

Appendix 1

Project Component Summaries

The following component summaries are included in this appendix:

1. Fort Totten / 1st Place-Galloway Road Access Improvements
2. Forest Glen Metrorail Access Project
3. Pedestrian Safety Measures for the New Carrollton Metrorail Station
4. Twinbrook Metrorail Station: Pedestrian Safety Improvements
5. West Hyattsville Metrorail Station Access Improvements
6. Arlington Army Navy Drive Multimodal Access Improvements
7. Bicycle Lockers at Virginia Railway Express (VRE) Stations

District of Columbia

Washington, DC

1. Fort Totten/1st Place-Galloway Road Access Improvements

Project Summary

The primary goal of the project component is to improve circulation so all modes can safely access and navigate the station area of the Fort Totten Metrorail station. The project will rehabilitate existing sidewalks and install sidewalks where informal footpaths currently exist along the roadway.

Project Cost

Project Component	Location	Project Parties	Total Project Cost	FY 2011 TIGER Grant Request	Percent TIGER	Match Source	Percent of Total Request
Fort Totten / 1st Place-Galloway Road Access Improvements	District of Columbia	DDOT	\$4,171,050	\$3,336,840	80%	Local funding	14%

Project Location

This project is located in the District of Columbia around the Fort Totten Metrorail station, a transfer station in northeast Washington, DC. The project area includes roadways and paths within one quarter of a mile of the Metrorail station. The land surrounding the station is currently underutilized and ripe for development. The station currently provides transit access to a diverse customer base. Any improvements to the station area will provide better access to these customers, who include low-income populations. There are several significant changes coming to the area, including a planned reconfiguration of the Riggs Road/South Dakota intersection and several major real estate developments in various stages of planning and construction in the immediate vicinity that will significantly increase residential and commercial densities.



Project Planning

In 2007, the Washington Metropolitan Area Transit Authority (WMATA) prepared the Fort Totten Metrorail Station Area Planning Study, an analysis that reviewed existing conditions at the site. This study identified deficiencies in the infrastructure that complicated pedestrian access to the station.

In August 2011, the District Department of Transportation (DDOT) received the final draft of the 1st Place and Galloway St, NE Transportation Access Study and Improvement Plan, which identified multimodal recommendations for circulation improvements around the station. The project was initiated by the District Department of Transportation to improve access and circulation for the confluence of pedestrians, bicyclists, buses, and vehicles at the Fort Totten Metrorail station. The study

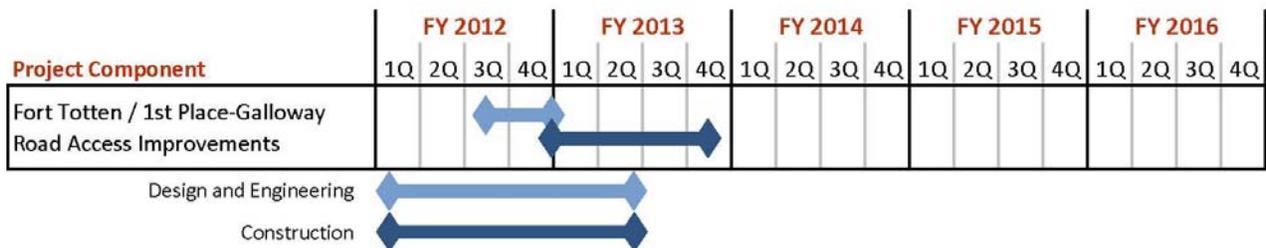
area included roadways and paths within 1/4-mile of the Fort Totten Metrorail station. Three public meetings were held with the community during the planning phase of the study. The process also included many meetings with WMATA, the National Park Service, and the DC Office of Planning.

Project Details

The project calls for Low Impact Development and storm water management features at two newly created pedestrian plazas near the Metro entrance. The project will install pavers, secure bicycle parking, and landscaping in and around the pedestrian plaza.

Improvements along 1st Place, NE include adding a sidewalk and lighting. Along Galloway Street, NE, the improvement will add a sidewalk and retaining wall. On WMATA property, the project includes adding pedestrian infrastructure, lighting and a rain garden.

Project Schedule



FY refers to the local fiscal year, July 1 through June 30.

Additional Documentation

The study, the 1st Place and Galloway St, NE Transportation Access Study and Improvement Plan, was completed August 4, 2011. More information may be found on the project website:

<http://www.tooledesign.com/forttotten>.

2. Forest Glen Metrorail Access Project

Project Summary

The project will construct a grade-separated crossing of Georgia Avenue (MD 97) at Forest Glen Road to provide for safer access to the Forest Glen Metrorail station to several communities and Holy Cross Hospital. The crossing will also streamline access to metro to/from these locations for persons using mobility devices. The project will also add ten Capital Bikeshare station to location around the Metro station and hospital, complementing the regional bikeshare network.

Project Cost

Project Component	Location	Project Parties	Total Project Cost	FY 2011 TIGER Grant Request	Percent TIGER	Match Source	Percent of Total Request
Forest Glen Metrorail Access Project	Montgomery County	Montgomery County	\$17,600,000	\$14,080,000	80%	Local funding	58%

Project Location

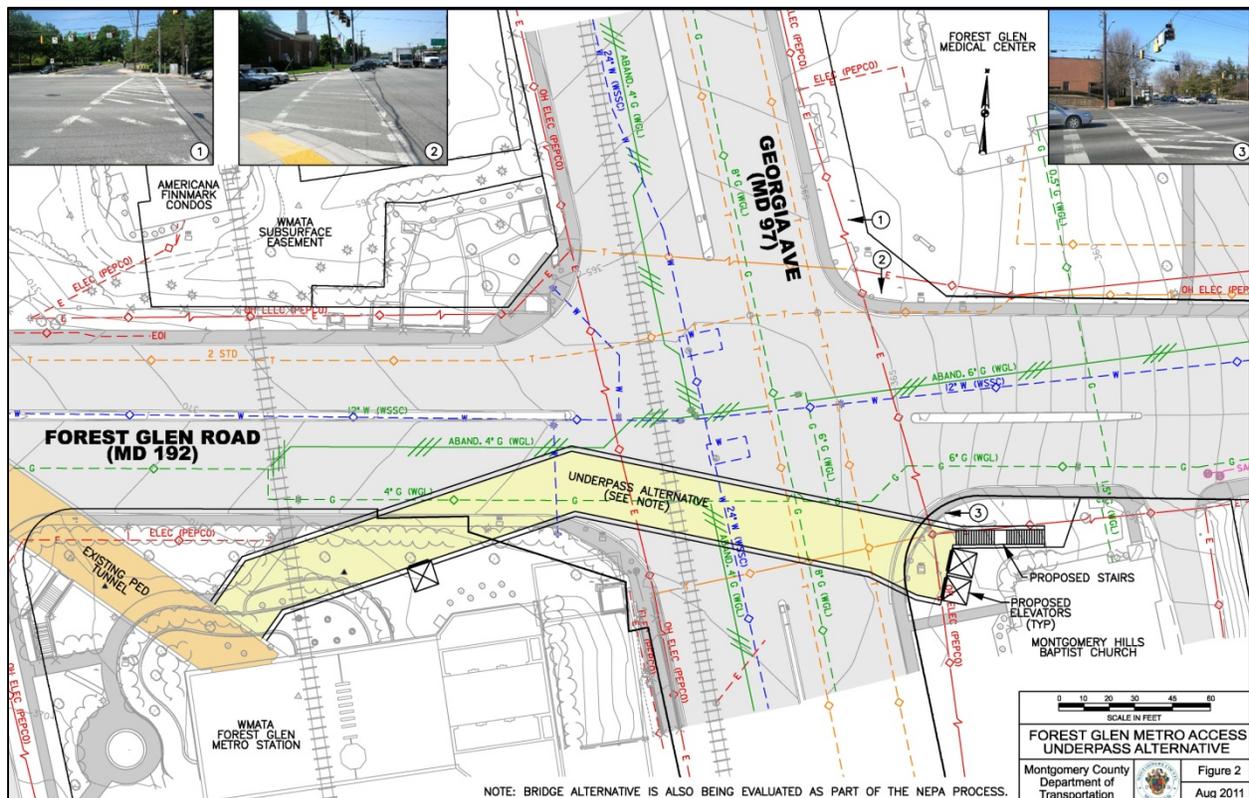
This project is located in Montgomery County, Maryland, just north of the Capital Beltway (I-495) at the intersection of Georgia Avenue (MD 97) and Forest Glen Road. Georgia Avenue is eight lanes wide at the Forest Glen Road intersection and there is no island refuge for pedestrians. The current Average Daily Traffic (ADT) volume on Georgia Avenue is approximately 80,000 vehicles per day. There were 84 crashes at this intersection between January 2005 and December 2009.



The project area is within Forest Glen Sector Plan and North and West Silver Spring Master Plan. Area is largely already built-out to current proposed land use and includes mostly single-family residential, some multi-family residential near Metro station, Holy Cross Hospital, and some other institutional (churches), medical/office, park, and retail land uses.

Project Planning

Montgomery County Department of Transportation (MCDOT) retained RK&K to perform surveys, identify utilities, complete a traffic study, develop alternatives, and evaluate the feasibility, constructability, impacts, and costs of implementing a new pedestrian passageway underneath or above Georgia Avenue. RK&K performed pedestrian and automobile counts at the intersection to evaluate the potential use of the passageway and impacts to vehicular and pedestrian traffic during construction; daily volumes for the new passageway are estimated to range between 450 and 800 pedestrians. RK&K evaluated initial concept alternatives that were reviewed with MCDOT, Maryland National Capital Park and Planning Commission, Maryland State Highway Administration, and WMATA. The feasibility report, including a recommended alternative will be completed in December 2011. Potential impacts to community, property, and natural, cultural and socio-economic resources are anticipated to be minor. RK&K anticipates that a Categorical Exclusion (CE) will be required to satisfy NEPA. After the Feasibility Report is complete and a preferred alternative is selected, the CE could be completed and approved by the spring of 2012.



For pedestrians crossing Georgia Avenue, the proposed tunnel would save approximately 119 seconds, on average. For vehicular traffic, pedestrians diverting to the proposed tunnel would reduce the number of calls for the extended pedestrian crossing interval, reducing average delay at the intersection. Based on having 63,603 vehicles entering the intersection during this 13-hour period, the total delay reduction due to the passageway would be 57 hours.

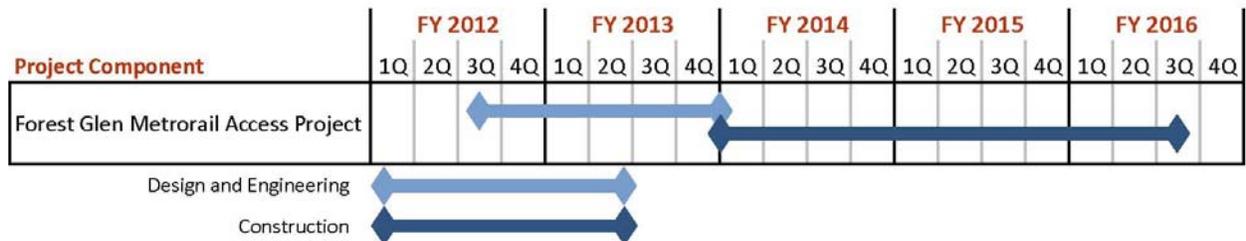
Up to 90 percent of the pedestrian activity at the Georgia Avenue / Forest Glen Road intersection is related to the Forest Glen Metro Station. For pedestrians crossing Georgia Avenue, there were four accidents in the study period of 2005-2009. It is anticipated that 95 percent of pedestrians crossing Georgia Avenue would use the proposed tunnel, eliminating 95 percent of the potential conflicts. This corresponds to a pedestrian accident rate reduction of 0.76 accidents per year.

Project Details

The intersection of Georgia Avenue and Forest Glen Road is one of the most congested intersections located adjacent to a Metrorail station in the Washington region and presents challenges for pedestrians to safely cross MD 97. The community has been lobbying several years for a grade-separated crossing that would eliminate conflicts with automobiles and significantly improve access to the Forest Glen Metro Station. Of the transit users who drive to the Metrorail station, one-third live within one mile of the station and would benefit from a safer connection to rail.

Construction of underpass would be accomplished via cut-and-cover, including construction of a temporary deck-over constructed at night (requiring temporary lane closures at night). Majority of passageway excavation and construction would be accomplished from below-grade, without interrupting traffic on Georgia Avenue during the daytime. Construction of bridge would be accomplished with minimum disruption to Georgia Avenue during peak period. Temporary lane closure would be required to erect the bridge. All work within travel lanes on Georgia Avenue would be limited to overnight hours (11pm-5am). Construction duration would be approximately 2 to 3 years depending on alternative selected.

Project Schedule



FY refers to the local fiscal year, July 1 through June 30.

Additional Documentation

Community website "Crossing Georgia": <http://www.crossinggeorgia.org/>

Montgomery County Project site: [http://www2.montgomerycountymd.gov/DOT-](http://www2.montgomerycountymd.gov/DOT-DTE/Common/Projects.aspx?id=500722-12&DatabaseType=SQL§ion=Facility%20Planning)

[DTE/Common/Projects.aspx?id=500722-12&DatabaseType=SQL§ion=Facility%20Planning](http://www2.montgomerycountymd.gov/DOT-DTE/Common/Projects.aspx?id=500722-12&DatabaseType=SQL§ion=Facility%20Planning)

3. Pedestrian Safety Measures for the New Carrollton Metrorail Station

Project Summary

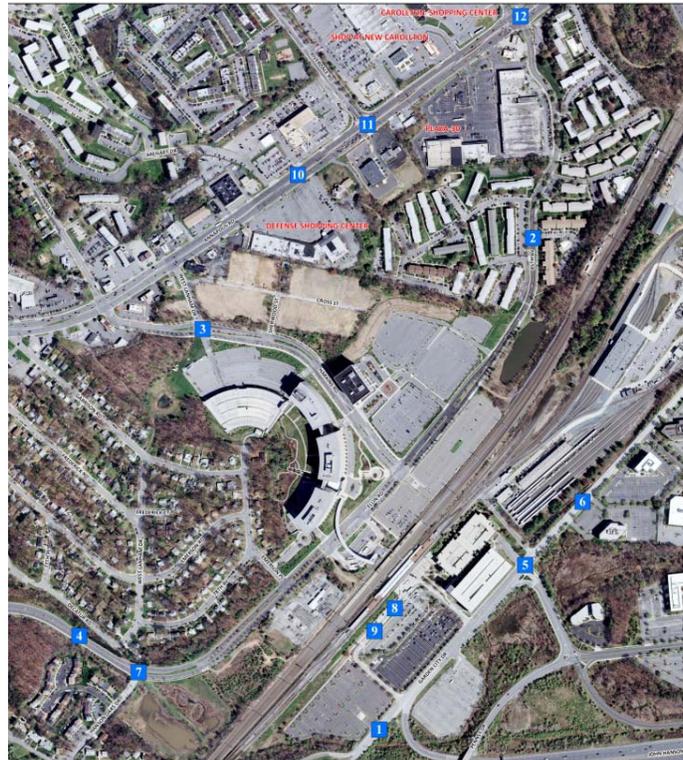
The New Carrollton Metrorail Station is currently Prince George's County's only full-service intermodal transportation center, which provides the region with an excellent opportunity to transform it into a premier, high-intensity and livable urban center and regional transit-oriented destination featuring a walkable and transit friendly environment. This grant request calls for implementation of 12 of the initial TLC study proposals for implementation.

Project Cost

Project Component	Location	Project Parties	Total Project Cost	FY 2011 TIGER Grant Request	Percent TIGER	Match Source	Percent of Total Request
Pedestrian Safety Measures for the New Carrollton Metrorail Station	Prince George's County	Prince George's County	\$945,595	\$676,476	72%	Local funding	3%

Project Location

This project is located in Prince George's County, Maryland, around the New Carrollton Metrorail Station, the terminus station on the eastern portion of Metro's orange line. The location also includes the New Carrollton Amtrak and MARC commuter rail stations. The



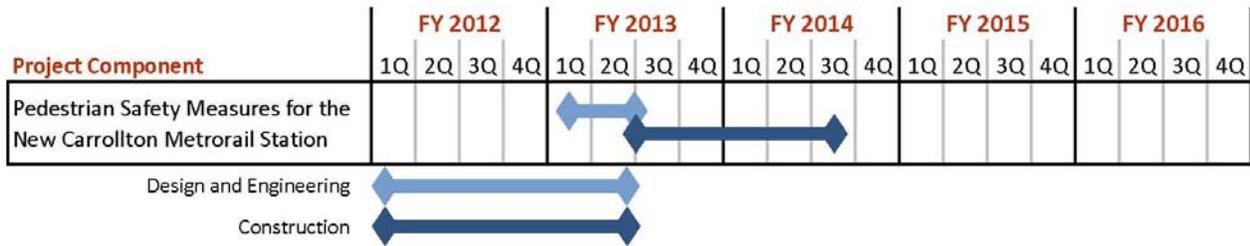
Project Planning

The 2010 New Carrollton Approved Transit District Development Plan (TDDP) and Transit District Overlay Zoning Map Amendment include planning concepts, recommendations, and implementation steps that came from the recommendations of the 2004 New Carrollton Transit-Oriented Development Strategy Planning Study, proposed public infrastructure investment recommendations provided by the Urban Land Institute Technical Assistance Panel convened in July 2007, as well as an extensive public outreach program that includes intensive hands-on workshops. Subsequent to the approval of the Plan, Prince George's County's Maryland National Capital Park and Planning Commission (M-NCPPC), through the Washington Metropolitan Council of Governments Transportation Planning Board (MWCOG-TPB), recently approved the 2010 Transportation Land-Use Connection (TLC) Study for the New Carrollton Station Area that provided a tool box of 29 recommended capital improvements.

Project Details

This grant request calls for construction of 12 of the initial TLC study recommendations for implementation. Included is the implementation of sidewalk and crossing improvements and signal timing changes, as identified in the TLC Study, and the pedestrian and bicycle recommendations of the 2010 TDDP around the New Carrollton Metro Station, which will assist the County in attracting future economic development to this area. Further, New Carrollton is the Number 1 identified Transit Oriented Development (TOD) in the County and ensuring that it is a safe pedestrian and bicycle friendly environment is critical to enhancing existing transit infrastructure and compounding its value as a TOD.

Project Schedule



FY refers to the local fiscal year, July 1 through June 30.

Additional Documentation

The components of this project were compiled from the 2010 TLC Program Study: New Carrollton Interim Pedestrian Safety Improvements. This study is located on the MWCOG website:

<http://www.mwcog.org/transportation/activities/tlc/pdf/NewCarrolltonPedSafety.pdf>

4. Twinbrook Metrorail Station: Pedestrian Safety Improvements

Project Summary

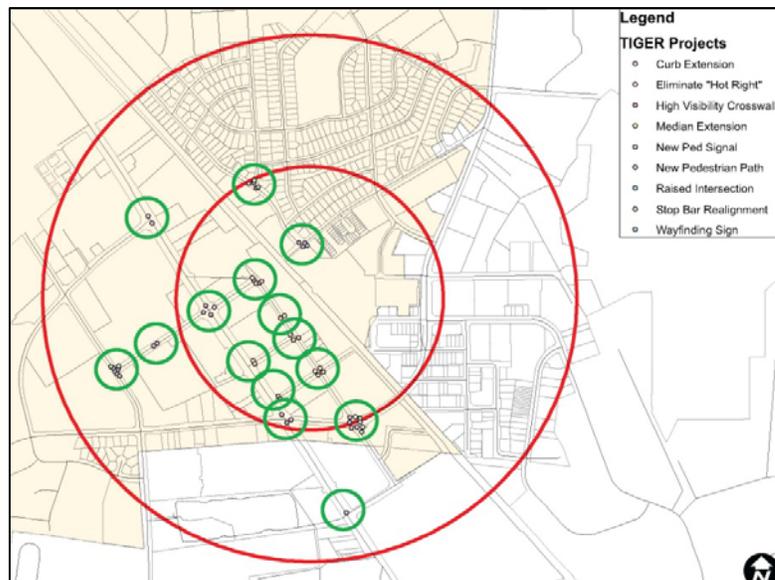
The project will construct safety improvements along four specific corridors within a one half mile radius of the Twinbrook Metrorail station. The improvements identified in this area include refurbished high-visibility crosswalks, median extensions, curb extensions, and other related enhancements at approximately 26 intersections within the project area. Implementation of this project will improve pedestrian safety in the immediate vicinity of the station.

Project Cost

Project Component	Location	Project Parties	Total Project Cost	FY 2011 TIGER Grant Request	Percent TIGER	Match Source	Percent of Total Request
Twinbrook Metrorail Station: Pedestrian Safety Improvements	City of Rockville	Rockville, MDOT	\$501,590	\$401,272	80%	Local funding	2%

Project Location

This project is located entirely within a one half mile radius around the Twinbrook Metrorail station. Twinbrook Metrorail station is located on the southeastern edge of the City of Rockville, and surrounded by roads owned and maintained by the City of Rockville, Montgomery County Department of Transportation (MCDOT), and the Maryland State Highway Administration (SHA). This project is located in a State-designated Transit Oriented Development area with existing residential, commercial, and employment uses. There are several other mixed-use developments expected to be constructed in this vicinity within the next few years.



Project Planning

The City of Rockville received a planning grant through the TPB's Transportation/Land-Use Connections (TLC) technical assistance program in 2011 to study safer walkways to the Twinbrook Metrorail Station. The TLC grant study was the result of a joint partnership between the City of Rockville and National Capital Transportation Planning Board. The community participated during the evaluation phase of this project, as Rockville hosted resident representatives from the City's Traffic and Transportation Commission as well as agency representatives for each of the jurisdictions described in this report. Implementation of this project will take place within existing City and State roadways and will require direct collaboration between staff at the City of Rockville and Maryland State Highway Administration

(SHA). In addition to this direct collaboration, City staff will coordinate with staff from the Montgomery County Department of Transportation and WMATA. Representatives from each of these agencies participated in a workshop during the concept design phase of the TLC study to discuss the proposed study recommendations.

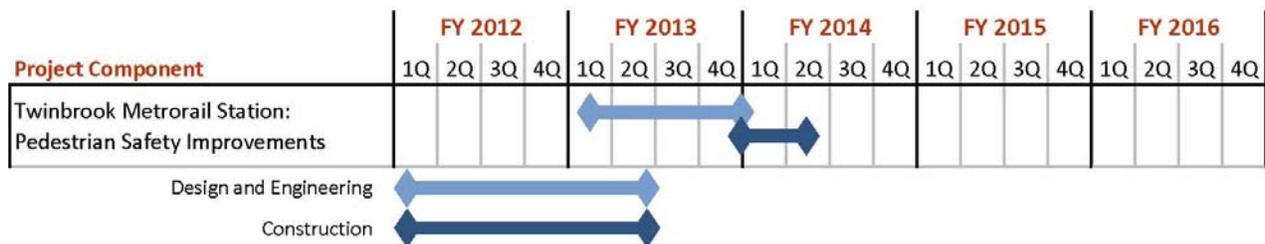
Nearly every recommendation included in the TLC grant study correlates directly to a safety improvement. Recommendations include, but are not limited to, providing pedestrian refuge islands, curb extensions, additional pedestrian-scale lighting, etc. The TLC study recommends consideration of rectangular rapid flashing beacons (RRFBs) to improve driver awareness of pedestrian activity at mid-block crosswalks. The grant study also recommended the use of innovative public safety campaigns, such as thermoplastic safety messages on the sidewalk, to reach pedestrians.

Project Details

The area immediately surrounding Twinbrook Metrorail station is currently under development as a high density residential community. This project will improve pedestrian and bicyclist accessibility to rapid transit without inhibiting automobile or bus operations. Improvements associated with this project are in specific corridors within the one half mile radius of the Twinbrook Metrorail station. These corridors were identified based on their importance to pedestrian accessibility and potential for improvement to support enhanced accessibility. These corridors are: Halpine Road, Lewis Avenue, , and Rockville Pike. The improvements identified in this area include refurbished high-visibility crosswalks, median extensions, curb extensions, and other related enhancements at approximately 15 intersections within the project area.

Private-sector redevelopment around the Twinbrook Metrorail station, a State-designated Transit Oriented Design (TOD) area, is adding more residential, retail, and office units. One such development, Twinbrook Station, is an award-winning, project that will include 1,595 residential units, 220,000 square feet of ground-floor retail, and 325,000 square feet of Class-A commercial space. Twinbrook Station has been designated a Smart Growth project by the Washington Smart Growth Alliance, received the International Charter Award for Excellence from the Congress for the New Urbanism, and was the first project in the Washington, DC, area to be awarded Stage 2 LEED for Neighborhood Development Gold-level certification for its plan. The City is able to match federal TIGER funds via Development Impact taxes collected as part of the Twinbrook Station development.

Project Schedule



FY refers to the local fiscal year, July 1through June 30.

Additional Documentation

This project was developed based on recommendations from a 2011 TLC Study: Safer Walkways to Transit in the City of Rockville, Maryland:

<http://www.mwcog.org/transportation/activities/tlc/pdf/Rockville-TOD.pdf>

5. West Hyattsville Metrorail Station Access Improvements

Project Summary

The project includes two components: adding approximately 500 linear feet of frontage along the south side of Jamestown road to improve pedestrian access to the West Hyattsville Metrorail station and providing a WMATA secure bike parking facility and related identified improvements that connect into the West Hyattsville station.

Project Cost

Project Component	Location	Project Parties	Total Project Cost	FY 2011 TIGER Grant Request	Percent TIGER	Match Source	Percent of Total Request
West Hyattsville Metrorail Station Access Improvements	Prince George's County	Prince George's County	\$710,250	\$542,750	76%	Local funding	2%

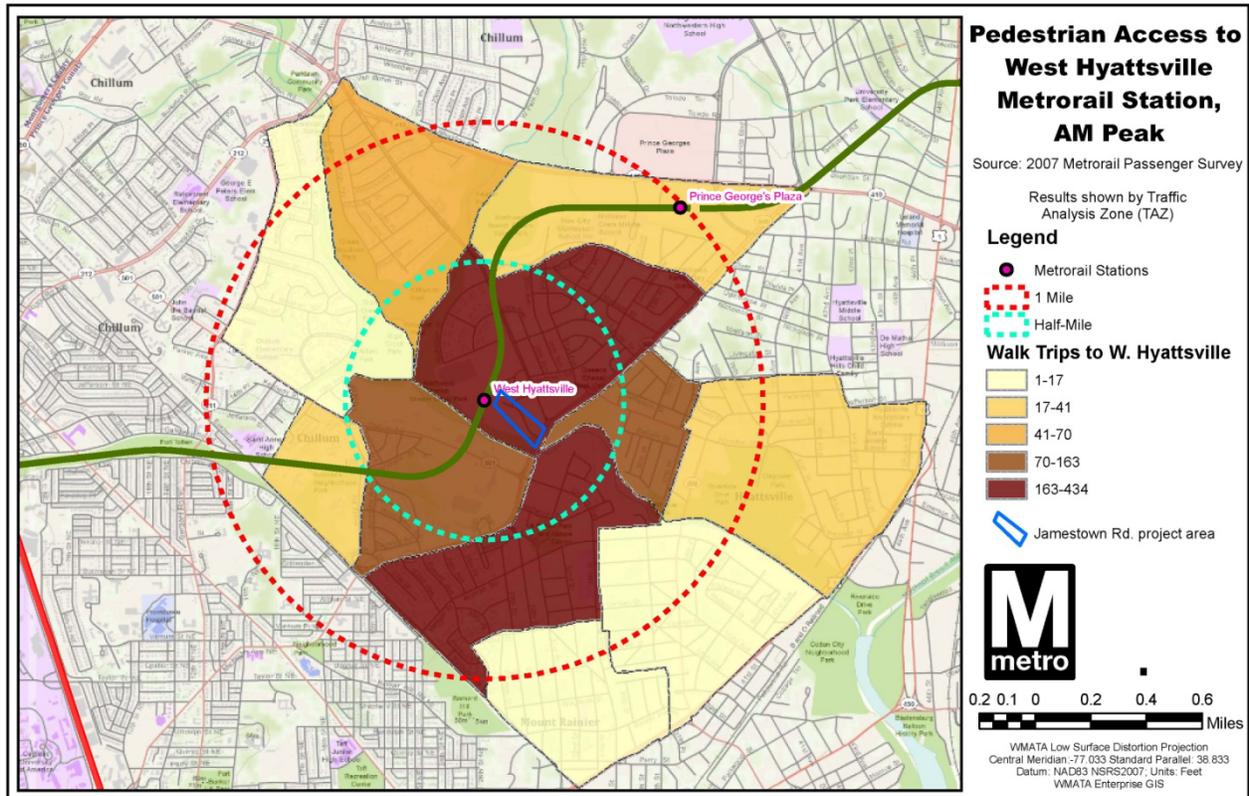
Project Location

This project is located in Prince George's County, Maryland, at the West Hyattsville Metrorail station, which is on the Metro green line, one station stop outside of the District of Columbia. This project is located in a mixed residential and commercial area and will provide better non-motorized access to the rail station. On a given weekday, 41 percent of the station's riders walk to the station. This amounts to approximately 1,600 pedestrian trips to the station and another 1,600 trips leaving the station. Many of these trips are along Jamestown Road, as it connects to high density residential uses located to the south and east of the station. An existing trail runs from the apartments to Queens Chapel Road, intersecting Queens Chapel Road near the intersection of Jamestown Road. Pedestrians using Jamestown Road must walk along the shoulder to reach the station.

Project Planning

The approved Prince George's Countywide Master Plan of Transportation (CMPOT) recommends wide sidewalks and designated bike lanes along Jamestown Road. These facilities are intended to improve pedestrian safety, facilitate non-motorized access to metro, and complement the existing stream valley trail network along Northwest Branch. According to WMATA's Station Site and Access Planning Manual, the West Hyattsville Metrorail station currently has the highest rate of bicycle and pedestrian access of all the metro stations in Prince George's County. The provision of bike facilities will further encourage and safely accommodate this mode. The road improvements along Jamestown Road will achieve the community vision as expressed in the West Hyattsville Transit District Development Plan (TDDP) by establishing land use/transit linkages that make it easier to use transit (rail and bus) and by creating an attractive pedestrian-friendly environment around the transit station. The TDDP also includes recommendations for various pedestrian safety features and amenities through the transit district that will serve to make a safer and more inviting pedestrian environment immediately around the station. Some of these improvements will occur as part of larger development applications; while others will be implemented by local agencies as funding becomes available.

The station area enhancements, including the secure bicycle parking facility, were derived from WMATA’s Metrorail Bicycle and Pedestrian Access Improvements Study.



Project Details

The project will add approximately 500 linear feet of sidewalk along the south side of Jamestown road to improve pedestrian access to the West Hyattsville Metrorail station. A WMATA secure bike parking facility and related identified improvements that connect into the WMATA West Hyattsville Station will be provided. This is one of the recommendations out of the WMATA Bicycle Access Study. The bike parking facility will be located adjacent to station entrance and will have access to the local bike network, including the trail system discussed above. It will be weather protected and security will be maintained by limited access entry system and cameras. A similar facility is under construction at the nearby College Park Metrorail Station (<http://planitmetro.com/2011/10/06/college-park-bike-ride-under-construction/>).

Project Schedule

Project Component	FY 2012				FY 2013				FY 2014				FY 2015				FY 2016			
	1Q	2Q	3Q	4Q																
West Hyattsville Metrorail Station Access Improvements					←	←	←	←	→	→	→	→								
Design and Engineering	←	←	←	←	←	←	←	←												
Construction	←	←	←	←	←	←	←	←												

FY refers to the local fiscal year, July 1through June 30.

Additional Documentation

References to this project may be found in the following documents:

Washington Metropolitan Area Transit Authority, Station Site and Access Planning Manual, Appendix C, page C-4.

Maryland-National Capital Park and Planning Commission, Approved West Hyattsville Transit District Development Plan, page 1.

Washington Metropolitan Area Transit Authority, Metrorail Bicycle & Pedestrian Access Improvements Study, October 2010:

<http://planitmetro.com/wp-content/uploads/2010/12/Metrorail-Bicycle-Pedestrian-Access-Improvements-Study-Final.pdf>

6. Army Navy Drive Multimodal Access Improvements

Project Summary

The project component re-conceives 3,300 feet of Army Navy Drive, providing a wider, safer sidewalk, a physically-separated two-way cycle track, and safer street cross section that will support a future streetcar. The project adds ten bikeshare stations along Columbia Pike to complement the established Capital Bikeshare activities in the core project area. Collectively, the improvements will enhance multimodal access to three major activity centers.

Project Cost

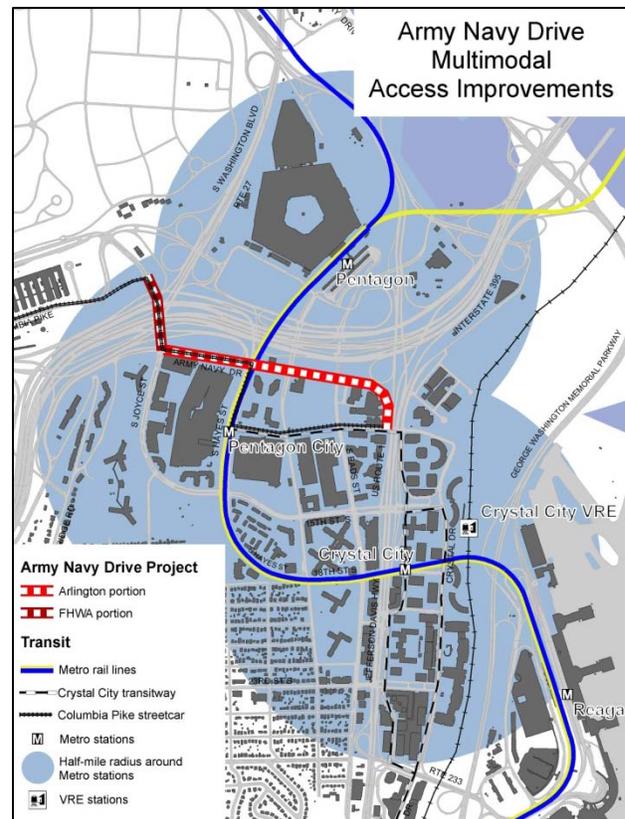
Project Component	Location	Project Parties	Total Project Cost	FY 2011 TIGER Grant Request	Percent TIGER	Match Source	Percent of Total Request
Arlington Army Navy Drive Multimodal Access Improvements	Arlington County	Arlington County	\$6,838,879	\$4,965,983	73%	Local bond funding	20%

Project Location

The component is located in Arlington County, Virginia, within one-half mile of three Metrorail stations: Pentagon, Pentagon City, and Crystal City. In addition, it is located within one half mile of the Crystal City VRE station. The bikeshare locations are along Columbia Pike, the terminus of which is within one half mile of the Pentagon and Pentagon City Metrorail stations; Columbia Pike will be reconfigured to accommodate a streetcar within the next decade.

Project Planning

This project originated as a need to improve bicycle and pedestrian access and connectivity in the vicinity of the Pentagon Reservation, immediately north of Army Navy Drive. Arlington County is committed to revitalizing Pentagon City and Crystal City, and as such target investments that yield the greatest good, not only from a transportation perspective, but also in terms of overall quality of life. This project is one of Arlington’s priorities, as it will make it easier and safer for residents, workers and visitors to access major activity centers within the County and the region. The project grows out of Arlington’s Master Transportation Plan process, and also fully supports the Federal Highway Administration’s 14th Street Bridge Corridor EIS, which aims to improve conditions for pedestrian and



bicycle access to river crossings as part of a long list of mitigation efforts to reduce the environmental effects of transportation in the region.

Guided by the Pentagon City Phased Development Site Plan, the Pentagon City area is developing a rich mix of office, retail, and residential uses to create a high-density, transit-oriented mixed use community. In 2010, the County adopted a long-range sector plan for Crystal City. The planning initiative was in response to BRAC recommendations, which called for the relocation of 17,000 jobs from Arlington to nearby military bases. As a result of the loss of employment, 4.2 million square feet of office space will be vacated. The approved Crystal City sector plan anticipates an increase in overall density of 61 percent by 2050, with an increased proportion of residential uses.

The project is also located within close proximity to major County capital projects, which further underscore the critical importance of the project area including: 1) construction of the new Long Bridge Park, a new state of the art aquatic, health and fitness facility and park located at the north end of Crystal City, scheduled to open in September 2011; 2) renewal of South Hayes Street in the heart of Pentagon City, scheduled for construction in 2012; 3) a major planning effort to establish fixed-rail transit along Columbia Pike; located just NW of the Project, with stations in Pentagon City and Crystal City; and 4) the initial launch site of Arlington's Capital Bikeshare system in September 2010.

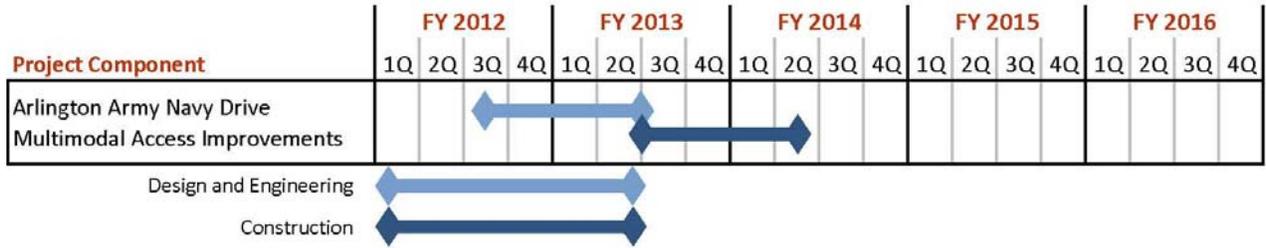
Project Details

This project proposes building the region's first separated two-way cycle track. While this type of facility is common in other parts of the world, especially in northern Europe, and has some precedent in North America; particularly in Montreal, this would be the first purpose-built cycle track in the Metropolitan Washington, DC area, and the first in the Commonwealth of Virginia. By narrowing the very wide existing street cross section of Army Navy Drive, space will be created for greatly improved conditions for pedestrians along an improved sidewalk, and a new alignment will be created for a dedicated bicycle facility. This will be done without negatively affecting motor vehicle operations, and while assuring a good fit for the anticipated fixed-rail streetcar line in the corridor. The anticipated cycle track facility proposed for Army Navy Drive is difficult to implement under existing modal funding in part because it is costly to build in prime urban settings, and in part because there are few precedents in this country for this type of bicycle accommodation.

Crystal City and Pentagon City launched Arlington's Capital Bikeshare program in 2010. That bicycle transit system continues to grow and meet the needs for short term cycle trips. Arlington County will provide the necessary planning and design costs as an in-kind match. Arlington County will own the bikes and equipment for the ten bikeshare facilities, but they will be operated by Capital Bikeshare through our existing contract.

The project is currently at 30% design, with an estimated budget of \$5.5 Million. A companion project to provide new bicycle and pedestrian facilities along South Joyce Street, immediately adjacent to Army Navy Drive, is scheduled for construction in 2012 (see attached map). It will be funded (at a cost of \$1.5 Million) and will be built by FHWA and VDOT.

Project Schedule



FY refers to the local fiscal year, July 1 through June 30.

Additional Documentation

The Federal Highway Administration's *14th Street Bridge Corridor EIS*.

