FEBRUARY 2016

# RICHMOND REGION BICYCLE INFRASTRUCTURE REPORT





## INTRODUCTION

The first Richmond Region Baseline Bicycle Infrastructure Report was published by Sports Backers in May of 2013. At that time, the entire region had 18.25 centerline miles of on-street bike lanes, many of which were fragmented and located along high-speed, high-volume roads that most people don't feel comfortable using. The region also had 18.5 fragmented miles of paved multi-use paths.

Since the 2013 Baseline Report, the Richmond region has hit several benchmarks, including hosting the 2015 UCI Road Cycling World Championships and completing the Virginia Capital Trail. In May of 2015, the City of Richmond released its first Bicycle Master Plan and has reached a total of nearly 13 centerline miles of on-street bike facilities, about half of which add additional space to buffer people on bikes from automobile traffic. Chesterfield County has doubled the number of miles of standard on-street bike lanes in the county and has also taken major steps toward building safer walking and biking infrastructure through the adoption of the Bikeways and Trails Chapter of the Comprehensive Plan. The Richmond region has now reached a total of 79 centerline miles of bikeways. As a result of this forward progress, our region now has the tools needed to become a place where people who are "interested but concerned" in bicycling can ride our streets with the already "strong and fearless" cyclists.

The purpose of this report is to document our region's progress in building bicycle infrastructure since 2013 and offer some commentary on our journey toward becoming a comfortable and connected region for people of all ages and abilities to ride.





In the 2013 Baseline Report, we surveyed the existing bikeways in the region—a Sports Backers employee literally walked, biked, or ran every mile of trail and bike lane. While there were about 37 total miles of bikeways in the region at the time, a majority of what we measured were unpaved trails, mostly in parks. This time we've decided to take a different approach, focusing mostly on paved multi-use paths and on-street bike lanes that contribute to a non-motorized transportation network.

For the 2016 Bicycle Infrastructure Report, instead of measuring bike lanes as one category, we've divided them up into traditional bike lanes, buffered bike lanes, protected bike lanes, and contraflow lanes to reflect the diversifying types of bikeways coming online in our region. Other bike and pedestrian facilities such as dedicated multi-use paths and bike-walk streets will also be included in this report. Examples of these facilities are provided on the next page. We've also chosen to measure mileage in "centerline miles," which counts bike lanes on both sides of a street at the same time as opposed to "lane miles," which count bike lanes on both sides of the street separately (a 1-mile-long street with bikes lanes on both sides has one centerline mile—or 2 lane miles).





**STANDARD BIKE LANES** are typically five feet wide and separate automobile traffic from bicycle traffic with a white line.



**BUFFERED BIKE LANES** are usually five or six feet wide, but give some extra space between automobile traffic and bicycle traffic with a hatched painted buffer, typically about 3 feet wide.



**PROTECTED BIKE LANES** provide some sort of physical barrier between automobile traffic and bicycle traffic in the form of plastic posts, curb, planter boxes, and/or parked cars. The region currently does not have any defined protected bike lanes.



**BIKE-WALK STREETS** (aka neighborhood byways or bicycle boulevards) utilize neighborhood streets as low-stress bikeway connections by slowing traffic and keeping vehicle volumes low. The City of Richmond is currently in the process of constructing the Floyd Avenue Bike-Walk Street, the first in the region.



**PAVED MULTI-USE PATHS** are typically eight to ten feet wide and are separated completely from automobile traffic, though they often run parallel to roads or through parks.



**CONTRAFLOW BIKE LANES** allow bicycle traffic to flow in the opposite direction of motor vehicle traffic on an otherwise one-way street. There is one contraflow bike lane in Richmond city.

## The Region's Progress

Since 2013, our region has made significant progress toward becoming more bike-friendly.



## THE VIRGINIA CAPITAL TRAIL

—a 53-mile long paved multi-use path between downtown Richmond and Jamestown, passing through Henrico County and several other localities, was completed in 2015.



About seven centerline miles of NEW BIKE LANE PROJECTS HAVE BEEN ADDED IN THE CITY OF RICHMOND.

including several buffered lanes that increase separation between cars and bike traffic.



Construction is underway on the T. Tyler Potterfield Memorial Bridge, A BICYCLE- AND PEDESTRIAN-ONLY CROSSING OF THE JAMES RIVER.

Construction of the FLOYD

AVENUE BIKE-WALK

STREET PROJECT began in

November—the first of its kind in the region.

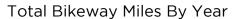


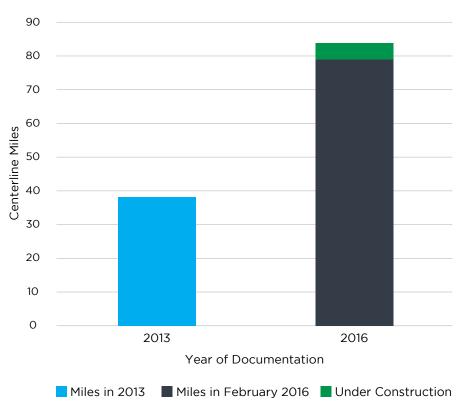


The City of Richmond's first Bicycle Master Plan was completed in 2015.



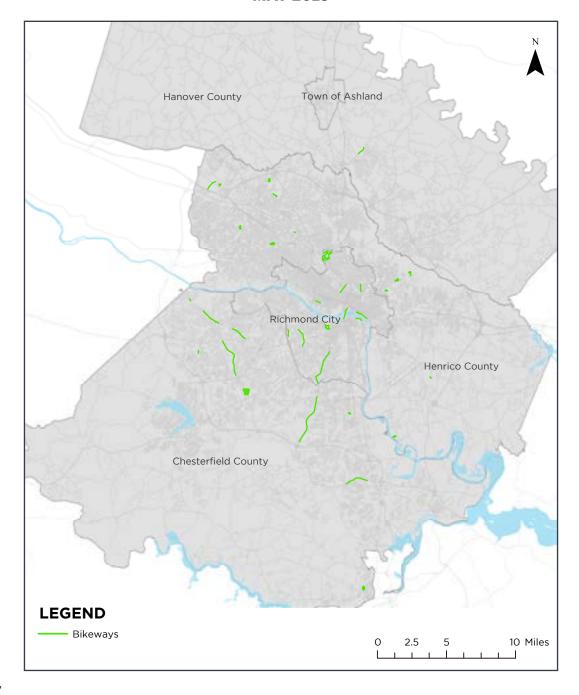
Chesterfield County adopted the Bikeways and Trails Chapter of its Comprehensive Plan in November of 2015.





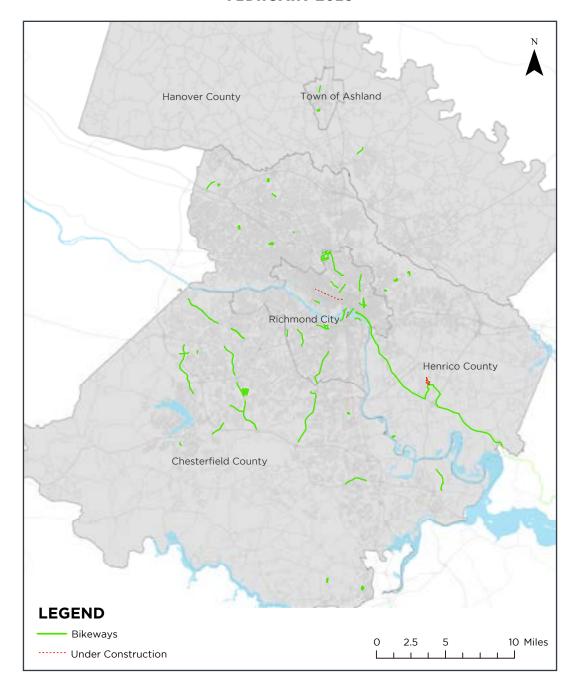
## **Richmond Region Bikeways**

**MAY 2013** 



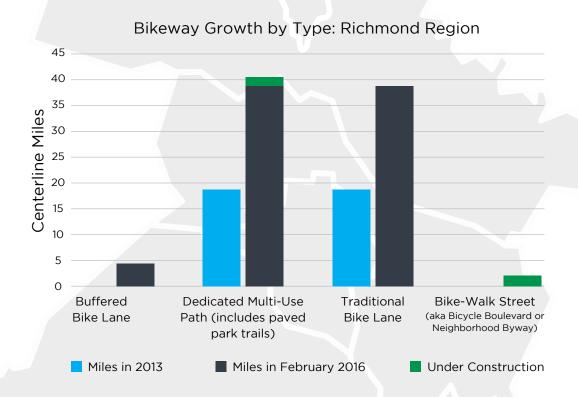
## **Richmond Region Bikeways**

## **FEBRUARY 2016**



## Growth in Bikeways by Jurisdiction and Type

Based on the maps previously shown, you can see the Richmond region has grown by leaps and bounds since May of 2013. To be more specific, the combined length of bikeways has increased from 37 miles to 79—more than doubling in mileage. The table below further illustrates that transformation.



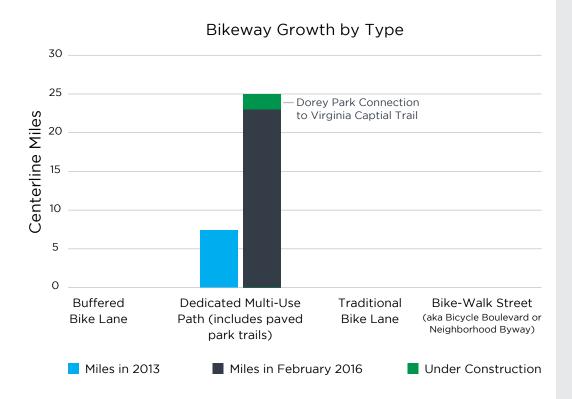
## **BIKEWAY GROWTH BY JURISDICTION**

The following tables illustrate the growth in bikeways since 2013 by jurisdiction—Henrico County, Chesterfield County, City of Richmond, and the Town of Ashland/Hanover County.

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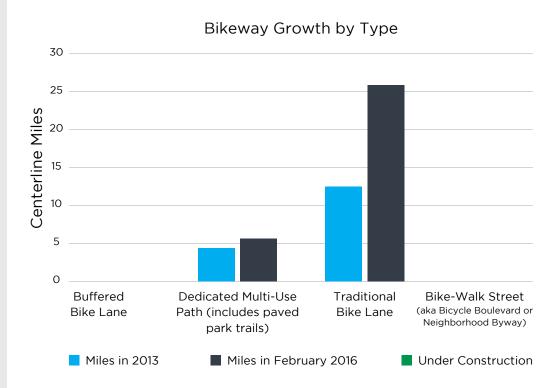


The major growth in mileage of paved multi-use path in Henrico County is due to the completion of the Virginia Capital Trail in the east end of the county. Henrico County is also constructing an additional 1.37 miles of paved multi-use path that will connect Dorey Park with the Virginia Capital Trail. There has been no growth in the miles of bike lanes and Henrico does not yet have a bicycle master plan in place.



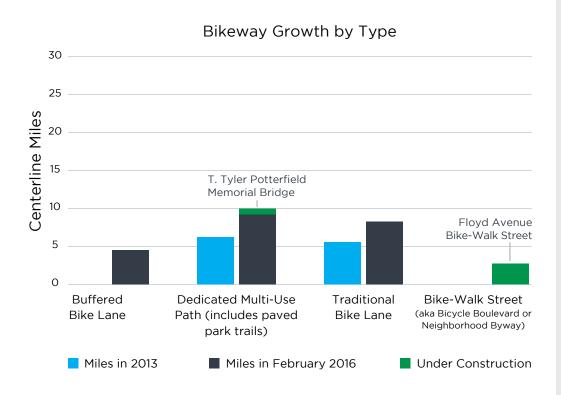


The number of miles of standard bike lanes in Chesterfield County has doubled since 2013, increasing from 13 to 26 centerline miles. However, nearly every mile is along a 45-55 MPH road with high traffic volumes. All of the bike lanes are a standard five feet in width and don't have an additional buffer from automobile traffic. There are also no sidewalks along most of the mileage, causing people who need to travel by foot to walk in the bike lane. There is room for improvement in Chesterfield. Fortunately, the Chesterfield County Board of Supervisors adopted the Bikeways and Trails Chapter of the Comprehensive Plan in November of 2015, which calls for 362 miles of comfortable on-street bikeways and paved multi-use paths to be built over the next 50 years.





There has been significant growth in the City of Richmond with regards to the bike lane network, and the City adopted its first Bicycle Master Plan in 2015. Centerline miles have increased from 5.65 miles of standard bike lanes in 2013 to 8 miles of standard bike lanes and 4.6 miles of buffered bike lanes in 2016. There are also several projects currently under construction, including the Floyd Avenue Bike-Walk Street and the T. Tyler Potterfield Memorial Bridge (a bicycle- and pedestrian-only crossing of the James River) from Brown's Island to Manchester. The Richmond portion of the Virginia Capital Trail was also completed in 2015, bringing the total miles of paved multi-use path up to just over 8 (including paved park trails).

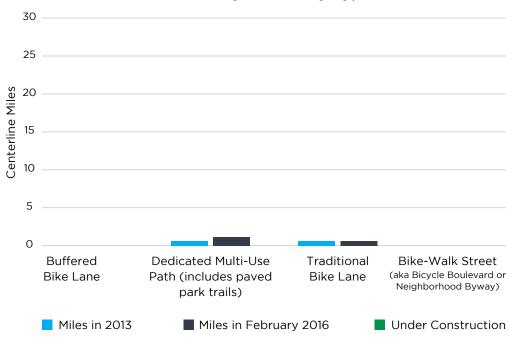




## There has been little growth of bikeway mileage in Ashland and Hanover County.

Taken together, there are fewer than 1.5 miles of existing bikeways in those jurisdictions, and neither have bicycle master plans in place at this time.

## Bikeway Growth by Type



# Opportunities for the Richmond Region Moving Forward

THE FUTURE OF BICYCLING IN THE RICHMOND REGION LOOKS BRIGHT. New plans for building a network of bikeways in the region provide a strong foundation for connecting people of all ages and abilities who want or need to ride a bike.

WE STILL HAVE A LONG WAY TO GO. In order to effectively build on the progress we have made thus far, Bike Walk RVA has the following recommendations for jurisdictions going forward:

## **ADOPT A PLAN**

Developing and passing a bicycle infrastructure plan is the first step toward having a connected network. Having a plan in place helps secure federal funding through grants for designing and building projects.

## **IDENTIFY FUNDING**

Funding for the plan does not have to come from local capital improvement dollars alone, though allocating funds annually in the Capital Improvement Program (CIP) is usually the most efficient way to build bike infrastructure. There are multiple grant opportunities for federal dollars, though many require a small local match. The local match is one important reason to allocate some funding for bicycle infrastructure in the CIP.

## **DESIGN FOR ALL AGES AND ABILITIES**

In order for new bikeways to be truly successful, they should be designed for all ages and abilities. By physically separating bicycle traffic from motor vehicle traffic, comfort increases for people on bikes and the bikeways are more likely to attract new riders.

## **BUILD CONNECTIONS**

Finally, we need to focus on building a connected network of bikeways and not just going after the low hanging fruit. Some streets might be easier to install bike lanes on than others, but if they don't connect to desired destinations or other bikeways, they are not as useful and don't contribute to the overall network.

With the right plans in place, ongoing funding, good design, community support, and political will, the Richmond region will continue to make great strides in building a comfortable and connected network of bicycle infrastructure.



Bike Walk RVA, a program of Sports Backers, was created to advocate for comfortable and connected places to bike and walk for people of all ages and abilities in greater Richmond. Biking and walking for everyday transportation should be accessible to everyone.

