

# **Approved and Adopted**

September 2010

# **purple line** Functional Plan



Montgomery County Planning Department The Maryland-National Capital Park and Planning Commission

## purple line functional plan

#### Approved and Adopted

#### a b s t r a c t

This plan for the Purple Line transit facility through Montgomery County contains route, mode, and station recommendations. It is a comprehensive amendment to the approved and adopted 1990 Georgetown Branch Master Plan Amendment. It also amends The General Plan (On Wedges and Corridors) for the Physical Development of the Maryland-Washington Regional District in Montgomery and Prince George's Counties, as amended, the Master Plan of Highways for Montgomery County, the Countywide Bikeways Functional Master Plan, the Bethesda-Chevy Chase Master Plan, the Bethesda Central Business District Sector Plan, the Silver Spring Central Business District and Vicinity Sector Plan, the North and West Silver Spring Master Plan, the East Silver Spring Master Plan, and the Takoma Park Master Plan.

#### source of copies

The Maryland-National Capital Park and Planning Commission 8787 Georgia Avenue Silver Spring, MD 20910-3760

Online at: www.montgomeryplanning.org/transportation/projects/purple\_line.shtm

#### THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

The Maryland-National Capital Park and Planning Commission is a bicounty agency created by the General Assembly of Maryland in 1927. The Commission's geographic authority extends to the great majority of Montgomery and Prince George's Counties; the Maryland-Washington Regional District (M-NCPPC planning jurisdiction) comprises 1,001 square miles, while the Metropolitan District (parks) comprises 919 square miles, in the two counties. The Commission is charged with preparing, adopting, and amending or extending The General Plan (On Wedges and Corridors) for the Physical Development of the Maryland-Washington Regional District in Montgomery and Prince George's Counties.

The Commission operates in each county through Planning Boards appointed by the county government. The Boards are responsible for all local plans, zoning amendments, subdivision regulations, and administration of parks.

The Maryland-National Capital Park and Planning Commission encourages the involvement and participation of individuals with disabilities, and its facilities are accessible. For assistance with special needs (e.g., large print materials, listening devices, sign language interpretation, etc.), please contact the Community Outreach Office, 301-495-4600 or TDD 301-495-1331.

#### CERTIFICATION OF APPROVAL AND ADOPTION

This Purple Line Functional Plan is a Comprehensive Amendment to the Approved and Adopted 1990 Georgetown Branch Master Plan Amendment; The General Plan (On Wedges and Corridors) for the Physical Development of the Maryland – Washington Regional District in Montgomery and Prince George's Counties, as amended; the Master Plan of Highways for Montgomery County; the Countywide Bikeways Functional Master Plan; the Bethesda-Chevy Chase Master Plan; the Bethesda Central Business District Sector Plan; the Silver Spring Central Business District Sector Plan; the Silver Spring Master Plan; the East Silver Spring Master Plan; the East Silver Spring Master Plan; the East Silver Spring Master Plan; the District Council, by Resolution No. 16-1470 on July 27, 2010, and has been adopted by The Maryland-National Capital Park and Planning Commission by Resolution No. 10-19 on September 8, 2010, after a duly advertised public hearing as required by Article 28 of the Annotated Code of Maryland.

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

Jamuel Parker, Jr. Samuel J. Parker, Jr. Chairman

Françoise Carrier Vice -- Chair

Joseph C. Zimmerman Secretary-Treasurer



MONTGOMERY COUNTY PLANNING DEPARTMENT THE MARYLAND NATIONAL CAPITAL PARK AND PLANNING COMMISSION

MCPB NO. 10-120 M-NCPPC NO. 10-19

#### RESOLUTION

WHEREAS, The Maryland-National Capital Park and Planning Commission, by virtue of Article 28 of the Annotated Code of Maryland, is authorized and empowered, from time to time, to make and adopt, amend, extend and add to The General Plan (On Wedges and Corridors) for the Physical Development of the Maryland-Washington Regional District within Montgomery and Prince George's Counties; and

WHEREAS, the Montgomery County Planning Board of The Maryland-National Capital Park and Planning Commission, pursuant to said law, held a duly advertised public hearing on December 10, 2009 on the Public Hearing Draft Purple Line Functional Plan, being also a comprehensive amendment to the Approved and Adopted 1990 Georgetown Branch Master Plan Amendment; The General Plan (On Wedges and Corridors) for the Physical Development of the Maryland-Washington Regional District within Montgomery and Prince George's Counties, as amended; the Master Plan of Highways for Montgomery County, as amended; the Countywide Bikeways Functional Master Plan, the Bethesda-Chevy Chase Master Plan, the Bethesda Central Business District Sector Plan, the Silver Spring Central Business District and Vicinity Sector Plan, the North and West Silver Spring Master Plan, the East Silver Spring Master Plan, and the Takoma Park Master Plan; and

WHEREAS, the Montgomery County Planning Board, after said public hearing and due deliberation and consideration, on April 8, 2010, approved the Planning Board Draft Purple Line Functional Plan, recommended that it be approved by the District Council, and forwarded it to the County Executive for recommendations and analysis; and

WHEREAS, the Montgomery County Executive reviewed and made recommendations on the Planning Board Draft Purple Line Functional Plan and forwarded those recommendations to the District Council on June 25, 2010; and

WHEREAS, the Montgomery County Council sitting as the District Council for the portion of the Maryland-Washington Regional District lying within Montgomery County, held a public hearing on June 29, 2010, wherein testimony was received concerning the Planning Board Draft Purple Line Functional Plan; and

> Transportation Division, 301-495-4525, Fax: 301-495-1304 8787 Georgia Avenue Street, Silver Spring, Maryland 20910 www.MontgomeryPlanning.org

WHEREAS, the District Council, on July 27, 2010 approved the Planning Board Draft Purple Line Functional Plan subject to modifications and revisions set forth in attached Resolution No. 16-1470.

NOW, THEREFORE BE IT RESOLVED, that the Montgomery County Planning Board and The Maryland-National Capital Park and Planning Commission do hereby adopt the said Purple Line Functional Plan, together with the General Plan for the Physical Development of the Maryland-Washington Regional District within Montgomery and Prince George's Counties, as amended, and as approved by the District Council in the attached Resolution No. 16-1470; and

BE IT FURTHER RESOLVED, that copies of said Amendment should be certified by The Maryland-National Capital Park and Planning Commission and filed with the Clerk of the Circuit Court of each of Montgomery and Prince George's Counties, as required by law.

#### \*\*\*\*\*

#### CERTIFICATION

This is to certify that the foregoing is a true and correct copy of a resolution adopted by the Montgomery County Planning Board of The Maryland-National Capital Park and Planning Commission on motion of Commissioner Alfandre, seconded by Commissioner Wells-Harley, with Commissioners Carrier, Wells-Harley, Alfandre, Dreyfuss, and Presley voting in favor of the motion, at its regular meeting held on Thursday, July 29, 2019, in Silver Spring, Maryland.

Francoise Carrier, Chair Montgomery County Planning Board

This is to certify that the foregoing is a true and correct copy of Resolution No. 10-19, adopted by the Maryland-National Capital Park and Planning Commission on motion of Commissioner Cavitt, seconded by Commissioner Wells-Harley, with Commissioners Parker, Carrier, Cavitt, Vaughns, Presley, and Alfandre, voting in favor of the motion, and Commissioners Squire, Clark and Dreyfuss absent during the vote, at its meeting held on Wednesday, September 8, 2010, in Silver Spring, Maryland.

2

Patricia Colihan Barne

**Executive Director** 



Philadelphia, PA David Pirmann

# Prepared by

The Maryland National Capital Park and Planning Commission April 8, 2010

# Approved by

The Montgomery County Council July 27, 2010

# Adopted by

The Maryland National Capital Park and Planning Commission September 8, 2010

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## introduction

The Purple Line alignment within Montgomery County travels from Bethesda to Takoma/Langley Crossroads, parallel to the Capital Crescent Trail, over the CSX railroad and Metrorail tracks, through a new tunnel under Plymouth Street, and in certain locations, traveling with traffic on public roadways.

The goal of this *Purple Line Functional Plan* is to identify the specific alignment and station locations within the County so that existing and future master, sector, station area, and other plans will have the benefit of adopted policy guidance as to the location, mode, function, and general operational characteristics of the Purple Line. This Plan makes no recommendations for zoning or land use changes, but identifies alignment and station locations to protect needed right-of-way.

This Plan should be consulted for development review cases and prior to issuing building permits.

#### list of acronyms

AA/DEIS	Alternatives Analysis/Draft Environmental Impact Statement
CBD	Central Business District
CSX	CSX Transportation Corporation
FEIS	Final Environmental Impact Statement
LPA	Locally Preferred Alternative
LRT	Light Rail Transit
MARC	Maryland Area Regional Commuter (rail)
MDOT	Maryland Department of Transportation
MPAG	Master Plan Advisory Group
MTA	Maryland Transit Administration
SHA	Maryland State Highway Administration
UMD	University of Maryland
WMATA	Washington Metropolitan Area Transit Authority

<sup>&</sup>lt;sup>1</sup> All of the build alternatives examined in the AA/DEIS included a fully bidirectional transitway (two lanes or two tracks) from Bethesda to New Carrolton. This Functional Plan includes that design element. The Georgetown Branch Master Plan included segments between Bethesda and Silver Spring that were single track segments.

# background

In January 1990, Montgomery County approved and adopted the Georgetown Branch Master Plan Amendment. This master plan amended a prior Georgetown Branch plan of 1986 and established as County policy the intent to construct, operate, and maintain a trolley and adjacent trail between Bethesda and Silver Spring on the Georgetown Branch right-ofway. The County purchased the Georgetown Branch right-of-way in December 1988.

Other County plans subsequently were adopted confirming County policy to utilize the right-of-way as a combined transit/trail facility between Bethesda and Silver Spring.

- Bethesda-Chevy Chase Master Plan Approved and Adopted April 1990
- Bethesda Central Business District Sector Plan Approved and Adopted July 1994
- Silver Spring Central Business District Sector Plan Approved February 2000 and Adopted March 2000
- North and West Silver Spring Master Plan Approved August 2000 and Adopted September 2000
- The General Plan (On Wedges and Corridors) for the Physical Development of the Maryland-Washington Regional District in Montgomery and Prince George's Counties as amended

The technical basis for extending the Purple Line east from Silver Spring to New Carrollton in Prince George's County was established with the Capital Beltway/Purple Line Study – Findings and Recommendations Report, prepared by the Maryland State Highway Administration (SHA) and Maryland Transit Administration (MTA) in March 2003. In September 2003, the MTA began the scoping process as part of the preparation of the Purple Line Alternatives Analysis/ Draft Environmental Impact Statement (AA/DEIS). The AA/DEIS was released in October 2008.<sup>1</sup>

### **County Council Policy Direction**

The Montgomery Council in January 2009 voted to recommend that the Governor endorse a Locally Preferred Alternative (LPA) with the following major attributes:

- Light Rail Transit (LRT) as the preferred mode
- "Medium Investment" LRT (one of the alternatives analyzed in the AA/DEIS) using the Georgetown Branch right-of-way as the preferred alignment with following modifications related to design.
  - Incorporate the "High Investment" LRT design for the Capital Crescent Trail through the tunnel under Wisconsin Avenue.
  - Curtail the "tail tracks" west of the Bethesda South Station to extend no farther than 100 feet west of the portal of the Apex Building, and less than that if possible.
  - Plant grass between and along the sides of the tracks where the line is parallel to the Capital Crescent Trail and not on a bridge or in a tunnel.
  - Expand the pavement width of the Capital Crescent Trail to a minimum of 12 feet, and, where existing right-of-way is available (i.e., between the western end of Columbia Country Club to the eastern end of Rock Creek Park) and where cost and tree loss would not be significant, expand the pavement width up to 16 feet with a wider buffer between the LRT and the trail.
  - If the surface option is ultimately selected for Wayne Avenue, delete the Dale Drive stop from the LPA but design the line to facilitate adding a stop there in the future.

The County Council and County Executive added the following items to be accomplished during preliminary engineering.

- Examine the feasibility of using hybrid light rail vehicles that do not require wires, poles, or an electrical substation.
- Consider more access points to the Capital Crescent Trail.
- Retain as many of the corridor's existing trees as possible.
- Investigate surface LRT operations to ensure pedestrian and vehicle safety.
- Study pedestrian, vehicular, and LRT operations in Silver Spring, including vehicle queuing, on-street parking operations, and the Green Trail design.

- Develop detailed designs for the Capital Crescent Trail that include access points, retaining walls, security and fencing, landscaping, aesthetic treatments for new bridges, signing and markings, bicycle facilities at station, and the public plaza at the Woodmont East terminus.
- Prepare a phasing plan along University Boulevard that identifies how LRT implementation will be coordinated with the wider master plan typical street section.
- Provide continuous sidewalks or shared use paths on both sides of roadways that carry the Purple Line alignment.
- Protect wetland, parkland, historic resources, and mitigate the impacts of the Parks Department's Brookfield Road Maintenance site and wheel squeal locations throughout the alignment.

#### **State Selection of Locally Preferred Alternative**

On August 4, 2009, Governor O'Malley announced that the State was proceeding with a Purple Line New Starts application for federal funding of a Purple Line between Bethesda and New Carrollton, and that the LPA in Montgomery County includes the design features recommended by the County Council and described above.

#### **Community Outreach**

Community outreach related to Purple Line planning has been extensive and has taken place under the auspices of the Maryland Transit Administration and local governments in both Montgomery and Prince George's County.

# Maryland Transit Administration (MTA)

The MTA developed a comprehensive outreach effort as part of its work in the completion of the Purple Line AA/DEIS. As an example, from the fall of 2005 through summer of 2008 multiple meetings were held with focus groups representing the following areas along the alignment within Montgomery County:

- Master Plan Alignment along the Georgetown Branch right-of-way
- Jones Bridge Road alignment
- Lyttonsville
- Silver Spring CBD
- East Silver Spring
- University Boulevard.

The agenda and information exchange at the focus group sessions was tailored to the specific geographical area.

In addition, open houses covering the entire alignment were held in:

- September 2003
- November 2004
- June 2006
- December 2007
- May 2008.

In November 2008, the MTA held two public hearings in the County on the Purple Line AA/DEIS.

# Montgomery County Planning Department

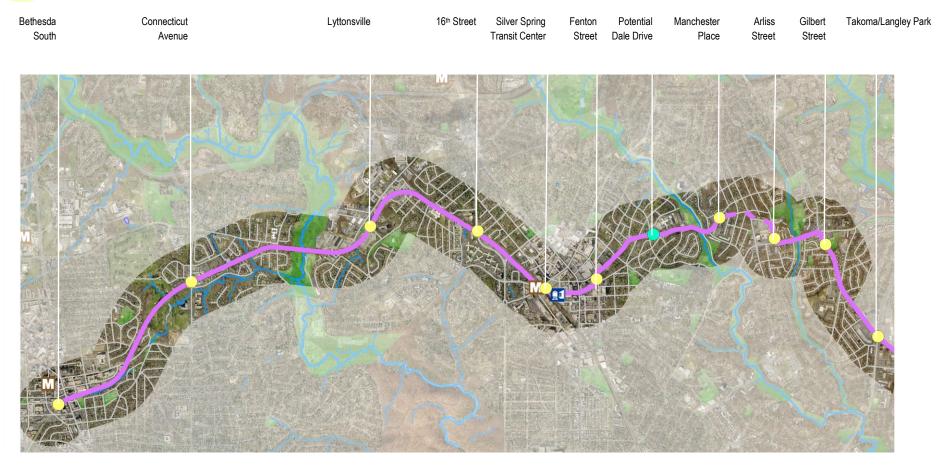
In May 2007, the Planning Board authorized the establishment of a Purple Line Master Plan Advisory Group (MPAG). The MPAG membership was composed of more than 30 representative stakeholders along the alignment within the County. The MPAG met 19 times between October 2007 and October 2008 when the Purple Line AA/DEIS was released. During that time, the group reviewed many of the technical and process issues inherent in large projects of this type and provided input to the staff memorandum and technical review of the AA/DEIS.

The MPAG also met on seven additional occasions after the release of the AA/DEIS to further examine issues in the context of the Planning Board, County Council, and State recommendations on the Purple Line. In addition, the Planning Board held a worksession in December 2008 and a hearing and worksession in January 2009 as part of its outreach during deliberations on reaching a recommendation on a Locally Preferred Alternative for the Purple Line.



Barcelona, Spain

## Map 1 Purple Line Alignment and Stations in Montgomery County



Note: The Takoma/Langley Park Station is in Prince George's County.

## vision

The Purple Line is a critically important component of the County's infrastructure for the 21<sup>st</sup> century. It represents a significant reinvestment in down-County infrastructure and helps set the stage to continue smart and sustainable growth by building on established communities closest to the region's core. The Purple Line will allow the County to remain economically competitive in the region.

The Purple Line's role within our overall growth strategy is perhaps best represented by the multiple ways it helps us address the four focus areas identified for the County's Growth Policy—connections, diversity, design, and environment.

## Table 1 Purple Line Characteristics and Objectives

purple line segment	connections	diversity	design	environment
Bethesda to Connecticut Avenue	Bethesda Red Line Metrorail Station Capital Crescent Trail to Georgetown	Access to Bethesda jobs, housing, and shopping Enhanced travel options for transit dependent Supports efforts to increase affordable housing Access to Elm Street Park, Leland Park, and Leland Recreation Center	Design effort focus on pedestrian and trail access and experience Will reinforce Bethesda CBD as multi-modal activity center Design should reflect and reinforce this urban destination and the area's gateway character Supports existing and planned transit-oriented development	Provides opportunities for targeted growth and helps prevent sprawl
Connecticut Avenue to Lyttonsville	Rock Creek Trail to Lake Needwood and D.C. Improved trail connection east of Rock Creek	Access to Walter Reed Annex and County Fleet Maintenance Center jobs Supports efforts to increase affordable housing Access to Rock Creek Park and Trail	Design effort focus on pedestrian and trail access and experience, and station access and compatibility Connection with Rock Creek Trail also critical design element	Locates operation and maintenance facility adjacent to similar land use
Lyttonsville to Silver Spring Transit Center	Silver Spring Red Line Metrorail Station MARC, Metrobus, Ride On, MTA Commuter Bus, UMD Shuttle, and Intercity bus at Silver Spring Transit Center Metropolitan Branch Trail to D.C. Directly connects Bethesda and Silver Spring CBDs	Access to Silver Spring jobs, housing, and shopping Enhanced travel options for transit dependent to Bethesda and east to Takoma/Langley Park, College Park, and New Carrollton Supports efforts to increase affordable housing Access to Coffield Community Center and Rock Creek Stream Valley Park	Station access and trail access and connectivity of primary importance in this area	Provides opportunities for targeted growth and helps prevent sprawl Significantly reduces travel time between Bethesda and Silver Spring and makes transit more competitive with auto travel
Silver Spring Transit Center to Manchester Road	Silver Spring Green Trail to Sligo Creek Trail Sligo Creek Trail to Wheaton Regional Park and Prince George's County Proposed new library site in Silver Spring	Access to Silver Spring jobs, housing, and shopping Enhanced travel options for transit dependent to Bethesda and east to Takoma/Langley Park, College Park, and New Carrollton Access to Sligo Park	Segment features transition from transit center to street grade, initial street running segment in Silver Spring, interface with proposed library site, crossing of Sligo Creek, and tunnel segment	Provides transit capacity between areas of highest transit dependency—Silver Spring, Long Branch, and Takoma//Langley Park with least amount of impact on neighborhoods and environment
Manchester Road to Takoma/ Langley Park	Metrobus, Ride On, and Prince George's County TheBus TheBus and the University of Maryland Shuttle at Takoma/Langley Park Transit Center	Bi-County's most diverse area with highest percentage of transit dependent residents Access to Long Branch Park and New Hampshire Estates Park	Design effort focus on station access, pedestrian connectivity, and compatibility with redevelopment	Helps establish sustainable growth with focus on redevelopment, retention, and expansion of affordable housing

#### Why a Purple Line Functional Plan?

The purpose of the *Purple Line Functional Plan* is to identify the specific alignment and approximate station locations within Montgomery County so that existing and future master, sector, station area, and other plans will have adopted policy guidance as to the location, mode, function, and general operational characteristics of the Purple Line.

The statutory basis for functional master plans is found in the Maryland Code. Title 7 of Article 28 states:

"The Commission may make and adopt and from time to time amend, and the district councils may approve and amend, functional master plans for the various elements of the general plan, including but not limited to master plan of highways, mass transit that includes light rail and bus ways, hospitals and health centers, parks and other open spaces, police stations, fire stations, and utilities."

## The statute also notes:

"Each functional master plan or amendment thereto, shall be an amendment to the general plan if so designated by the appropriate district council."

It is also important to note that this Plan updates prior planning efforts by addressing the segment of the Purple Line between Silver Spring and the County boundary in the Takoma/Langley Crossroads area in addition to the segment between Bethesda and Silver Spring. The focus of prior plans had been solely on the segment between Bethesda and Silver Spring.

#### Land Use and Zoning

As a functional plan, this Plan does not address potential changes in land use or zoning.

### Light Rail as the Mode

This Plan establishes light rail as the preferred mode for the Purple Line for the following reasons.

- Light rail provides the capacity needed to meet the ridership projections for year 2030 and beyond.
- Light rail is consistent with the original vision as expressed in previously adopted master plans.
- Light rail is the stated preferred mode of most other neighboring jurisdictions along the Purple Line alignment.
- Each light rail station should be designed with art, historic information, and other elements to make it a focal point for its community.

While this Plan does not recommend a specific rail vehicle, it does endorse the following general principles related to procurement that should be considered by the MTA.

- To the extent possible, the vehicles should reflect the latest technology in passenger and pedestrian safety and in mitigating environmental impacts including point or source emissions, noise, energy efficiency, and potential modifications to stations, running way, or the yard and shop facilities.
- MTA should use vehicles that would not require overhead wires for a power source, if they have proven to be reliable in a comparable environment elsewhere, and not be prohibitively expensive. Nor should a power source be used that would rule out a track bed constructed over a natural porous surface such as grass, particularly in the segment where the trail is parallel to the tracks.
- The vehicles and train should be able to accommodate the expected ridership using station platform lengths of no more than 200 feet.



Minneapolis Steven Vance

## transitway segments

The following sections describe the alignment from west to east in 16 segments. While some of the segments begin or end at major features, landmarks, terminals, or boundaries, there is no formal rationale for the way the segments are presented; primarily, they are divided into segments of approximately similar length that can be easily presented on a series of maps.

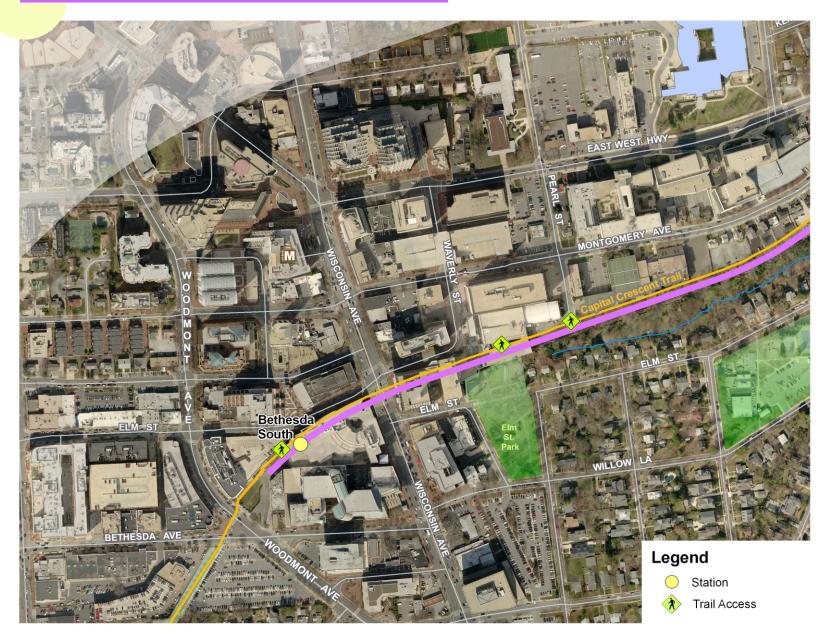
Along with a map, each segment is presented with more detail on rights-ofway, a description of planned stations, and where applicable, details of the adjacent trail. Three types of right-of-way elements are described.

- Current right-of-way describes area already in the public domain through either fee simple property ownership or dedication to transportation use.
- Prior master plan right-of-way describes rights-of-way protected through master plans adopted prior to 2010.
- Minimum right-of-way describes the need for right-of-way to incorporate the Purple Line into the public realm.

No additional right-of-way protection is needed at locations where the Purple Line right-of-way needs are less than what is already in the public domain or that will be dedicated through the land development process. In some cases, additional right-of-way will be needed as indicated in the following tables and the summarized amendments to the *Master Plan* of *Highways*.

This Plan is based on the best project planning information available at the time of the Plan's adoption. The estimated dimensions, features, and descriptions are subject to ongoing modification as project planning continues into preliminary engineering, final design, and construction.

# Map 2 Woodmont Avenue to Pearl Street



#### Table 2 Woodmont Avenue to Pearl Street

from	to	current right-of-way width	prior master plan right-of-way width (minimum)	minimum right-of-way width and/or area required for Purple Line and trail
Woodmont Avenue	West end of tunnel	66 feet	66 feet	38 feet plus area for ramp to accommodate trail descent/ascent
West end of tunnel	East end of tunnel	Varies an estimated 32 to 50 feet	Varies an estimated 40 to 50 feet	Varies an estimated 40 to 50 feet
East end of tunnel	Just west of Pearl Street	32 feet	32 feet	57 feet
Just west of Pearl Street	Pearl Street	32 feet	32 feet	57 feet

#### Notes

Balance of 66-foot right-of-way or easement area retained for public use space, access to station area, and access to Elm Street

Trail is elevated above rail vehicles in this area

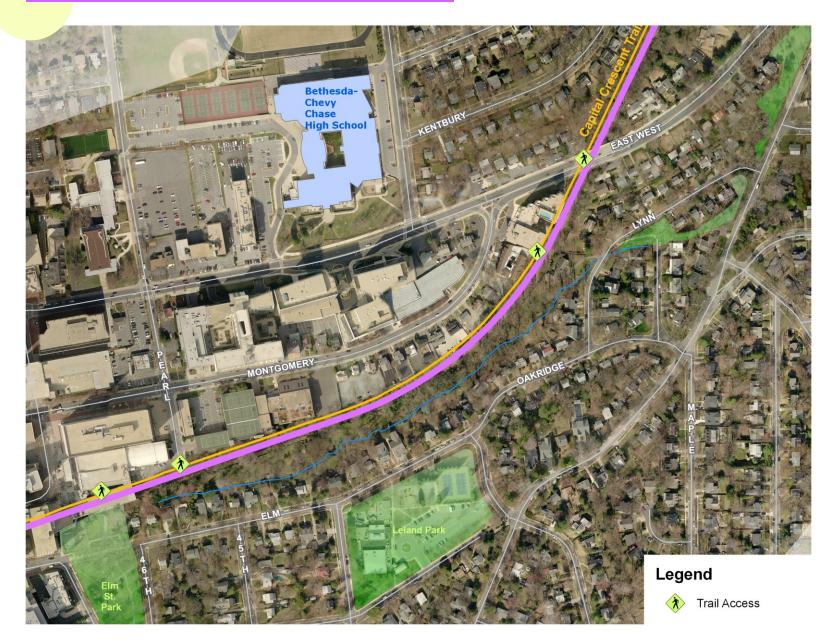
Pedestrian bridge will provide access from Elm Street Park to north side of tracks. Trail is elevated in this segment

## Bethesda South Station

Key potential features of the Bethesda South Station concept plan include:

- station platforms located under the Apex Building and in the tunnel under Wisconsin Avenue
- pedestrian connections to Elm Street
- pedestrian connection via elevators to the south end of the Metrorail Bethesda Station mezzanine and platform
- pedestrian connection to the Woodmont East plaza area between the western end of the tunnel and Woodmont Avenue
- tail tracks extending west from the station platform into the Woodmont East plaza for not more than 100 feet from the tunnel's western end.

## Map 3 Pearl Street to East–West Highway



#### Table 3 Pearl Street to East-West Highway

from	to	current right-of-way width	prior master plan right-of-way width (minimum)	minimum right-of-way width and/or area required for Purple Line and trail
Pearl Street	East-West Highway	Varies, generally estimated as 66 feet	Varies, generally estimated as 66 feet	Varies, estimated as 66 to 85 feet (includes additional area for ramp to Pearl Street) and 80
Notes				feet at ramp next to Riviera Apartments.

....

Pedestrian ramp on north side of tracks is in area of widest right-of-way along this segment. Ramp connects to at-grade crossing of tracks and to existing trail access on south side of right-of-way in 7500-7600 block of Lynn Drive

In the design phase, alternatives to the Lynn Drive at-grade crossing should be explored and if the crossing is retained, special attention given to safety

# Capital Crescent Trail

Key features of the Capital Crescent Trail concept plan from Bethesda to Chevy Chase Lake include:

- access to and from the trail elevated above the light rail vehicles within the Apex tunnel
- between Bethesda and the Silver Spring Transit Center build a 12-foot wide paved surface with two-foot shoulders except where not feasible
- trail routed on the north side of the Georgetown Branch right-of-way<sup>2</sup>
- trail access to and from the south side of the Georgetown Branch rightof-way via a pedestrian ramp within the tunnel adjacent to Elm Street Park
- trail access via a pedestrian ramp at or just east of Pearl Street on the north side of the Georgetown Branch right-of-way
- trail access via a pedestrian ramp on the north side of the right-of-way near the Riviera Apartments with an at-grade track crossing to an existing trail connection to Lynn Drive

- trail access via pedestrian ramps on the north and south sides of the Georgetown Branch right-of-way located largely within the Sleaford Road Extended right-of-way
- access to the trail via a pedestrian ramp on the north side of the Georgetown Branch right-of-way at Kentbury Way Extended
- trail and Connecticut Avenue bridge access via a pedestrian ramp on the north side of the Georgetown Branch right-of-way and west of Connecticut Avenue largely within the Georgetown Branch right-of-way but also within the Newdale Road right-of-way.

<sup>&</sup>lt;sup>2</sup> This is a change from the 1990 Georgetown Branch Master Plan Amendment.

# Map 4 East-West Highway to Kentbury Way Extended



#### Table 4 East-West Highway to Kentbury Way Extended

from	to	current right-of-way width	prior master plan right-of-way width (minimum)	minimum right-of-way width and/or area required for Purple Line and trail
East-West Highway	Right-of-way for trail access on north side of tracks at Kentbury Way Extended	Varies, generally estimated as 66 feet	Varies, generally estimated as 66 feet	Varies, generally estimated as 66 feet

Notes

Trail routed on the north side of the Georgetown Branch right-of-way. This is a change from the 1990 Georgetown Branch Master Plan Amendment

Pedestrian ramp to trail on north side of tracks is within Sleaford Road Extended right-of-way

Pedestrian path under tracks providing access from south side to north side of tracks is within right-of-way of Sleaford Road Extended

Additional trail access provided by ramp on north side of trail at Kentbury Way Extended right-of-way



#### Table 5 Kentbury Way Extended to Connecticut Avenue

from	to	current right-of-way width	prior master plan right-of-way width (minimum) 	minimum right-of-way width and/or area required for Purple Line and trail
Right-of-way for trail access on north side of tracks at Kentbury Way Extended	Connecticut Avenue	Varies, generally estimated as 66 feet	Varies, generally estimated as 66 to 100 feet	Varies, generally estimated as 66 to 100 feet

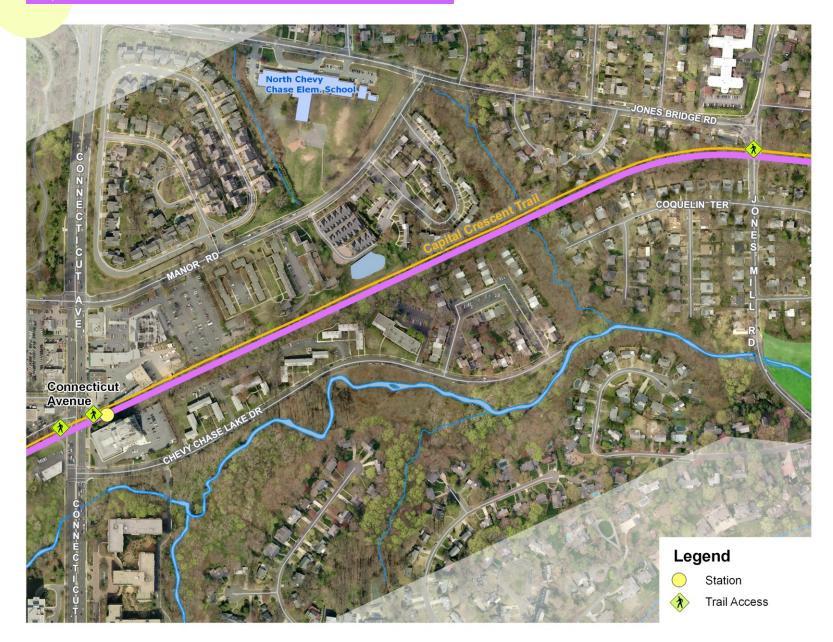
#### Notes

Trail routed on the north side of the Georgetown Branch right-of-way. This is a change from the 1990 Georgetown Branch Master Plan Amendment

Pedestrian path within right-of-way both parallel and under trail and tracks for pedestrian and golfer access to country club property on either side of right-of-way

Pedestrian ramp on north side of tracks to provide trail access. Ramp is within trail and Newdale Road rightof-way

Trail and tracks are on two different aerial structures that extend over Connecticut Avenue

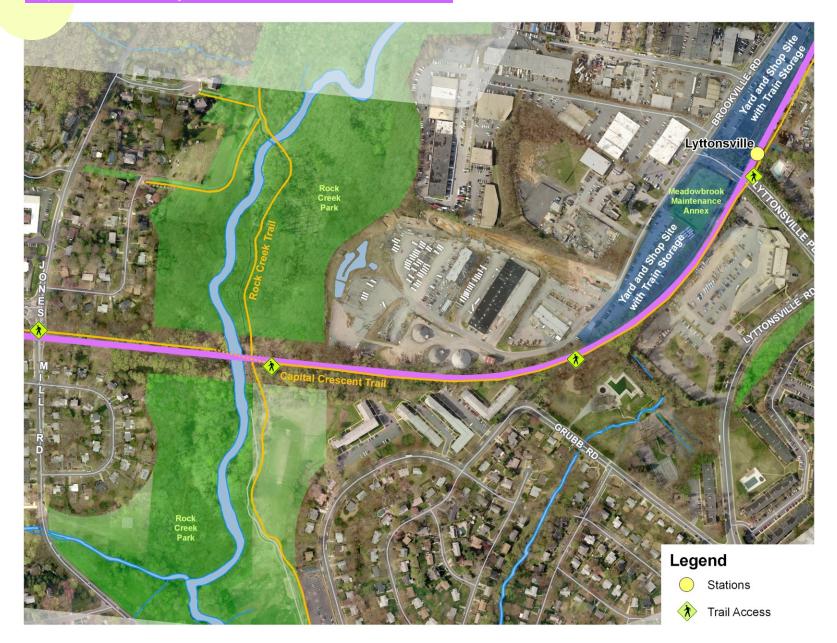


#### Table 6 Connecticut Avenue to Jones Mill Road

from	to	current right-of-way width	prior master plan right-of-way width (minimum)	minimum right-of-way width and/or area required for Purple Line and trail
Connecticut Avenue	Jones Mill Road	Varies an estimated 90 to 100 feet	Varies an estimated 90 to 100 feet	Varies an estimated 90 to 100 feet
Notes Trail routed on the north s <i>Georgetown Branch Mas</i> Tracks and trail go under	ter Plan Amendment.	ght-of-way. This is a change from the 1990	<ul> <li>station platforms immedia structure extending over C</li> <li>station access via a pedes Avenue</li> </ul>	ut Avenue Station concept plan include: tely east of Connecticut Avenue on an aer Connecticut Avenue ttrian ramp on the west side of Connecticut ction east of Connecticut Avenue between

• kiss-and-ride area incorporated into station area plan.

## Map 7 Jones Mill Road to Lyttonsville Place



#### Table 7 Jones Mill Road to Lyttonsville Place

from	to	current right-of-way width	prior master plan right-of-way width (minimum)	minimum right-of-way width and/or area required for Purple Line and trail
Jones Mill Road	Lyttonsville Place	Varies an estimated 66 to 225 feet	Varies, an estimated 66 to 225 feet and includes two adjacent parcels for yard and shop—the MDOT parking area (2.64 acres) and the M-NCPPC Meadowbrook Maintenance Annex (1.31 acres) —both in southwest quadrant of the Brookville Road and Lyttonsville Place intersection	Varies, an estimated 66 to 225 feet and includes two adjacent parcels—the MDOT parking area (2.64 acres) and the M- NCPPC Meadowbrook Maintenance Annex (1.31 acres) — both in southwest quadrant of the Brookville Road and Lyttonsville Place intersection

#### Notes

Pedestrian ramp to trail is on north side of tracks just east of Jones Mill Road. Trail begins descent east of Jones Mill Road on separate structure below tracks on bridge over Rock Creek Park

Additional long pedestrian ramp connects Capital Crescent Trail with Rock Creek Trail about 40 feet below Capital Crescent Trail

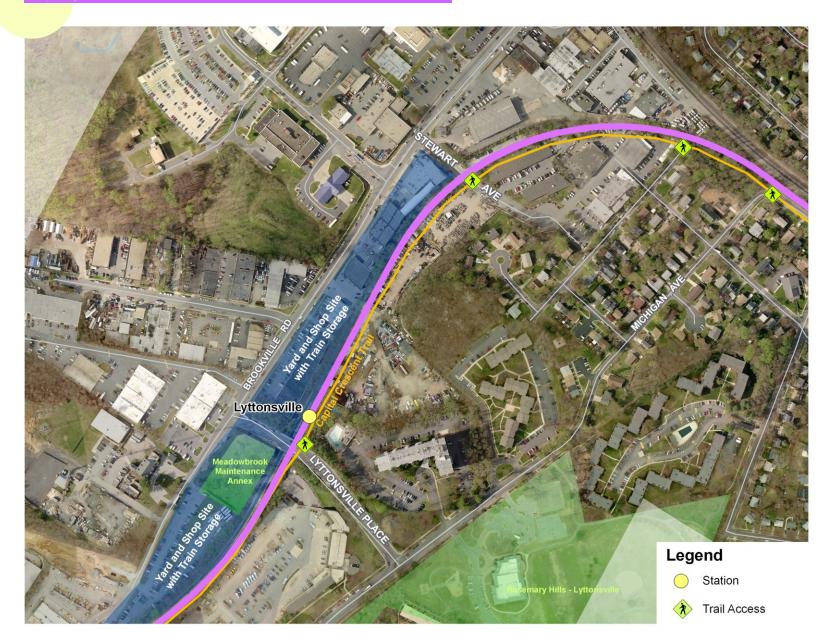
Tracks on bridge are about 15 feet above separate bridge for Capital Crescent Trail

Tracks and trail within Georgetown Branch right-of-way and go under Lyttonsville Place

# Capital Crescent Trail

Key features of the Capital Crescent Trail concept plan from Connecticut Avenue to Lyttonsville include:

- trail routed on the north side of the Georgetown Branch right-of-way west of Rock Creek. This is a change from the 1990 Georgetown Branch Master Plan Amendment
- a trail passing underneath Jones Mill Road
- a pedestrian ramp east of Jones Mill Road providing trail access as it descends west to east
- a pedestrian/bike bridge over Rock Creek below the bridge for the Purple Line that moves the trail from north side to the south side of the Georgetown Branch right-of-way
- a pedestrian ramp connecting the Capital Crescent Trail with the Rock Creek Trail
- trail access from the intersection of Grubb Road and Terrace Drive
- trail and station access via a pedestrian path, elevator, and stairs on the east side of Lyttonsville Place.



#### Table 8 Lyttonsville Place to Stewart Avenue

from	to	current right-of-way width	prior master plan right-of-way width (minimum)	minimum right-of-way width and/or area required for Purple Line and trail
Lyttonsville Place	Stewart Avenue	60 feet	60 feet	Future expansion for yard and shop will require estimated additional 3 acres (comprising 11 different parcels excluding publicly owned land) east of Lyttonsville Place, south of Brookville Road and north of Georgetown Branch right-of-way. Additional strip acquisitions adjacent to and along the south side of existing Georgetown Branch right-of-way will be required to accommodate the tracks and trail on this curve while still providing area for yard expansion on north side of existing right-of-way. Total right-of-way width required for tracks and trail is estimated at 100 feet

Notes

This area includes space for future expansion of yard and shop area

The Purple Line and adjacent trail cross Stewart Avenue at grade

The Georgetown Branch right-of-way terminates in the vicinity of Stewart Avenue

## Lyttonsville Station

Key features of the Lyttonsville Station concept plan include:

- station platforms east of Lyttonsville Place
- kiss-and-ride area on or near a reconstructed bridge over the Georgetown Branch right-of-way
- a pedestrian path to the platforms and trail on east side of Lyttonsville Place
- trail and platform access via sidewalks on Lyttonsville Place.



#### Table 9 Stewart Avenue to CSX/WMATA Right-of-Way

from	to	current right-of-way width	prior master plan right-of-way width (minimum)	minimum right-of-way width and/or area required for Purple Line and trail
Stewart Avenue	Beginning of CSX/WMATA right- of-way with CSX/Metrorail/MARC/Amtrak service	Varies an estimated 49 to 65 feet and includes a one-acre parcel at the segment's southeast end	Varies an estimated 55 to 65 feet and includes a one-acre parcel at the segment's southeast end	Additional strip acquisitions adjacent to and along the south side of the existing right-of-way will be required to accommodate tracks and trail on this curve. Total right-of-way width required for tracks and trail is estimated at 80 to 85 feet

Notes

In this segment, rights-of-way for the Purple Line and the trail are owned by CSX

Additional strip acquisitions would be from property owned by other private parties

## Capital Crescent Trail<sup>3</sup>

Key features of the concept plan for the Capital Crescent Trail from Lyttonsville to the CSX/WMATA right-of-way:

- the trail adjacent to and south of tracks from Lyttonsville Place to atgrade crossing of Stewart Avenue
- the trail remaining at grade above and south of tracks as they transition into CSX/WMATA right-of-way
- trail access from Kansas Avenue
- trail access from Michigan Avenue.

<sup>&</sup>lt;sup>3</sup> The County-owned portion of the Georgetown Branch right-of-way ends approximately 450 feet east of Stewart Avenue. The remaining Georgetown Branch right-of-way between this point and the Metropolitan Branch right-ofway near Talbot Avenue is owned by CSX. The Purple Line and trail from Talbot Avenue to the Silver Spring Transit Center is often referred to as being within the Metropolitan Branch railroad rights-of-way. The Capital Crescent Trail will be one uninterrupted trail under one name through these several differently owned right-of-ways, from Georgetown through Bethesda to Silver Spring Transit Center.



#### Table 10 CSX/WMATA/Right-of-Way to 16th Street Station

from	to	current right-of-way width	prior master plan right-of-way width (minimum)	minimum right-of-way width and/or area required for Purple Line and trail
Beginning of CSX/WMATA right-of-way with CSX/Metrorail/MARC/Amtrak service	16 <sup>th</sup> Street Station	Varies an estimated 70 to 130 feet	Varies an estimated 70 to 130 feet Both tracks and trail are recommended on the north or east side of right-of-way in the 1990 Plan Amendment	Trail is parallel to and south of relocated Talbot Avenue on segment between Michigan Avenue and Lanier Drive. Strip acquisitions of an estimated 10 to 15 feet will be required in addition to existing right-of-way. East of Rosemary Hills Elementary School, an estimated minimum 120-foot right-of-way is required for the combined CSX and Purple Line facilities until the trail (on north side of right-of-way) and Purple Line (on south side of right-of-way) reach Stewart Avenue. An estimated minimum 160-foot right-of-way is required from the beginning of the CSX right-of-way to the 16 <sup>th</sup> Street station to accommodate the trail on the north side and the station platforms and tracks on the south side

#### Notes

Both tracks and trail to remain on right-of-way's south side to where a pedestrian bridge over the right-of-way will move the trail to the north side. The trail will cross over to the north side of the CSX/WMATA right-of-way between Hanover Street and Grace Church Road. The Purple Line tracks remain on the right-of-way's south side

Both the trail and Purple Line pass under the existing 16<sup>th</sup> Street bridge, which will be modified or replaced to accommodate the trail and the Purple Line

The 16th Street station platform is east of the eastern edge of the existing 16th Street bridge

This 16th Street Station should be named the `Harry Sanders/Woodside Station`

# $16^{+h}$ Street Station

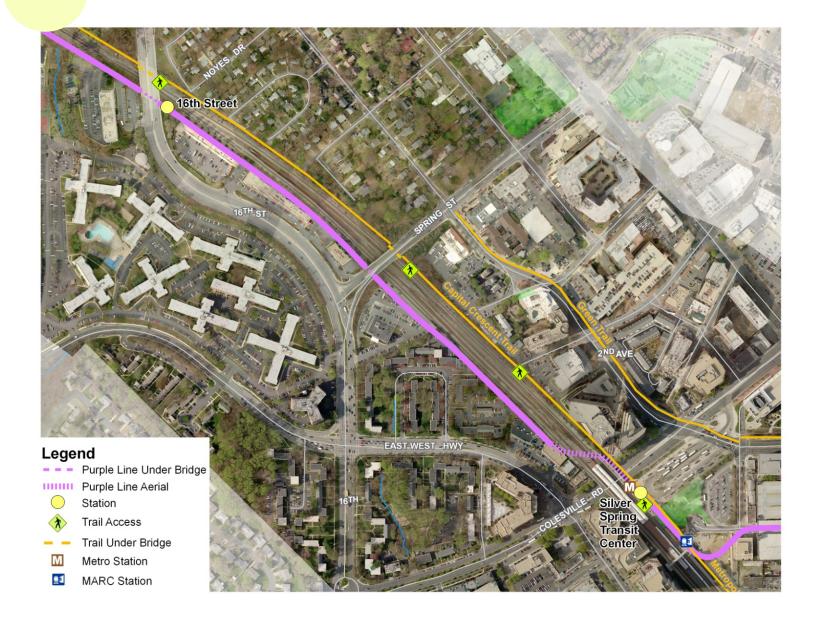
Key features of the 16<sup>th</sup> Street Station concept plan include:

- station platforms east of the existing 16<sup>th</sup> Street bridge
- kiss-and-ride lanes potentially incorporated into station area plan
- pedestrian connections to apartments on the west side of 16<sup>th</sup> Street.

# Capital Crescent Trail

Key features of the concept plan for the Capital Crescent Trail from CSX/WMATA right-of-way to the 16<sup>th</sup> Street Station include:

- the trail continues on the south side of the tracks adjacent to Talbot Avenue near Rosemary Hills Elementary School. The trail will cross over (via a pedestrian bridge) to the north side of the CSX/WMATA right-ofway between Hanover Street and Grace Church Road
- the trail between crash wall and retaining wall from where it crosses to north side of right-of-way to just north of Spring Street
- trail access from Lyttonsville Road
- trail access from near 16<sup>th</sup> Street.



## Table 11 16<sup>th</sup> Street Station to Paul S. Sarbanes Silver Spring Transit Center

from	to	current right-of-way width	prior master plan right-of-way width (minimum)	minimum right-of-way width and/or area required for Purple Line and trail	
16 <sup>th</sup> Street Station	Silver Spring Transit Center	Varies an estimated 75 to 165 feet	Varies an estimated 75 to 165 feet. Both tracks and trail recommended to be located on the right-of- way's north or east side in the 1990 Plan Amendment	An estimated 180-foot right-of-way is required to accommodate the trail (north side of right-of-way) and tracks (south side of right-of-way)	
Notes The tracks will be on an aerial structure crossing from the south side of the right-of-way to the north side where the tracks and trail will join and cross Colesville Road before entering the Transit Center The Purple Line tracks at the Transit Center are on an aerial structure above the Metrorail and MARC tracks			Capital Crescent Trail Key features of the concept plan for the Capital Crescent Trail from the 16 <sup>th</sup> Street Station to the Silver Spring Transit Center include: trail access from Spring Street trail access from Apple Avenue		
<ul> <li>Silver Spring Transit Center Station</li> <li>Key features of the Purple Line Silver Spring Transit Center Station include:</li> <li>platform on an aerial structure above Metrorail and MARC track level</li> <li>elevator and escalator access from Purple Line level to Metrorail and MARC level</li> <li>access to the Transit Center's second level via pedestrian bridge from Metrorail and MARC level</li> <li>access to street level via elevator and escalator from either Transit Center or Metrorail and MARC track level</li> </ul>			<ul> <li>the trail continues on north side of rail right-of-way below both 16<sup>th</sup> Street and Spring Street bridges</li> <li>the trail will cross Colesville Road on a bridge and enter the Silver Spring Transit Center area between the Metrorail/MARC tracks and the bus bays at or near an elevation close to the second level of the Transit Center</li> <li>the trail will provide access to the Transit Center for rail and bus users</li> <li>the Capital Crescent Trail and Metropolitan Branch Trail will connect directly to each other, at the same level, in the area between the Transit Center and the right-of-way containing the Metrorail, MARC, CSX, and Purple Line tracks</li> </ul>		

Purple Line tracks

- connections to Metrorail Red Line, local buses, MARC, inter-city bus, • and taxis at Transit Center.
- the elevated trail structure will be ten-feet wide (inside clear) and to the extent possible, maintain a level grade and direct path through the Transit Center area.

## Map 12 Paul S. Sarbanes Silver Spring Transit Center to Fenton Street Station



### Table 12 Paul S. Sarbanes Silver Spring Transit Center to Fenton Street Station

from	to	current right-of-way width	prior master plan right-of-way width (minimum)	minimum right-of-way width and/or area required for Purple Line and trail
Silver Spring Transit Center	Library site at Wayne Avenue and Fenton Street	40 feet	70 feet (Silver Spring Central Business District Sector Plan)	Varies an estimated 40 to 70 feet

#### Notes

The tracks are on an aerial structure at Transit Center and return to surface on Bonifant Street west of Georgia Avenue

On-street parking along Bonifant Street east of Georgia Avenue may be prohibited to accommodate the Purple Line. Some of the on-street parking could be retained if the street were restricted to one-way eastbound vehicular traffic

Recommendations for traffic operations on Bonifant Street will be finalized during later phases of project planning

## Fenton Street Station at the Wayne Avenue Silver Spring Library Site

Key features of the Fenton Street Station concept plan include:

- station platforms located on the library's footprint with the train accessing the footprint on Bonifant Street approximately 250 feet prior to Fenton Street
- no parking on north side of Bonifant Street.



Rendering of the Silver Spring Library with the Purple Line



#### Table 13 Fenton Street Station to Sligo Creek Parkway

from	to	current right-of-way width	prior master plan right-of-way width (minimum)	minimum right-of-way width and/or area required for Purple Line and trail
Silver Spring Library Wayne Avenue and Fenton Street	site at Sligo Creek Parkway	Varies an estimated 70 to 100 feet	80 feet (Silver Spring Central Business District Sector Plan, East Silver Spring Master plan, and North and West Silver Spring Master Plan)	Varies an estimated 70 to 100 feet and includes area for the Silver Spring Green Trail—a shared use path no less than eight feet wide on the north side of Wayne Avenue. The sidewalk on south side of Wayne Avenue is at least six feet wide along this segment

#### Notes

Concept design calls for the alignment to pass through the Silver Spring Library site in the northwest quadrant of the Bonifant Street/Fenton Street intersection. The alignment calls for the train to enter the Fenton Street/Wayne Avenue intersection diagonally as a fifth stream of traffic, then turn eastward onto Wayne Avenue

On Wayne Avenue, the alignment will be in the roadway median, sharing traffic lanes (with on-street parking during peak periods likely prohibited between Cedar Street and Mansfield Road at a minimum)

Separate left turn lanes will be provided where warranted to accommodate turning traffic

# Potential Dale Drive Station

Key features of the Dale Drive Station concept plan include:

- there is no intent or desire to change the zoning in the single-family residential neighborhoods in and around the Wayne Avenue/Dale Drive intersection, if a station is established at this location in the future
- the station is not included in initial construction phase; the timing of implementation to be determined
- platform in median of Wayne Avenue
- access for walk-up users and persons with disabilities only.

# Silver Spring Green Trail

The Silver Spring Green Trail is a master-planned, shared use path on the north side of 2<sup>nd</sup> Avenue and Wayne Avenue, between Spring Street and the Sligo Creek Trail. It will accommodate bicyclists, pedestrians, and other users on a path separated from vehicular travel lanes by a landscaped panel. The *Countywide Bikeways Functional Master Plan* indicates that a five-foot sidewalk will parallel the shared use path. This already exists on the segment between Cameron Street and the Whole Foods driveway. On the segment between the Whole Foods driveway and the Sligo Creek Trail that will be constructed in conjunction with the Purple Line, there will not be a separate sidewalk due to right-of-way constraints. The combined trail and buffer along this segment will be at least 13 feet wide. The Purple Line alignment within the median of Wayne Avenue will be designed and constructed to accommodate the trail.

31



### Table 14 Sligo Creek Parkway to Manchester Place Station

from	to	current right-of-way width	prior master plan right-of-way width (minimum)	minimum right-of-way width and/or area required for Purple Line and trail
Sligo Creek Parkway	Manchester Place Station	Varies an estimated 60 to 70 feet	70 feet (East Silver Spring Master Plan)	Varies an estimated 70 to 80 feet and includes a minimum six-foot sidewalk on both sides of Wayne Avenue

#### Notes

Concept design calls for the Purple Line alignment to continue in the median of Wayne Avenue to approximately 600 feet east of Manchester Road where it will enter a tunnel

The Manchester Place Station platform will be located an estimated 100 to 200 feet south of Wayne Avenue

## Manchester Place Station

Key features of the Manchester Place Station concept plan include:

- station platform an estimated 100 to 200 feet south of Wayne Avenue where tracks enter tunnel
- access for walk-up users and persons with disabilities only.



#### Table 15 Manchester Place Station to Arliss Street Station

from	to	current right-of-way width	prior master plan right-of-way width (minimum)	minimum right-of-way width and/or area required for Purple Line and trail
Manchester Place Station	Arliss Street Station	Varies an estimated 65 to 90 feet	70 feet (East Silver Spring Master Plan)	Varies an estimated 80 to 90 feet and includes a minimum six-foot wide sidewalk on both sides of Arliss Street

#### Notes

Tracks enter a tunnel east of the Manchester Place platform. They surface in the median of Arliss Street roughly 350 feet west of its intersection with Walden Road and Garland Avenue and continue in the median in dedicated lanes

The Arliss Street Station platform is located on Arliss Street north of Piney Branch Road

# Arliss Street Station

Key features of the Arliss Street Station concept plan include:

- station platform approximately 100 feet north of the intersection with Piney Branch Road in the median of Arliss Street
- access for walk-up users and persons with disabilities only
- minimum six-foot wide sidewalks on both sides of Arliss Street adjacent to Purple Line alignment.

### Map 16 Arliss Street Station to Gilbert Street Station



### Table 16 Arliss Street Station to Gilbert Street Station

from	to	current right-of-way width	prior master plan right-of-way width (minimum)	minimum right-of-way width and/or area required for Purple Line and trail
Arliss Street Station	Gilbert Street Station	Varies an estimated 70 to 95 feet on Piney Branch Road	80 feet on Piney Branch Road (East Silver Spring Master Plan)	Varies an estimated 80 to 100 feet on Piney Branch Road and includes a minimum six-foot sidewalk
		Varies an estimate 100 to 110 feet on University Boulevard	120 feet on University Boulevard (East Silver Spring Master Plan)	Varies an estimated 120 to 130 feet on this section of University Boulevard and includes a five-foot, on road bikeway and six-foot sidewalk based on SHA guidelines

Notes

Alignment turns east onto Piney Branch Road with the tracks in dedicated lanes in the median

The tracks remain in the median dedicated lanes as the alignment turns southeast onto University Boulevard. Separate left turn lanes for vehicular traffic are provided in all quadrants of the intersection of Piney Branch Road and University Boulevard

The Gilbert Street Station platform is located just southeast of the intersection of University Boulevard and Gilbert Street in the median of University Boulevard

Gilbert Street Station

Key features of the Gilbert Street Station concept plan include:

- station platform in the University Boulevard median, south of the intersection with Piney Branch Road
- access for walk-up users and persons with disabilities only
- minimum six-foot wide sidewalks on both sides of University Boulevard.

## Map 17 Gilbert Street Station to County Line



### Table 17 Gilbert Street Station to County Line

from	to	current right-of-way width	prior master plan right-of-way width (minimum)	minimum right-of-way width and/or area required for Purple Line and trail
Gilbert Street Station	County line approximately 130 feet southeast of Merrimac Drive	Varies, generally estimated as 100 feet	120 feet (East Silver Spring Master Plan)	Varies an estimated 125 to 140 and includes a five-foot, on road bikeway and six-foot sidewalk based on SHA
Notes				guidelines for the segment along University Boulevard, from Piney Branch Road to Carroll Avenue
Tracks in dedicated lanes in t	he University Boulevard median			Bikeway facilities will be phased in per the pending
This is the last segment of the alignment wholly within Montgomery County			Takoma/Langley Crossroads Sector Plan for the segment along University Boulevard from Carroll Avenue to 130 feet southeast of Merrimac Drive	

### Table 18 County Line to City of Takoma Park

from	to	current right-of-way width	prior master plan right-of-way width (minimum)	minimum right-of-way width and/or area required for Purple Line and trail <sup>4</sup>
County line approximately 130 feet southeast of Merrimac Drive <sup>4</sup>	130 feet southeast ofboundary, south of the UniversityMerrimac Drive4Boulevard and 14th Avenue		120 feet (East Silver Spring Master Plan)	Varies an estimated 125 to 150 and includes a five-foot, on road bikeway and six-foot sidewalk based on SHA guidelines
	intersection			Bikeway facilities will be phased in per the pending Takoma/Langley Crossroads Sector Plan

#### Notes

Tracks in dedicated lanes in the University Boulevard median

This segment is across from the Takoma/Langley Park Transit Center. The station platform and Transit Center are in Prince George's County

<sup>&</sup>lt;sup>4</sup>University Boulevard, east of the County line and approximately 130 feet southeast of Merrimac Drive, is wholly within Prince George's County. Any additional right-ofway along this segment is therefore intended to be controlled by Prince George's County.

### master plan of highways

This Plan amends the Master Plan of Highways by identifying an alignment for the Purple Line from Bethesda to the County's boundary with Prince George's County on University Boulevard west of the Takoma/Langley Park Transit Center, summarized in Table 19.

In addition, an estimated additional three acres for the proposed Lyttonsville yard and shop is needed in the area directly east of Lyttonsville Place between Brookville Road and the Georgetown Branch right-of-way.

Freeways Primary Road Railroad Metrorail

## Table 19 Amendments to Master Plan of Highways Rights-of-Way

from	to	prior minimum right-of-way	amended minimum right-of-way <sup>5</sup>	
100 feet west of Pearl Street	100 feet east of Pearl Street	66 feet	Varies an estimated 32 to 85 feet	
500 feet west of East-West Highway	400 feet west of East-West Highway	66 feet	80 feet	
2,000 feet west of Lyttonsville Place	Stewart Avenue	Varies an estimated 40 to 58 feet	100 feet	
Stewart Avenue	Beginning of CSX/WMATA right-of-way	Varies an estimated 55 to 65 feet and includes a one-acre parcel at the segme southeast end	Varies an estimated 80 to 85 feet nt's	
Beginning of CSX/WMATA right-of-way	16th Street Station area	Varies an estimated 70 to 130 feet	160 feet	
Notes		Required to accommodate track curvature and adjacent trail just west of		
Required for ramp part of pedestrian conne	ection at Pearl Street	Lyttonsville station		
Required for ramp portion of pedestrian co	nnection at Riviera Apartments	Required to accommodate track curvature and adjacent trail as it enters (going east or south) the CSX/WMATA right-of-way		
		track on the south side of the CSX	n the north side and station platforms and (/WMATA corridor from approximately ion area. The 160-foot right-of-way is for VMATA	

<sup>&</sup>lt;sup>5</sup> The right-of-way shown is the estimated minimum amount needed within the segment to accommodate the project at a point required the most land area. In most instances, the land area is expressed as right-of-way needed to accommodate the project. In some cases (like the yard and shop) the area includes land adjacent to the alignment and is expressed in acres. The actual amount of right-of-way required within each segment can vary, based on project plans that can be modified up to and through, the construction phase

### Table 19 Amendments to Master Plan of Highways Rights-of-Way, cont'd.

from	to	prior minimum right-of-way	amended minimum right-of-way
Silver Spring Library site at Wayne Avenue and Fenton Street	Sligo Creek Parkway	80 feet	Varies an estimated 70 to 100 feet
Sligo Creek Parkway	600 feet east of Manchester Road	70 feet	Varies an estimated 70 to 80 feet
600 feet east of Manchester Road	Plymouth Street	None	70 feet
Flower Avenue	Piney Branch Road	70 feet	Varies an estimated 80 to 90 feet
Arliss Street	Gilbert Street Station	80 feet on Piney Branch Road 120 feet on University Boulevard	100 feet on Piney Branch Road 130 feet on University Boulevard
Gilbert Street Station	County line approximately 130 feet southeast of Merrimac Drive	120 feet	125 feet

### Notes

Required at locations along Wayne Avenue to accommodate Silver Spring Green Trail, left turn lanes, potential station at Dale Drive, and tracks

Required at certain locations along Wayne Avenue to accommodate tracks and sidewalks

Transition into tunnel between Wayne Avenue and Plymouth Avenue right-of-way

Required at locations along Arliss Street to accommodate tracks, tunnel portal, and sidewalks

Required at locations along Piney Branch Road and University Boulevard for tracks, station platform(s), buffer area, sidewalks, bike lanes, and amenities

Required at locations along University Boulevard for tracks, station platform(s), buffer area, sidewalks, bike lanes, and amenities

## conceptual cross sections

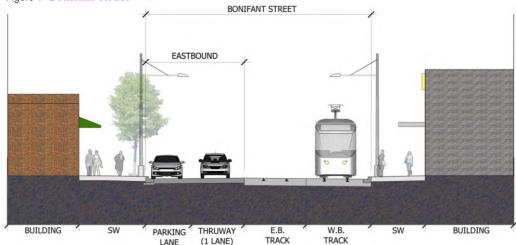
The following illustrations depict the Purple Line running along segments of:

- Bonifant Street (west of Georgia Avenue) in Silver Spring
- Wayne Avenue in Silver Spring
- Arliss Street in Long Branch
- Piney Branch Road in Long Branch
- University Boulevard in Long Branch and the Takoma/Langley Crossroads area

These illustrations are conceptual and intended to represent the planned relationship between the Purple Line and the vehicular traffic on the roadway segment illustrated.

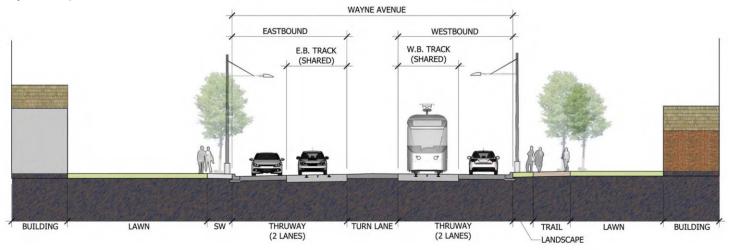
The various elements (buildings, lawns, etc.) in the area outside the right-ofway depicted in these illustrations reflects current, not ultimate, conditions and is not intended to convey adjacent land use along any specific street segment.





Source: Maryland Department of Transportation

### Figure 2 Wayne Avenue

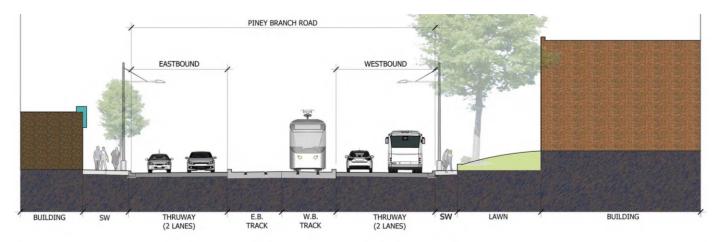


### Figure 3 Arliss Street

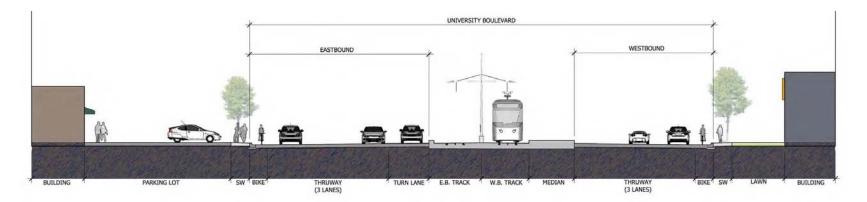


Source: Maryland Department of Transportation

## Figure 4 Piney Branch Road



### Figure 5 University Boulevard



Source: Maryland Department of Transportation

### glossary

### Alternatives Analysis/Draft Environmental Impact Statement

A document, prepared by a federal agency, which evaluates the environmental impact of government proposals for large projects, such as highways or facilities that could significantly affect the quality of the human environment. Environmental Impact Statements are used as decision-making tools and are required by the National Environmental Policy Act.

#### **Buffer**

An area of land designed or managed for the purpose of separating or providing a transition between two or more land areas whose uses may conflict or be seen as incompatible.

### **Dedicated Lanes**

Lanes that are for the sole use of a transit vehicle.

#### **Double Track**

Two parallel tracks allowing trains to pass each other.

#### **Kiss and Ride**

A facility where transit patrons are dropped off and picked up by auto.

### **Locally Preferred Alternative**

A term used by the Federal Transit Administration to denote the alternative (alignment and mode) selected for further consideration and additional engineering analysis. The State of Maryland selected the Locally Preferred Alternative in consultation with county and local jurisdiction officials based on comparisons of all of the proposed alignments and modes examined in the AA/DEIS.

### **Light Rail Transit**

A passenger railway system characterized by its capability to operate single cars or short trains along exclusive rights-of-way at ground level, on aerial structures, or in streets. It is typically operated by electricity, but in some cases is powered by diesel.

#### Master Plan Advisory Group

Group of individuals selected to advise the Planning Board and staff in selecting a Locally Preferred Alternative and the development of this Purple Line Functional Plan.

#### **Master Plan of Highways**

The functional master plan that records the recommended highways and transit lines within Montgomery County.

### Right-of-Way (r.o.w.)

A strip of land occupied or intended to be occupied by a road, crosswalk, railroad, electronic transmission line, oil or gas pipeline, water main, sanitary or storm sewer main, or for other special use (e.g. a transitway). It must be shown on a record plat as separate and distinct from the adjoining lots or parcels and not be included within their dimensions. Rights-of-way maintained by a public agency are shown as dedicated to public use on the record plat.

#### **Signed Shared Roadway**

A roadway designed for both bicycle and motor vehicle travel and designated as a preferred route for bicycle use. This may be an existing local street, a street with wide curb lanes, or road with paved shoulders.

### **Shared Use Path**

A recreational trail (or bikeway) physically separated from motorized vehicular traffic by an open space or barrier and either within the roadway right-of-way or within an independent right-of-way. Shared Use Paths may be used by pedestrians, skaters, wheelchair users, joggers, and other nonmotorized users.

#### **Yard and Shop**

A facility where light rail vehicles are stored and serviced. It may also be designed to accommodate the transit system's administrative and operating personnel.

		F
	Resolution No.:       16-1470         Introduced:       July 27, 2010         Adopted:       July 27, 2010	F
	COUNTY COUNCIL FOR MONTGOMERY COUNTY, MARYLAND SITTING AS THE DISTRICT COUNCIL FOR THAT PORTION OF THE MARYLAND-WASHINGTON REGIONAL DISTRICT WITHIN MONTGOMERY COUNTY, MARYLAND	F
		S
	By: District Council	F
SUE	3JECT: Approval of Planning Board Draft for the Purple Line Functional Plan	
	Background	P
1.	On April 20, 2010 the Montgomery County Planning Board transmitted to the County Executive and the County Council the Planning Board Draft for the Purple Line Functional Plan, a comprehensive amendment to the 1990 Georgetown Branch Master Plan Amendment.	
2.	On June 25, 2010 the Executive transmitted to the Council comments concerning the Planning Board Draft with a fiscal analysis.	I
3.	On June 29, 2010 the Council held a public hearing regarding the Planning Board Draft. It was referred to the Transportation and Environment Committee for review and recommendation.	t
4.	On July 15, 2010 the Transportation, Infrastructure, Energy and Environment Committee held a worksession to review the issues raised in connection with the Planning Board Draft. The Committee forwarded it to the Council with several revisions.	f
5.	On July 20, 2010 the Council reviewed the Planning Board Draft and the recommendations of the Transportation, Infrastructure, Energy and Environment Committee.	P P
	Action	
	The County Council of Montgomery County, Maryland, sitting as the District Council for portion of the Maryland-Washington Regional District in Montgomery County, Maryland, oves the following resolution:	P
	The Planning Board Draft for the Purple Line Functional Plan is approved with revisions. Council revisions to the Planning Board Draft are identified below.	

age 2

Resolution No.: 16-1470

Deletions to the text of the Plan are indicated by [brackets], additions by underscoring.

Page 1-Start the second paragraph as follows:

The goal of this Purple Line Functional Plan is to identify the specific alignment and station locations within ...

Page 5, Table 1-Change "Chevy Chase Lake" to "Connecticut Avenue" in the Purple Line Segment column.

Page 6-Add this fourth bullet in the "Light Rail as the Mode" section:

 Each light rail station should be designed with art, historic information, and other elements to make it a focal point for its community.

Page 6-Revise the second-to-last bullet as follows:

 [To the extent possible, the] MTA should [consider] <u>use</u> vehicles that would not require overhead wires for a power source, <u>if they have proven to be reliable in a comparable</u> <u>environment elsewhere, and not be prohibitively expensive</u>. Nor <u>should</u> a power source <u>be used</u> that would [prevent] <u>rule out</u> a track bed constructed over a natural porous surface such as grass, particularly in the segment where the trail is parallel to the tracks.

Page 8, Map 2-Add a Trail Access logo west of the Apex Building.

Page 11-Change references from "Bethesda Station" to "Bethesda South Station" and move the text from page 11 to page 9.

Page 11-Replace the second and third bullets in the "Capital Crescent Trail" section with the following bullet:

Between Bethesda and the Silver Spring Transit Center build a 12'-wide paved surface
 with 2' shoulders except where not feasible.

Page 11 - Delete Footnote 2.

Page 13—Add as the first note:

Trail routed on the north side of the Georgetown Branch right-of-way. This is a change from the 1990 - Georgetown Branch Master Plan Amendment.

Pages 14 and 16, Maps 5-6-Move the station logo for the Connecticut Avenue station east of Connecticut Avenue.

Page 3

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Page 19-Add a bullet under "Capital Crescent Trail":

Page 4

• trail access from the intersection of Grubb Road and Terrace Drive

Pages 20 and 22, Maps 8-9-Add Trail Access logo at Kansas Avenue.

Pages 20, 22, and 24, Maps 8-10-Add Trail Access logo at Michigan Avenue.

Page 21-Move Lyttonsville Station text from page 19 to page 21.

Pages 22 and 24, Maps 9-10-Add Trail Access logo at Lyttonsville Road.

Page 23-Add bullets under "Capital Crescent Trail":

- trail access from Kansas Avenue
- trail access from Michigan Avenue

Page 23 – Move 16<sup>th</sup> Street Station key feature bullets to page 25. Move Silver Spring Transit Center Station key feature bullets to page 27.

Page 24, Map 10—Add Trail Access logos at Michigan Avenue, Lyttonsville Road, and 16th Street.

Pages 24 and 26, Maps 10-11—Move the station logo for the  $16^{th}$  Street station 100 feet southeast of  $16^{th}$  Street.

Page 25-Add a "Capital Crescent Trail" section with the following:

- trail access from Lyttonsville Road
- trail access from near 16<sup>th</sup> Street

Page 25—Complete the last sentence in the fifth column as follows: "... and tracks on the south side."

Page 25, Notes-Start the first note as follows: "Both tracks and trail ..."

Page 25, Notes—Add this note: "This 16<sup>th</sup> Street Station should be named the 'Harry Sanders/Woodside Station.""

Page 26, Map 11-Add Trail Access logos at 16th Street, Spring Street, and Apple Avenue.

Page 27-Add a "Capital Crescent Trail" section with the following:

- trail access from Spring Street
- trail access from Apple Avenue

Page 27, Notes-Start the first note as follows: "The tracks will be on an aerial structure ..."

Page 15-Add as the first note:

Trail routed on the north side of the Georgetown Branch right-of-way. This is a change from the 1990 - Georgetown Branch Master Plan Amendment.

Page 16, Map 6—Show the Capital Crescent Trail on the north side of the Purple Line on the entire length of this map.

Page 17—Move the "Chevy Chase Lake Station" text from Page 19. Rename the section and the concept plan to "Connecticut Avenue Station." Add the following key feature bullet:

kiss-and-ride area incorporated into station area plan

Page 17-Revise the note as follows:

<u>Trail routed on the north side of the Georgetown Branch right-of-way. This is a change</u> from the 1990 - Georgetown Branch Master Plan Amendment. Tracks and trail go under Jones Mill Road [pedestrian bridge just west of Jones Mill Road as trail moves from north to south side of tracks going west to east].

Page 17-In the fifth column, change "Variesan" to "Varies an" ...

Page 18, Map 7—Show the Capital Crescent Trail on the north side of the Purple Line from on this map from the west edge to Rock Creek, where it crosses to the south side.

Pages 18 and 20, Maps 7-8-Move the station logo for the Lyttonsville station east of Lyttonsville Place.

Page 18, Map 7-Add a Trail Access logo near the intersection of Grubb Road and Terrace Drive.

Page 19-Revise the first note as follows:

Pedestrian ramp to trail in on [south] north side of tracks just east of Jones Mill Road.

Page 19-Add a new bullet before the first bullet under "Capital Crescent Trail":

Trail routed on the north side of the Georgetown Branch right-of-way west of Rock Creek. This is a change from the 1990 - Georgetown Branch Master Plan Amendment.

Page 19-Revise the first bullet under "Capital Crescent Trail" section, as follows:

 a pedestrian/<u>bike</u> bridge [west of Jones Mill Road] <u>over Rock Creek below the bridge for</u> <u>the Purple Line</u> that moves the trail from the north side to the south side of the Georgetown Branch right-of-way.

Page 19-Delete the fourth bullet under "Capital Crescent Trail."

Page 5

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Page 31, Notes-Change the last sentence as follows:

Separate left turn lanes will be provided <u>where warranted to accommodate turning traffic</u> [at signalized intersections, except the westbound to southbound left at Dale Drive, if the Dale Drive station is built].

Page 31-Add the following text under "Potential Dale Drive Station":

There is no intent or desire to change the zoning in the single-family residential neighborhoods in and around the Wayne Avenue/Dale Drive intersection, if a station is established at this location in the future.

Page 31-In the "Silver Spring Green Trail" section, revise the second-to-last sentence as follows:

The combined trail and buffer along this segment will be at least 13 feet wide [with a minimum eight-foot wide trail and a minimum five-foot wide buffer].

Pages 32 and 34, Maps 14-15—Move the station logo for the Manchester Place station just east of Wayne Avenue.

Page 35-Move Arliss Street Station text from page 39 to page 35.

Page 37-Move Gilbert Street Station text from page 39 to page 37.

Pages 36 and 38, Maps 16-17—Move the station logo for the Gilbert Street station further north, south of University Boulevard intersection with Piney Branch Road.

All maps where applicable-Change Legend denoting "Pedestrian Access" to "Trail Access."

Prior to Glossary—Insert new graphic showing conceptual roadway sections for selected locations along Bonifant Avenue, Wayne Avenue, Arliss Street, Piney Branch Road, and University Boulevard to convey the relationship between Purple Line tracks, through travel lanes, on-street parking, landscape panels, and sidewalks or shared use paths.

#### General

All figures and tables are to be revised where appropriate to reflect County Council changes to the Planning Board Draft for the Purple Line Functional Plan. The text is to be revised as necessary to achieve clarity and consistency, to update factual information, and to convey the actions of the County Council. All identifying references pertain to the Planning Board Draft for the Purple Line Functional Plan, dated April 2010.

This is a correct copy of Council action.

Jon da M. Lauer. Linda M. Lauer, Clerk of the Council

# elected and appointed officials

## County Council

Nancy Floreen, President Valerie Ervin, Vice-President Phil Andrews Roger Berliner Marc Elrich Michael Knapp George L. Leventhal Nancy Navarro Duchy Trachtenberg

## County Executive

## lsiah Leggett

## The Maryland–National Capital Park and Planning Commission

Samuel J. Parker, Jr., Chairman Françoise Carrier, Vice Chairman

### Commissioners

Montgomery County Planning
Board
Françoise Carrier, Chair
Marye Wells-Harley, Vice Chair
Joe Alfandre
Norman Dreyfuss
Amy Presley

Prince George's County Planning Board Samuel J. Parker, Jr., Chairman Sylvester J. Vaughns, Vice Chair Sarah A. Cavitt Jesse Clark Colonel John H. Squire Plan reflects a vision of the future that responds to the unique character of the local community within the context of a County wide perspective. Together with relevant policies, plans should be referred to by public officials and private individuals when making land use decisions.

### the plan process

The PUBLIC HEARING DRAFT PLAN is the formal proposal to amend an adopted master plan, sector plan, or functional plan. Its recommendations are not necessarily those of the Planning Board; it is prepared for the purpose of receiving public testimony. The Planning Board holds a public hearing and receives testimony, after which it holds public worksessions to review the testimony and revise the Public Hearing Draft Plan as appropriate. When the Planning Board's changes are made, the document becomes the Planning Board Draft Plan.

The PLANNING BOARD DRAFT PLAN is the Board's recommended Plan and reflects their revisions to the Public Hearing Draft Plan. The Regional District Act requires the Planning Board to transmit a plan to the County Council with copies to the County Executive who must, within sixty days, prepare and transmit a fiscal impact analysis of the Planning Board Draft Plan to the County Council. The County Executive may also forward to the County Council other comments and recommendations.



Portland, OR Katherine Holt

After receiving the Executive's fiscal impact analysis and comments, the County Council holds a public hearing to receive public testimony. After the hearing record is closed, the relevant Council committee holds public worksessions to review the testimony and makes recommendations to the County Council. The Council holds its own worksessions, and then adopts a resolution approving the Planning Board Draft Plan, as revised.

After Council approval the plan is forwarded to the Maryland-National Capital Park and Planning Commission for adoption. Once adopted by the Commission, the plan officially amends the master plans, functional plans, and sector plans cited in the Commission's adoption resolution.

# acknowledgements

Special thanks to all the Master Plan Advisory Group members, alternates, and guests who contributed to this Plan and improved it with their suggestions. Their input and commitment to this process was invaluable. Please contact MTA with specific design questions on the Purple Line alignment throughout Montgomery and Prince George's Counties.

## **Project Staff**

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Approved and Adopted



Montgomery County Planning Department MontgomeryPlanning.org