Connecticut Trail Census

Statewide multi-use trail user study

2022 Trail Use Count Data Report

May 2023

Acknowledgements

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Overview

This report includes the final adjusted infrared (IR) counter data from 21 multi-use path locations in Connecticut at which counts were conducted for 2022.

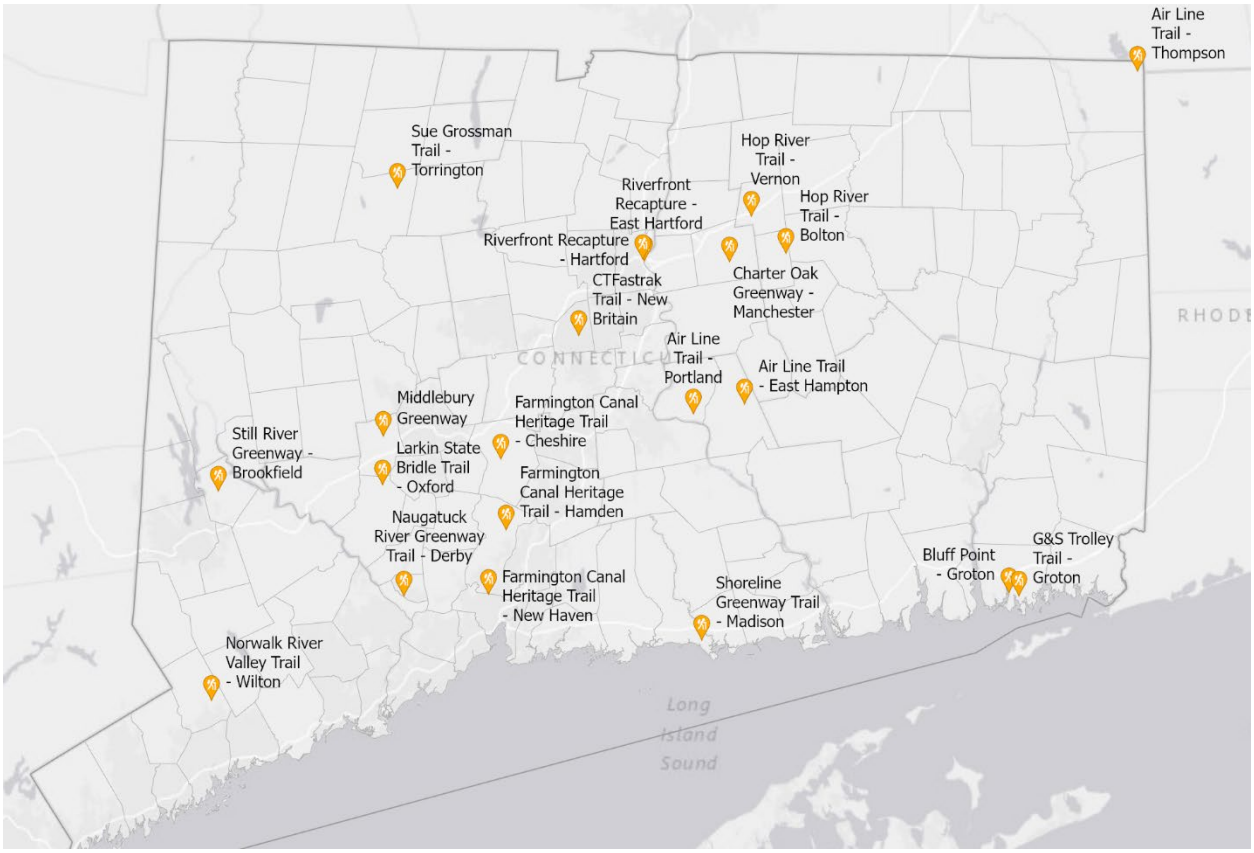


***Figure 1**. Trail Counter Sites*

This user count summary is part of a larger multi-use trail data collection effort, the Connecticut Trail Census[1], which is a statewide volunteer data collection program intended to inform a better 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 team also publishes data through an online data dashboard that allows users to explore count data across sites and years, accessible through the CT Trail Census website.

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

[1] https://cttrailcensus.uconn.edu/

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 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. These IR counters register a temperature differential between background levels and that of a person or object passing by the IR scope, and compile these "hits" into hourly totals. They collect data 24 hours per day for as long as they are installed. While they work well, the counters do have some limitations. They cannot distinguish between different types of users (like pedestrians vs. cyclists) and cannot 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. Some overcounting may occur in certain instances, pets or even wild animals passing the counter may be counted, for instance, 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 is adjusted, or calibrated, using manual counts conducted by volunteers and CT Trail Census staff. Manual counts conducted at the trail counter location are then compared to the count registered by the IR counter in that location for the same time period. 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. This year, however, we developed calibration factors differently. To maximize the number of manual counts from which we developed factors and to eliminate the application of an arbitrary minimal factor, factors were developed from all previous manual counts conducted on each trail going back, in some cases, to 2017. This approach should more accurately correct for undercounts and help avoid both swings in estimates caused by sometimes drastic shifts in calibration factors from year to year and the imposition of minimal factors where no manual counts were conducted each 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 be counted twice. For trails with primarily out and back traffic, trail visits can be estimated at ½ of the count total. The count data in this report only reflects use 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

There were issues with several counters that resulted in missing or corrupted data and therefore incomplete datasets for the year. Issues resulting in missing or corrupted data can include moisture in the IR scope, heated vegetation within view of the IR scope, nesting insects or vegetation obstructing the IR scope, or counter malfunction. These 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 those cases, the data was 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 365. All other breakdowns are based on the adjusted (calibrated) counts, but still reflect the missing or removed data unless otherwise noted. More detailed information about methodology can be found on the website.

2022 Overall Trail Use: Key Takeaways

- **Summary**. Trail use in 2022 was similar to that in 2021, both of which were lower than that of 2020 when there was a surge of trail use during the Covid-19 shutdown. 2021 and 2022 trail use was slightly higher than 2019 pre-COVID levels.
- **Trail Specific Trail Use Patterns.** 2022 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. Although most of the trail use occurs in the summer/spring and fall, roughly 12% of use in 2022 occurred in December, January, and February. Even on rainy cold days, most trails still saw some use.

2022 Yearly Count Estimate by Trail

The most heavily used trails in the study in 2022 were the Naugatuck River Greenway Trail in Derby, Bluff Point State Park in Groton, the Still River Greenway in Brookfield, and the Farmington Canal Heritage Trail in Cheshire. The Air Line Trail counters in Thompson and Portland recorded the lowest number of uses. A total of 2,070,766 counts were recorded across the 21 sites in 2022, for which data was available. Using average daily counts to account for missing data, the 21 sites had an estimated 2,103,863 uses in 2022 (Table 1).

Table 1: 2022 total IR counts, daily averages and estimated annual use by trail location*. Total counts are adjusted for undercount with trail specific calibration factors. Red values indicate sites where fewer than 365 days of data were collected and where annual estimate was derived using the daily average for days with data multiplied by 365. The Estimated total use is the Average Daily Total multiplied by 365.*

	Counter Location	Total count (adjusted)	Days with data	Average Daily Total	Estimated total use
1	Air Line Trail - East Hampton	78,442	365	214.910	78,442
2	Air Line Trail - Portland	21,512	365	58.937	21,512
3	Air Line Trail - Thompson	23,453	365	64.255	23,453
4	Charter Oak Greenway - Manchester	69,708	365	190.981	69,708
5	CTFastrak Trail - New Britain	35,002	365	95.896	35,002
6	Farmington Canal Heritage Trail - Cheshire	161,894	365	443.545	161,894
7	Farmington Canal Heritage Trail - Hamden	129,216	362	356.950	*130,287*
8	Farmington Canal Heritage Trail - New Haven	108,994	365	298.614	108,994
9	Groton - Bluff Point	253,100	365	693.425	253,100
10	Groton - G&S Trolley Trail	31,795	365	87.110	31,795
11	Hop River Trail - Bolton	82,264	365	225.381	82,264
12	Hop River Trail - Vernon	143,501	365	393.153	143,501
13	Larkin State Bridle Trail - Oxford	28,484	365	78.038	28,484
14	Middlebury Greenway	64,869	365	177.723	64,869
15	Naugatuck River Greenway Trail - Derby	251,743	350	719.266	*262,532*
16	Norwalk River Valley Trail - Wilton	110,960	365	304.000	110,960
17	Riverfront Recapture - East Hartford	64,164	365	175.792	64,164
18	Riverfront Recapture - Hartford	94,257	365	258.238	94,257
19	Shoreline Greenway Trail - Madison	77,868	365	213.337	77,868
20	Still River Greenway - Brookfield	170,643	365	467.515	170,643
21	Sue Grossman Trail - Torrington	68,897	279	246.943	*90,134*
	Totals:	**2,070,766**		**5,764.008**	**2,103,863**

2022 Counts by Month

Tables 2 and 3 present the 2022 CT Trail Census Count data by month (count and percent), while Figure 2 presents monthly trail count data since 2018 on trails that have had consistent data recorded for all years.

Key Takeaways

- **Summer Peak.** As observed in previous years, the heaviest trail use occurred, in general, between the months of March and October. June had the highest total recorded trail use statewide with 12% of recorded 2022 use, followed by September, August, and July with 11% each, and May and October with 10% of trail use each. Only 3% of the annual total statewide was recorded in January.
- **Patterns are trail specific.** Percent of Total Annual Trail Use by Month counts show that trail use patterns varied by trail in 2022. Appendix A provides comparisons of monthly data collected between 2018 and 2022 for 15 individual trails.
- **Year-Round Trail Use.** While trails are more heavily used in the summer, all trails were also used in the winter.
- Anomalous low counts in New Britain in June and Hartford in July may be the result of a partial counter scope blockage or other issue that limited counter effectiveness.
- **Compared to previous years**, aggregated monthly trail use levels are lower than in 2020 and 2021, but still higher than pre-pandemic levels, individual trail comparisons to previous years varies.

Table 2. Monthly Counts by Trail. *Pink shading indicates months with some missing data; totals are calculated by "filling in" missing days with daily averages for that month from available data. Red shading indicates months where there was no data.*

Trail Location	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Airline Trail - East Hampton	2,348	2,454	4,342	7,417	8,871	9,433	8,109	8,198	8,749	8,546	6,164	3,811
Airline Trail - Portland	773	1,654	2,020	2,285	2,025	2,201	2,155	1,911	2,117	2,053	1,195	1,123
Airline Trail - Thompson	872	1,073	1,740	2,952	2,369	1,762	1,930	1,868	2,561	2,744	2,114	1,468
Charter Oak Greenway - Manchester	1,427	2,078	4,992	7,706	8,741	8,164	9,570	7,519	6,693	5,992	4,290	2,536
CTFastrak - New Britain	1,784	1,912	2,814	3,478	4,002	1,939	3,329	3,386	3,342	3,386	3,041	2,589
Farmington Canal Heritage Trail - Cheshire	2,999	4,959	9,290	12,942	18,175	23,790	19,716	21,015	19,762	14,123	9,759	5,364
Farmington Canal Heritage Trail - Hamden	2,179	3,840	6,661	12,348	14,951	*15,382*	16,322	15,258	17,391	13,056	8,849	4,517
Farmington Canal Heritage Trail - New Haven	5,405	6,694	8,516	12,983	7,234	7,796	8,238	9,357	14,417	12,324	9,123	6,907
Groton - Bluff Point	8,915	10,074	16,420	20,481	22,515	28,125	25,371	22,607	28,702	29,310	25,233	15,347
Groton - G&S Trolley	1,562	1,367	2,104	3,084	3,713	3,424	3,498	2,900	2,988	2,789	2,674	1,692
Hop River Trail - Bolton	1,928	1,924	3,641	7,446	9,175	9,343	10,268	11,216	10,507	9,113	4,631	3,072
Hop River Trail - Vernon	3,314	3,208	7,806	12,107	11,661	17,553	18,487	18,265	17,361	15,053	11,356	7,330
Larkin Trail - Oxford	1,338	1,146	1,987	2,622	2,825	2,718	2,803	3,017	3,211	3,226	2,147	1,444
Middlebury Greenway	927	1,203	4,527	6,406	7,917	8,072	7,247	7,233	7,182	5,891	5,028	3,236
Naugatuck River - Derby	*10,953*	15,672	23,228	25,234	26,464	27,110	25,853	26,585	22,988	22,449	18,878	11,629
Norwalk RVT - Wilton	4,595	4,318	8,132	10,641	11,386	12,027	10,622	10,102	11,551	10,982	9,562	7,042
Riverfront Recapture - East Hartford	2,028	3,337	5,357	6,904	7,998	8,394	6,270	5,929	5,991	5,669	3,786	2,501
Riverfront Recapture - Hartford	2,695	3,234	5,481	7,912	11,026	13,254	4,923	9,612	13,337	13,860	5,471	3,452
Shoreline Greenway - Madison	2,419	2,878	5,178	5,888	6,932	9,774	11,943	10,681	8,690	6,245	4,108	3,132
Still River Greenway - Brookfield	4,578	8,404	14,860	16,952	16,793	19,128	15,297	16,160	18,294	17,601	13,803	8,773
Sue Grossman- Torrington	1,883	3,874	6,111	8,792	9,617	10,899	9,046	8,527	9,127	*5,275*	-	-
Total	64,922	85,303	145,207	196,580	214,390	240,288	220,997	221,346	234,961	209,687	151,212	96,965

***Table 3. Percent of Annual Trail Counts by Month**. Darker greens indicate higher percentage. Red framed cells indicate months with some missing data; totals are calculated by "filling in" missing days with daily averages for that month from available data. Red shading indicates months where there was no data. The anomalous low percentages in New Britain in June and Hartford in July may be the result of a partial scope blockage or other issue that limited counter effectiveness.*

Counter Location	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Air Line Trail - East Hampton	3%	3%	6%	9%	11%	12%	10%	10%	11%	11%	8%	5%
Air Line Trail - Portland	4%	8%	9%	11%	9%	10%	10%	9%	10%	10%	6%	5%
Air Line Trail - Thompson	4%	5%	7%	13%	10%	8%	8%	8%	11%	12%	9%	6%
Charter Oak Greenway - Manchester	2%	3%	7%	11%	13%	12%	14%	11%	10%	9%	6%	4%
CTFastrak - New Britain	5%	5%	8%	10%	11%	6%	10%	10%	10%	10%	9%	7%
Farmington Canal Heritage Trail - Cheshire	2%	3%	6%	8%	11%	15%	12%	13%	12%	9%	6%	3%
Farmington Canal Heritage Trail - Hamden	2%	3%	5%	9%	11%	12%	12%	12%	13%	10%	7%	3%
Farmington Canal Heritage Trail - New Haven	5%	6%	8%	12%	7%	7%	8%	9%	13%	11%	8%	6%
Groton - Bluff Point	4%	4%	6%	8%	9%	11%	10%	9%	11%	12%	10%	6%
Groton - G&S Trolley	5%	4%	7%	10%	12%	11%	11%	9%	9%	9%	8%	5%
Hop River Trail - Bolton	2%	2%	4%	9%	11%	11%	12%	14%	13%	11%	6%	4%
Hop River Trail - Vernon	2%	2%	5%	8%	8%	12%	13%	13%	12%	10%	8%	5%
Larkin Trail - Oxford	5%	4%	7%	9%	10%	10%	10%	11%	11%	11%	8%	5%
Middlebury Greenway	1%	2%	7%	10%	12%	12%	11%	11%	11%	9%	8%	5%
Naugatuck River - Derby	4%	6%	9%	10%	10%	11%	10%	10%	9%	9%	7%	5%
Norwalk RVT - Wilton	4%	4%	7%	10%	10%	11%	10%	9%	10%	10%	9%	6%
Riverfront Recapture - East Hartford	3%	5%	8%	11%	12%	13%	10%	9%	9%	9%	6%	4%
Riverfront Recapture - Hartford	3%	3%	6%	8%	12%	14%	5%	10%	14%	15%	6%	4%
Shoreline Greenway – Madison	3%	4%	7%	8%	9%	13%	15%	14%	11%	8%	5%	4%
Still River Greenway - Brookfield	3%	5%	9%	10%	10%	11%	9%	9%	11%	10%	8%	5%
Sue Grossman Trail - Torrington	3%	5%	8%	12%	13%	15%	12%	12%	12%	7%	-	-

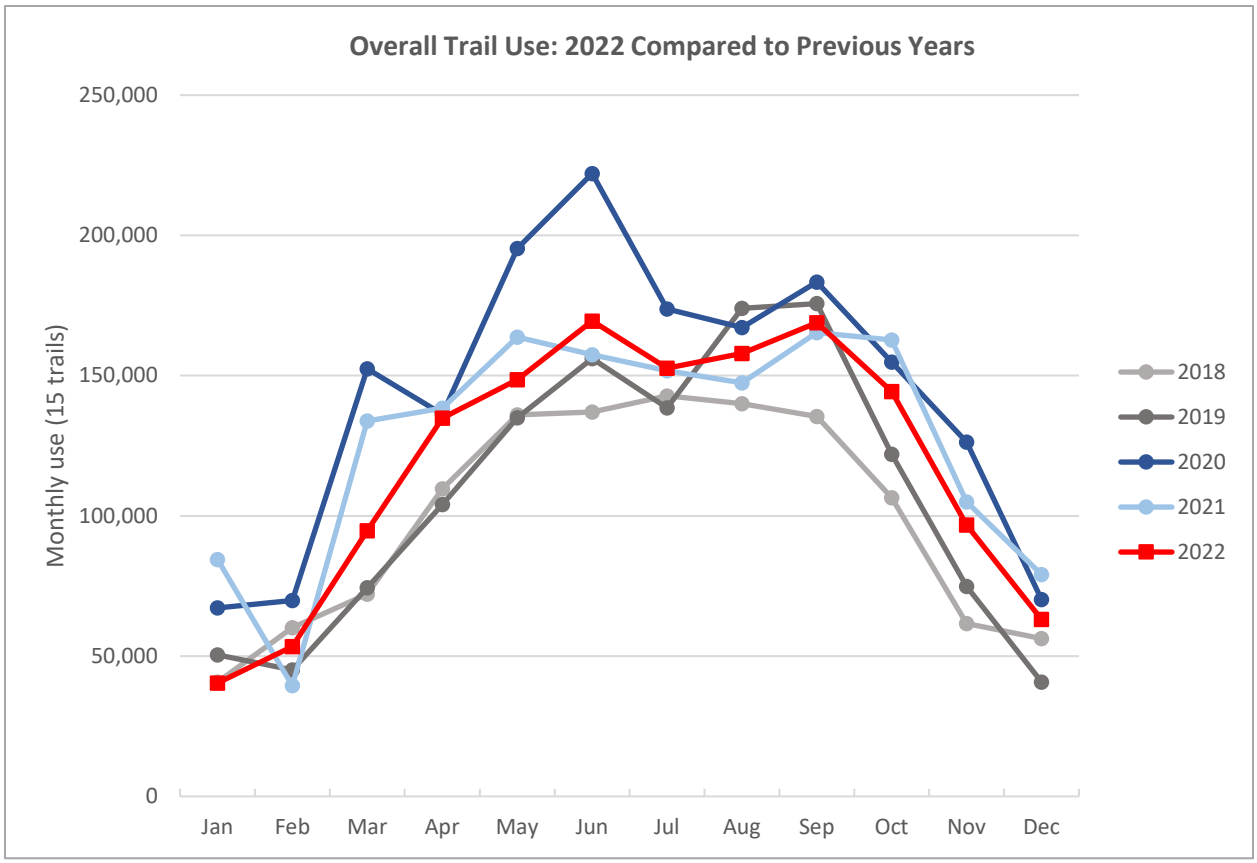


Figure 2. Aggregated Trail Counts Comparison by month for 2018-2022. *Trail counts are based on counts collected from trail sites with data available consistently from 2018 through 2022. These sites are on the Air Line Trail in East Hampton, on the CTFastrack Trail in New Britain, on the Farmington Canal Heritage Trail in Cheshire, Hamden, and New Haven, on the Hop River Trail in Bolton and Vernon, on the Larkin State Bridle Trail in Oxford, on the Middlebury Greenway Trail in Middlebury, on the Norwalk River Valley Trail in Wilton, on the Riverfront Recapture Trail in Hartford and East Hartford, on the Shoreline Greenway Trail in Madison, on the Still River Greenway Trail in Brookfield, and on the Sue Grossman Trail in Torrington. For yearly comparison of 15 individual trails see Appendix A.*

2022 Counts by Day of Week

The day of week summary presents average uses by day of the week. Table 4 shows average counts by the day of week and Table 5 shows the percentage of trail use by day of week for each trail. Higher values are shaded darker green.

Key Takeaways

- **There was a decrease in average daily trail use in 2022 compared to 2021 and 2020.** The average daily uses across 15 of the 21 trail counter locations with full datasets for 2018-2022 decreased from a high of 319 in 2020, to 281 in 2021 to 263 in 2022. This is higher than the average daily uses of 217 and 240 in 2018 and 2019, respectively.
- **Studied trails saw heavier use on weekends.** This trend has been consistent since 2017. Saturdays and Sundays accounted for approximately 18% of uses each on trails statewide,

followed by Friday with 14%, Monday, Wednesday, and Thursday with 13% each, and Tuesday with 12% of trail uses.

- **Some trails saw heavier use during the week than on weekends** - most notably, the CT Fastrak trail saw heavier use on weekdays than on weekends, likely indicating higher levels of commuter use than recreational use - the trail runs parallel to the CT Fastrak Bus Rapid Transit line. More uniform use was also observed on Sue Grossman Trail in Torrington, Farmington Heritage Canal Trail in New Haven, and the Riverfront Recapture Trail in East Hartford.

***Table 4. Average Counts by Day of Week**, rounded to the nearest whole number. Day-of-week counts per trail are summed over the entire year and divided by 52 to see the pattern of average daily count per trail and the Average Day-of-Week Total over all 21 trails. The total average count for all days-of-week (average weekly total) over all trails is 40,326. The percentages are the day-of-week count divided by the total average count. Darker green indicates higher percentage.*

Counter Location	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Air Line Trail - East Hampton	183	172	176	184	192	291	305
Air Line Trail - Portland	58	51	55	54	56	65	74
Air Line Trail - Thompson	49	44	44	43	54	105	110
Charter Oak Greenway - Manchester	172	181	189	175	178	246	194
CTFastrak Trail - New Britain	95	96	106	100	101	88	86
Farmington Canal Heritage Trail - Cheshire	364	347	399	374	432	574	613
Farmington Canal Heritage Trail - Hamden	281	280	316	288	315	506	515
Farmington Canal Heritage Trail - New Haven	271	289	298	289	301	329	312
Groton - Bluff Point	567	517	549	558	636	1018	1003
Groton - G&S Trolley Trail	67	75	72	69	73	119	134
Hop River Trail - Bolton	163	151	174	177	200	348	363
Hop River Trail - Vernon	362	321	380	336	376	479	495
Larkin State Bridle Trail - Oxford	67	61	68	66	76	101	107
Middlebury Greenway	175	155	174	159	174	186	220
Naugatuck River GW Trail - Derby	695	656	741	663	718	778	784
Norwalk River Valley Trail - Wilton	279	248	265	267	280	366	422
Riverfront Recapture - East Hartford	174	169	208	176	169	175	160
Riverfront Recapture - Hartford	209	224	234	220	202	394	322
Shoreline Greenway Trail - Madison	166	161	180	180	211	287	307
Still River Greenway- Brookfield	456	430	474	438	477	508	489
Sue Grossman Trail - Torrington	259	234	272	249	263	223	230
Average day-of-week total	**5112**	**4862**	**5374**	**5065**	**5482**	**7187**	**7244**
Percentage of average day-of-week use	13%	12%	13%	13%	14%	18%	18%

Table 5. Percentage of Counts by Day of Week by trail. *Darker green indicates higher percentage.*

Counter Location	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Air Line Trail - East Hampton	12%	11%	12%	12%	13%	19%	20%
Air Line Trail - Portland	14%	12%	13%	13%	14%	16%	18%
Air Line Trail - Thompson	11%	10%	10%	9%	12%	23%	25%
Charter Oak Greenway - Manchester	13%	14%	14%	13%	13%	18%	15%
CTFastrak Trail New Britain	14%	14%	16%	15%	15%	13%	13%
Farmington Canal Heritage Trail - Cheshire	12%	11%	13%	12%	14%	18%	20%
Farmington Canal Heritage Trail - Hamden	11%	11%	13%	12%	13%	20%	21%
Farmington Canal Heritage Trail - New Haven	13%	14%	14%	14%	14%	16%	15%
Groton - Bluff Point	12%	11%	11%	12%	13%	21%	21%
Groton - G&S Trolley Trail	11%	12%	12%	11%	12%	19%	22%
Hop River Trail - Bolton	10%	10%	11%	11%	13%	22%	23%
Hop River Trail - Vernon	13%	12%	14%	12%	14%	17%	18%
Larkin State Bridle Trail - Oxford	12%	11%	12%	12%	14%	19%	20%
Middlebury Greenway	14%	12%	14%	13%	14%	15%	18%
Naugatuck River GW Trail - Derby	14%	13%	15%	13%	14%	15%	16%
Norwalk River Valley Trail - Wilton	13%	12%	12%	13%	13%	17%	20%
Riverfront Recapture - East Hartford	14%	14%	17%	14%	14%	14%	13%
Riverfront Recapture - Hartford	12%	12%	13%	12%	11%	22%	18%
Shoreline Greenway Trail - Madison	11%	11%	12%	12%	14%	19%	21%
Still River Greenway - Brookfield	14%	13%	15%	13%	15%	16%	15%
Sue Grossman Trail - Torrington	15%	14%	16%	14%	15%	13%	13%

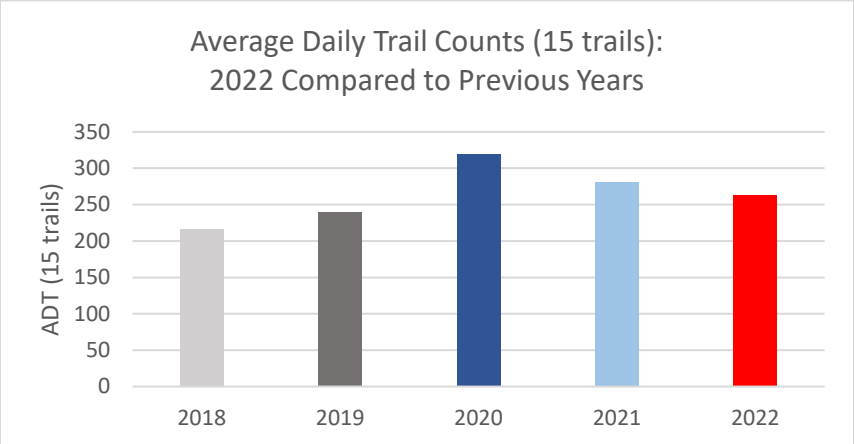


Figure 3. Average Daily Trail counts, aggregated over 15 trails with data for 2018-2022. *Trail counts are based on data collected from trail sites with data available from 2018 to 2022. These sites are in East Hampton, New Britain, Cheshire, Hamden, New Haven, Bolton, Vernon, Oxford, Middlebury, Wilton, Hartford, East Hartford, Madison, Brookfield, and Torrington.*

2022 Counts by Hour of Day

The Hour of Day summary presents trail counts by time of day. Table 6 shows the total hourly counts over all 21 trails, averaged over 365 days, as well as the hourly percentage of daily use pattern. Table 7 shows the percentage of daily counts by hour-of-day for each trail. Higher values are shaded darker green.

Key Takeaways

- **Most trail use (76%) takes place between 9 am-5 pm**. This is consistent with findings throughout the Connecticut Trail Census data collection. The busiest hour in 2022 was 12pm-1pm on average, followed by the 11am, 10am, and 4pm hours.
- **Peaks for the noon hour in Hartford and East Hartford** likely reflect the popularity of lunchtime walks by workers in nearby office buildings.
- **One trail shows commuter use**: the CT Fastrak Trail in New Britain had a higher rate of commuter use and more pronounced early morning and late afternoon peaks as a result.

***Table 6. Average counts per hour for all 21 trails over the calendar year**, rounded to the nearest whole number. Hourly counts per trail were summed over the entire year and divided by 365 to see the pattern of average hourly count per trail and the Average Hourly Total. The total average count for all hours over all trails is 5,767 which corresponds to the aggregated Average Daily Total in Table 1 (disregarding some rounding errors). The percentages are the hourly count divided by the total average count.*

	12AM	1 AM	2 AM	3 AM	4 AM	5 AM	6 AM	7 AM	8 AM	9 AM	10AM	11AM	12PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM	10PM	11PM
Average Hourly Total	7	4	3	3	4	25	98	208	347	454	503	512	516	486	476	487	494	482	349	195	70	23	13	9
Percent	0%	0%	0%	0%	0%	0%	2%	4%	6%	8%	9%	9%	9%	8%	8%	8%	9%	8%	6%	3%	1%	0%	0%	0%

***Table 7. Percentage of Daily Use by Hour of Day**. Numbers are percentages. Darker green indicates a higher percentage. Hourly counts per trail were summed over the entire year and divided by 365 to see the pattern of average hourly count per trail.*

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

2022 Counts by Day and Weather

Weather is an important factor when looking at trail use data. Figures 3, 4, and 5 present daily count totals across all trails as compared with daily high temperature, precipitation, and snow cover, respectively, as recorded at Bradley International Airport.

Key Takeaways

- **Weather is an influential factor impacting levels of daily trail use.** Although most of the trail use occurs in the summer/spring and fall, approximately 12% of use occurred in winter. Even on cold and/or rainy days, people are still using trails.
- **Snow cover decreases trail use.** There was significant snow cover recorded (at Bradley International Airport) throughout January, February, March, and December of 2022, and overall reduced trail use coincided with that snow cover (Figure 5).
- **Spring Fever!** On unseasonably warm days in winter and early spring, trail use spikes. For example, the total trail use across all count locations spiked to 10,733 (compared to less than 5,000 on days before or after) on February 12, a dry 59-degree day, and to 12,403 (compared to 10,287 or less before or after) on March 18, 2022, a dry 76-degree day.
- **September 10, 2022,** saw the highest uses recorded across all trail count locations with **14,210**.

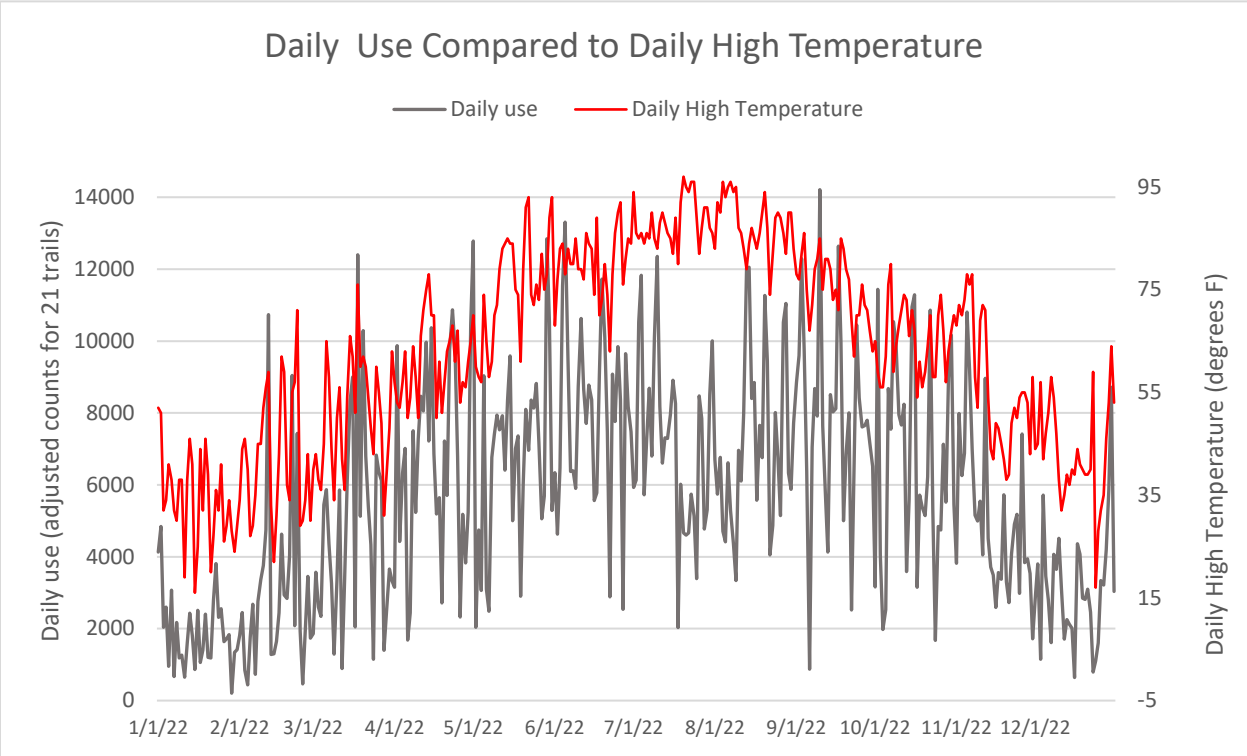


Figure 3. Trail Counts (21 trails) and Temperature*. Weather data for Bradley International Airport, NOAA weather station USW00014740, obtained from NOAA – National Centers for Environmental Information[2].*

[2] https://www.ncdc.noaa.gov/cdo-web/datasets/GHCND/stations/GHCND:USW00014740/detail

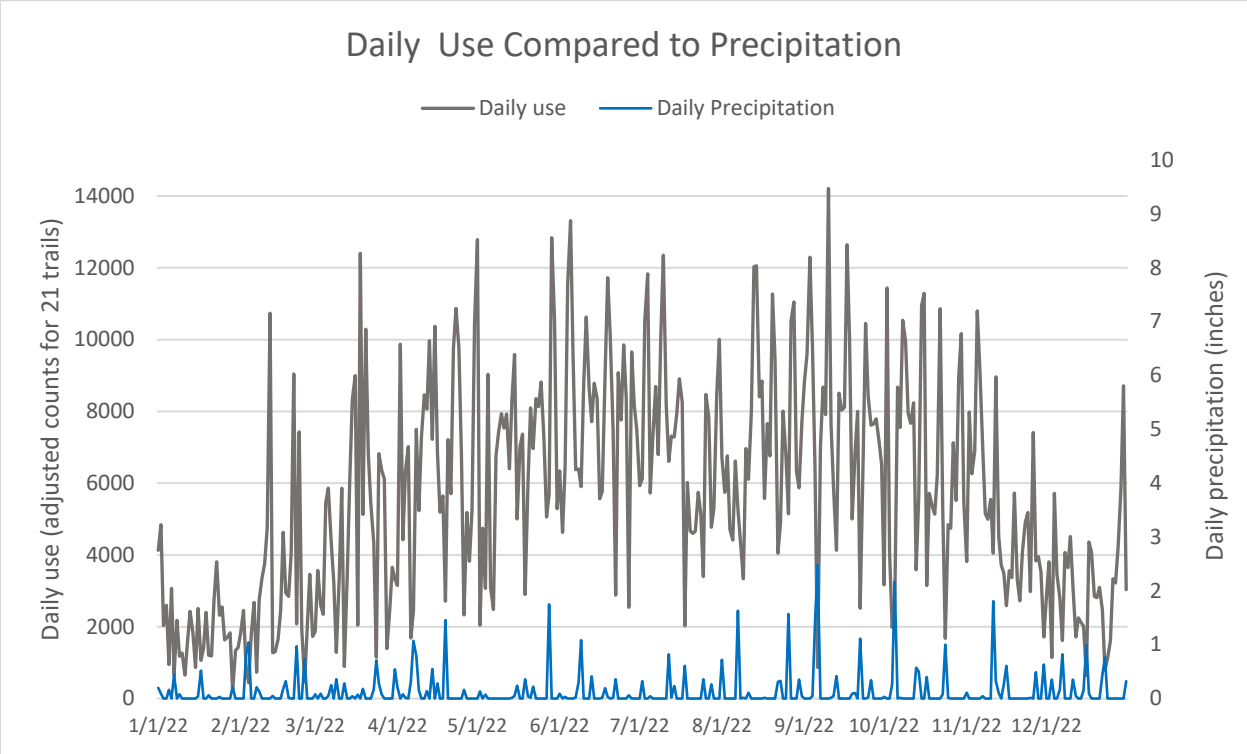


***Figure 4. Trail Counts (21 trails) and Precipitation**.*

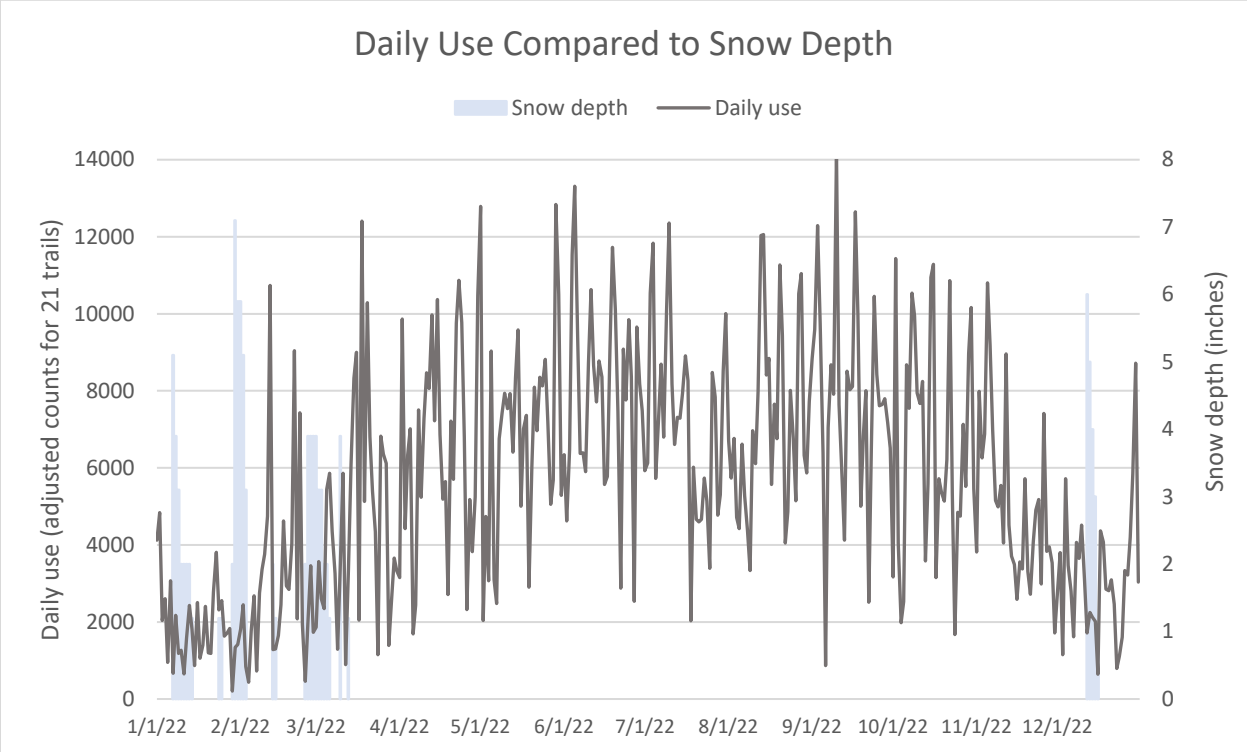


***Figure 5. Trail Counts (21 trails) and Snow Cover**. Generally, trail use decreases when there is snow cover.*

Mode Share

The TRAFx IR counters cannot differentiate between different types of trail user. Volunteers conducting manual counts for calibration purposes, however, do collect information about the mode of travel by classifying trail users into three categories: Pedestrian (walkers, runners, etc.) Bike (all types of cycles, includes e-bikes, recumbent, tricycle, etc.), and Other (using a wheelchair, stroller, roller skates/blades, skateboard, etc.).
Figure 6 shows mode shares for individual trails recorded during manual counts from 2017-2022. Riverfront Recapture - Hartford (94%) and Norwalk River Valley Trail - Wilton (93%) had the highest proportion of pedestrian use. The Farmington Canal Heritage Trail in Cheshire and the Hop River Trail in Bolton have seen the highest proportion of cyclist use with 67% and 58% mode share, respectively.

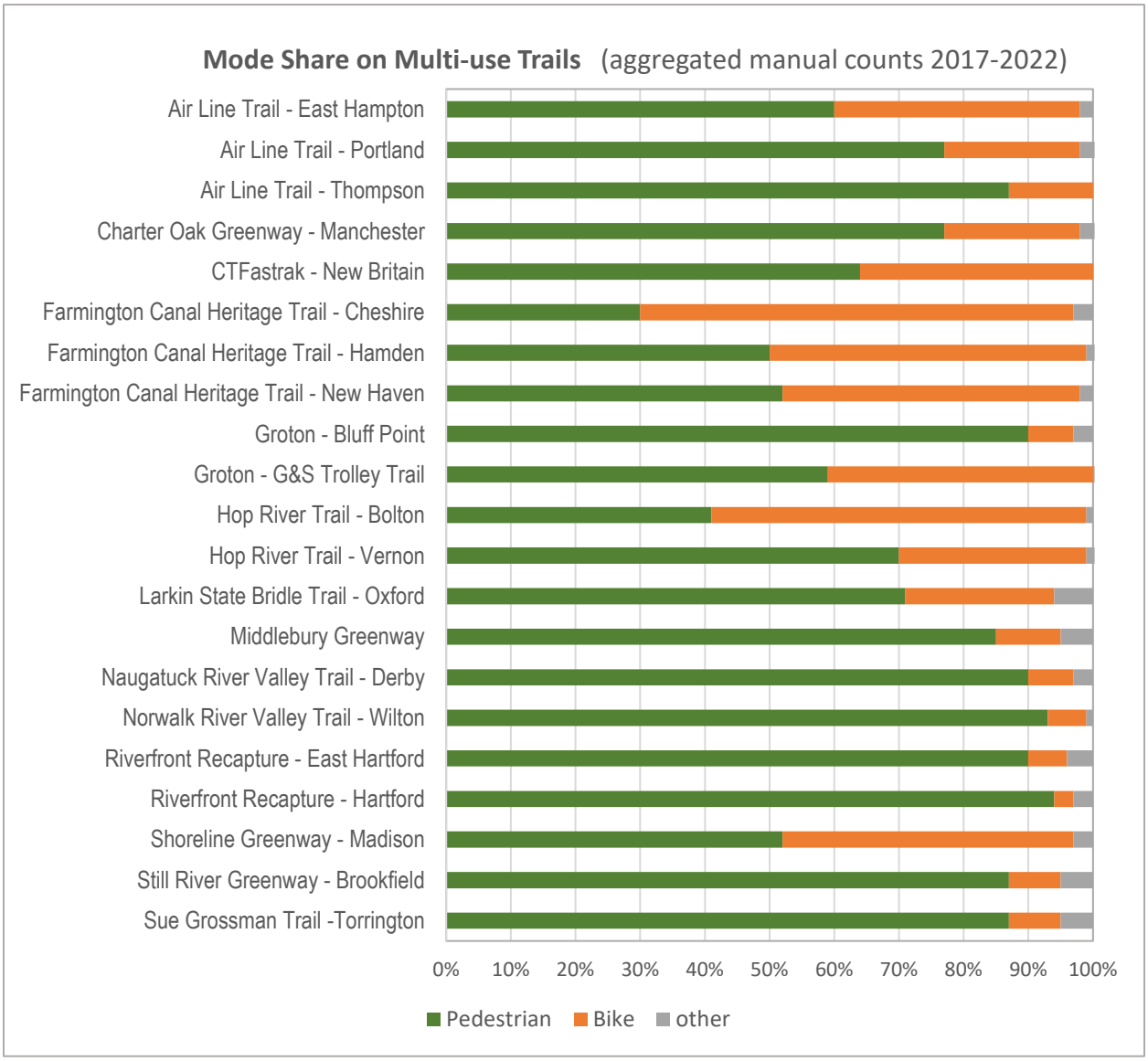
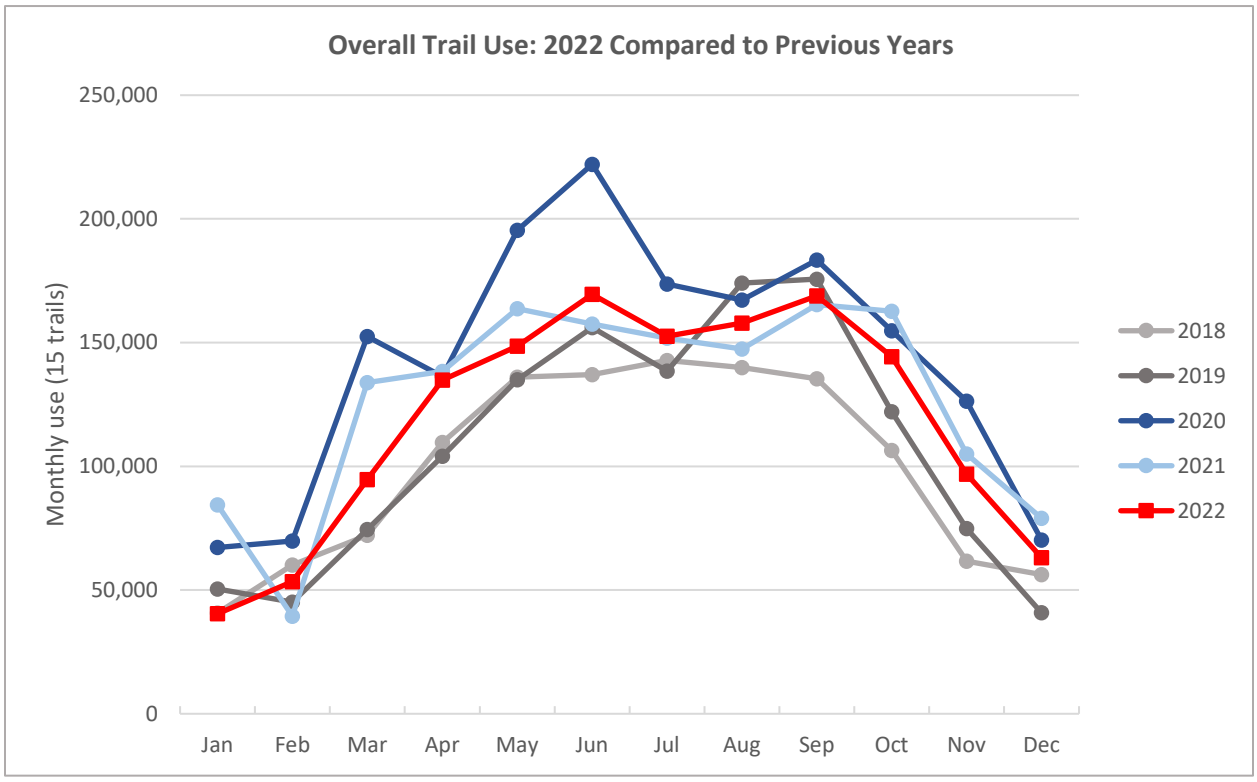
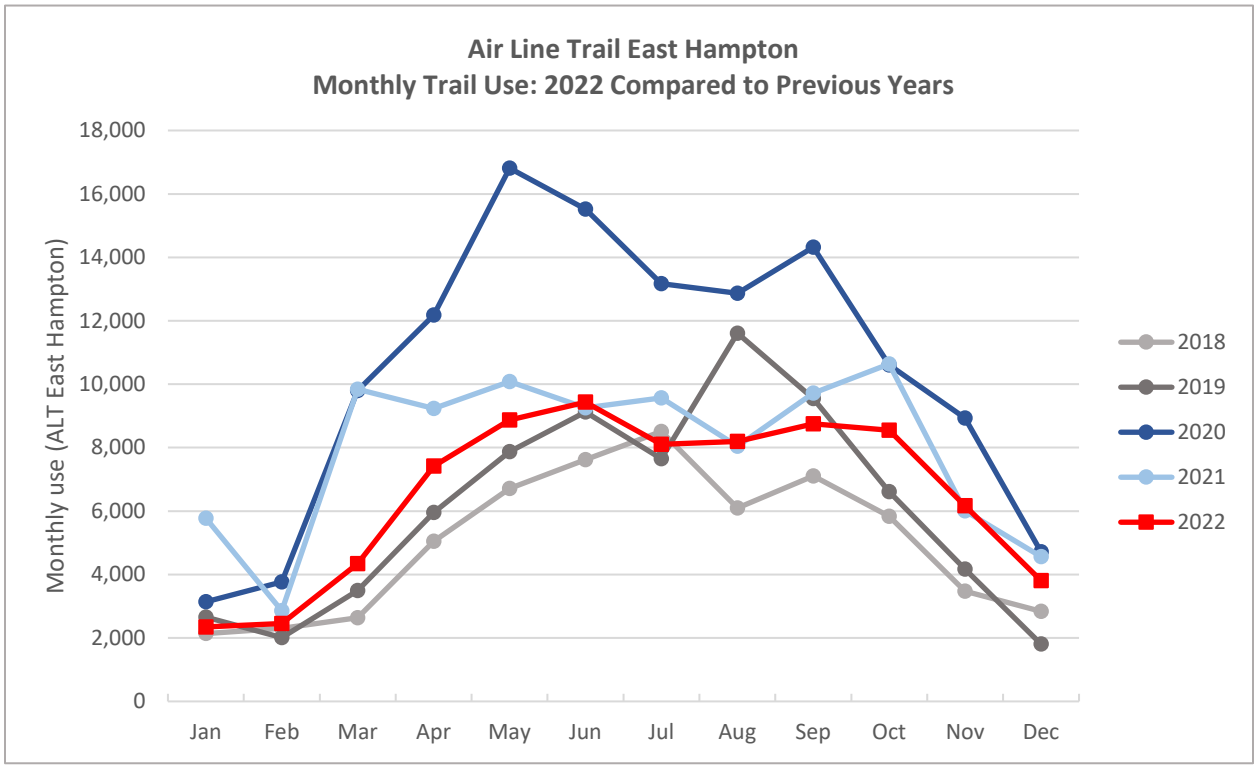
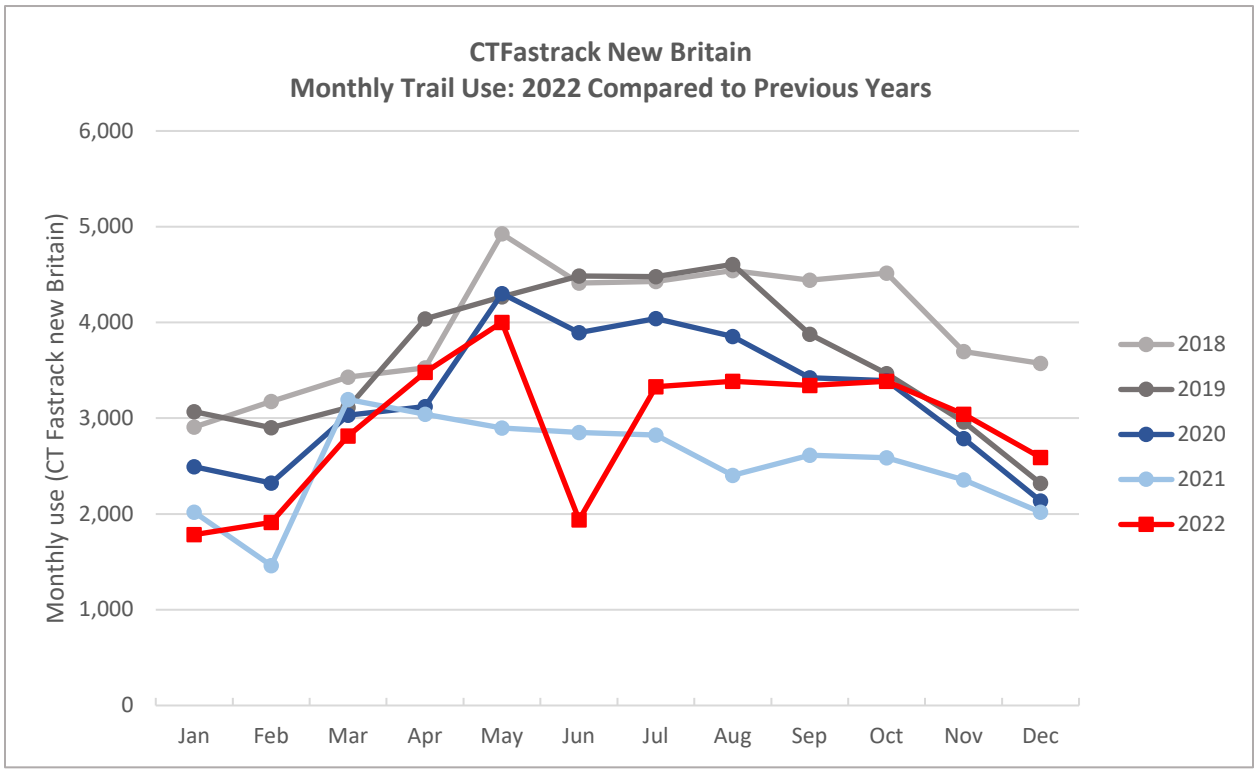


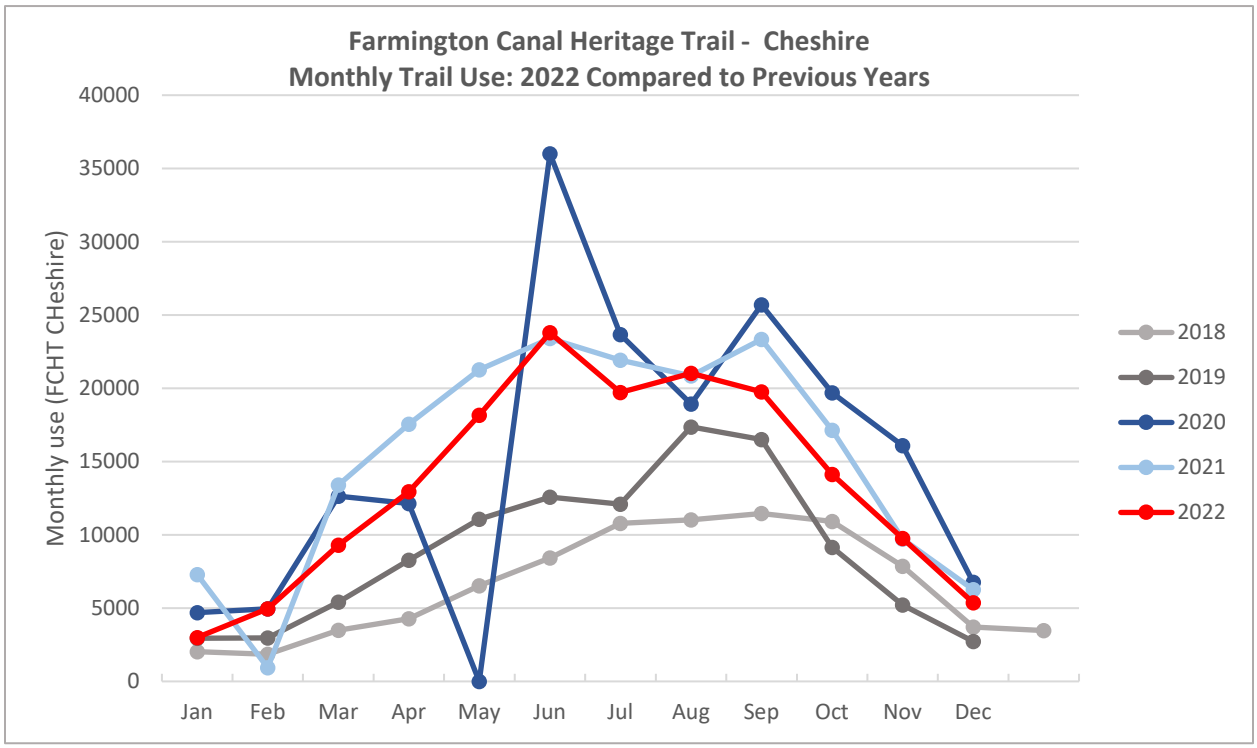
Figure 6. Mode share per trail from manual counts conducted between 2017-2022.

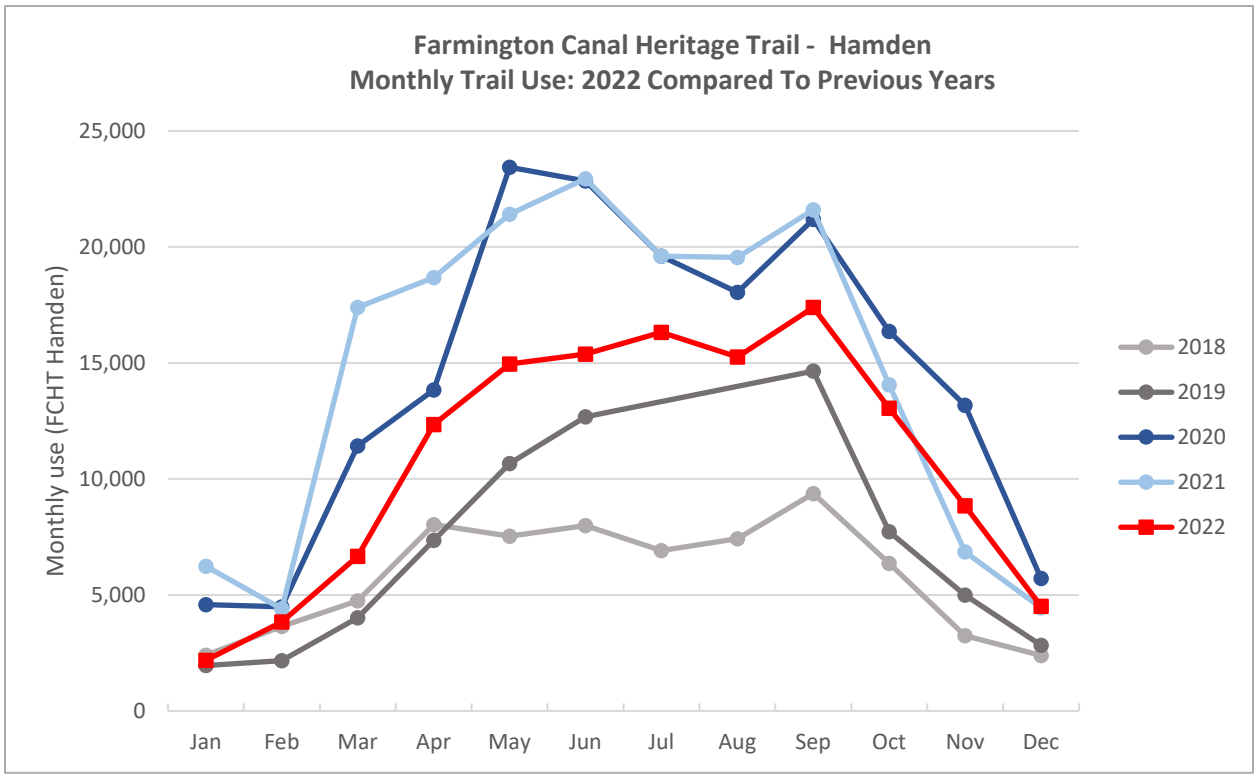
Appendix A – Trail Specific Comparisons of 2018-2022 Monthly Data

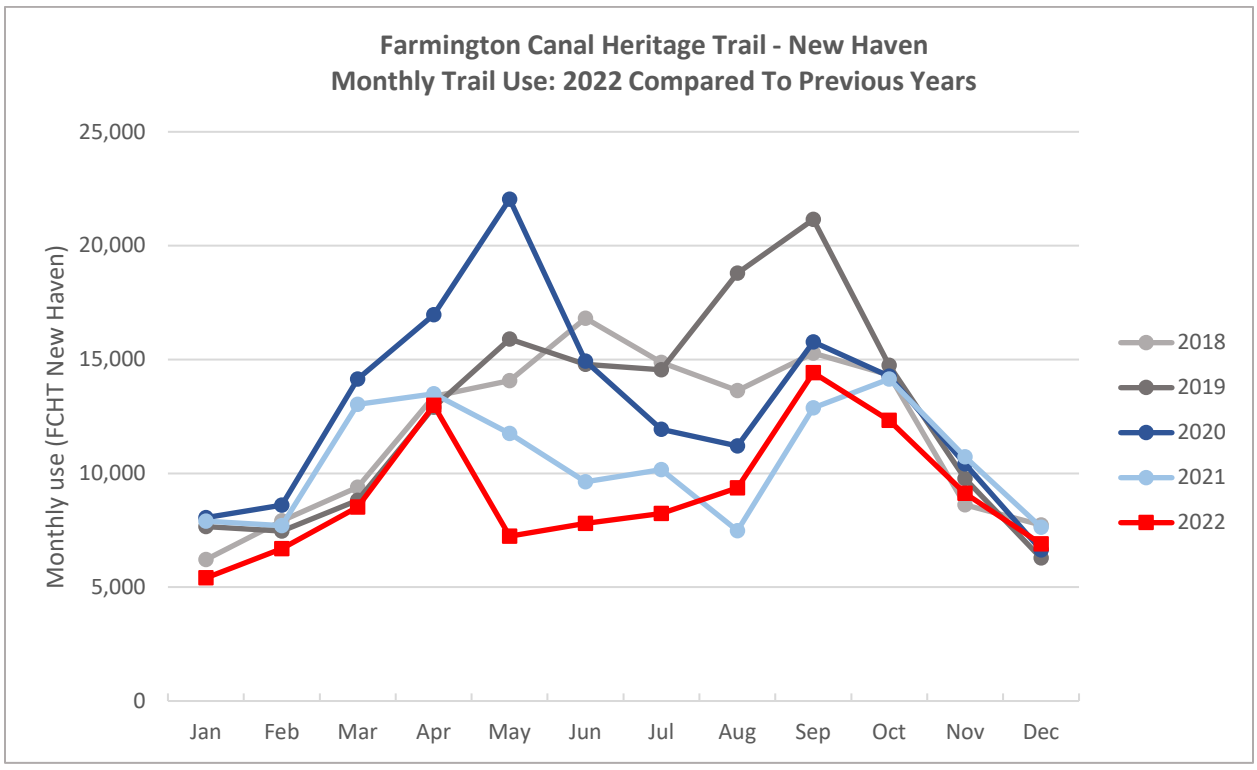


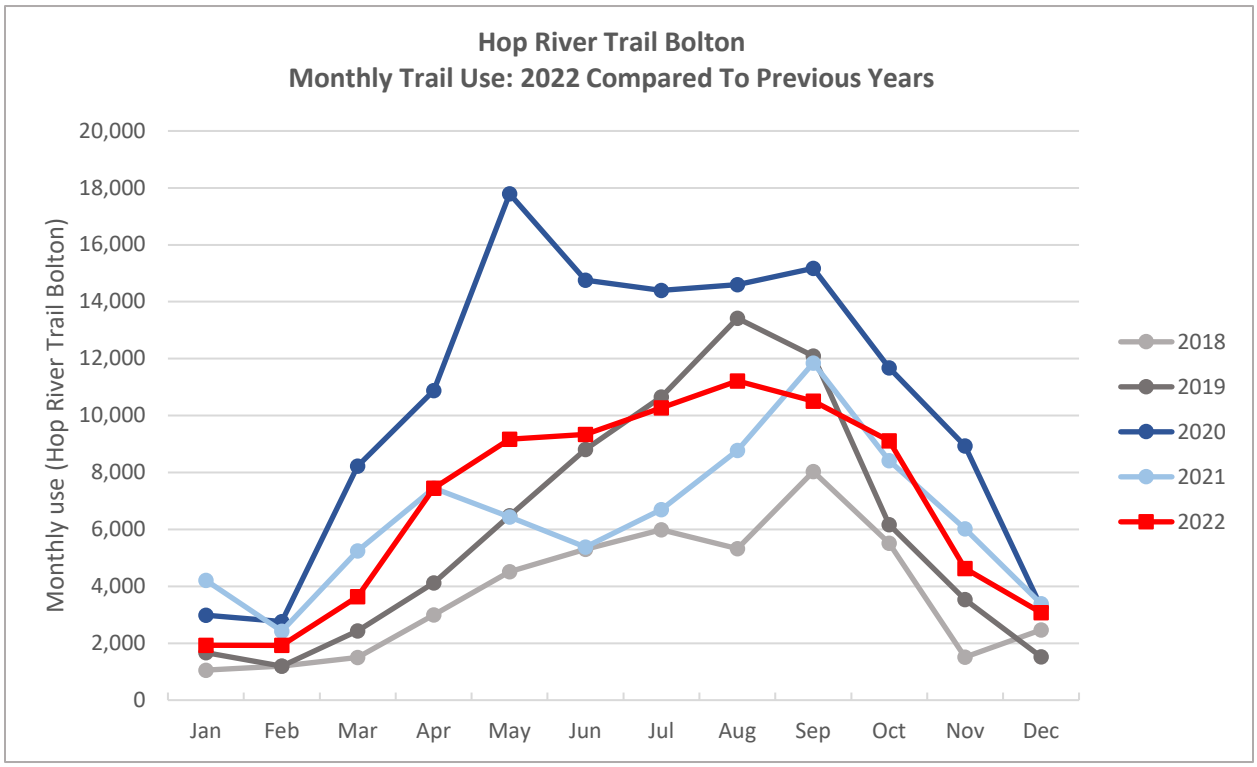


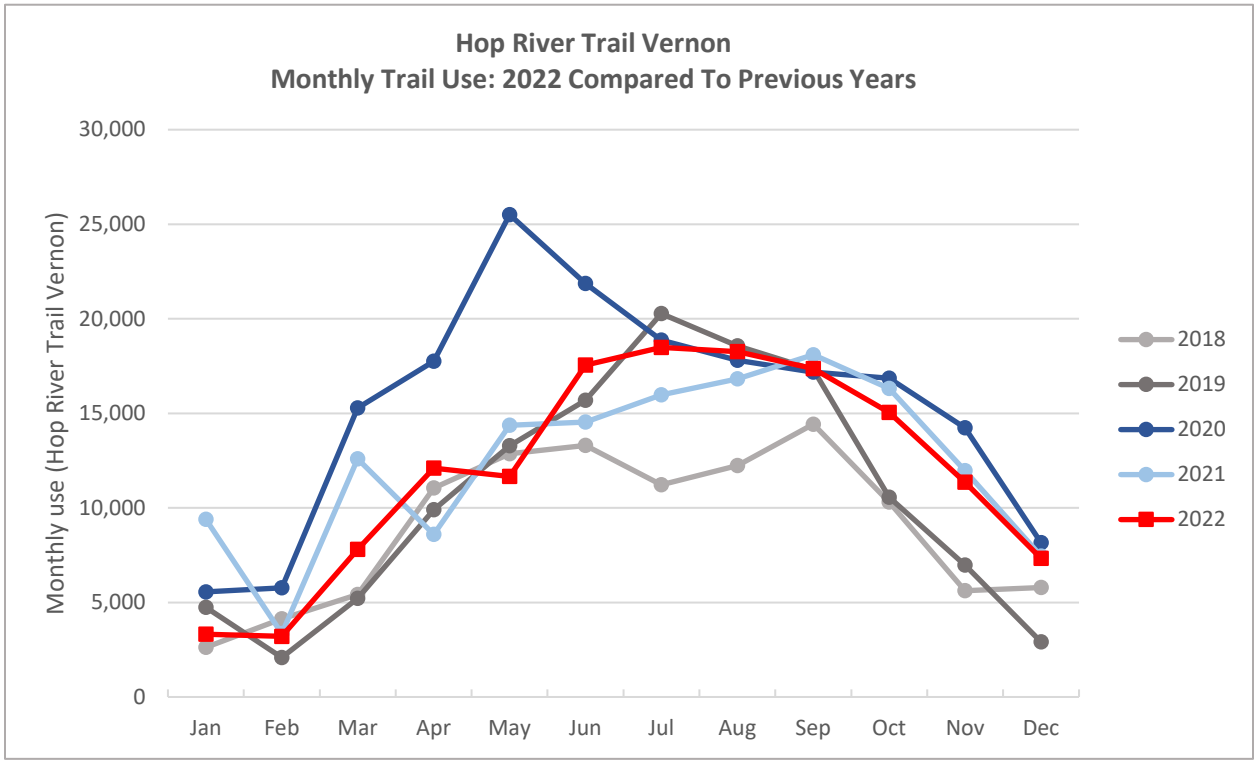

CTFastrack New Britain
Monthly Trail Use: 2022 Compared to Previous Years
Monthly use (CT Fastrack new Britain)
6,000
5,000
4,000
3,000
2,000
1,000
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
2018
2019
2020
2021
2022

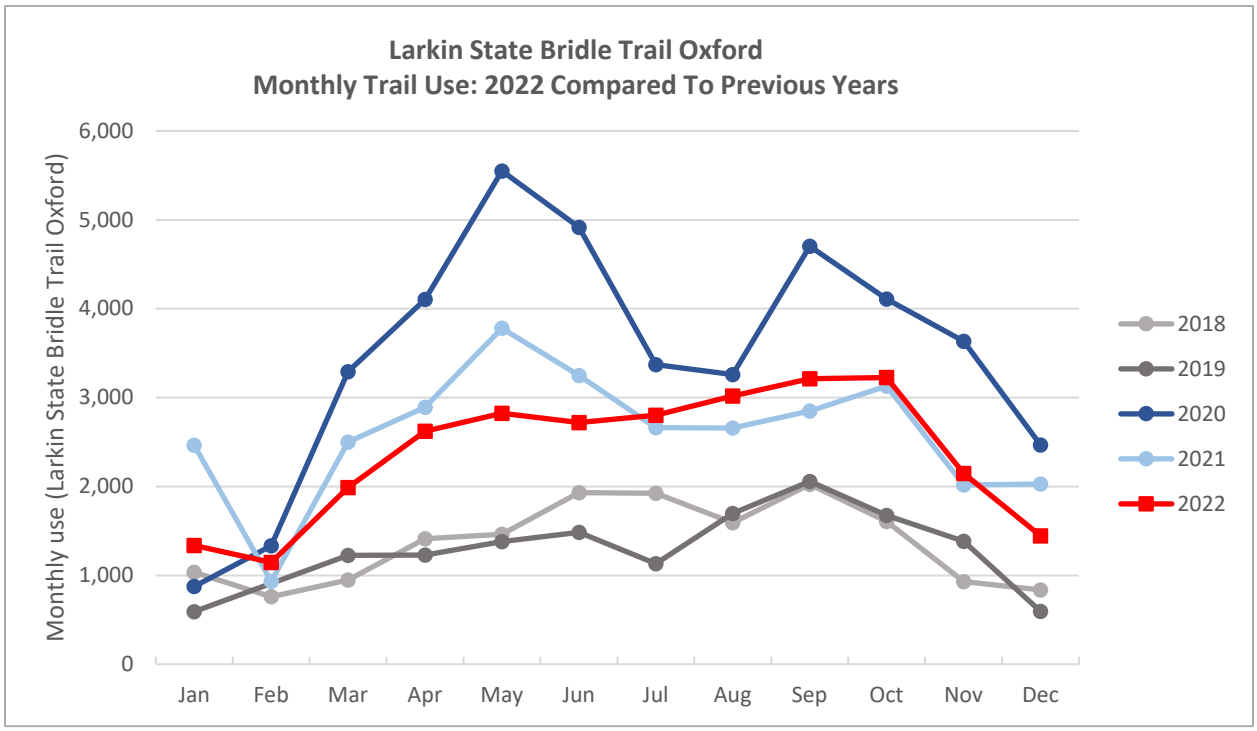

Farmington Canal Heritage Trail - Cheshire
Monthly Trail Use: 2022 Compared to Previous Years
Monthly use (FCHT CHeshire)
40000
35000
30000
25000
20000
15000
10000
5000
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
2018
2019
2020
2021
2022

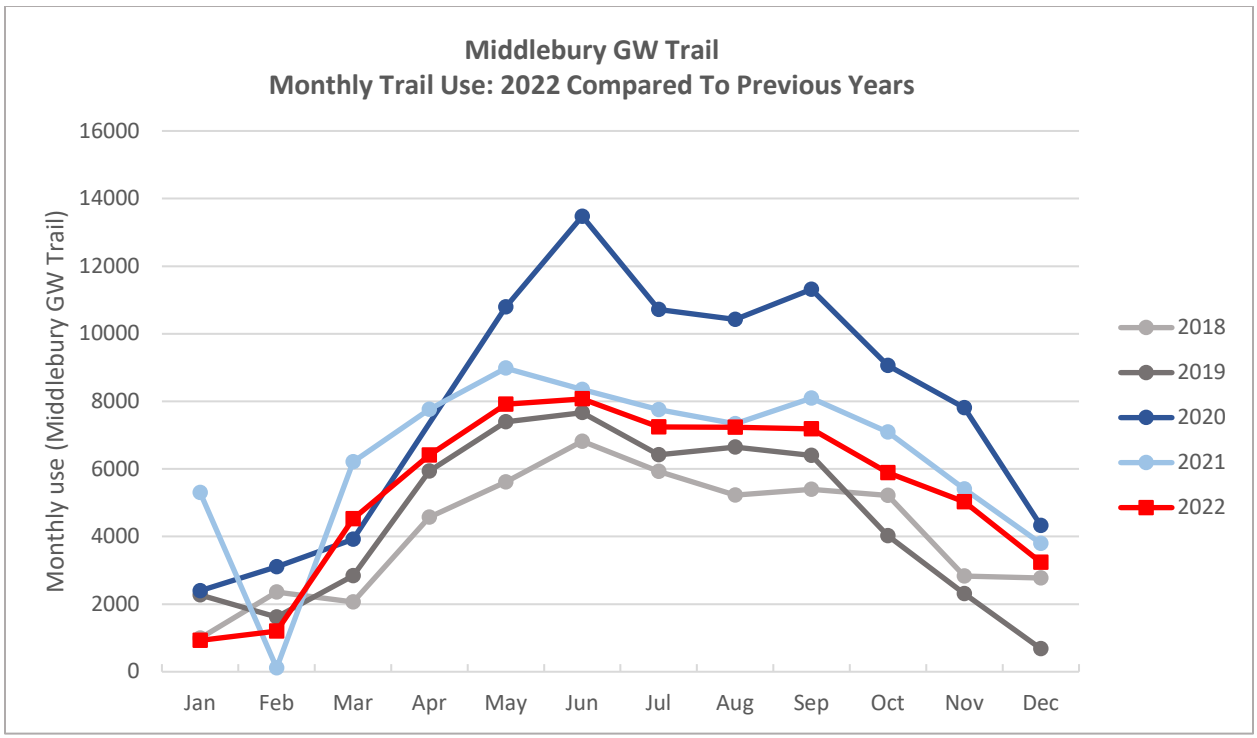

Farmington Canal Heritage Trail - Hamden
Monthly Trail Use: 2022 Compared To Previous Years
Monthly use (FCHT Hamden)
25,000
20,000
15,000
10,000
5,000
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
2018
2019
2020
2021
2022

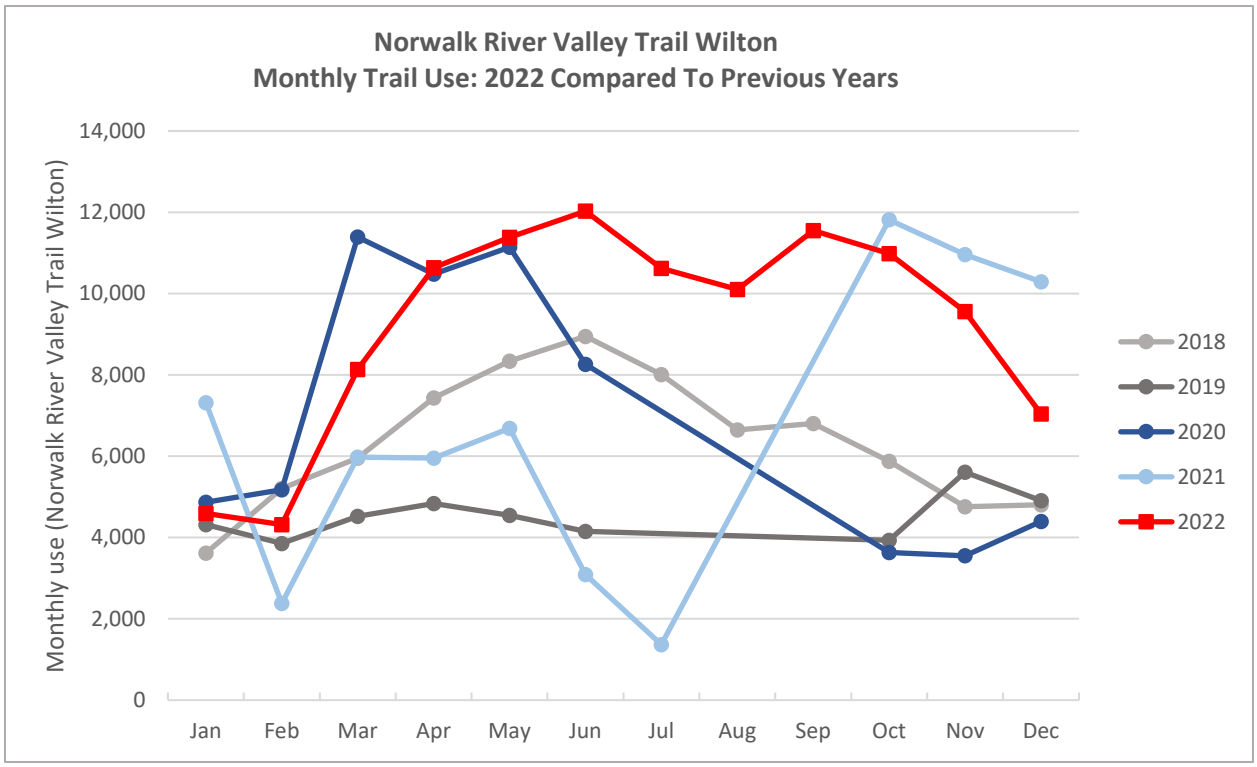

Farmington Canal Heritage Trail - New Haven
Monthly Trail Use: 2022 Compared To Previous Years
Monthly use (FCHT New Haven)
25,000
20,000
15,000
10,000
5,000
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
2018
2019
2020
2021
2022

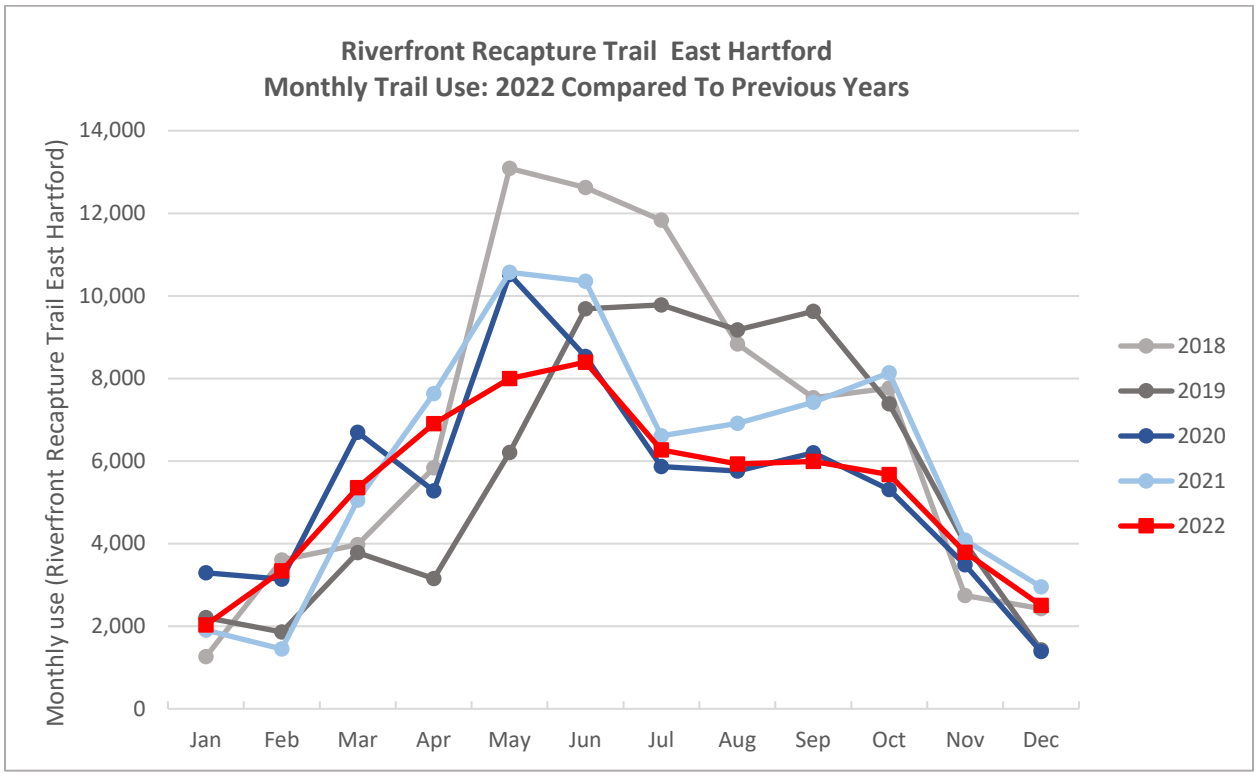

Hop River Trail Bolton
Monthly Trail Use: 2022 Compared To Previous Years
Monthly use (Hop River Trail Bolton)
20,000
18,000
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
2018
2019
2020
2021
2022

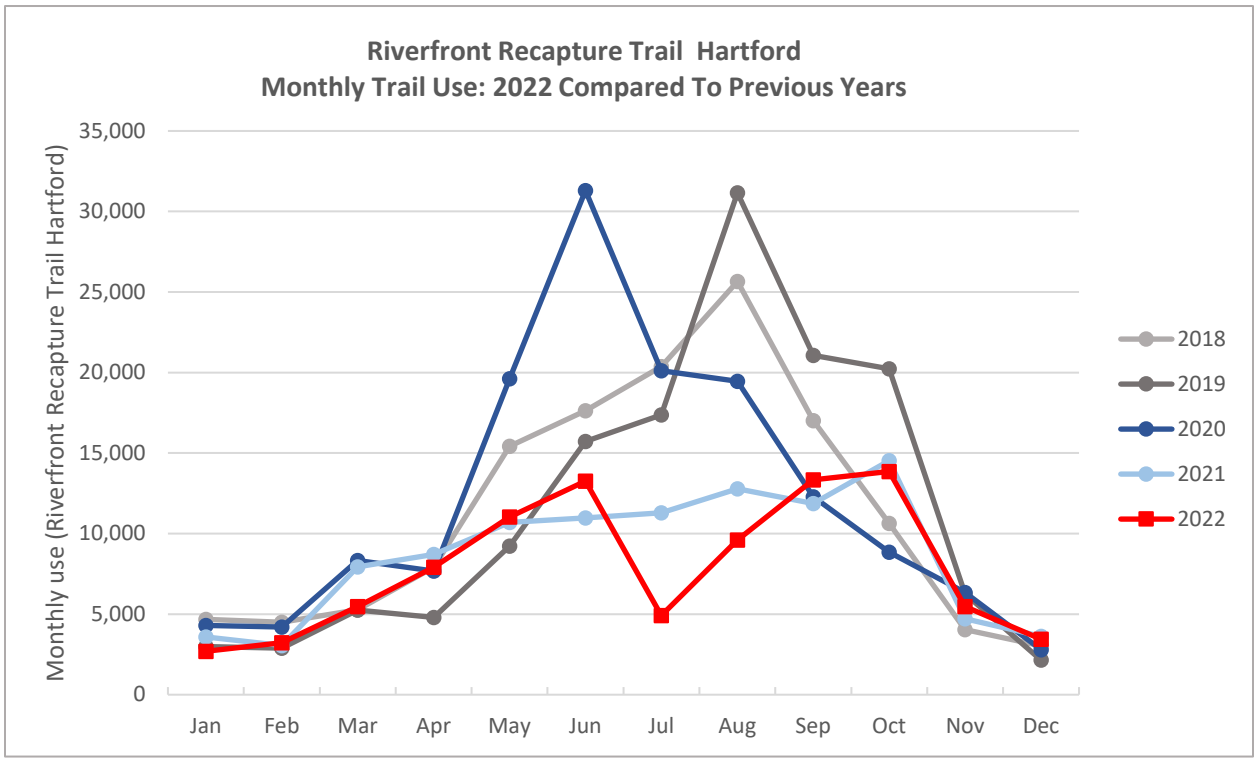

Hop River Trail Vernon
Monthly Trail Use: 2022 Compared To Previous Years
Monthly use (Hop River Trail Vernon)
30,000
25,000
20,000
15,000
10,000
5,000
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
2018
2019
2020
2021
2022

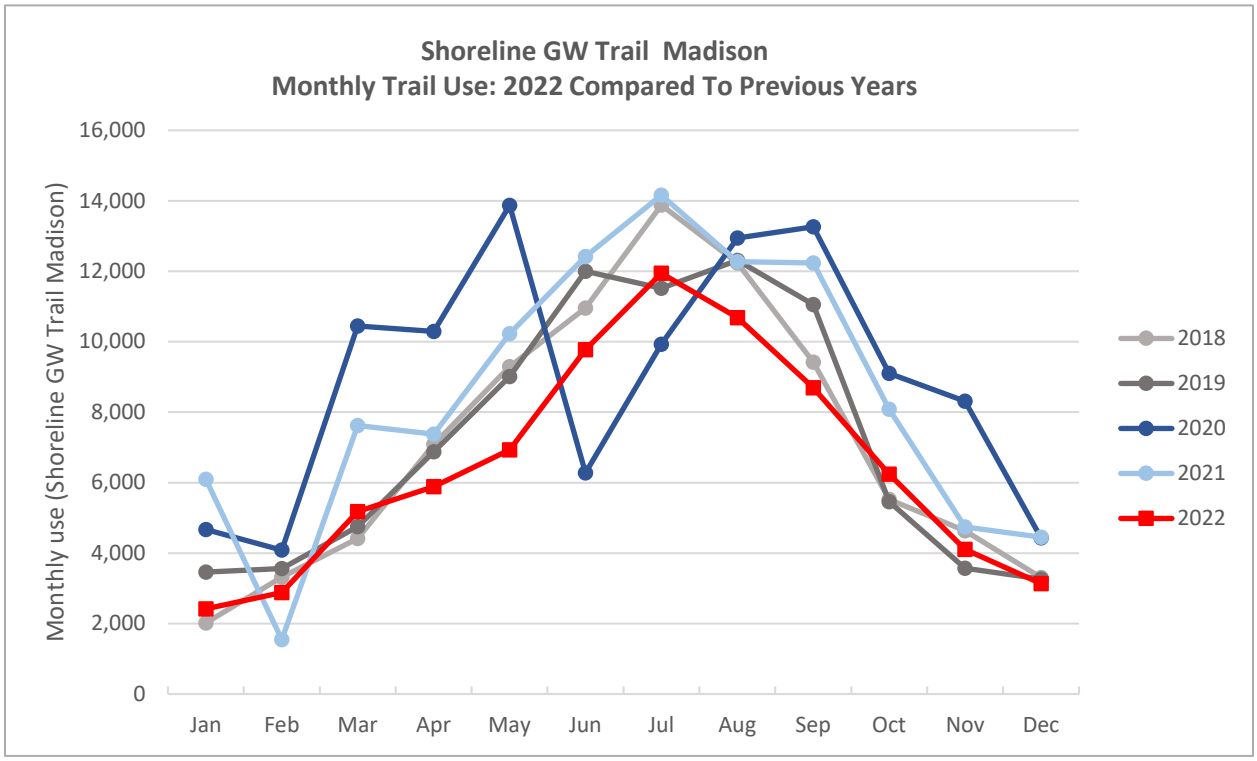

Larkin State Bridle Trail Oxford
Monthly Trail Use: 2022 Compared To Previous Years
Monthly use (Larkin State Bridle Trail Oxford)
6,000
5,000
4,000
3,000
2,000
1,000
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
2018
2019
2020
2021
2022

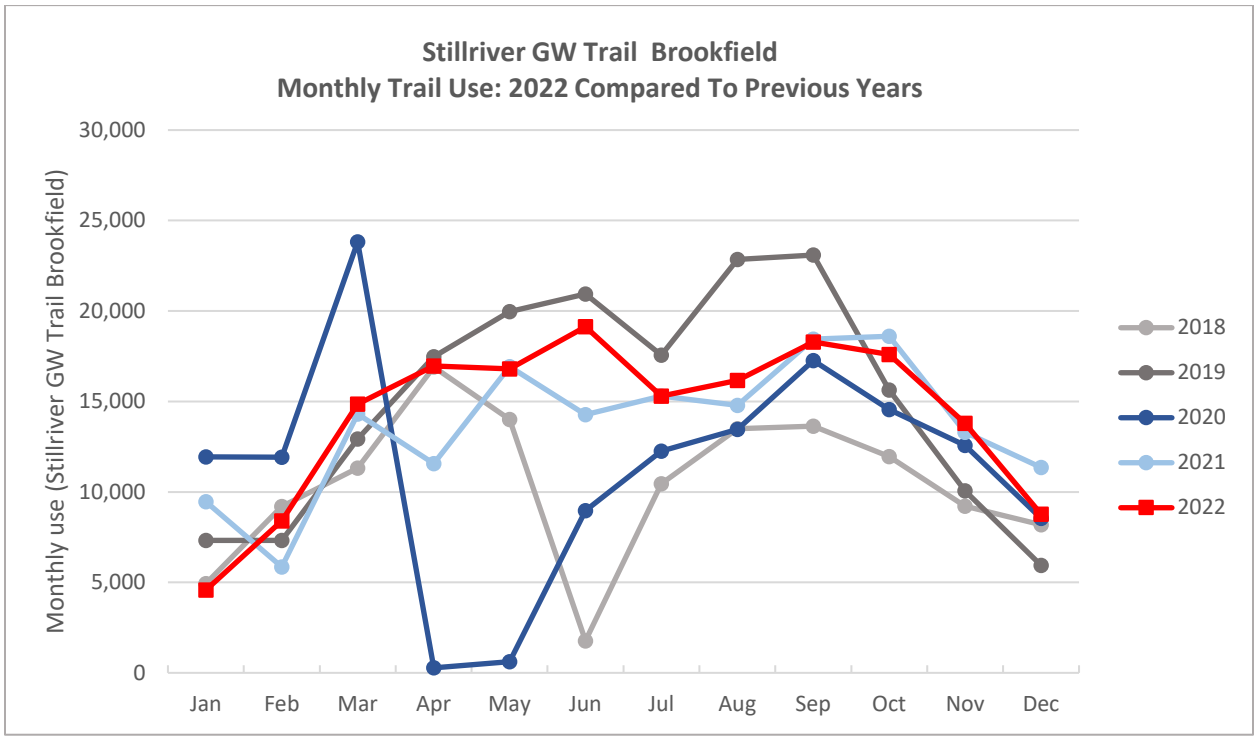

Middlebury GW Trail
Monthly Trail Use: 2022 Compared To Previous Years
Monthly use (Middlebury GW Trail)
16000
14000
12000
10000
8000
6000
4000
2000
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
2018
2019
2020
2021
2022

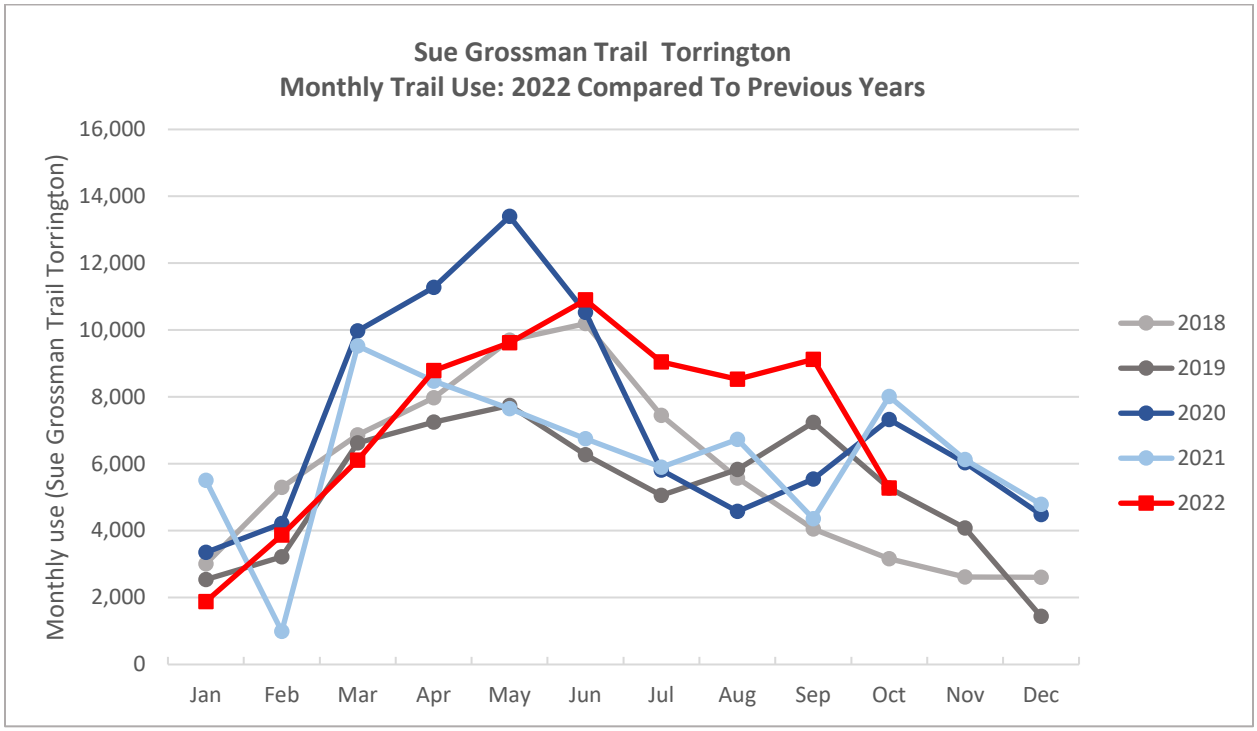

Norwalk River Valley Trail Wilton
Monthly Trail Use: 2022 Compared To Previous Years
Monthly use (Norwalk River Valley Trail Wilton)
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
2018
2019
2020
2021
2022


Riverfront Recapture Trail East Hartford
Monthly Trail Use: 2022 Compared To Previous Years
Monthly use (Riverfront Recapture Trail East Hartford)
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
2018
2019
2020
2021
2022


Riverfront Recapture Trail Hartford
Monthly Trail Use: 2022 Compared To Previous Years
Monthly use (Riverfront Recapture Trail Hartford)
35,000
30,000
25,000
20,000
15,000
10,000
5,000
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
2018
2019
2020
2021
2022


Shoreline GW Trail Madison
Monthly Trail Use: 2022 Compared To Previous Years
Monthly use (Shoreline GW Trail Madison)
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
2018
2019
2020
2021
2022


Stillriver GW Trail Brookfield
Monthly Trail Use: 2022 Compared To Previous Years
Monthly use (Stillriver GW Trail Brookfield)
30,000
25,000
20,000
15,000
10,000
5,000
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
2018
2019
2020
2021
2022


Sue Grossman Trail Torrington
Monthly Trail Use: 2022 Compared To Previous Years
Monthly use (Sue Grossman Trail Torrington)
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
2018
2019
2020
2021
2022