

**Arlington County
Fiscal Year 2019 Summary Report on Capital Bikeshare**



**Arlington County Commuter Services
Department of Environmental Services
Arlington County, Virginia**

November 2019



DEPARTMENT OF
ENVIRONMENTAL SERVICES
Arlington County Commuter Services

Introduction

Capital Bikeshare's 9th fiscal year (FY) of service ended on June 30, 2019. After consistent ridership and revenue growth over the service's history, both began declining in FY 2018 and continued this decline in FY 2019. The introduction of ride-hailing services, like Uber and Lyft, as well as the more recent appearance of e-scooters and e-bikes, starting in May 2018, have created increased competition. The County is working to reverse the decline through a variety of initiatives including relocating low-performing stations, planning for the addition of eight new stations at predicted high-demand locations in and along the Mt. Vernon Trail, customer service improvements, and e-bikes.

Cost Recovery

Total cost recovery and operating cost recovery decreased to 39% and 46%, respectively, down from 45% and 55% in FY 2018. Total cost recovery includes total revenues divided by total expenses (i.e. operations and maintenance (O&M), marketing, and management) and operating cost recovery is total revenues divided by O&M costs.

In FY 2019, revenues included \$766,000 in user fees and \$71,000 from third-party financial support for a total of \$837,000, which is a 15% decrease from the prior fiscal year's user fees. Expenses included \$1,676,000 in O&M and \$286,000 in management and marketing for a total of \$1,962,000 in expenses -- a 3% decrease from FY 2018, mainly due to lower management and marketing expenses as O&M expenses remained the same.

Membership and Trips

Statistics comparing Arlington's portion of Capital Bikeshare over the three most recent years of service are shown on the following page along with regional data that includes Washington, D.C.; Alexandria, VA; Fairfax County, VA; Falls Church, VA; Montgomery County, MD; and Prince George's County, MD.

The number of Arlington annual members decreased 13% over the previous fiscal year to 3,071. There were 146,862 24-Hour memberships purchased regionally, representing a decrease of 21%. In the region 479,794 Single Trip memberships were sold, representing a 1% decrease from FY 2018.

Trips starting in Arlington declined by 8% to 256,441. These trips accounted for about 517,055 miles, a decrease of 6%, with customers burning 22.2 million calories for a decrease of 6%. The average trip length increased slightly from 1.97 to 2.02 miles.

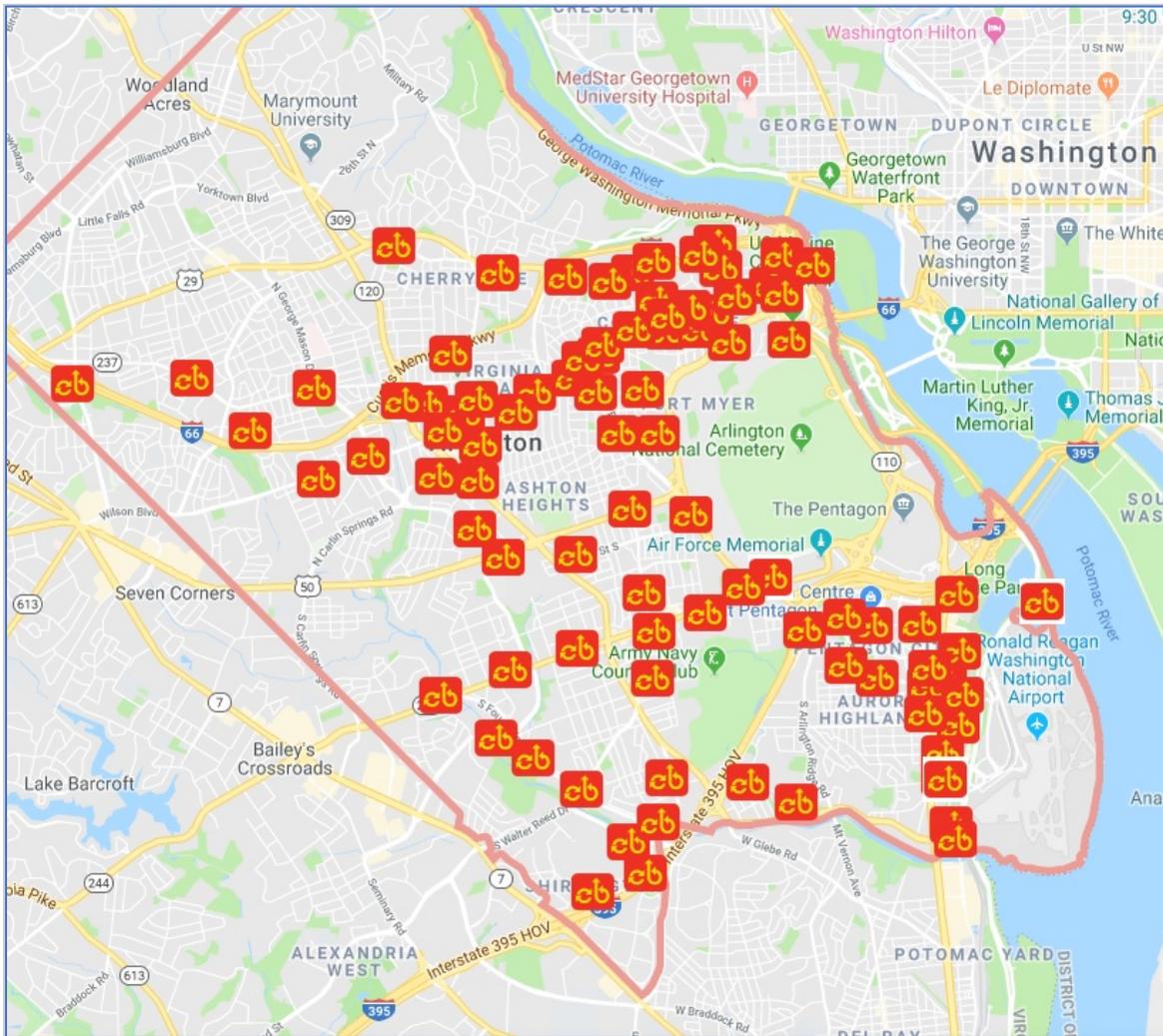
System Expansion Slows

With the Virginia General Assembly's legislation requiring Northern Virginia localities to redirect some regional transportation money to better fund Metro, expansion of the bikeshare network in the County has slowed.¹ No new stations were added during FY 2019 and future growth next fiscal year is limited to eight grant-funded stations to be paid for by the Federal Lands Access Program (FLAP) and a developer-funded station at N. Vermont St. & N. Tazewell St. The FLAP stations will be placed on or near National Park Service lands along the G.W. Memorial Parkway.

¹ McCartney, Robert. Breakthrough in Virginia on Metro funding: Lawmakers approve \$154 million. The Washington Post. https://www.washingtonpost.com/local/trafficandcommuting/breakthrough-in-virginia-on-metro-funding-lawmakers-approve-154-million/2018/03/10/a115384c-2254-11e8-86f6-54bfff693d2b_story.html. Accessed 9/24/19.

FY 2019 Network Map

Due to delays in obtaining federal approval to purchase the FLAP stations, the County moved two low-ridership stations to two of the FLAP sites: Gravelly Point and Roosevelt Island, both on National Park Service land. These temporary stations will be swapped out with the new FLAP equipment once received in roughly mid-2020. Within six months from installation, these two stations became the first and fifth busiest, respectively, in the County. Alone, they boosted County ridership by 8% in June 2019. The move showed the potential of the FLAP stations, especially in busy federally owned parks, as a way to reverse Arlington's ridership and revenue decline while providing a green, car-free alternative.



Ridership & Financial Statistics

Statistics for Capital Bikeshare in Arlington					
Arlington data (unless otherwise noted as regional)	FY16	FY17	FY18	FY19	% Change in FY19
Fleet:					
stations	85	92	92	92	0%
stations – regional	392	473	506	559	10%
bikes	639	698	698	694	-1%
bikes - regional	3,435	3,688	4,330	5,720	32%
docks	1,186	1,297	1,297	1,301	0%
% of regional fleet (measured by docks)	17.57%	16.02%	14.86%	13.55%	-9%
Finances:					
Total cost recovery ratio*	49%	49%	45%	39%	-13%
Operating cost recovery ratio**	58%	60%	55%	46%	-16%
Total Revenues:	\$1,078,000	\$1,111,000	\$986,000	\$700,870	-29%
user fees	\$988,000	\$1,004,000	\$906,000	\$629,784	-30%
station support	\$90,000	\$107,000	\$80,000	\$71,086	-11%
Total Expenses:	\$2,011,000	\$2,064,000	\$2,023,000	\$1,961,707	-3%
operating (incl. credit card fees, taxes, & refunds)	\$1,713,000	\$1,685,000	\$1,657,000	\$1,676,135	1%
management and marketing	\$297,000	\$379,000	\$366,000	\$285,572	-22%
net operating cost	\$1,022,000	\$1,060,000	\$1,117,000	\$1,195,750	7%
Customers:					
annual (registered)	3,496	3,848	3,524	3,071	-13%
annual (registered) – regional	30,556	32,922	31,384	30,023	-4%
24-hour (casual) – regional	265,320	185,494	185,897	146,862	-21%
Single Trip (casual) - regional	29,235	387,614	482,332	479,794	-1%
registered / casual customer split – regional	11% / 89%	7% / 93%	5% / 95%	5% / 95%	n/a
Trips:					
starting in Arlington	263,111	277,970	280,258	256,441	-8%
ending in Arlington	247,247	262,347	265,540	242,816	-9%
total during fiscal year – regional	3,259,125	3,592,299	3,694,163	3,439,619	-7%
miles, starting in Arlington	516,242	574,470	549,959	517,055	-6%
miles – regional	6,834,014	7,909,526	7,934,846	7,256,895	-9%
average trip length (miles)	1.96	2.01	1.97	2.02	2%
average trip duration (minutes)	19	19	16	16	-3%
registered / casual trip split – regional	80% / 20%	75% / 25%	79% / 21%	76% / 24%	n/a
CO2 saved, trips starting in Arlington (pounds)	351,045	390,640	446,567	419,849	-6%
CO2 saved – regional	4,647,130	5,378,478	6,443,095	5,904,726	-8%
calories burned, trips starting in Arlington	22,198,413	24,702,225	23,648,226	22,233,361	-6%
calories burned – regional	293,862,618	340,109,608	341,198,386	312,688,667	-8%
reported crashes	7	0	2	4	100%
reported crashes – regional	37	27	35	46	31%
unrecovered thefts	1	0	4	63	1475%
unrecovered thefts – regional	12	16	115	432	276%

*Includes operations, management, and marketing.

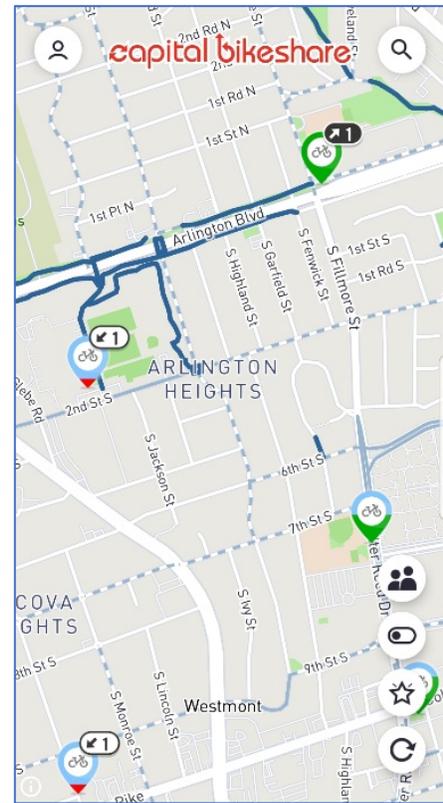
**Includes operations only.

Bike Angels

In December, Capital Bikeshare began its Bike Angels program which rewards members who help solve the system’s greatest challenge, rebalancing. Members earn points whenever they remove a bike from a nearly or completely full station or add a bike to a nearly or completely empty one. The number of points is relative to the immediate need for bikes, with completely full or completely empty stations providing more points than those nearly full or nearly empty. The need is represented by either an upward or downward arrow and a number to the right of the arrow.

In the app screenshot to the right, a Bike Angel would receive a point for removing a bike from the station on the upper right of the screen, shown as an upward pointing arrow with the number 1 beside it, representing the need for one bike to be removed. Conversely, a downward arrow with the number 1 means that one bike needs to be added.

The points can be converted into free day passes (for 10 points) or free membership extensions (for 20-80 points). The program uniquely rewards and engages members by gamifying the rebalancing challenge.



E-bike Pilot

In September 2018, Motivate – Capital Bikeshare’s operator -- launched an electric bike (e-bike) pilot, called “CaBi Plus”, and injected 50 e-bikes into the system. The bikes proved popular and were used twice as often as standard Capital Bikeshare bikes.² In March 2019, the pilot fleet was to expand to 500 e-bikes, however, Motivate removed the e-bikes on April 14 from the D.C. region due to a braking problem impacting all e-bikes operated by Motivate, nation-wide.^{3,4} The County remains interested in an e-bike solution and continues working with its operator and the Capital Bikeshare member jurisdictions on a resolution.

Bike Theft

For the first eight years of the service’s operation, Capital Bikeshare had relatively few bike thefts. However, in the past year, thefts have dramatically increased from 4 in FY 2018 to 63 in FY 2019 in Arlington. The reasons for this are not yet known but could be a mixture of the docking mechanisms wearing out, not allowing customers to properly dock a bike on the first try, as well customers not docking their bike due to confusion about private company e-bikes and e-scooters for rent which do not need to be docked. Staff are assessing the docking mechanisms and improving educational efforts about docking Capital Bikeshare bikes.

² Sussman, Mark. Members took 99% of Capital Bikeshare’s e-bike trips, and other insights from the data. Greater Greater Washington. <https://ggwash.org/view/69833/capital-bikeshare-members-hog-the-new-e-bikes-other-things-we-learned-data/>. Accessed on 10/9/19.

³ @iowanindc. Twitter. <https://twitter.com/iowanindc/status/1117416081889669127/>. Accessed on 10/9/19.

⁴ Voucolo, Alex. Lyft Pulled Thousands of E-Bikes From City Streets. Here’s What Went Wrong. Bicycling. <https://www.bicycling.com/news/a27287868/lyft-electric-bike-share-recall/>. Accessed on 10/9/19.

Impacts Shared Mobility Device (SMD) Pilot

At the beginning of the fiscal year, the Arlington County Board approved a Shared Mobility Devices (SMD) Demonstration Project to allow e-scooters and e-bikes to apply for permits to operate within the County. By June 2019, six e-scooter companies were operating in the County. While e-scooter companies compete with Capital Bikeshare for customers, they also attract new customers to the shared mobility landscape. Between October 2018 and June 2019, e-scooter riders made almost three times as many trips (435,690) as Capital Bikeshare riders made (173,436). Yet, bikeshare trips declined only about 6.4% from the prior year's same nine-month period. So, a portion of Capital Bikeshare's decline is due to the recent introduction of Shared Mobility Devices, however, when combined, these modes are providing an alternative to Arlingtonians and visitors to driving a personal vehicle.

Marketing Efforts Highlights

- The annual scavenger hunt #BikeinBloom campaign featured a unicorn pink a Capital Bikeshare e-bike this year.
- To promote Capital Bikeshare usage and awareness during the League of American Bicyclists' National Bike Summit held in Crystal City, the County offered attendees 3-day passes. Of the 450 passes distributed, 83 were redeemed (18.5%) resulting in 367 trips, generating \$358 in revenue.
- Four distinct CaBi station PSAs were designed to be distributed to 76 of the oldest stations in Arlington. The ads featured the \$2 Single-Trip Fare, the new Capital Bikeshare app and photos of riders over the age of 30.
- To increase the diversity of riders in our brochures and ads, the County also conducted a photoshoot of models who are 40+ years of age and are women and men of color. The models rode Capital Bikeshare bikes along the Mt. Vernon Trail and in Crystal City.

Community Partners Program

Registration in the Community Partners Program grew to 133 people under partnership agreements with six organizations: Arlington Partnership for Affordable Housing (APAH), Phoenix Bikes, AHC, Bonder and Amanda Johnson Community Development Corporation, The Arlington County Healthy Living Program, and the Randolph Elementary School Club de Madres. During the fiscal year, a total of 2,665 trips were taken with the following distribution:

APAH-The Springs:	256
APAH-Marbella:	1,011
APAH-Arlington Mill:	130
Phoenix Bikes:	87
InSHAPE:	139
APAH-General:	287
AHC:	669
Randolph Elementary School Club de Madres:	77
Bonder and Amanda Johnson Community Development:	9

This is a 11% increase over the FY18 total of 2,365 trips. Community rides are being organized with existing Program members at the partners' operation sites to encourage more ridership and to sign up additional members.

Arlington and the District Department of Transportation jointly launched the Capital Bikeshare Community Partners Program in May 2016. Under the partnership between the jurisdictions and social service and community outreach organizations, Community Partners can offer annual Capital Bikeshare memberships to their clients for just \$5 a year. These memberships also come with unlimited 60-minute trips instead of the usual 30-minute trips. Clients also receive a new rider kit and helmet.

Several other Arlington nonprofits have been approached about joining, however the current Community Partners Program agreement calls for the participating nonprofits to provide a credit card to cover any usage fees incurred by their client members. Several staff members of those nonprofits have expressed reservations about doing this and have asked for an option where their client members use their own credit card. Planning for this option is underway.

Capital Bikeshare is a regional bikeshare service owned and managed through a partnership between Arlington County; the City of Alexandria, the City of Falls Church, and Fairfax County, VA; the District of Columbia Department of Transportation; and Montgomery County and Prince George's County, MD; and operated by Motivate, LLC.