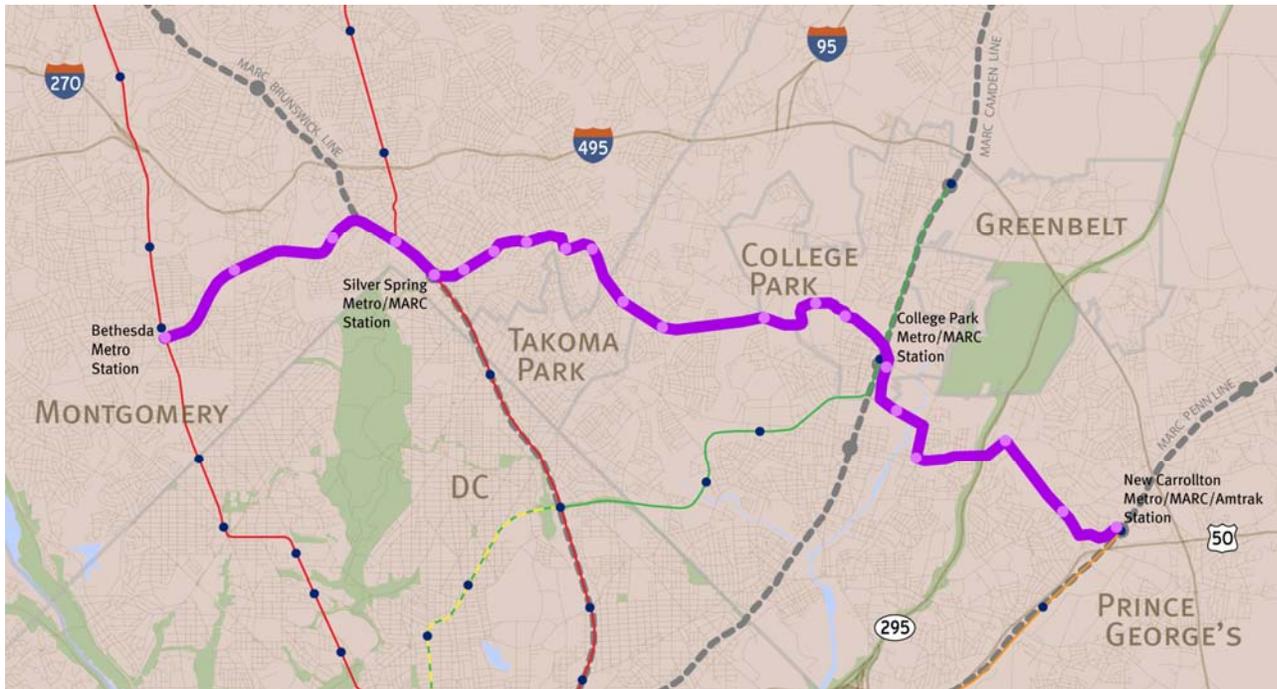


# Proposed for Amendment to the 2009 Update to the Constrained Long-Range Transportation Plan (CLRP)



## Purple Line from Bethesda to New Carrollton



Design, construct and operate a light rail system in Montgomery and Prince George's Counties between Bethesda and New Carrollton. The 16-mile long facility features 21 stations and will connect to Metro stations on the Red Line (Bethesda, Silver Spring), the Green Line (College Park) and Orange Line (New Carrollton), as well as MARC and Amtrak rail stations.

Length: 16 miles  
Complete: 2017  
Cost: \$1.685 billion  
Source: Federal and state funding



# Purple Line Connections

## Legend

- MARC Station
- Purple Line - Bethesda to New Carrollton
- Red Line - Glenmont to Shady Grove
- Orange Line - New Carrollton to Vienna/Fairfax-GMA
- Blue Line - Franconia-Springfield to Largo Town Center
- Green Line - Branch Avenue to Greenbelt
- Yellow Line - Huntington to Mt. Vernon Sq./7th St.-Convention Center



## CONSTRAINED LONG RANGE PLAN (CLRP)

### Proposed Project or Action Description Form

1. Location and Jurisdiction:

Facility:  
 From/At: **Bethesda**  
 To: **New Carrollton**  
 Jurisdiction: **Montgomery County, Prince George's County**

2. Submitting Agency: **MDOT/Maryland Transit Administration**

Last Modified On: **5/13/2009**

3. Project Type and Description:

**Transit**

Description of project or action:

**Preparation of Alternatives Analysis, Draft Environmental Impact Statement (DEIS) and Preliminary Engineering/Final Environmental Impact Assessment (FEIS) and New Starts Application. Construct the proposed Purple Line which will provide high-capacity transit along a 16-mile corridor that extends from Bethesda to the New Carrollton with connections to the Metrorail Red Line, Green Line and Orange Line as well as all three MARC lines, AMTRAK and regional and local bus services. The project includes approximately 21 stations with a forecasted daily ridership of 62,600. Of the daily ridership, approximately 19,200 riders will be new riders and translate into a net reduction of auto trips.**

**Bicycle/pedestrian accommodations included**

4. Project Phasing:

Project ID	In TIP	Improvement	Facility	From	To	#Lane		Completion Date
						From	To	
1042	Yes	Construct						2017

5. Purpose / Contribution to regional goals:

6. Funding and Schedule Information:

Cost (In Thousands): **\$1,685,000.00**

Date of Completion or Implementation: **2017**

Source: **Federal, State**

Cost and Schedule Remarks: **The AA/DEIS is anticipated to be submitted to FTA by summer 2008; public hearings in fall, 2008. The Purple Line AA/DEIS was completed and submitted to FTA in September 2008. A 90-day public review period was completed on January 14, 2009. Four public hearings were held in November 2008 that yielded over 3000 comments. The County Councils and County Executives of both Montgomery and Prince George's Counties unanimously Maryland-National Capital Park and Planning Commissions in both counties endorsed the Medium Investment light rail alternative. - Constuction to begin to 2014 with services starting in 2017.**

7. CMS Documentation:

Is this a highway capacity-increasing project on a limited access or other principal arterial highway?: No

If yes, does this project require a CMS Documentation form under the given criteria?:

If not, please identify the criteria that exempt the project here:

[Return to Projects](#)

## **MEMORANDUM**

**TO:** Donald A. Halligan, Director  
Office of Planning

**FROM:** **Diane Ratcliff, Director of Planning**

**DATE:** April 21, 2009

**SUBJECT:** Proposed Purple Line Light Rail  
Montgomery and Prince George's Counties

The Maryland Transit Administration (MTA) requests that an Amendment to the 2009 Constrained Long Range Plan (CLRP) be initiated. The Purple Line is a future 16-mile transitway between New Carrollton and Bethesda Metrorail Stations. MTA has been engaged in Project Planning for the Purple Line transit project for many years, and MTA is preparing to submit an application for federal funding for the New Starts Program in the Fall of 2009. The portion of the Purple Line project between Bethesda and Silver Spring (the earlier Georgetown Branch project) is included as a project in the CLRP. The portion between Silver Spring and New Carrollton is defined as a study. An amendment is needed in order to include the entire project in the CLRP for the project to qualify for federal funding under the Federal New Starts Program.

The following memo describes the need for the project, the planning process to date, and provides a detailed description of the alternatives, land use, vehicular travel and trip information, air quality analysis, cost estimates, and project schedule.

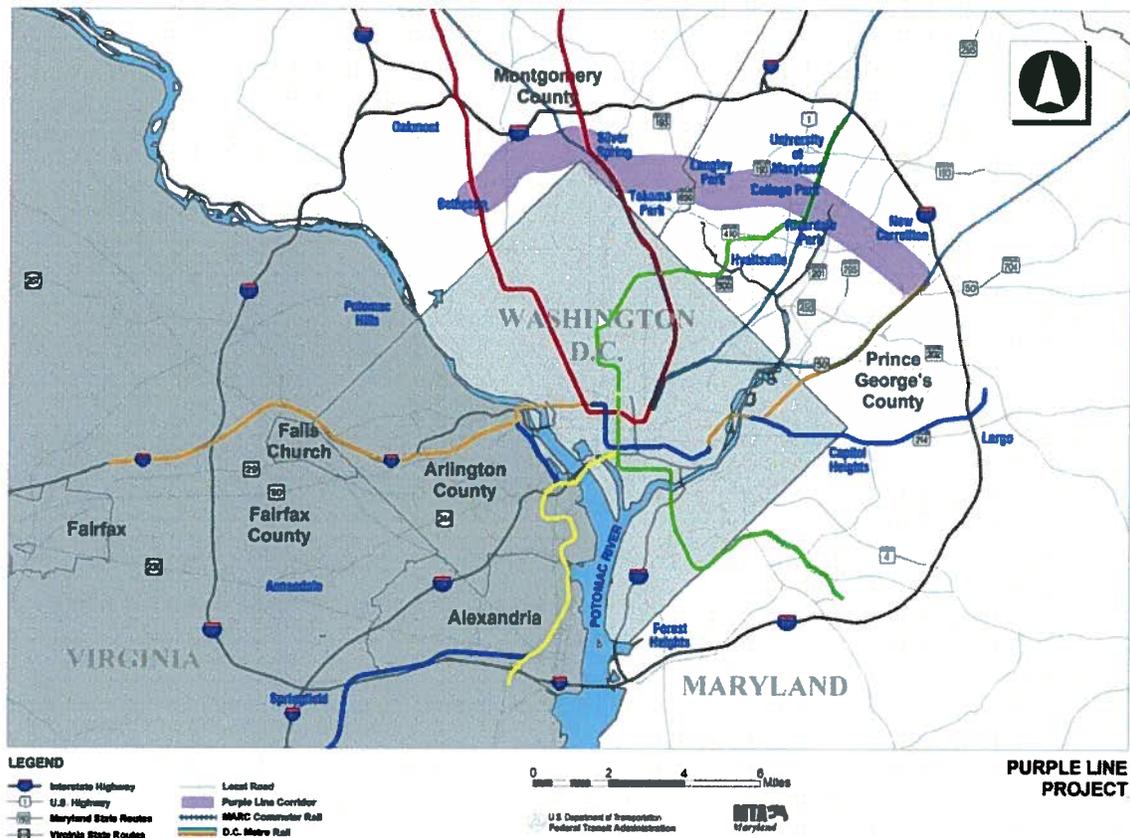
### **Need for the Project**

The Purple Line corridor was identified in the multimodal Capital Beltway/Purple Line Study initiated jointly by the Maryland State Highway Administration (SHA) and MTA in 1996 as the priority transit corridor. The roadways in this corridor have grown increasingly congested as circumferential travel has increased around Washington DC. The movement of jobs out of downtown Washington has led to east-west travel in this area. While there is an extensive transit network inside the beltway, much of this network is buses operating in mixed traffic on congested roadways. The Metrorail and MARC systems are radial services into and out of Washington DC. The Purple Line study compared a range of alternative means to improve east-west mobility and accessibility between Bethesda and New Carrollton. (See Figure 1 for project area).

The purpose of the Purple Line is to provide faster, more direct and more reliable east-west transit service in the corridor, which would connect four major activity centers, (Bethesda, Silver Spring, College Park and New Carrollton) including the Metrorail service located there. The Purple Line would provide access to the Metrorail for the communities in the "wedges" between these lines. The ridership forecasts indicate that over 40% of the projected Purple Line ridership would use the Metro system for part of their trips. The daily ridership projections for the Purple Line Medium Investment Light

Rail Alternative are 62,600, of which 19,200 would be new transit riders (cars off the roads). This is a net reduction in auto trips.

**Figure 1: Project Area**



The Purple Line project has the potential to slightly reduce traffic congestion and slightly improve regional air quality by prompting a shift in the mode of travel from private automobiles to public transit. The Purple Line would pass through a built-out urban area, and the station locations were selected to maximize walk and bus transfer access. Additionally, no new park-and-ride facilities and only limited formal kiss-and-ride facilities are being proposed as part of the Purple Line. Each trip removed from the network is one less automobile traveling through the corridor each day.

Overall the project's predicted impact on regional pollutant levels range from minor positive to no impact. It has been determined that the project meets all the project-level PM<sub>2.5</sub> conformity requirements, and that the project will not cause or contribute to a new violation of the PM<sub>2.5</sub> NAAQS, or increase the frequency or severity of a violation.

### Planning Process

The Purple Line Alternative Analysis and Draft Environmental Impact Statement was completed and submitted to FTA in September 2008. A 90-day public review period was completed on January 14, 2009. Four public hearings were held in November 2008.

Over 3000 comments were received. The County Councils and County Executives of both Montgomery and Prince George's Counties unanimously endorsed the Medium Investment Light Rail Alternative. The Maryland-National Capital Park and Planning Commissions in both counties also endorsed the Medium Investment Light Rail. There have been requests for some minor modifications of the Medium Investment Light Rail Alternative to include several elements from the High Investment light rail alternative. In the following project description and the discussion of air quality conformity, the phrase "Medium Investment Light Rail Alternative" will be used interchangeably with "the Purple Line".

### **Description of Medium Investment Light Rail Alternative**

The Purple Line (see Figure 2) would be 16 miles long and would be largely at grade, with sections in shared lanes, in dedicated lanes, and in exclusive rights-of-way. There would be a short section in tunnel where the existing roadway grade is too steep for light rail operations.

The Purple Line would begin on the Georgetown Branch right-of-way near the Bethesda Metro Station under the Air Rights Building. The terminal station would be the Bethesda Metro Station with a connection to the southern end of the existing station platform.

After emerging from under the Air Rights Building, the transitway would follow the Georgetown Branch right-of-way, crossing over Connecticut Avenue and crossing under Jones Mill Road. Between the area of Pearl Street and just west of Jones Mill Road the trail would be on the north side of the transitway, elsewhere it would be on the south side.

Along the CSX corridor the alignment would be grade-separated (below) at 16th and Spring Streets. After crossing under Spring Street, the alignment would rise above the level of the existing development south of the CSX right-of-way. East of the Falklands Chase apartments, it would cross over the CSX tracks on an aerial structure to enter the Silver Spring Transit Center parallel to, but at a higher level than, the existing tracks.

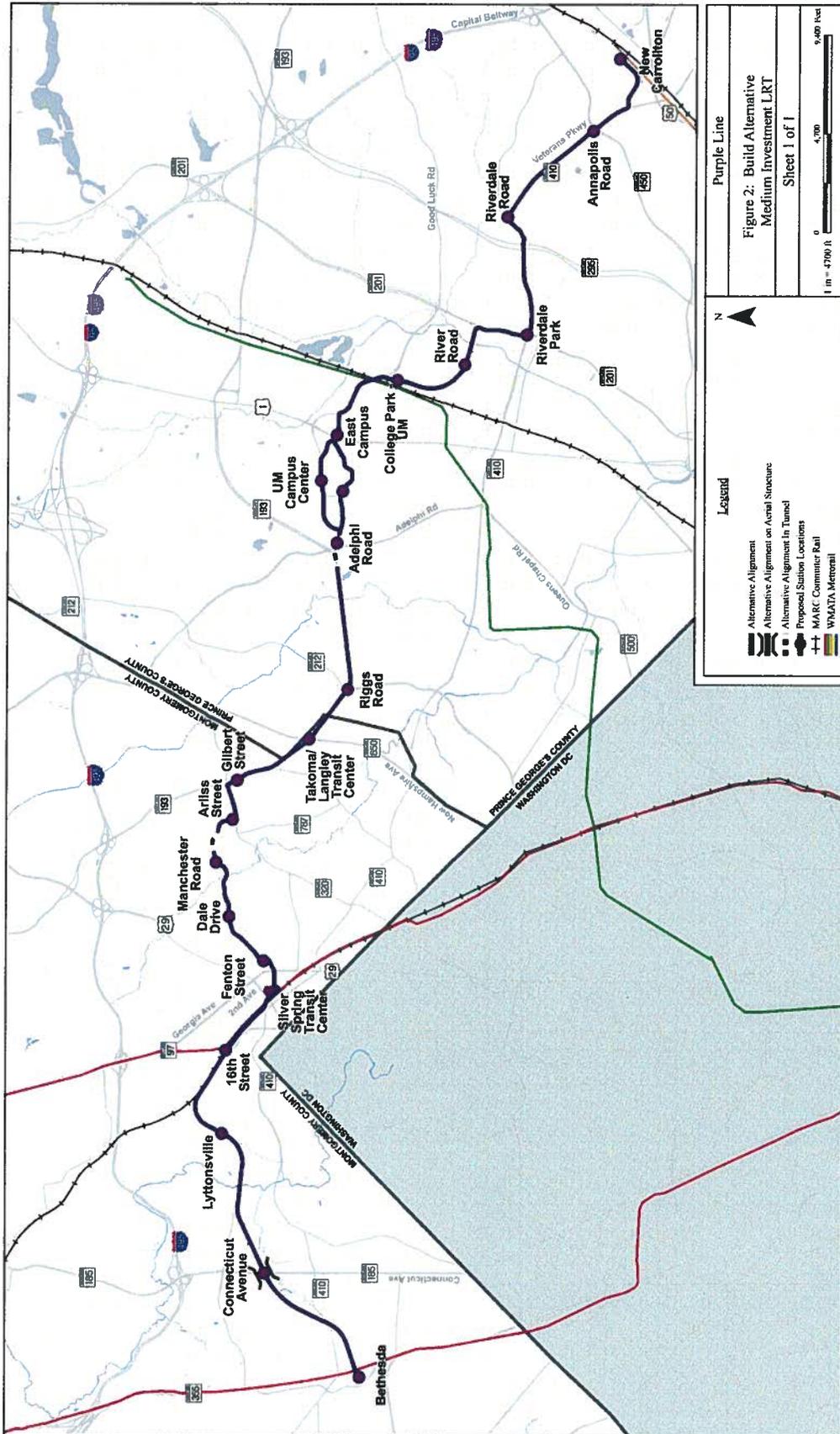
From the Silver Spring Transit Center, the alignment would follow Bonifant Street in dedicated lanes to Wayne Avenue. On Wayne Avenue, the Purple Line would be in shared lanes with added left turn lanes.

The Purple Line would cross Sligo Creek Parkway and enter a tunnel from Wayne Avenue to pass under Plymouth Street. The Purple Line would emerge from the tunnel on Arliss Street.

The alignment would then follow Piney Branch Road and University Boulevard at grade in dedicated lanes. As the Purple Line approaches Adelphi Road, the grade of the existing roadway is too steep for the type of light rail vehicles being considered. For this reason, the transitway would cross the intersection below grade.

At Adelphi Road, the Purple Line would enter the UM campus on Campus Drive. The alignment would continue through campus in dedicated lanes on Campus Drive and then continue at grade in a new exclusive transitway through the parking lots adjacent to the Armory, behind the Visitors Center to Rossborough Lane.

**Figure 2: Medium Investment Alternative**



Crossing US 1 at-grade, the Purple Line would pass through the East Campus development on Rossborough Lane to Paint Branch Parkway. The alignment would continue on Paint Branch Parkway in shared lanes. The light rail would enter the College Park Metro station next to the existing parking garage.

From the College Park Metro Station to the terminus at the New Carrollton Metro Station, the Purple Line would be in dedicated lanes on River Road on the south side of the road. On Kenilworth Avenue the light rail would be in a dedicated lane southbound, but a shared lane northbound. On East West Highway the light rail would be in dedicated lanes with shared left turn lanes; and in shared lanes under Baltimore-Washington Parkway. On Veterans Parkway the Purple Line would be in dedicated lanes.

At the intersection of Veterans Parkway and Annapolis Road the Purple Line would continue across Annapolis at grade, turning left at Ellin Road still in dedicated lanes to arrive at the New Carrollton Metro Station.

It should be noted that refinements will be made to the alignment in the next phases of the project.

The Purple Line would have 21 stations. Four of the stations have existing parking lots, but no new parking will be constructed for this project.

**Table 1: Stations**

	<b>Station</b>	<b>Parking</b>
1	Bethesda	Existing
2	Connecticut Avenue	No
3	Lyttonsville	No
4	16 <sup>th</sup> Street	No
5	Silver Spring Transit Center	Existing
6	New Silver Spring Library	No
7	Dale Drive	No
8	Manchester Road	No
9	Arliss Street/Long Branch	No
10	Gilbert Street	No
11	Takoma/Langley Transit Center	No
12	Riggs Road	No
13	UMUC	No
14	UM Campus Center	No
15	East Campus	No
16	College Park Metro	Existing
17	Rivertech Court	No
18	Riverdale Park	No
19	Riverdale Road	No
20	Annapolis Road	No
21	New Carrollton Metro	Existing

## Land Use

The Purple Line corridor is located in an inner ring suburb of Washington DC and as such, is generally built out, particularly in Montgomery County. The corridor is characterized by an extensive transit network and the land uses and master plans reflect this. The high quality/high speed transit is radial, in and out of Washington DC, so the Purple Line would provide improved accessibility, particularly in those areas in the corridor which don't have convenient access to the rail system. The Purple Line would not change patterns of development but supports existing patterns. Both Montgomery and Prince George's counties are developing functional master plans including the Purple Line. In Montgomery County the Purple Line between Bethesda and Silver Spring has long been in the Master Plans on the Georgetown Branch right-of-way.

There are several areas that could experience some land use changes in the corridor, most notably the Takoma/Langley Transit Center, Riverdale Park, and New Carrollton, with or without the implementation of the Purple Line. Future land use plans for the area include maintenance of communities with redevelopment and revitalization of some activity centers. Most of the communities in the corridor have plans that emphasize a mix of land uses in areas adjacent to transit stations, typical of transit oriented development. The Takoma - Langley area is currently the subject of a new bi-county Sector Plan. Other station areas that have transit district planning include the New Carrollton and the College Park Metro stations.

## Cost Estimates

The capital cost estimate for the Purple Line, by phase, in 2009 dollars, is as follows:

Project Planning	\$82 million
Preliminary Engineering	\$113 million
Right-of-Way	\$82 million
Construction	\$1,147 million
Total Project Cost	\$1,423 million

## CTP Program for the Purple Line

Maryland has programmed funding in the six-year CTP program as follows:

	FY 09	FY10	FY11	FY12	FY13	FY14	TOTAL
<b>TOTAL</b>	\$ 5	\$ 7	\$ 10	\$ 20	\$ 20	\$ 20	\$ 82

Therefore, the balance of the funding needed to complete the project is \$1,341 million, \$419 million of which is already identified in the 2006 CLRP Financial Plan. We will be providing documentation to demonstrate that MDOT can afford to add \$922 million into the CLRP.

## **Project Schedule**

Completion of Project Planning	2012
Project Engineering/Completion of NEPA	2012 – 2014
ROW Acquisition	2013 – 2014
Construction	2014 – 2017
Start of Service	2017

Attached you will find the completed CLRP Forms. If you have any questions please contact Mike Madden, Project Manager at 410-767-3694 or Diane Ratcliff, Planning Director at 410-767-3787.

### **Attachments**

cc: Lyn Erickson, Manager, Regional Planning, Office of Planning and Capital Programming, Maryland Department of Transportation  
Leonard Howard, Manager Statewide Planning, Maryland Transit Administration  
Michael Madden, Project Manager, Maryland Transit Administration  
Joseph Madison, Regional Planner, Maryland Transit Administration