



2021 TRAIL COUNT REPORT

HIGHLIGHTS

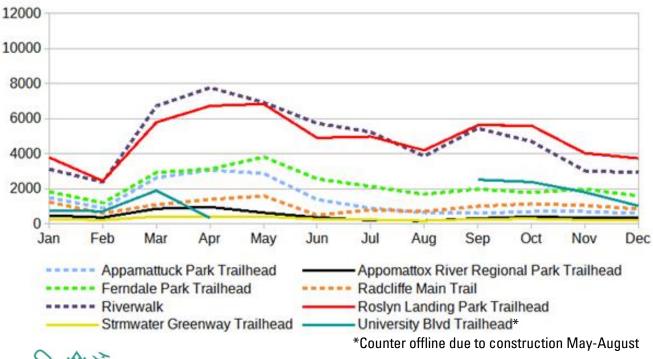
Friends of the Lower Appomattox River (FOLAR) is excited to share our second, annual trail count report from trails in all 6 jurisdictions along the lower Appomattox River. FOLAR's automated trail counters tallied over 191,000 trail counts on the Appomattox River Trail in 2021 - an average of 3,673 per week. The most active trails tend to have ample parking, proximity to population centers, and scenic river views. As trail segments are improved and become more connected, the lesser used trails will likely see more activity.

MOST ACTIVE TRAILS

- 1. Hopewell Riverwalk pg. 15
- 2. Roslyn Landing Park pg. 16
- 3. Ferndale Park pg. 12

Trail activity increases on the weekend, indicating primarily recreational users. Throughout the week, peaks tend to occur in the late afternoon. It seems like the pandemic lock down measures played a role in increased trail use in 2020, a trend that is shared state wide.

Monthly Trail Counts 2021



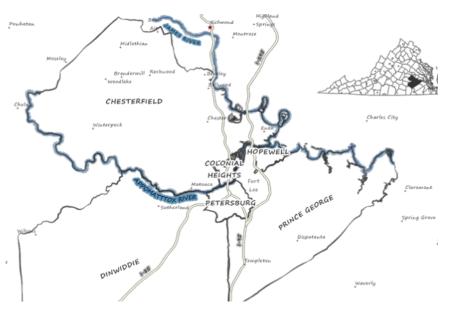


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APPOMATTOX RIVERTRAIL | 2021TRAIL COUNT REPORT

FOLAR AND THE APPOMATTOX RIVERTRAIL

Friends of the Lower Appomattox River (FOLAR) is the only regional organization working collaboratively with six jurisdictions and the community to develop, maintain and protect a 20+mile regional blueway-greenway corridor along the lower Appomattox River. As part of their work, FOLAR is leading the development of the 25-mile long bicycle-pedestrian Appomattox River Trail. FOLAR also devotes resources to protecting water quality and land conservation, as well as promoting economic strengthen and healthy lifestyles.



The Lower Appomattox River corridor is located in Central Virginia in a region known as the Tri-Cities area. The river is a state-designated Scenic River that flows through the Cities of Colonial Heights, Hopewell and Petersburg and the Counties of Chesterfield, Dinwiddie and Prince George. **The population for the trail service area is approximately 210,000** (does not count the northern portion of Chesterfield) and the median income for the region ranges from \$38,293 to \$81,641. The region is racially and ethnically diverse. Many areas are considered socially vulnerable with higher rates of poverty, single income households, and high rates of obesity and other preventable diseases.

The completed Appomattox River Trail will serve to reduce these vulnerabilities by increasing access for recreation and daily exercise as well as provide a safe and alternative form of transportation for the region. The completed bicycle-pedestrian trail will transform the quality of life for the region by attracting new jobs and employees, generating more sales for local businesses and increasing home values. And, this investment will increase civic engagement, encourage neighbors to meet, and improve public health, environmental protection and conservation.

Protection and conservation of the Appomattox River corridor is critical for protecting the water quality of the river, a key source of drinking water for the region. The river appears on the 303D Impaired Waters list, and the entire corridor is a priority in the Governor's Conserve VA initiative.

As envisioned, the Appomattox River Trail will extend from Lake Chesdin to the confluence with the James River at City Point, in Hopewell Virginia. The trail development is being guided by the regional **Appomattox River Trail Master Plan and Signage Plan** completed in 2017, funded by The Cameron Foundation. Approximately 10 miles of this trail are on the ground today.

ABOUTTRAIL COUNTS

This report presents trail use information and analysis from data collected from the automated TRAFx counter system which has been installed at eight Appomattox River Trail segments. The data is gathered and analyzed by FOLAR volunteers and program partners.

FOLAR collects trail data for several important reasons. First, this data provides accurate metrics on how much trail use, or trail traffic, each trail section is receiving. This information is useful for Parks & Recreation Departments to understand use trends for maintenance purposes and understand the demand for trails for planning purposes. We can get a better understanding of what types of trails are most popular based on their use and what type of volume to expect in other areas.

For public health determinations, this data is helpful to understand how and where the community is physically active and if that trend increases or decreases based on other efforts. This data can help communicate the positive impacts trails have on the general health of a community. As FOLAR continues to collect yearly data, we can better understand trends about trail use including the most active time of day, season, or other events that might impact trail use.

The data presented in this report provides information about the overall traffic on the Appomattox River Trail. It does not report on specific numbers of trail users or visitors, which are variables that are difficult to isolate using automated counters. For example, in most cases, people will pass by a trail counter at least twice when visiting a trail but could pass a counter multiple times. It is also possible a person may enter a trail segment at one point and exit at another point, thereby only passing the counter once.

The TRAFx counter system was donated to FOLAR by the Crater Health District. The Crater Health District works with partners to foster healthy communities through disease prevention & control, health promotion, environmental protection and emergency preparedness & response. Improving and promoting physical activity through biking and walking is one of the local health district's priorities.

Through grant funding, the Crater Health District partnered with FOLAR to provide Appomattox River Trail signage throughout the community and purchased 12 TRAFx trail counters. FOLAR installed the counters in the fall of 2019 to collect trail use data along the Appomattox River Trail and will continue to install additional counters as the trail expands. The Crater Health District and FOLAR purchased the same brand of counters that are used throughout the trail network in Chesterfield County, including counters installed along portions of trail along the Appomattox River. Data from Chesterfield County's counters is included in this report. FOLAR partners with many organizations and stakeholders to accomplish the vision of the Appomattox River Trail, and we are so grateful for their ongoing support.

ABOUTTRAFX INFRAREDTRAIL COUNTERS

FOLAR has installed seven <u>TRAFx infrared trail counters</u> at trailheads along the Appomattox River Trail. Chesterfield County maintains a network of TRAFx counters throughout the county and data from the John J. Radcliffe Conservation Area is included in this report.

TRAFx trail counters are the size of a deck of cards, with an attached infrared sensor at the end of a short cable. The assembly is mounted in a small electrical circuit breaker box, providing some environmental and tamper protection. The boxes are mounted on posts adjacent to trails, at a distance

of approximately ten feet from the trail. Trail counters are installed at slightly above waist height. The sensor works by detecting the infrared wavelength that humans emit. It collects no personally identifiable information.

TRAFx trail counters have a tendency to undercount people walking past, both because the counters have a 30 second delay between triggering (counting) events and because they recognize one person walking by and multiple people walking abreast as a single count. In order to gather more specific data, and to provide a measure for calibrating the data logged by the TRAFx counters, FOLAR organizes volunteer trail counts twice each year. TRAFx counter data is collected once each month by volunteers. This monthly collection helps ensure that any counter malfunction issue can be addressed quickly.

The eight trail counters included in this report, identified east to west, are located at:

- 1. Hopewell Riverwalk at City Park
- 2. Riverside Greenway (Hopewell)
- 3. Appomattox River Regional Park (Prince George County)
- 4. Roslyn Landing Park Trailhead (Colonial Heights)
- 5. Appamatuck Park Trailhead (Colonial Heights)
- 6. University Boulevard Trailhead (Petersburg)
- 7. Ferndale Park Trailhead (Dinwiddie County)
- 8. John J. Radcliffe Conservation Area (Chesterfield County)

Note: Detailed analyses of trail activity observed at each of these locations appear later in this report by alphabetical order on pages 10-17.



FOLAR volunteers installing a TRAFx counter, from left to right, Craig Reynolds and Mike Golden

FOLAR VOLUNTEERTRAIL COUNT PROGRAM

FOLAR organizes a volunteer trail count program which supplements the data from the TRAFx system. The volunteer count program is modeled on the National Bicycle and Pedestrian Documentation Project. Trail count events occur in May and September each year. Each event includes counting on a Thursday and a Saturday, both in the morning and afternoon. FOLAR asks volunteers to sit alongside the trail at specific location and count everyone who passes by in a 2-hour window on a standard form.

This volunteer trail count allows collection of more detailed information that the TRAFx counters do not collect such as the type of trail user (walker or bicyclist) and gender. FOLAR is also able to observe other details about trail users that help understand use trends. Volunteer count data provides details such as, whether the trail is visited by families or individuals; it is used by people pushing strollers or using a wheelchair; or if the trail is being used to access a location for another activity like fishing. These observations and stories that we gather from volunteers help us better understand who is using the trail and why they use the trail. We count at 6 of the sites included in this report.

			M	lorning Star	ndardized Screenlir	ne Cou	int Form
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Weather Co Cemperatu	onditions (circl re: 73 °	le one): s	Station #: unnypartly ne period? If ye	cloudy clo	Time Period: 10 gast	12:00	Examples of notes/observations: Strollers Wheelchairs Rollerblading /skateboards Kayaks/paddleboards Fishermen
Does your l	ocation have r	more than on		Yes / No destrians	Other	Pets	Notes/Observations
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10:00- 10:15			HTI	++++1			· most people are traviling in grows
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11:30- 11:45			11	**************************************			· More family activities across and above
11:45- 12:00			t[111	Body no stroller		e More fanilles
TOTAL			21	177		1	

FOLAR relies on volunteers (pictured below) to verify the automated TRAFx infrared counters twice a year using a standardized form (shown left) and process. Note the sturgeon sighting reported here at the Hopewell Riverwalk!

Are you interested in volunteering with FOLAR?
Sign up for our newsletter!









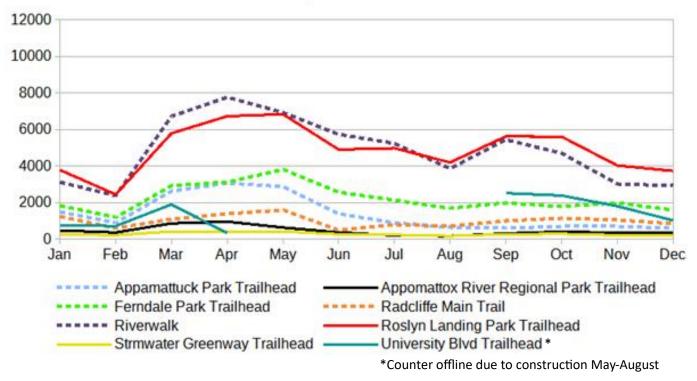
KEY FINDINGS

This section provides key findings for the overall trail counter network and is followed by detailed reports for each trail count location. All trails allow bicycle traffic except the Hopewell Riverwalk. There is not enough data from volunteer counts at this time to provide statistics that separate walkers from bicyclists.

Trail use varies by type — Differences in use patterns among trails are likely due to the presence of a variety of amenities and conveniences including availability of ample parking, proximity to population centers, views of and access to the river, and the accessibility of the trail itself, for example paved versus rustic. The two most frequently used trails, the Hopewell Riverwalk and the trail at Roslyn Landing, have hard surfaces. However, "rustic" cannot explain all differences in trail use. The popular Ferndale trail (heavier use) and the ARRP trail (lighter use) are both rustic. More analysis is needed here.

Trails were most popular in the spring - Monthly patterns of activity, shown below, demonstrate that trail use increased substantially in the spring, dips a little during the heat of the summer and increases again in the fall. Overall trail counts are lower in the spring of 2021 over 2020, likely due to the development of COVID-19 vaccines and the return to "normal". This 2020 peak in trail use was seen state and nation wide. In the future we expect year-over year data to provide more insight.

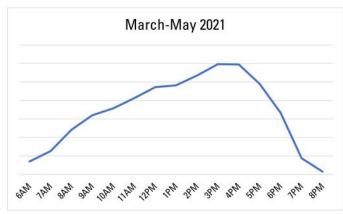
Monthly Trail Counts 2021

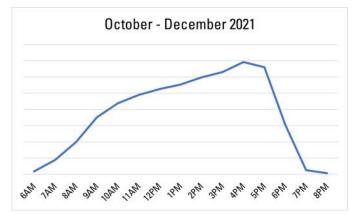


KEY FINDINGS CONTINUED

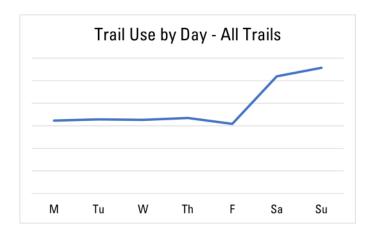
Afternoons are popular – Hourly use statistics on all trails clearly show active afternoon use. The charts below show average hourly statistics for the second and fourth quarter of 2021. (Excluding University Blvd Trailhead because of construction.)

Trail Use by the Hour - All Trails





Weekends are popular – Daily use statistics on the eight trails clearly show a preference towards weekend use, as can be seen in the chart to the right. Averages in this chart represent trail use for the entire year. In this period, on average, nearly twice as many people are on the trails on a Sunday as on a Thursday.



FUTURETRAIL COUNT REPORTS & TRAIL EXPANSION EFFORTS

This report will be produced by FOLAR annually to track trail use and analyze trends. New counters will be installed as new trails sections open or conditions are improved. Information collected through the volunteer trail count program will be incorporated into this report.

In 2021, there was one major infrastructure improvement to the system. The University Boulevard Trailhead in Petersburg was improved with a new riverfront overlook and 1/3 mile of trail was paved to the west (completed August 10, 2021).

Several trail and bicycle infrastructure improvement projects are fully funded and under design. FOLAR and local partners will evaluate which projects should have new TRAFx counters installed or where new volunteer trail counts should occur. Projects include the extension of the Hopewell Riverwalk another 1/3 mile to connect to the Hopewell City Marina (construction pending due to upgrades at the

FUTURETRAIL COUNT REPORTS & TRAIL EXPANSION EFFORTS (CONTINUED)

water plant). In addition, a network of bike lanes will be installed throughout Hopewell, some of which are along the route of the Appomattox River Trail. In Colonial Heights, the trail at Roslyn Landing Park will extend another 1/4 mile to the east. In Petersburg, funding has been secured to construct the Fall Line Trail to Chester (an 8-mile section of trail, including a bridge over the Appomattox River) and extend the Appomattox River Trail 1/3 mile east through Patton Park and 1/3 west past the Battersea Bridges. In addition to these physical infrastructure improvements, there are several land acquisition and park and trail master planning efforts underway.

Developing the Appomattox River Trail is a regional effort that will take many years to complete. It is the community's vision to develop this world class trail, and it will take many partners, including private, public and nonprofit, coming together to bring the vision alive. Efforts like this trail count report show the importance of this infrastructure to our community.

The members and staff of FOLAR sincerely thank the volunteers who put in countless hours on the trail and at the computer to make this program possible.

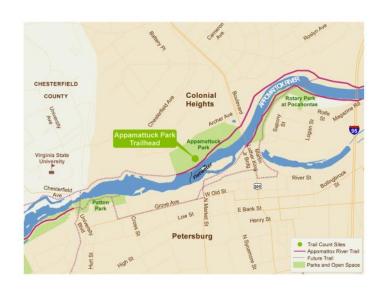
INDIVIDUAL SITE ANALYSES

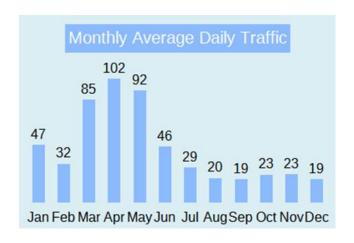
The eight trail counters included in this report, in alphabetical order, are described in detail on the following pages:

- 10. Appamatuck Park Trailhead (Colonial Heights)
- 11. Appomattox River Regional Park (Prince George County)
- 12. Ferndale Park Trailhead (Dinwiddie County)
- 13. Hopewell Riverwalk at City Park
- 14. John J. Radcliffe Conservation Area (Chesterfield County)
- 15. Riverside Greenway (Hopewell)
- 16. Roslyn Landing Park Trailhead (Colonial Heights)
- 17. University Boulevard Trailhead (Petersburg)

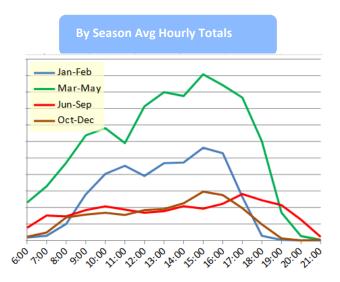
Appamatuck ParkTrailhead (Colonial Heights)

The Appamatuck Park trail segment in Colonial Heights was completed in September 2020. The trail is paved and extends 1.8 miles eastward to the Roslyn Landing Trailhead. This trail extension provides not only safe walking for the western portion of Colonial Heights, but also a safe crossing under the MLK Bridge a connection to Roslyn Landing Park. In addition, this trail is proposed to extend west and will connect with the future Fall Line, a proposed 42 mile trail from Petersburg to Ashland.









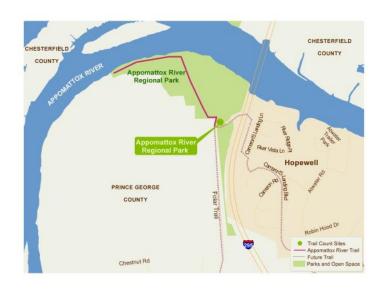
		ву-ра					
	М	Tu	W	Th	F	Sa	Su
Jan-Feb	33	42	45	38	28	57	35
Mar-May	93	94	76	88	71	107	122
Jun-Sep	22	25	29	32	28	31	32
Oct-Dec	23	26	29	21	15	16	23

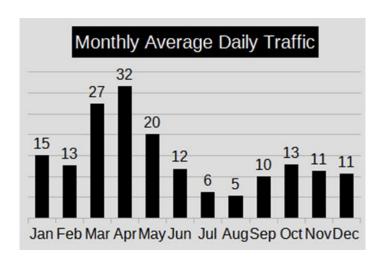
Total 2021 Traffic

16,374

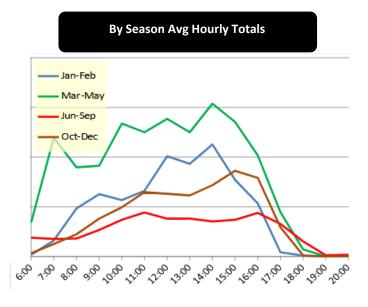
Appomattox River Regional Park (Prince George)

Appomattox River Regional Park is located in Prince George County, adjacent to Interstate 295. Over 3 miles of rustic (not paved) trails and several loop options are available within the park. The trail counter is located at the trailhead of the park trail system. The trail features exercise stations, and the park includes a pavilion, restrooms and direct access to the river, including an observation deck and a canoe/kayak launch. The trailhead is located near the Riverside Regional Jail.







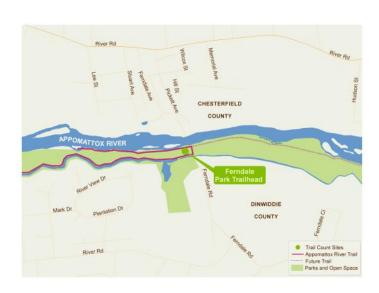


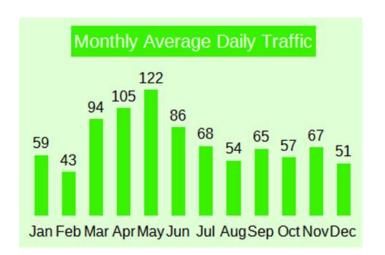
	_ E						
	M	Tu	W	Th	F	Sa	Su
Jan-Feb	9	11	12	12	11	19	22
Mar-May	21	24	15	24	20	42	39
Jun-Sep	4	7	6	8	7	13	14
Oct-Dec	10	10	12	10	11	11	17

Total 2021 Traffic 5,332

Ferndale ParkTrailhead (Dinwiddie)

Ferndale Park is a historic park site located in Dinwiddie County, just south of the Village of Matoaca in Chesterfield County. A historic shipping canal traverses the park. Amenities include a playground, numerous picnicking areas, and river access for fishing, and kayak and canoe launching. A hiking trail along the canal extends 1.5 miles from the trailhead in Ferndale Park westward to the historic abutment dam. This trail is not paved, but is generally flat and accessible. A master plan is being developed for this park and trail system.







By Season Avg Hourly Totals — Jan-Feb — Mar-May — Jun-Sep — Oct-Dec — Oct-Dec

		by buy / by scuson Abis						
	М	Tu	W	Th	F	Sa	Su	
Jan-Feb	26	46	80	48	29	76	52	
Mar-May	104	91	82	96	71	146	159	
Jun-Sep	57	54	51	45	56	97	119	
Oct-Dec	38	35	47	48	45	95	101	

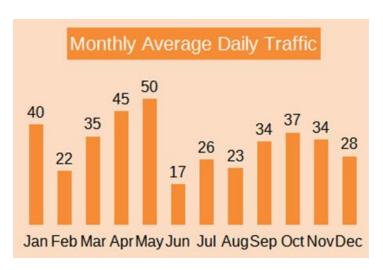
By-Day / By-Season ADT

Total 2021 Traffic 26,487

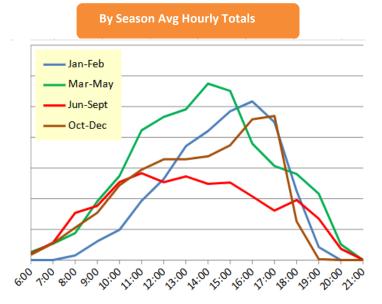
John J. Radcliffe Conservation Area (Chesterfield)

The John J. Radcliffe Conservation Area begins just below the Brasfield Dam at Lake Chesdin and extends nearly 2 miles downstream, to a point across the river from the western extent of the Ferndale Trail. The conservation area features 2.8 miles of trails, ample parking, launch areas for non-powered boats, a picnic area and fishing access. The site is mostly wooded. The trail with the counter is not paved, but is flat and a generally accessible surface of stone dust.









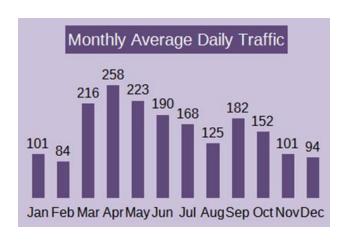
	P)	by-Day / by-Season ADTS						
	М	Tu	W	Th	F	Sa	Su	
Jan-Feb	20	25	27	23	20	64	38	
Mar-May	39	35	33	29	32	66	74	
Jun-Sep	27	18	16	21	23	43	44	
Oct-Dec	20	27	28	29	31	41	54	

Total 2021 Traffic 11,923

Hopewell Riverwalk at City Park

The Hopewell Riverwalk originates in Hopewell's City Park and extends westward approximately 1/3 mile. At high tide the wooden walkway crosses over water, providing a unique walking experience. The trail counter is located at the eastern end of the walkway. The Riverwalk will be extended to the Hopewell City Marina in the future (construction pending due to upgrades at the water plant). The Hopewell Riverwalk received a Governor's Environmental Excellence Award in 2020.







By Seaso	on Avg Hourly Totals
Jan-Feb — Mar-May — Jun-Sept — Oct-Dec	
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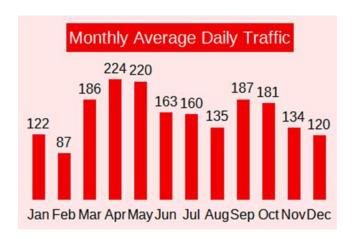
	E	By-Day / By-Season ADTs								
	M	Tu	W	Th	F	Sa	Su			
Jan-Feb	54	104	112	94	67	125	91			
Mar-May	215	226	180	201	175	301	329			
Jun-Sep	139	136	138	143	137	259	214			
Oct-Dec	99	85	115	112	116	137	146			

Total 2021 Traffic 57,723

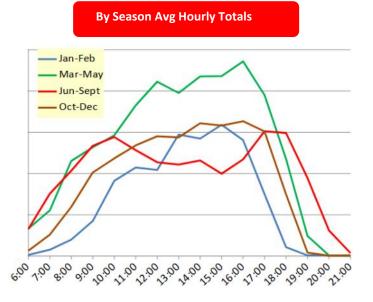
Roslyn Landing ParkTrailhead (Colonial Heights)

The Roslyn Landing Trailhead is a paved trail that extends westward 1.8 miles to the new Appamatuck Park Trailhead. The Roslyn Landing trail counter is located along the path at its east end. Roslyn Park has a large parking area, a boat launch, a small dock and a picnic pavilion. The trail is used by bicyclists as well as walkers. Funding has been secured to extend the trail eastward 1/4 mile.









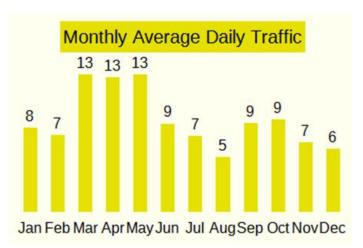
		By-Da	5				
	М	Tu	W	Th	F	Sa	Su
Jan-Feb	64	111	100	110	79	158	109
Mar-May	178	222	166	189	158	281	279
Jun-Sep	152	162	131	146	129	197	215
Oct-Dec	129	117	122	147	119	188	196

Total 2021 Traffic 58,544

Riverside Greenway Trailhead (Hopewell)

The Riverside Greenway Trail originates at the Hopewell City Marina and extends southward approximately 1/3 mile to the Riverside Park. The trail is gravel and has educational signage and many observation waysides explaining the stream restoration project that runs alongside the trail. The trail counter is located at the northern end of the trail.







By Season Avg Hourly Totals Jan-Feb Mar-May Jun-Sept Oct-Dec Oct-Dec

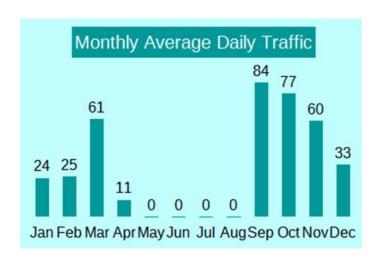
	М	Tu	W	Th	F	Sa	Su
Jan-Feb	5	6	6	8	7	11	11
Mar-May	12	13	11	13	12	14	17
Jun-Sep	6	6	7	7	5	10	11
Oct-Dec	7	4	5	5	7	9	13

Total 2021 Traffic 3,252

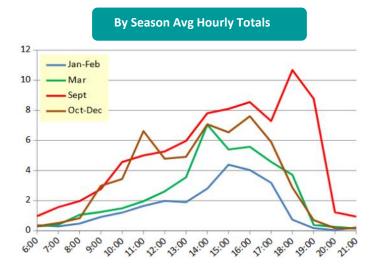
University Boulevard Trailhead (Petersburg)

University Boulevard Trailhead begins on the west side of University Blvd in Petersburg, just south of Virginia State University and Campbell's Bridge. The trail is paved for 1/3 mile and extends another 2/3 mile west. The paving project was completed in the summer of 2021. Patton Park is across University Blvd to the east. The planned Fall Line Trail will intersect the Appomattox River Trail at the University Blvd Trailhead and Patton Park. Funding has been secured to construct the Fall Line to Chester and extend the Appomattox River Trail 1/3 mile east through Patton Park and 1/3 west past the Battersea Bridges.









F Su Tu Th Sa Jan-Feb 19 31 27 25 17 28 26 28 47 Mar 32 37 45 56 Sep 76 45 71 119 44 Oct-Dec 48 106

By-Day / By-Season ADTs



*Not a full year of data. Counter off during construction May-Aug.