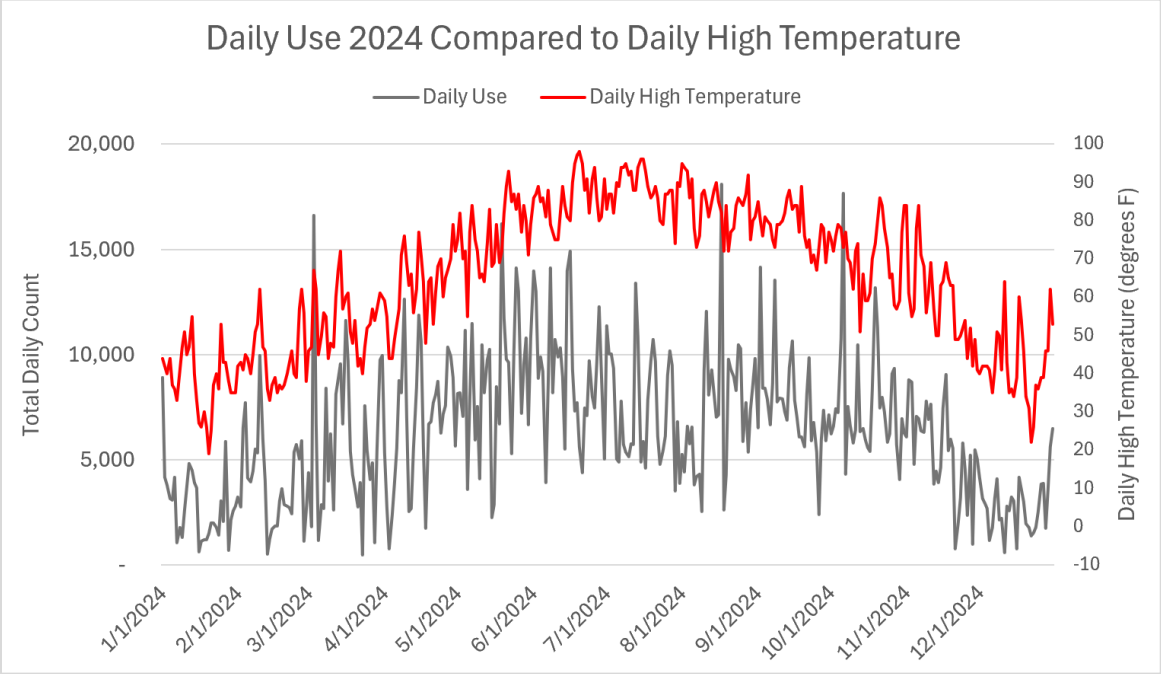

***Figure 5**. **Trail Counts and Temperature**. A comparison of the total daily counts for 23 trails with daily high temperatures recorded at Bradley International Airport and obtained from NOAA weather station USW00014740, NOAA – National Centers for Environmental Information[3].*

Late season warmth may account for high counts in October 2024 with 19 days of 70 degrees Fahrenheit, 11 days of which were 75 degrees or warmer, and only five days with rain up to 0.23 inches, only one of which fell on a weekend. For comparison, October 2023 had 12 days with 70 degrees or warmer, of which 8 were 75 degrees or warmer, and 7 days with rain up to 0.84 inches (three weekends had one rainy day each). This warm and dry fall weather coincided with peak foliage season.

Southeastern Connecticut experienced an extreme localized flooding event on August 18-19, 2024, with 24-hour rainfall totals of 14.8 inches and 13.5 inches recorded in two different locations near Oxford[4]. Wash-outs and mudslides caused a partial closure of the Larkin State

[3] https://www.ncei.noaa.gov/access/past-weather/Bradley%20International%20Airport (retrieved 2/20/2025)
[4] NOAA Climate.gov: Extreme rainfall brings catastrophic flooding to the Northeast in August 2024. https://www.climate.gov/news-features/event-tracker/extreme-rainfall-brings-catastrophic-flooding-northeast-august-2024

Bridle Trail. Otherwise, late summer and fall 2024 were historically dry[5], which may have contributed to higher than usual trail use during that season.

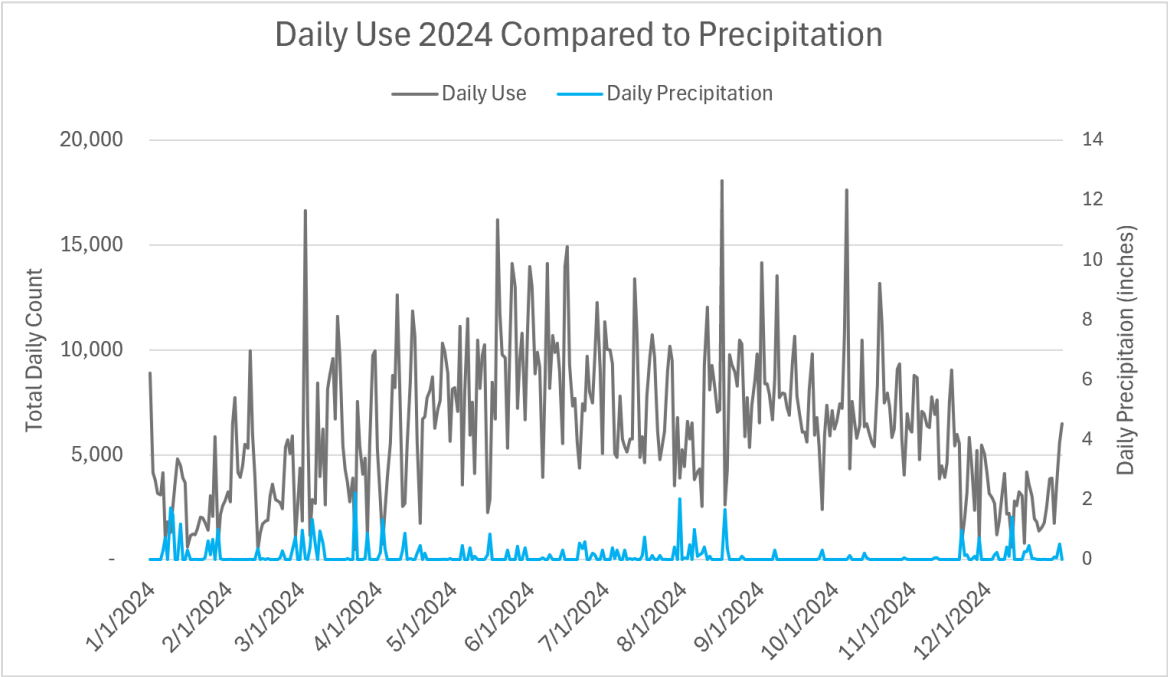

***Figure 6. Trail Counts and Precipitation**. A comparison of daily counts over 23 trails with daily precipitation recorded at Bradley International Airport. High precipitation coincides with lower trail use.*

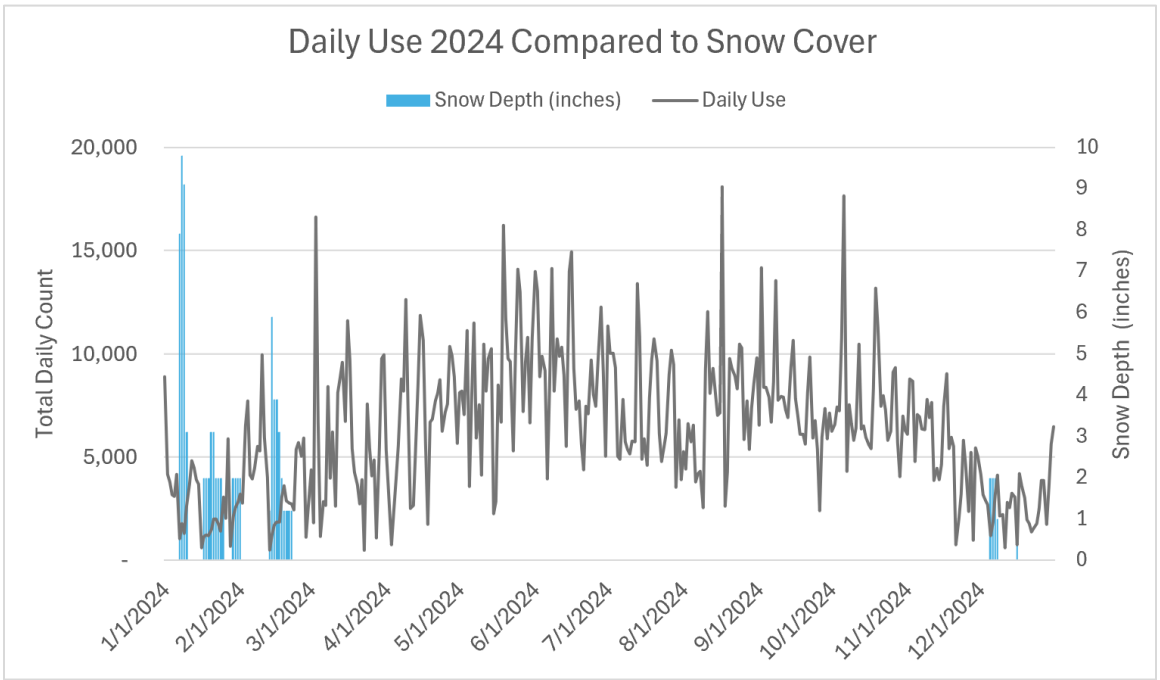

***Figure 7. Trail Counts and Snow Cover**. A comparison of total daily counts for 23 trails and snow depth as recorded at Bradley International Airport. Generally, trail use decreases when there is snow cover.*

[5] CT Public.org: Reflecting on CT's historic wildfire season – and the toll it took. https://www.ctpublic.org/news/2024-12-13/ct-wildfire-historic-season-brush-fire-forecast-climate-change

Mode Share

The TRAFx IR counters cannot differentiate between different types of trail users. Volunteers conducting manual counts for calibration purposes, however, do collect information about mode of travel by classifying trail users into three categories: pedestrian (walk, run, etc.), bike (all types, includes e-bikes, recumbent, tricycle, etc.), and other (wheelchair, stroller, roller skates/blades, skateboard, etc.). Mode shares recorded during manual counts are shown in Figure 8. The locations with the highest proportion of pedestrian use in 2024 were Riverfront Recapture-Hartford (94%), the Norwalk River Valley Trail-Wilton (93%), and the Norwalk River Valley Trail-Redding (92%). The highest proportion of cyclists were on the Farmington Canal Heritage Trail in Cheshire (70%) and the Hop River Trail in Bolton (61%).

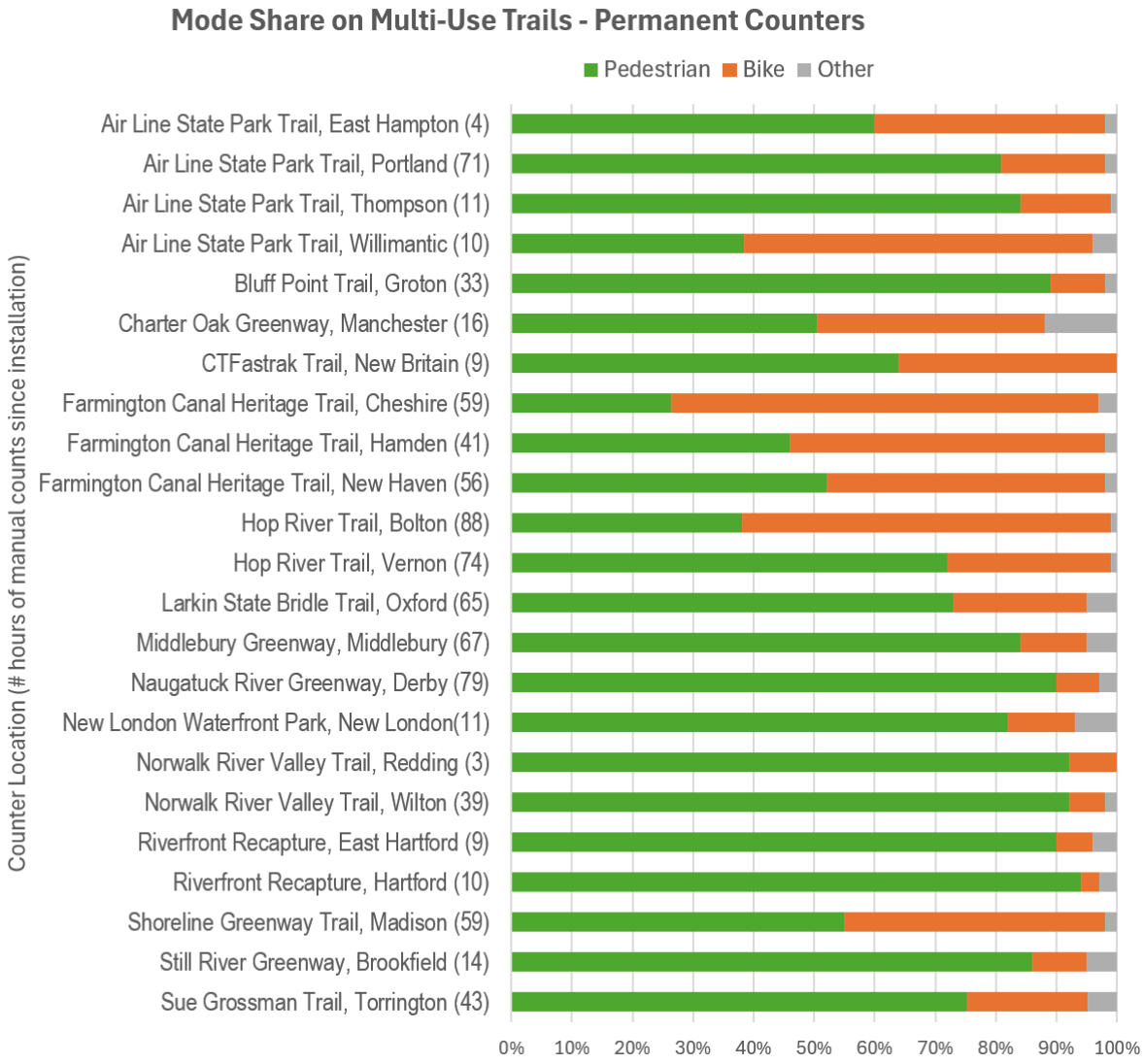

***Figure 8. Mode Share by Trail - permanent counters**, from manual counts conducted between 2017 and 2024.*

For short-term counters, the only location with a volunteer conducting manual counts was Lock 12 on the Farmington Canal Heritage Trail in Cheshire. During three hours of observation in the fall of 2024, 46% were pedestrian, 52% bike and 2% other uses.