

Trail Usage Study.



**Little Miami State Park and
Little Miami Scenic Trail
2024**





3080 Exploration Avenue, Suite 640
Cincinnati, OH 45206

513.655.3981
www.tristatetrails.org

Trail Monitoring Report 2023-2024 Little Miami State Park and Little Miami Scenic Trail

About the Trail Monitoring Program

From 2019 to 2024, Tri-State Trails has partnered with the Friends of Little Miami State Park (FLMSP) and Great Parks of Hamilton County to monitor trail usage on the Little Miami Scenic Trail. The section of the Little Miami Scenic Trail monitored for this study extends from Beechmont Avenue in Hamilton County to Spring Valley in Green County. Great Parks of Hamilton County manages the Little Miami Scenic Trail from Beechmont Avenue to just north of Avoca Park, where the trail transitions to the Little Miami State Park, which is managed by Ohio Department of Natural Resources and supported by FLMSP. This study was prepared for FLMSP to document usage for both the Little Miami State Park and the Little Miami Scenic Trail as a whole.

Why We Count

The objectives of this Trail Monitoring Program are as follows:

- Utilize a standardized regional trail measurement methodology and framework for ongoing monitoring;
- Generate information about the trail network to be used by key stakeholders who are working to develop, manage, and obtain funding for trail network improvements, expansion, and connectivity;
- Use data to persuade state and regional officials to invest the capital and operating funds required to adequately restore and maintain the Little Miami State Park; and
- Document usage of Greater Cincinnati's regional trails in order to understand the impact of the trail network over time as connections are made and new trails are built.

FLMSP Technology and Methodology

Tri-State Trails utilizes passive-infrared pedestrian/bicyclist counting technology for this Trail Monitoring Program. Most of the counters do not differentiate between cyclists and pedestrians. Data are collected along the Little Miami Scenic Trail for the entire year at four locations:

- Loveland #2: North of Nisbet Park, Eco-Counter Pyro Post;

- Morrow #4: Veteran's Memorial Park, Eco-Counter Pyro Post;
- GPHC #4: Avoca Park, TRAFx counter / Eco-Counter MULTI Nature, managed by Great Parks; and
- GPHC #5: North of Beechmont Bridge using an Eco-Counter MULTI Nature, managed by Great Parks.

In December 2024, Great Parks upgraded the TRAFx counter at Avoca Park to Eco-Counter technology and added a new counting site near the Beechmont Bridge, both of which are MULTI Nature counters. These counters use an inductive loop embedded in the pavement to differentiate bicyclist and pedestrian users of the trail.

Additionally, Tri-State Trails staff rotates twenty-six Eco-Counter PyroBox counters in seven-day increments to collect a snapshot of usage at twenty-six locations along the Little Miami Scenic Trail corridor from Anderson Township to Spring Valley. The permanent counting sites are used as a reference to extrapolate the seven-day counts into three key metrics for the trail corridor: annual trail usage, Average Annual Daily Trail Traffic (AADTT), and Trail Miles Travelled (TMT).

FLMSP considers a typical "use" or "visit" to be one person travelling out and back from a trail access point. It is assumed that approximately 95% of users on the Little Miami Scenic Trail start from and return to the same trail access point. Therefore, it is common that users will be counted twice as they go out and back. The remaining 5% of users are assumed to utilize a part of the trail as one leg of their biking or walking/running route and they pass through in one direction only. Therefore, a factor of 0.525 is applied to the Little Miami State Park count numbers to calculate "trail usage."

Example:

After seven days, the total counts on one of the counters reads 6,342, so the total uses would be calculated as follows:

$$6,342 \times 0.525 = 3,329$$

A "section" of trail, for counting purposes, is a portion of trail bordered by significant trail access points at each boundary. Significant points are commonly parking lots for trail users but may include pedestrian-only access points and intersections with other trails. The presence of a trail road crossing without trail parking is usually not considered a significant trail access point. The significant access points are typically two to four miles apart. Counters are typically positioned at least 0.25 miles away from the access point, so data is not skewed by trail users congregating near the trailhead.

For 2023-2024, the entire trail in the Little Miami Scenic Trail is divided into thirty counting sections. Before partnering with Tri-State Trails, Friends of Little Miami State Park counted on twenty sections of the Little Miami State Park. In 2019, Tri-State Trails created five additional count locations within the Little Miami State Park and four additional sections on the Little Miami Scenic Trail in Great Parks of Hamilton County's jurisdiction. In 2022, Great Parks constructed the Beechmont Levee Bridge, connecting a significant gap between the Lunken Airport Trail and Little Miami Scenic Trail. A new permanent counter was placed on the bridge in 2023, and the counter collected a full year of data for the first time in 2024. The ten additional count locations chosen by Tri-State Trails are labeled as follows:

- GPHC # 1: 0.25 miles north of Clough Pike in Anderson Township
- GPHC # 2: Clear Creek Park
- GPHC # 3: Newtown Bridge
- GPHC # 4: Avoca Park
- GPHC # 5: Beechmont Levee Bridge
- TST # 1: South of the Arrowhead Apartments in Branch Hill
- TST # 2: Directly north of Miami Riverview Park
- TST # 3: Countryside YMCA Trail / Lebanon Spur
- TST # 4: 0.25 miles east of US-48
- TST # 5: 0.25 miles north of Oregonia

Overall Findings and Conclusion

Below are the data reported through this Trail Monitoring Program for 2024:

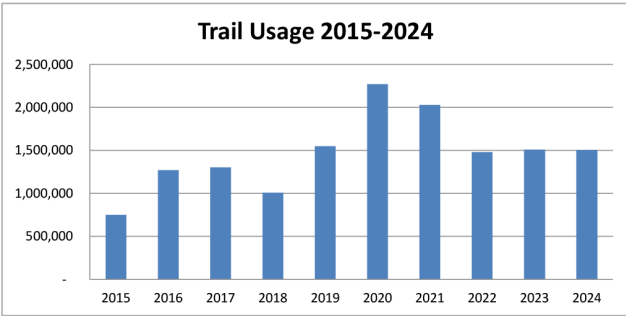
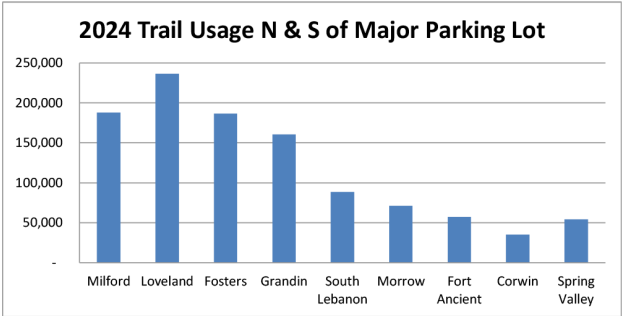
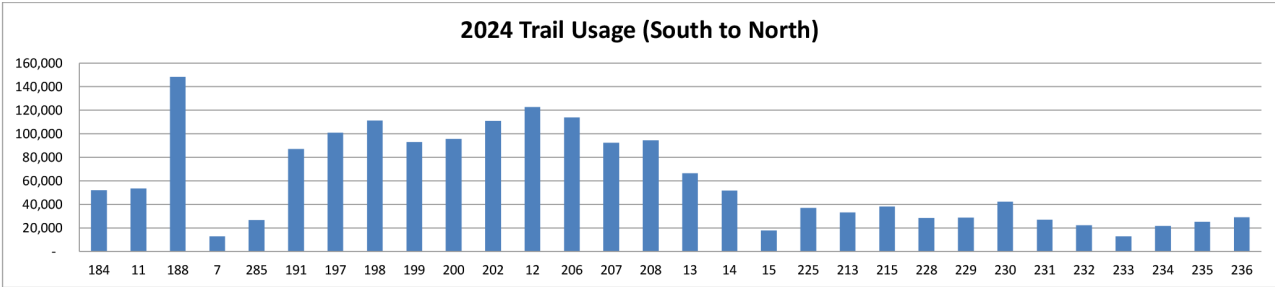
- Total Little Miami State Park Usage: 1,503,931 (down 0.34% from 2023)
- Total Little Miami Scenic Trail Usage: 1,797,219 (down 3.62% from 2023)
- Little Miami Scenic Trail Average Annual Daily Trail Traffic: 164 (down 7.08% from 2023)
- Little Miami Scenic Trail Trail Miles Traveled: 3,052,698 (down 5.75% from 2023)

Based on the analysis for 2024, trail usage on the 50.2 miles of Little Miami Scenic Park has decreased by 0.34% and by 3.62% on the entire stretch of the Little Miami Scenic Trail from Beechmont to Caesar Creek Park. Several factors could impact why trail usage is estimated to be down from 2023. For example, when short duration counts were collected along the trail in Hamilton County in early May, there had just been a large storm, which may have impacted trail usage. Most notably, however, Great Parks' TRAFx counter GPHC #4 in Avoca Park malfunctioned sporadically throughout the calendar year. Missing data were recreated using a negative binomial regression analysis, but due to numbers at nearby counter locations, the usage estimate at Avoca Park is believed to be lower than actual usage. This issue was resolved when Great Parks invested in a new trail counter at the site.

2024 Little Miami Scenic Trail
Trail Use Estimates

2024 Little Miami Scenic Trail Usage Estimates						
Counter Position Number	TST Counter #	Location	Week Counted	Total Count	52.5% Estimation	Extrapolated Count
Great Parks of Hamilton County 1	184	0.25 N of Clough Pike	May 9-May15	2,786	1,463	51,914
Great Parks of Hamilton County 2	11	Clear Creek Park	May 9-May15	2,874	1,509	53,554
Great Parks of Hamilton County 3	188	Newtown Bridge	May 1-May 7	5,397	2,833	148,428
Great Parks of Hamilton County 4	7	Avoca Park	All year	24,298	12,756	12,756
Great Parks of Hamilton County 5	285	Beechmont Bridge	All year	50,733	26,635	26,635
Milford 1	191	0.5 mi south of New Rd	May 9-May15	4,677	2,455	87,151
Milford 2	197	0.3 mi north of Milford	May 9-May15	5,411	2,841	100,829
Milford 3	198	Miamiville Bridge	May 9-May15	5,968	3,133	111,208
Milford 4	199	Beech Rd	May 17-May 23	5,038	2,645	93,099
TST 1	200	S Arrowhead Apartments	May 17-May 23	5,179	2,719	95,704
Loveland 1	202	1.5 mi south of Nisbett Park	May 17-May 23	6,004	3,152	110,950
TST 2	12	N of Miami Township Park	May 17-May 23	6,645	3,489	122,795
Loveland 2	206	0.75 mi north of Loveland	All year	216,815	113,828	113,828
Loveland 3	207	0.75 mi south of Fosters	May 25-May 31	7,258	3,810	92,386
Loveland 4	208	1 mi north of Fosters	May 25-May 31	7,409	3,890	94,308
Morrow 1	13	0.75 mi north of Grandin	May 25-May 31	5,222	2,742	66,470
Morrow 2	14	0.5 W of 48	June 3-June 9	3,913	2,054	51,839
TST 3	15	Lebanon Spur	May 25-May 31	1,393	731	17,731
TST 4	225	0.25 E of 48	June 3-June 9	2,791	1,465	36,975
Morrow 3	213	1 mi south of Morrow	June 3-June 9	2,504	1,315	33,173
Morrow 4	215	0.5 north of Morrow	May-December	72,648	38,140	38,140
Corwin 1	228	0.2 mi south Ft Ancient	June 3-June 9	2,145	1,126	28,417
Corwin 2	229	0.3 mi north Ft Ancient	June 3-June 9	2,176	1,142	28,827
Corwin 3	230	0.5 S of Oregonia	June 11-June 17	2,930	1,538	42,356
TST 5	231	0.25 N of Oregonia	June 11-June 17	1,858	975	26,859
Corwin 4	232	1 mi south of Corwin	June 11-June 17	1,547	812	22,363
Spring Valley 1	233	North of Corwin	June 11-June 17	880	462	12,721
Spring Valley 2	234	2.5 mi north New Burl Rd	June 11-June 17	1,495	785	21,612
Spring Valley 3	235	0.5 mi south of Spring Val	June 19-June 25	1,248	655	25,187
Spring Valley 4	236	Hedges Rd	June 19-June 25	1,437	754	29,001

Total	460,679	241,857	1,797,219
Total FLMSP	374,591	196,660	1,503,931



Trailhead	Total Count	Count Sites
Milford	187,980	191+197
Loveland	236,623	12+206
Fosters	186,695	207+208
Grandin	160,779	208+13
South Lebanon	88,814	14+225
Morrow	71,313	213+215
Fort Ancient	57,244	228+229
Corwin	35,084	232+233
Spring Valley	54,188	235+236

Year	Trail Usage
2015	750,734
2016	1,271,677
2017	1,302,402
2018	1,010,056
2019	1,548,784
2020	2,271,922
2021	2,029,838
2022	1,481,651
2023	1,509,026
2024	1,503,931