

September 2021

Bike Ped Count Project Report



**Yearly Count of Bike and Pedestrian Activity
in Richmond, Virginia**



RICHMOND CITY
HEALTH DISTRICT

HENRICO COUNTY
HEALTH DISTRICT

About Bike Ped Counts

Bike Ped Counts (BPC) is an annual count of bicycle and pedestrian activity across Richmond City streets and major trails. Bike Ped Count 2021 occurred on May 11th – 13th and September 14th – 16th. The second week in September is proposed by [the National Bicycle and Walk Documentation Project](#) as the official annual national bicycle and walk count week. Counts are conducted in the optional month of May to understand seasonal changes in walking and cycling. This volunteer-supported effort gathers valuable information about biking and walking activity to improve and inform planning and design.

BPC is a joint effort between the Richmond City Health District and Bike Walk RVA, a program of Sportsbackers, implemented since 2014 following [The National Bicycle and Walk Documentation Project](#) methodology detailed in this report.

Key Takeaways

This fall, there has been a decrease in overall bike and pedestrian activity in Richmond compared to the Fall 2020 counts (refer to appendix A.).

- Bicycle activity remained highest along corridors with bicycle infrastructure, such as Floyd Ave.
- In September 2020, Broad St (VCU) saw the highest pedestrian activity, this remained consistent during the spring 2021 counts but could not be verified for the fall 2021 counts as there was no data collected at this location.
- Broad St (downtown) had the highest combined average counts for this fall's BPC.
- 1st Street saw the greatest percent increase in bicycle activity compared to the fall 2020 BPC. This is significant due to the recently completed infrastructural projects along this corridor.

Highest Bicycle Activity (estimated cyclists per day)	
Floyd Ave (Fan)	675
Tredegar St	604
MLK Bridge	405
Greatest Increase in Activity 2020-2021	
1 st St	↑ 117%
29 th St (north)	↑ 67%
3 rd St	↑ 50%

Highest Pedestrian Activity (estimated pedestrians per day)	
Broad St (Downtown)	2,205
Arthur Ashe Blvd	1,898
Franklin St	1,658
Greatest Increase in Activity 2020-2021	
Franklin St	↑ 135%
29 th St (north)	↑ 100%
Main St	↑ 72%

Data Collection and Analysis

Bike Walk RVA and the Richmond City Health District enlisted and trained volunteers to count the number of pedestrians and bicyclists traveling along specified corridors in Richmond, VA. Following the National Bicycle and Walk Documentation Project (NBPD) methodology, volunteers manually counted bicyclists and pedestrians from 5:00pm – 7:00pm on two consecutive days in September.

Bike Ped Count volunteers were provided with the following tools:

- Standard Screenline Count Form developed by NBPD. The Count Form allows volunteers to count bicyclists and pedestrians at 15-minute increments. The sheet provided space to count pedestrians, bicyclists, as well as people using other modes of transportation (e.g. skateboards, rollerblades, etc.).
- Instructions for preparing and submitting the Count Form.
- Support provided by the count coordinator to answer any questions volunteers may have had.

At each designated location, volunteers counted the number of bicyclists, on the street and on the sidewalk, as well as the number of bikes attached to buses passing by. Pedestrian traffic was counted in addition to other modes of transportation such as skateboards, scooters, and rollerblades. For each location where counts were conducted, an average bike-ped count was calculated.

Bicycle and Pedestrian Activity Estimates

Volunteers collected spring counts at 25 locations across the city on September 14-15, 2021 (figure 1), including the first intersection, which will count as two locations, Marshall St and Brook Rd (at Marshall). **Table 1** provides the average number of pedestrians and bicyclists observed at each location during the 2-hour count period.

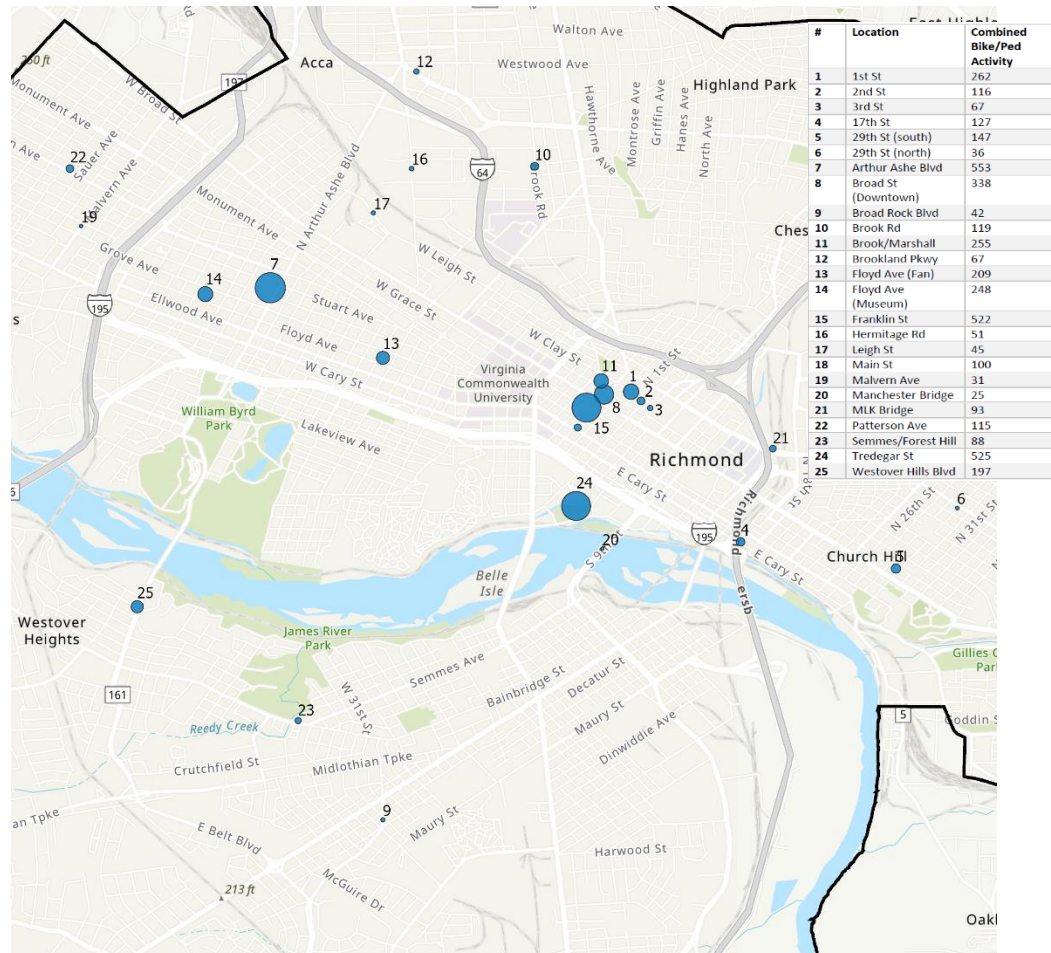


Figure 1. Map of September 2021 Count Locations. Icon size is proportional to combined bike/ped activity.

TABLE 1. 2-HOUR COUNT AVERAGE

Location	Biking 2-Hour Average	Walking 2-Hour Average
1 st St	26	104
2 nd St	6	50
3 rd St	12	53
17 th St	7	57
29 th St (south)	5	69
29 th St (north)	10	26
Arthur Ashe Blvd	24	253
Broad St (downtown)	33	294
Broad Rock Blvd	5	16
Brook Rd	30	30
Brook Rd (at Marshall)	4	44
Brookland Parkway	12	22
Floyd Ave (Fan)	90	119
Floyd Ave (Museum District)	48	76
Franklin St	40	221
Hermitage Rd	16	9
Leigh St	13	31
Main St	12	86
Malvern Ave	11	20
Manchester Bridge	9	14
MLK Bridge	54	38
Marshall St	16	64
Patterson Ave	21	37
Semmes/Forest Hill	17	27
Tredegar St	81	182
Westover Hills Blvd	39	60

Bicyclists

Floyd Avenue (Fan) saw the highest bicycle activity this Fall with a reported estimate of 675 cyclists daily. This remains consistent with the Spring 2021 counts, where Floyd Avenue also saw the highest bicycle activity. Floyd Avenue locations have been included in BPC since 2014 and have typically had a high number of bicyclists - Floyd Avenue is a designated Bike Boulevard with generally slower moving traffic than other east-west corridors in the City.

Tredegar Street (604) and **Martin Luther King Jr. Bridge (405)** had high levels of bicycle activity as well.

These results are consistent with the fall 2020 count results. In the fall 2020 counts, the locations with the highest bicycle activity were **Tredegar St, Floyd Ave (Fan), and Floyd Ave (Museum)**.



Figure 2 Brook and Marshall after the recently completed placemaking mural installation

Pedestrians

Broad St in Downtown Richmond saw the highest pedestrian activity this fall, with an estimated 2,205 pedestrians daily. **Arthur Ashe Blvd (1,898)** and **Franklin St (1,658)** also saw high pedestrian activity.

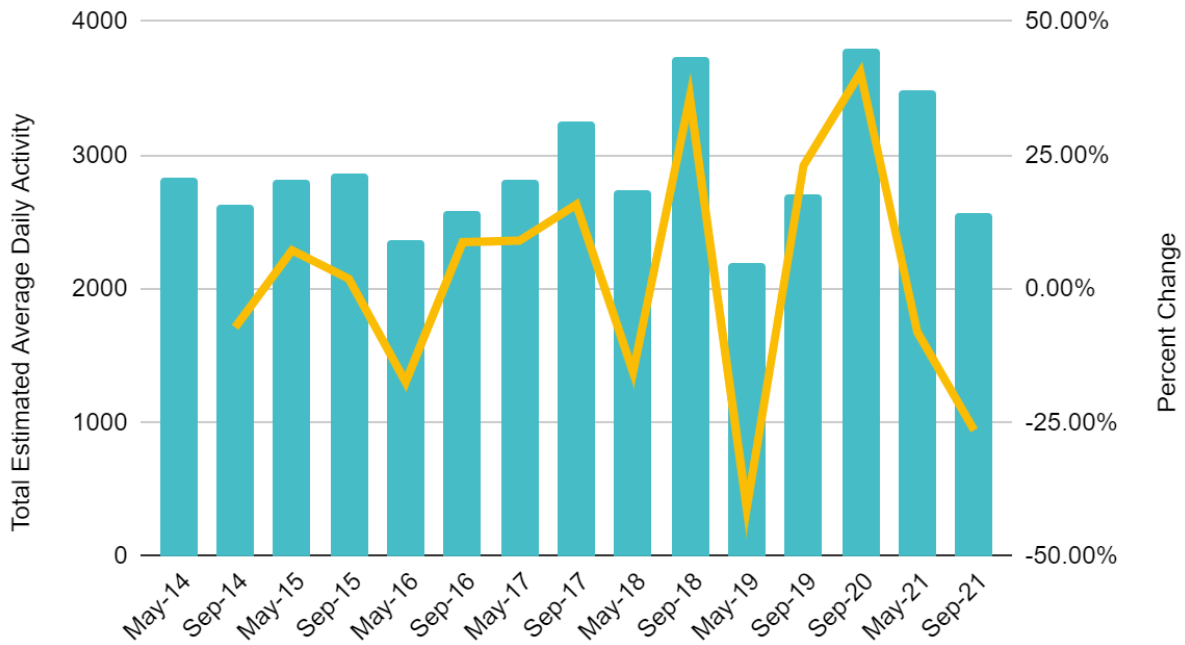
As mentioned in the previous section, **Broad St (VCU)** had the greatest pedestrian activity during both the Fall 2020 and Spring 2021 counts. Other top locations in Fall 2020 include **Arthur Ashe Blvd** and **Tredegar St**.

Although the pedestrian activity on Arthur Ashe Blvd remained among the highest of this count,

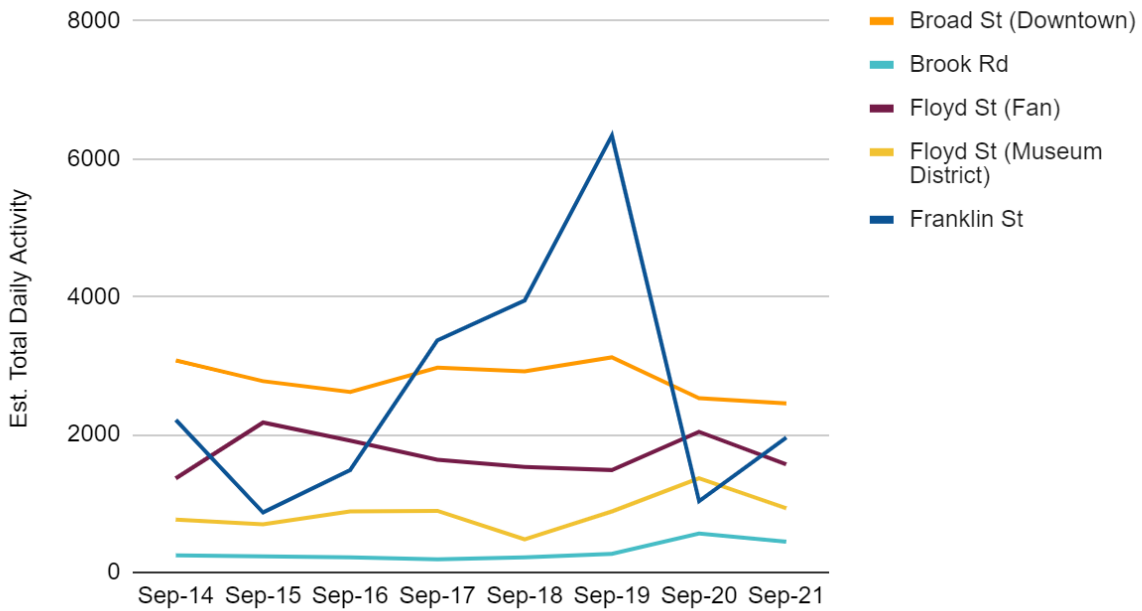
there was a significant drop in activity compared to the fall 2020 counts (-32.89%). In fact, pedestrian activity dropped at 15 locations this count when compared to last year's BPC (Appendix A).

There were no counts in the spring of 2020 due to the COVID-19 pandemic, which prevents the comparison between 2020 and 2021 combined spring and fall data.

Estimated Average Daily Activity Change



Trends in Estimated Bike and Pedestrian Activity, 2014-2021



WEATHER

The counts were scheduled for September 14th-16th. On Thursday, September 16th, a flashflood warning was issued for the city of Richmond and counts for that day were canceled.

NEW COUNT LOCATIONS

For the first time, Richmond BPC included an intersection count location this fall. The intersection of Brook and Marshall was added to provide data prior to the implementation of placemaking designs in the area, as well as post-implementation for future counts.

A NOTE ON RELIABILITY

Out of the 24 locations where counts were held this fall, 6 had only one day of counts (3rd St, 29th St (north), Broad St (downtown), Floyd Ave (Fan), Main St, and MLK Bridge). Since counts had to be canceled on Thursday, all remaining locations only had 2 days of counts as opposed to three. In addition, 5 locations that were included in the fall counts ended up having no count data due to the Thursday cancellation as well as an absence of volunteers at those locations on Tuesday and Wednesday (Broad St (VCU), Grayland Ave, Hull St, Mosby St, and Oliver Hill Way). This resulted in fewer observations, which statistically reduces the reliability of these estimates.

In addition, one day of counts for the Franklin St location was taken on Thursday, even though the counts had been canceled for that day. To collect as much data as possible, and to not discredit the efforts of volunteers, count data for the day and location were included. It should be noted when considering the comparisons to fall 2020 that the fall 2020 BPC only had two days of counts due to a flashflood warning on the third day as well.

Statewide Bicycle and Pedestrian Tracking

In 2019, the Virginia Department of Transportation established a [Statewide Bicycle and Pedestrian Count Network](#), with count data from locations across the state. Gathered from multiple localities, by various manual and automated counters, this data can be viewed in conjunction with this report.

Locations to Watch

At the time of the September 2021 counts, there were plans to install a mural and parklet at the intersection of Brook Rd and Marshall St. The mural has since been completed and may slow traffic as well as encourage bike and pedestrian activity. The recent removal of traffic calming measures known as “bump-outs” along Brookland Parkway could negatively impact safety and bicycling activity. Forest Hill Avenue could be seeing some new connecting bike lanes, downtown Richmond will be seeing installations of permanent bollards protecting bike lanes which may increase bicycle activity, and a new 1.6 mile standard bike lane on Jahnke Rd (not currently included in the counts) connecting Hioaks Rd to Blakemore Rd may improve travel for cyclists.

Acknowledgements

As always, we would like to thank all of our amazing volunteers, without whom this report would not be possible. Thank you!

Appendix A

APPENDIX A. ESTIMATED ACTIVITY AND PERCENT CHANGE BY LOCATION, SEPTEMBER 2020- SEPTEMBER 2021

Location	Estimated Daily Bicycle Usage	Estimated Daily Pedestrian Usage	Percent Change in Bicycle Usage from 2020	Percent Change in Pedestrian Usage from 2020
1st St	195	776	116.67%	45.59%
2nd St	41	375	-69.63%	-25.45%
3rd St	90	398	50%	12.75%
17th St	49	428	-67.33%	-28.67%
29th St (south)	34	518	-10.53%	-25.79%
29th St (north)	75	195	66.7%	98.98%
Arthur Ashe Blvd	176	1898	-46.67%	-32.89%
Broad St (downtown)	248	2205	-35.25%	2.8%
Brook Rd	221	225	-7.92%	-30.34%
Brook Rd (at Marshall)	30	326	N/A	N/A
Brookland Parkway	90	161	-40%	-2.42%
Floyd Ave (Fan)	675	893	0%	-17.92%
Floyd Ave (Museum District)	360	570	-30.5%	-32.78%
Franklin St	300	1658	-9.09%	135.18%
Hermitage Rd	120	68	44.58%	-81.87%
Leigh St	98	233	-13.27%	0%
Main St	90	645	-25%	72%
Malvern Ave	83	150	-65.42%	-62.31%
Manchester Bridge	68	105	-52.45%	-56.25%
Marshall St	120	480	N/A	N/A
Martin Luther King Bridge	405	285	0%	-15.68%
Patterson Ave	158	274	-24.76%	-29.74%
Semmes/Forest Hill	128	203	-51.33%	-39.94%
Tredegar St	604	1365	-39.9%	-43.13%
Westover Hills Blvd	289	450	-3.67%	0%

Appendix B

Brook Rd (between Hammond Rd and Edgehill Rd)															
Brookland Parkway (between Hermitage Rd and Chatham Rd)															
Cannon Creek Greenway (south of Brookland Parkway)															
Floyd Ave (between Allen St & Granby St)															
Floyd Ave (between Belmont Ave and Auburn St)															
Franklin St (between Adams St and Foushee St)															
Grayland Ave (between Allen St and Randolph St)															
Hermitage St (between Cumming Dr and Road Miller)															
Hull St (Between 7 th St and Commerce Rd)	New 2021 location														
W Leigh St (between Myers St and DMV Dr)															
Main St (between Adams St and Foushee St)															
Malvern Ave	New 2017 location														

