



CITY OF FALLS CHURCH

DATE: March 14, 2018

TO: Chair Caumont and Members of the Citizens Advisory Committee on Transportation

FROM: Kerri Oddenino, Planner **KO 3-1-2018**

THROUGH: Paul Stoddard, AICP, Director of Planning **PS 3-1-18**

SUBJECT: Bike-Share Project Schedule Update

Introduction

The first phase of the City of Falls Church Capital Bikeshare System is expected to open in Fall 2018. Bike-share station installation will occur in two phases. Phase 1 of the Bike-share Expansion includes 11 stations and will be installed in Fall 2018. Installation of Phase 2 stations will occur in Fall 2019. Phase 2 locations may include previously endorsed locations that require right of way negotiations or may include newly suggested locations.

This memo provides information on the project, including:

- A description of bike-share,
- Policy guidance used to plan the bike-share network,
- Map of phase 1 stations,
- Project costs, and
- Project schedule.

What is Bike-Share?

Bike-share is a bicycle sharing system that allows individuals to borrow shared bicycles on a short-term basis. Bike-share systems are comprised of a network of stations located throughout a geographic area. Capital Bikeshare stations have docks where bicycles are checked in, checked out, and stored. Bike-share allows users to borrow and return bicycles at any station.

Why Bike-share?

Bike-share provides connections to regional transportation networks, including rail, bicycle and pedestrian networks. By providing another transportation option, bike-share increases mode choice and reduces reliance on any single mode (such as automobile).

Bike-share is frequently used as a first mile/last mile solution by individuals traveling to and from rail transit. Bike-share is also used for other short trips, typically in denser urban or urban-suburban areas. In the City of Falls Church, bike-share can provide new connections to the East Falls Church and West Falls Church Metro stations. Bike-share can also provide more options for in-town trips.



Above: Capital Bikeshare Station in Washington, D.C.

How do People Access Bike-share?

Capital Bikeshare users must sign up for a membership. Memberships range from as short as a day to as long as a year (see table below). All Capital Bikeshare rides of less than 30 minutes incur no additional fees. Rides lasting longer than 30 minutes incur additional fees for each additional 30 minute increment. This fee structure encourages short term use of the bicycles, which helps keep the bikes available to meet user demand.

Membership Options (As of February 28, 2018)	
Annual	\$85 or \$8/month
30 Day	\$28
3 Day	\$17
24 Hour	\$8
Single Trip	\$2

Policy Guidance

In 2014, City Council adopted Mobility for all Modes as the City’s Transportation Master Plan. That plan establishes a vision for expanded transportation mode choice and stronger connections to the regional transportation system:

“Provide for the safe movement of people and goods within and through the City via a transportation network that connects to the regional transportation network, offers choices in travel modes, supports economic activity, is sensitive to the environment, and provides equitable access for all City residents, workers, and visitors.”

In 2015, the City Council adopted the City's Bicycle Master Plan, subtitled *Connecting Communities*. The Bicycle Master Plan identifies future corridors for bicycle facilities, including bike-share. As stated in the plan's vision statement, the corridors are designed to provide more bicycle connectivity within and beyond the City:

"Provide a network of bicycle routes that connects the City's commercial areas and neighborhoods, transit facilities, schools, regional bicycle facilities, and designated bicycle routes in neighboring jurisdictions."

Expanding bike-share into the City is strongly supported by adopted City policies. Expanding bike-share will increase travel options, strengthen connections to the regional transportation network, and strengthen connections generally throughout the City.

Station Planning

Several criteria are used to guide the planning of bike-share station locations. These include proximity to key destinations, station density, and accessibility to key bicycle routes. Bike-share stations should be located as close as possible to key destinations including metro stations, cultural attractions, and higher density commercial, retail, and residential activity. Locating bike-share stations adjacent to bicycle facilities improves safety and provides comfortable biking options for bike-share users.

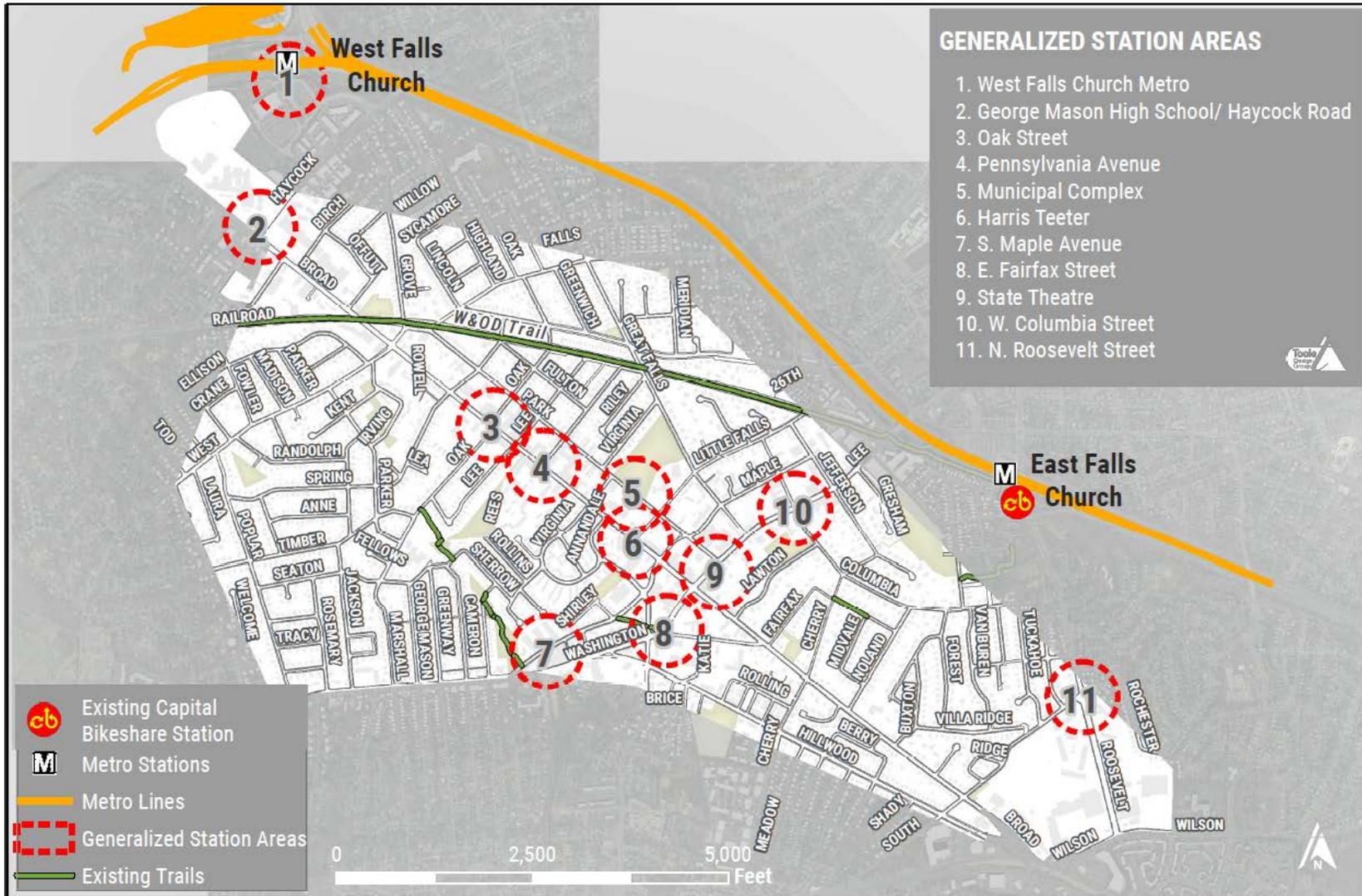
In terms of station density, stations should be located within ½ mile of other bike-share stations, and ideally should be located within ¼ mile of other bike-share stations. This level of density ensures that walking distances between bike-share stations and trip destinations are relatively short – a maximum 2.5 minutes walking time before or after using bike-share if stations are ¼ mile apart.

Station locations were developed through a mix of consultant studies, staff analysis, public engagement, and review with boards and commissions.

Phase 1 Station Locations

Phase 1 station locations were endorsed by City Council at their August 14, 2017 meeting. Due to right of way limitations, installation of the West Street and W&OD Trail, and the Eden Center bike-share station locations are not included in the Phase 1 map. These station locations and additional station locations could be explored as part of a Phase 2 installation.

Phase 1 Bikeshare Station Locations



Project Costs

The City of Falls Church received \$2 million in Regional Surface Transportation Program (RSTP) capital funds for bike-share through the Northern Virginia Transportation Authority (NVTA), transferred by Fairfax County. An additional \$500,000 in operating funds was received through the Northern Virginia Transportation Commission (NVTC) and the Commonwealth Transportation Board (CTB) from the I-66 Inside the Beltway Commuter Choice program. Additional operating support is available from developer contributions.

Capital Bikeshare equipment is owned by localities and managed by a third party. Localities pay for the cost of operation. The third party operator returns revenue collected through membership fees back to the locality.

Capital Costs

As noted above, the City was awarded \$2 million for the purchase of up to 16 bike-share stations. The cost of a 12-dock bike-share station including bikes is \$41,622, and for a 19-dock bike-share station including bikes is \$55,789. The installation of a bike-share station is \$3,200. The total estimated cost of all equipment for the Phase 1 bike-share stations, including installation, is \$831,121.66.

The capital grant funding of \$2 million will comfortably cover the cost of the stations. In addition to the cost of the stations, the capital funds are also being used for soft costs, including consulting fees, right-of-way acquisition, and staff costs. Additionally, the capital funds will be used to fill in gaps in the City's biking corridors needed to support the expansion of bike-share. This could include marking of additional biking routes and/or bike lanes.

Operating Costs

The cost to operate each bike-share station is between \$13,848 per year and \$21,927 per year (note station costs vary slightly based on the number of docks in a station). For Phase 1 stations, operating costs per year will be approximately \$160,412. These costs will be offset by system revenue.

As part of the station planning process, Foursquare Integrated Transportation Planning conducted a ridership analysis. The analysis provided estimates of ridership patterns and expected operating cost recovery for the Bike-share system in the City of Falls Church.

Operating costs can be offset by multiple revenue sources, including user fees, station sponsorship, and advertising fees. Foursquare estimates that user fee recovery for the City's Bike-share system will be approximately 35 percent. Including station sponsorships and advertising fees increases this percentage to 62 percent.

Accounting for system revenue, the annual cost to the City to operate Phase 1 bike-share stations is projected to be between \$62,661.42 and \$107,184.01. As noted above, the City was awarded \$500,000 in operating funds for the first five (5) years of operation. Because of this grant funding, assuming revenue projections hold, the City could operate 14 bike-share stations without incurring local costs for at least the first five years of operation, and additional grant support can be requested for future years.

Project Schedule

Staff anticipates that installation for Phase 1 will occur in Fall 2018 and Phase 2 will occur in Fall 2019. The largest impediment to delivering the stations before Fall 2018 is a combination of manufacturing time and procurement requirements. Because the capital funds are federal, required steps in the procurement process must be followed sequentially (instead of in parallel), and there are additional requirements for review and approval at both the state and federal level.

The longest steps remaining in the procurement process are (1) Invitation for Bid (IFB) and (2) equipment manufacture. The IFB is a 30 day process and the manufacture process is expected to take four to five months. The chart below shows additional timing information.

