Northern Virginia Transportation Authority

The Authority for Transportation in Northern Virginia

Project Description Form – 6S

Basic Project Information

Submitting Jurisdiction/Agency: Arlington

County

Project Title: East Falls Church Regional

Connection and Access

Project Location: East Falls Church Metro station park-and-ride lot and Washington Boulevard entrance, bus bays, and six Capital Bikeshare stations within a one-mile radius of the Metro station. The station is located just inside



the Beltway on the I-66 corridor and is the major regional transfer point for the Silver and Orange Metrorail lines.

Project Description: The East Falls Church Metro station is a major regional transit facility for residents of the City of Falls Church, Fairfax County, and Arlington County. Due to a limited amount of park-and-ride spaces on site, station access is very dependent on bus service, walking, and bicycling. In 2015, Arlington County, in conjunction with WMATA, completed a planning level study aimed at expanding transit and pedestrian access to the East Falls Church Metro. This study explored alternatives to expand bus capacity in the existing bus bay location and evaluated pedestrian connections around the station. This project follows up on that study with design and construction of multimodal access and safety solutions intended to accommodate near-future growth in Metrorail ridership, local and commuter bus ridership, and bicycle and pedestrian connections to transit.

This project will increase the capacity of the existing bus bays by a maximum of two additional bays, serving both local and regional bus routes, and reduce pedestrian and bus conflicts in the bus bay area. This project will also upgrade and expand all bus shelters and seating. It will also provide operational and access improvements through the addition of a bus only access lane from North Sycamore Street and by optimizing existing and proposed signal timing to better coordinate travel patterns around the station. This project will also provide sidewalk extensions, a crosswalk, and a signalized intersection north of the station where the park and ride exits onto Washington Blvd. In accordance with Arlington's Capital Bikeshare Transit Development Plan, this project will also introduce Capital Bikeshare to the East Falls Church area through the installation of six Capital Bikeshare stations within approximately one mile of the Metro Station entrance.

| Project Analysis Summary* | | | | | |
|--|-------|----------------|------|----|--|
| NVTA Quantitative Score | 49.32 | | Rank | 8 | |
| Congestion Reduction Relative to Cost Ratio (NVTA Share) | 0.12 | hours saved/\$ | Rank | 17 | |
| Congestion Reduction Relative to Cost Ratio (Total Cost) | 0.12 | hours saved/\$ | Rank | 16 | |
| *Detailed scoring information can be found at: http://www.thenovaauthority.org/planning-programming/fy2017-program/ | | | | | |

Several of these bikeshare stations will be placed on the border with the City of Falls Church, and provide increased accessibility to the Falls Church activity center from the Metrorail station.

Project Milestones

Project Milestones by Project Phase:

• Engineering:

• Environmental Work:

Design: July 2016-June 2017Right of Way Acquisition:

Construction: July 2017-December 2018
Capital Asset Acquisitions: July 2016

• Other: Capital Bikeshare station install: Beginning January 2017 and completed in June 2017.

Project Cost

Requested NVTA FY2017 Funds: \$6,500,000

Total Cost to Complete Project: \$6,500,000

| Project Phases | Requested NVTA FY2017 Funds | Other Sources of Funding | Total Cost by Phase |
|-------------------------------|--------------------------------|--------------------------|----------------------------|
| Engineering | \$200,000 (September 2017) | | \$200,000 (September 2017) |
| Environmental Work | \$50,000 (January 2018) | | \$50,000 (January 2018) |
| Design | \$300,000 (May 2018) | | \$300,000 (May 2018) |
| Right of Way Acquisition | \$0 (May 2018) | | \$0 (May 2018) |
| Construction | \$5,650,000 (FY2019) | | \$5,650,000 (FY2019) |
| Capital Asset Acquisitions | \$300,000 (Fall 2018) | | \$300,000 (Fall 2018) |
| Other | | | |
| TOTAL | \$6,500,000 | | \$6,500,000 |

Other Funding Sources: Arlington is considering a concurrent DRPT application for the bus bay expansion component of this project. Arlington County staff will coordinate with NVTA staff should this grant be awarded.

Project Impacts

What regional benefit(s) does this project offer? With the completion of the first phase of the Silver Line, the East Falls Church Metrorail Station is now a transfer station receiving approximately 20 trains per hour in the peak period. Additional bus bays, increased pedestrian access, and the installation of Capital Bikeshare stations in Arlington and Falls Church form an integrated package of improved intermodal access at the East Falls Church Station. These improvements benefit regional transit service by reaching more regional transit riders through pedestrian, bicycle, and bus connections and by providing a critical link and alternative commuting option to I-66 for regional commuter buses.

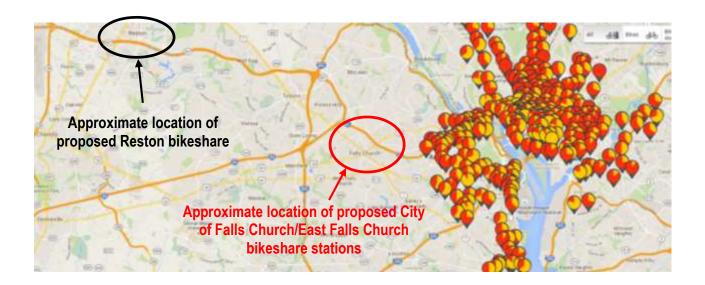
Increasing the capacity, by adding a maximum of two additional bus bays to the existing four bays, and reducing pedestrian/bus conflicts in the bus bays would allow for expansion of local and commuter bus service, including some of the planned regional I-66 service to accommodate I-66 Multimodal Improvement Projects. These local and regional bus riders would be able to access a major transfer point of the Silver and Orange Metrorail Lines. With additional planned commuter service as part of the I-66 study recommendations, this bus bay expansion provides critical toll-free access to the I-66 corridor. This project offers the region increased reliability of the regional Metrobus, commuter bus, and proposed I-66 commuter bus system by reducing bus congestion experienced approaching the station, and increasing bus capacity and intermodal connections at the Metrorail Station

The addition of a traffic signal, sidewalk extension, and crosswalk at the park-and-ride lot entrance on Washington Boulevard improves both vehicular and pedestrian access and safety for local users who walk to the Metrorail Station as well as the car, bus, and bicycle users who access the station from Arlington County, the City of Falls Church, and Fairfax County. An analysis of parking facility users in 2009 showed the regional reach of the East Falls Church Metrorail Station. Only 27% of users came from Arlington County, and the remaining users were split primarily between the City of Falls Church and Fairfax County.

Out of all Metrorail stations in the Washington region, East Falls Church has the highest number of bicyclists accessing the station in the AM Peak. This is the second highest bicycle mode share in the region (3.4%), and the highest share in Northern Virginia.² Adding Capital Bikeshare stations to the East Falls Church area and in neighboring areas of the City of Falls Church will enhance the already robust bike to Metro patterns in the area and augment the constrained supply of park and ride spaces at the station.

¹ East Falls Church Station Vision Plan (Draft), Page 32.

² Metrorail Bicycle and Pedestrian Access Improvements, Page 13, http://www.reconnectingamerica.org/assets/Uploads/2010-metro-rail-bicyle-ped-study.pdf#page=31



How will the project reduce congestion? Due to limited existing park-and-ride capacity and bus bay capacity at the East Falls Church Metrorail station, ridership at this station is approaching capacity and is unlikely to increase without additional access improvements. Expanding bus bay capacity and bike access to the station will expand intermodal access and service, accommodate more regional transit users, provide for enhanced transit options, decrease the need for kiss-and-ride trips, and reduce vehicle miles traveled in the congested I-66 corridor.

The additional bus bays will accommodate additional local service, regional Metrobus service, and planned regional commuter bus service identified in the I-66 TDM Study.³ Pedestrian safety improvements in the station area will enhance pedestrian access to the north of the station, while the addition of six bikeshare stations in Arlington and up to 16 stations in the City of Falls Church will provide critical capacity accessing the Metro station and connecting it to the nearby Falls Church activity center. These local and regional bus, pedestrian, and bicycle improvements will expand multimodal access to the Metrorail station and increase the number of transit riders at the station. In aggregate, these measures provide multi-modal options that are like increasing the capacity of the constrained park-and-ride facility at the East Falls Church Metrorail Station.

Capital Bikeshare bridges the travel distance between households and jobs and the Metrorail station that are outside of a traditional walking distance to the Metrorail station. According to the 2014 Capital Bikeshare customer survey, 64% of members used bikeshare at least once in the past month and 21% used it 6 or more times in the last month to access a Metrorail station.⁴ Bikeshare provides a critical last mile connection from home or work to a Metrorail station. Recent literature indicates the presence of a Capital Bikeshare station reduces congestion by 2-3% within a neighborhood⁵ and 12% of Capital Bikeshare trips replace automobile trips. 6

³ I-66 Transit Study/TDM Recommendations, page12-13, http://www.drpt.virginia.gov/media/1213/ fr1 i66transittdmstudy finalreport.pdf#page=247

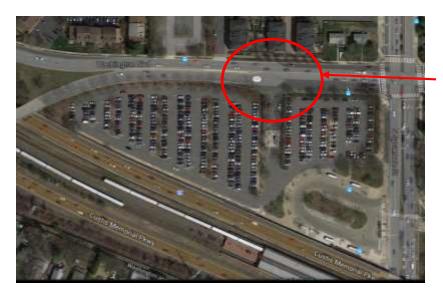
⁴ Capital Bikeshare 2014 Member Survey Report, page 26, http://www.capitalbikeshare.com/assets/pdf/cabi-2014surveyreport.pdf

http://www.rff.org/research/publications/bicycle-infrastructure-and-traffic-congestion-evidence-dc-s-capital-bikeshare
Capital Bikeshare 2014 Member Survey Report, page 32, http://www.capitalbikeshare.com/assets/pdf/cabi-2014surveyreport.pdf

The addition of a signal at the entrance/exit of the park-and-ride facility will help with peak-hour flow for vehicles leaving the facility. The new signal will be coordinated with the other existing signals in the immediate area to minimize disruption of through traffic, reduce bus congestion, and improve bus operations.

How will the project increase capacity? This project will increase the by bus transfer and layover capacity of the congested bus bays by 50%. This increase in capacity can accommodate local ART service, regional Metrobus service, and regional commuter bus service related to I-66 congestion mitigation planning efforts. This project will also increase the capacity of pedestrians and bicyclists to access the station from existing and planned housing and jobs in Falls Church/EFC activity center as well as nearby residential areas. The addition of Capital Bikeshare in Falls Church and East Falls Church will also provide a crucial last mile connection between the East Falls Church Metrorail Station and job centers in the Broad Street (Route 7) and Washington St (Route 29) corridors of Falls Church, providing a key connection for transit commuters to downtown Washington, the Rosslyn-Ballston corridor, Tysons Corner, and elsewhere.

How will the project improve auto and pedestrian safety? Safety would be improved through addition of a new traffic signal at conflict point on Washington Boulevard where pedestrians cross and vehicles enter and exit the station park and ride lot. This will provide for a much needed signalized, mid-block pedestrian crossing of Washington Blvd. This area sees a high degree of pedestrian activity as pedestrians from the north access the East Falls Church station. Safety for automobile drivers and passengers will be improved at the same proposed signalized intersection by controlling the egress of vehicles as they exit the park and ride facility onto Washington Blvd.



New signalized intersection and pedestrian crossing

Additionally, improvements to the bus entrance on Sycamore Street will reduce the conflict points between turning buses and pedestrians and shorten the distance of the pedestrian crossing of the drive aisle.

How will the project improve regional connectivity? This project is located in the City of Falls Church/East Falls Church activity center. For purposes of regional coordination, the part of East Falls Church that includes the East Falls Church Neighborhood Center District as shown on Arlington's General Land Use Plan was combined with the City of Falls Church to form one regional activity center. This project

would enhance bus, pedestrian, and bicycle connectivity within this multi-jurisdictional activity center and within the nearby **Seven Corners** activity center, as well as crucial last-mile connections between the Metro station and activity center areas.

Furthermore, additional bus bay capacity would allow for additional local and regional bus service to reach the East Falls Church Metrorail station. Today, there is no additional bus capacity given the existing bus bay configuration. This additional capacity would allow for regional commuter bus connections, shown as priority corridor bus routes in the I-66 corridor, to **Vienna**, **Merrifield/Dunn Loring**, **Fairfax Center**, **Centreville**, and **Gainesville** as shown in the 2009 DPRT I-66/TDM Study.⁷ Additional commuter bus services would be provided to multiple additional activity centers in the **Tysons Corner** area and in Loudoun County. Additional local bus service includes planned service for the Lee Highway Corridor in Arlington County, which will run buses connecting East Falls Church to the **Rosslyn** activity center. Accommodating this local and regional bus service provides a critical intermodal connection to the Orange and Silver Metrorail lines, which provide regional connectivity to additional Arlington and Fairfax County activity centers.

How will the project improve bicycle and pedestrian travel options? Currently, there is no Capital Bikeshare in this part of Arlington or in the City of Falls Church. This project will be the first expansion of this important transit network to the western portion of Arlington. In conjunction with Falls Church's concurrent FY17 application for Capital Bikeshare stations along the Broad Street, Washington Street, and WO&D trail corridors, these two projects will increase bicycle options and access to transit within areas of Arlington and Falls Church planned for redevelopment and their adjacent single-family neighborhoods. Adjacent to the WO&D trail, this project will also provide a critical connection and station coverage for the regional multi-use trail system, particularly as a connection to Capital Bikeshare stations planned to open along the trail in Reston in FY2017.

The addition of the signalized intersection and crosswalk will increase pedestrian access to the East Falls Church Metrorail Station for areas to the north of Washington Blvd. This accommodates an existing demand for pedestrian crossing at the park-and-ride entrance, providing a cost-effective walkable connection between existing housing density and the Metrorail station. Pedestrians are currently crossing a very busy road at an un-signalized location with no crosswalk facilities, creating a very dangerous situation for both drivers and especially pedestrians.

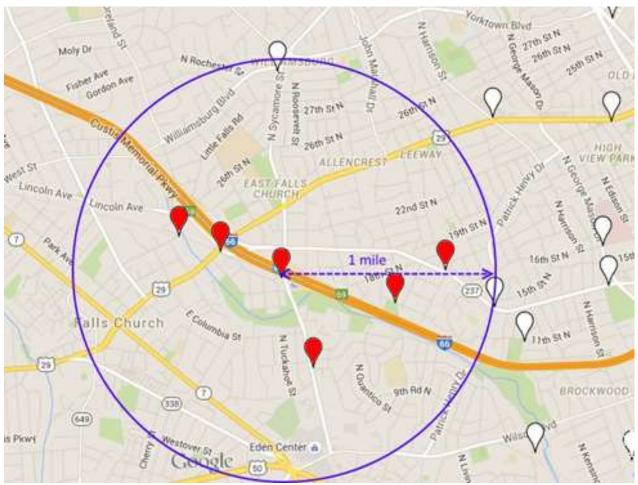
How will the project improve the management and operation of existing facilities through technology applications? This project will improve the signal timing at existing and new signals in the project area. Existing signals that will be improved are at N. Sycamore St. and Washington Blvd. and N. Sycamore St. and the bus bay entrance/exit. The new signal will be installed at Washington Blvd. and the park-and-ride entrance/exit. Improvements to these existing and new traffic signals will optimize vehicular, pedestrian, and bus circulation to minimize congestion and reduce delays.

⁷¹⁻⁶⁶ Transit Study/TDM Recommendations, page 12-13, http://www.drpt.virginia.gov/media/1213/_fr1_i66transittdmstudy_finalreport.pdf#page=247

Additional Information in Support of This Project



Illustrative Concept plan for proposed East Falls Church Bus Improvements from 2015 East Falls Church Station Bus Facilities Study.



Concept plan for propose Capital Bikeshare stations in the East Falls Church Area of Arlington. Stations proposed for funding under this application are in red.