

Purple Line



Prince George's
County
&
Montgomery County
Delegates Briefing
July 31, 2008



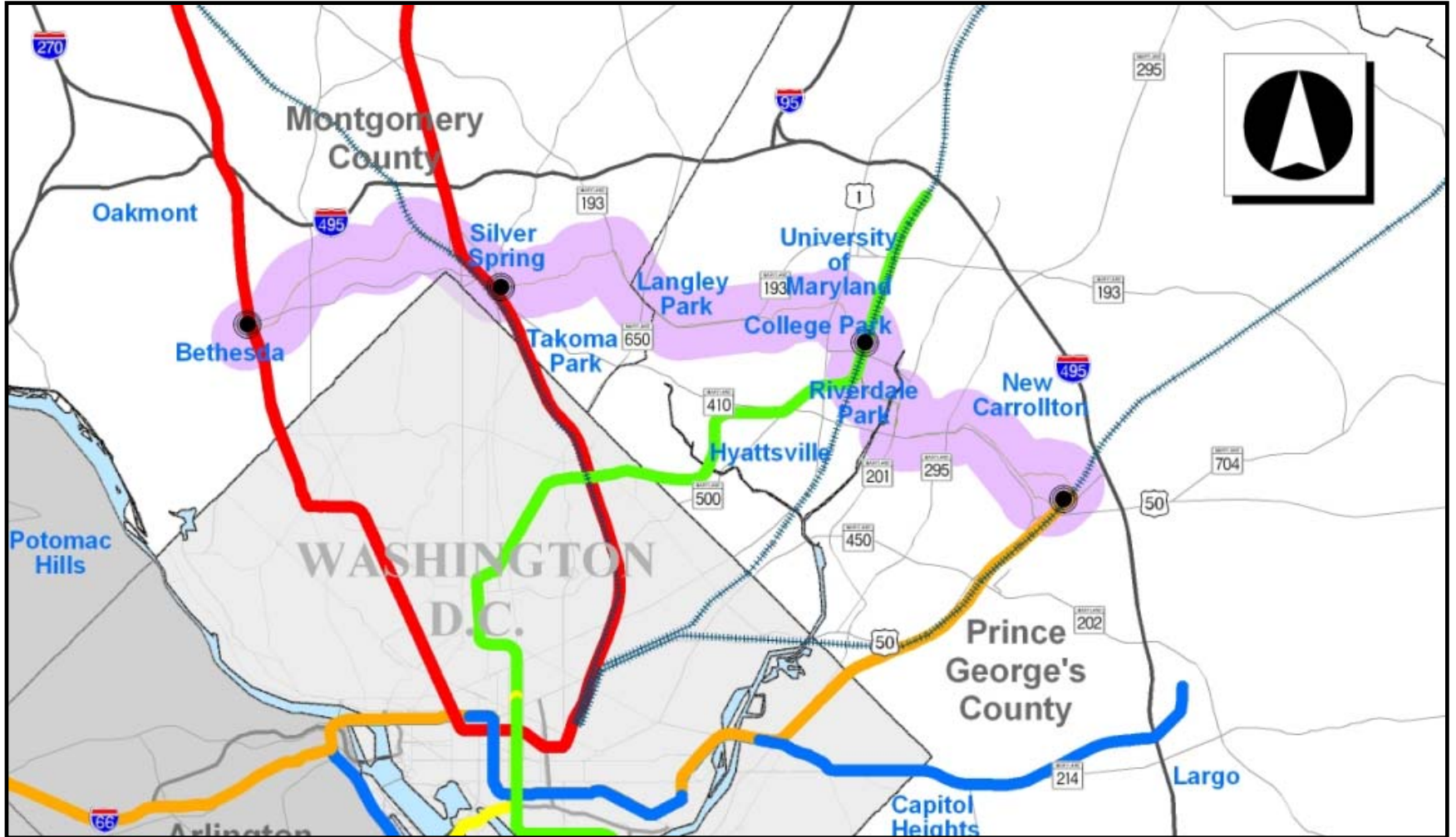
Agenda

- Project Overview
- Alternatives
- Project Updates
 - Travel Markets
 - Ridership
 - Travel Times
 - Cost Effectiveness
 - Public Outreach
- Project Issues/Updates
- Next Steps and Schedule

Project Overview

- 16-mile east-west rapid transit line extending from Bethesda to New Carrollton.
- The Purple Line will be either light rail or bus rapid transit and will operate largely at street level.
- A hiker biker trail is included along the Georgetown Branch and CSX/WMATA corridor as part of the Capital Crescent Trail.
- Twenty-two station locations are currently being planned.
- Provides direct connections to Metrorail at Bethesda, Silver Spring, College Park, and New Carrollton; linking the two branches of the Red Line, the Green Line and the Orange Line.
- Provides connections to MARC, Amtrak and regional and local bus services.

Project Area Map



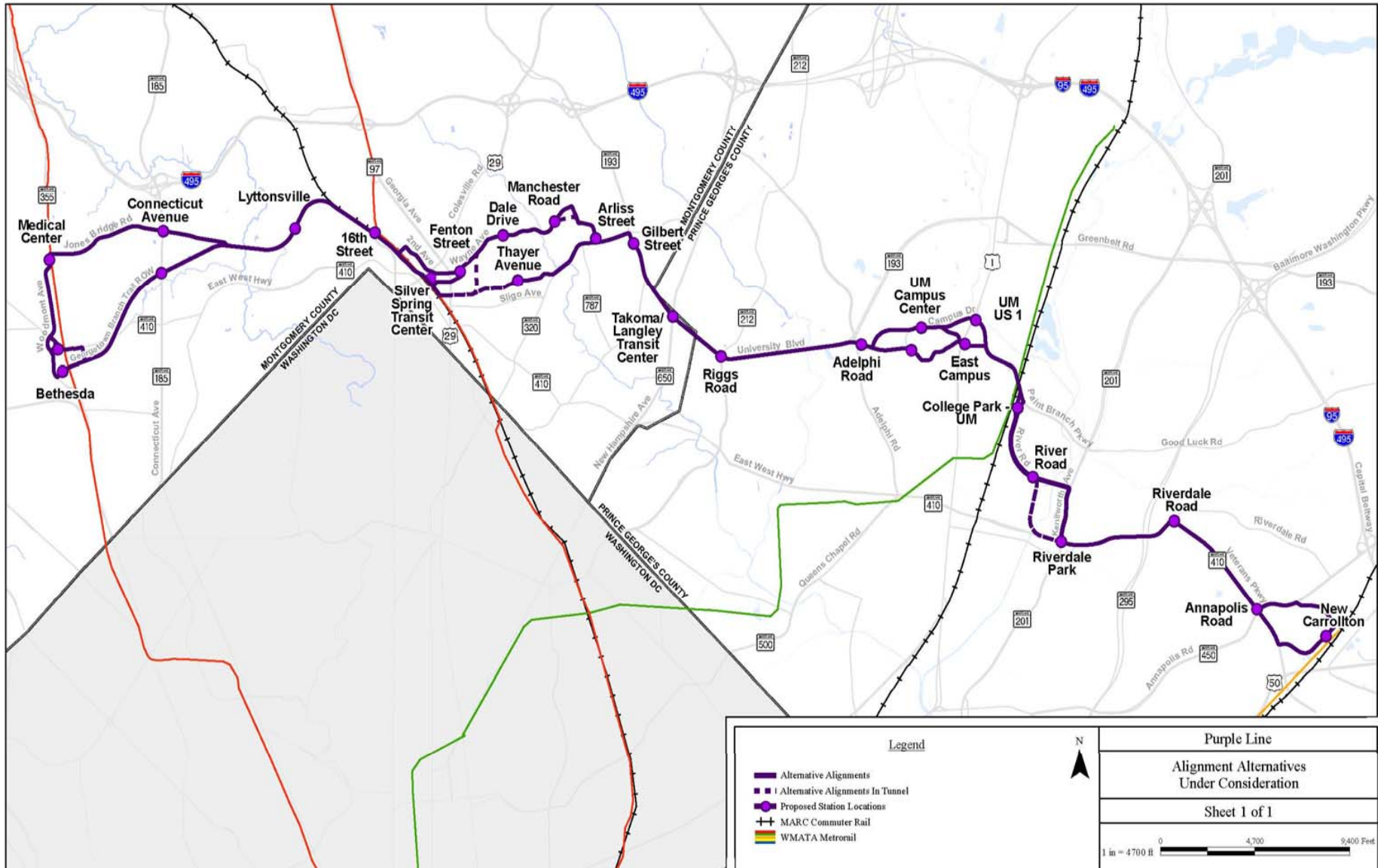
Project Goals

- Provide faster and more reliable transit service in the corridor to serve growing east-west travel markets
- Support economic development and strengthen and revitalize communities in the corridor
- Improve access to and connectivity to Metrorail, MARC, AMTRAK, and bus services
- Serve transit-dependent populations
- Support local, regional and state policies and adopted Master Plans
- Improve access to existing activity centers and planned commercial, office, and residential development in Bethesda, Silver Spring, Takoma/Langley, University of Maryland/College Park, and New Carrollton

Travel Markets

- Much more than a circumferential market
- Serves markets connecting corridor with the regional transit system, especially Metrorail
 - Most new transit trips linked with districts outside corridor
 - Major travel market is travelers transferring between purple line and Metrorail
- Provides a new set of links in extensive regional system
- Increasing capital investments in features that improve travel times will increase ridership and user benefits
- Significant Transit Oriented Development (TOD) or TOD opportunities at Bethesda, Connecticut Ave, two downtown Silver Spring stations, Long Branch, Takoma-Langley, East Campus, College Park Metro, River Road, Riverdale Park, and New Carrollton

Alignment Alternatives



Alternatives

Description

- **Alternative 1: No-Build**

Existing transportation system and programmed transit and roadway improvements.

- **Alternative 2: TSM / Baseline**

Enhanced bus service and other lower cost improvements such as more frequent and additional service, and signal and intersection improvements.

Alternatives

Description

BRT ALTERNATIVES

- **Alternative 3: Low Investment BRT**
Mostly at-grade and shared use on existing roadways
- **Alternative 4: Medium Investment BRT**
Generally at-grade, though often in dedicated lanes, with some grade-separated intersections and segments.
- **Alternative 5: High Investment BRT**
Largely dedicated, exclusive where possible, with grade separation in key areas

Bus Rapid Transit



Alternatives

Description

LRT ALTERNATIVES

- **Alternative 6: Low Investment LRT**

Mostly at-grade with minimal tunneling or aerial structures, where steep grades require it.

- **Alternative 7: Medium Investment LRT**

Mostly dedicated, with some intersections and key areas grade-separated.

- **Alternative 8: High Investment LRT**

Largely exclusive or dedicated, and grade-separated in key areas.

Light Rail Transit



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Stations



Ridership

- Approximately 40 % of the riders use Metro for part of their trip
- Walk & bus primary mode of access
- Biggest market: Bethesda - Silver Spring

| Transit Ridership (daily boardings) | TSM | Low Invest BRT | Med Invest BRT | High Invest BRT | Low Invest LRT | Med Invest LRT | High Invest LRT |
|--|---------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Purple Line | 14,800 | 22,200 | 29,300 | 33,800 | 32,500 | 33,900 | 36,100 |
| Purple Line via Metrorail | 2,100 | 16,700 | 21,100 | 23,700 | 25,300 | 27,200 | 30,500 |
| Purple Line via MARC | 0 | 1,100 | 1,400 | 1,400 | 1,500 | 1,500 | 1,500 |
| Total | 16,900 | 40,000 | 51,800 | 58,800 | 59,300 | 62,600 | 68,100 |
| <i>New Transit Trips Relative to No-Build</i> | | 11,400 (29%) | 15,300 (30%) | 17,700 (30%) | 18,200 (31%) | 19,200 (31%) | 20,500 (30%) |
| <i>New Transit Trips Relative to TSM</i> | | 3,200 (8%) | 7,100 (14%) | 9,500 (16%) | 10,000 (17%) | 11,000 (18%) | 12,300 (18%) |

Note: New transit riders are diverted auto users

Estimated Reduction in Vehicle Trips

| Purple Line Build Alternatives Daily Reduction in Auto Trips by District Compared to No-Build | | | | | | |
|--|---------|---------|----------|---------|---------|----------|
| District | Low BRT | Med BRT | High BRT | Low LRT | Med LRT | High LRT |
| Bethesda | 900 | 2,000 | 2,200 | 3,700 | 4,200 | 4,300 |
| Connecticut / Lytonsville | 1,000 | 1,000 | 1,000 | 1,200 | 1,300 | 1,300 |
| Silver Spring | 2,800 | 4,300 | 4,900 | 5,200 | 5,600 | 5,900 |
| Takoma / Langley | 1,300 | 2,400 | 3,400 | 3,000 | 3,300 | 3,900 |
| College Park | 5,500 | 6,300 | 6,900 | 6,500 | 6,600 | 7,100 |
| Riverdale | 2,400 | 2,600 | 2,900 | 2,700 | 2,600 | 2,900 |
| New Carrollton | 1,000 | 1,200 | 1,500 | 1,300 | 1,200 | 1,500 |
| Shady Grove | 1,000 | 1,300 | 1,500 | 1,800 | 2,000 | 2,200 |
| Glenmont | 500 | 900 | 1,000 | 1,300 | 1,400 | 1,500 |
| Greenbelt | 700 | 900 | 1,000 | 900 | 900 | 1,100 |
| DC (All 4 Districts) | 2,200 | 2,800 | 3,300 | 3,300 | 3,400 | 3,900 |
| Southwest Mont. Co. | 100 | 400 | 500 | 500 | 600 | 700 |
| North | 1,000 | 1,700 | 1,900 | 2,100 | 2,300 | 2,500 |
| South | 900 | 1,100 | 1,200 | 1,200 | 1,200 | 1,300 |
| East | 1,200 | 1,500 | 1,800 | 1,600 | 1,500 | 1,900 |
| West | 100 | 100 | 200 | 100 | 100 | 200 |

Daily Boardings by Station

| Segment | Low Investment BRT | Medium Investment BRT | High Investment BRT | Low Investment LRT | Medium Investment LRT | High Investment LRT |
|----------------------------------|--------------------|-----------------------|---------------------|--------------------|-----------------------|---------------------|
| Bethesda Metro, North Entrance | 1,400 | 5,600 | 6,000 | N/A | N/A | N/A |
| Medical Center Metro | 3,900 | N/A | N/A | N/A | N/A | N/A |
| Bethesda Metro, South Entrance | N/A | 2,800 | 3,000 | 11,300 | 12,700 | 13,300 |
| Connecticut Avenue | 400 | 500 | 500 | 900 | 900 | 1000 |
| Lyttonsville | 600 | 700 | 700 | 800 | 800 | 900 |
| Woodside/16 th Street | 1,400 | 2,000 | 2,500 | 2,200 | 2,300 | 2,400 |
| Silver Spring Transit Center | 5,100 | 8,700 | 10,400 | 11,100 | 12,200 | 13,600 |
| Fenton Street | 600 | 600 | N/A | 700 | 700 | N/A |
| Dale Drive | 1,200 | 1,300 | 1,400 | 1,300 | 1,400 | 1,500 |
| Manchester Place | 700 | 800 | 1,100 | 800 | 900 | 1,200 |
| Arliss Street | 800 | 900 | 1,700 | 1,300 | 1,500 | 2,200 |
| Gilbert Street | 300 | 900 | 1,300 | 1,200 | 1,200 | 1,400 |
| Takoma/Langley Transit Center | 1,400 | 2,300 | 3,200 | 2,700 | 3,000 | 3,700 |
| Riggs Road | 400 | 600 | 800 | 700 | 800 | 900 |
| Adelphi Road | 500 | 600 | 700 | 600 | 700 | 700 |
| UM Campus Center | 1,500 | 2,100 | 2,200 | 2,100 | 2,200 | 2,200 |
| US 1 – East Campus | 4,400 | 4,400 | 4,700 | 4,500 | 4,500 | 4,700 |
| College Park Metro | 8,000 | 8,600 | 9,100 | 8,600 | 8,600 | 8,900 |
| River Road | 1,500 | 1,500 | 1,500 | 1,500 | 1,500 | 1,500 |
| Riverdale Park | 1,400 | 1,500 | 1,600 | 1,600 | 1,500 | 1,600 |
| Riverdale Road | 500 | 500 | 700 | 600 | 500 | 700 |
| Annapolis Road | 900 | 1,100 | 1,200 | 1,00 | 1,000 | 1,200 |
| New Carrollton Metro | 3,100 | 3,800 | 4,500 | 3,800 | 3,700 | 4,500 |
| Total Boardings | 40,000 | 51,800 | 58,800 | 59,300 | 62,600 | 68,100 |

Representative Travel Times

Estimated 2030 Travel Times (in minutes) between Stations by Alternative

| <i>Station-to-Station</i> | <i>TSM</i> | <i>Low BRT</i> | <i>Med BRT</i> | <i>High BRT</i> | <i>Low LRT</i> | <i>Med LRT</i> | <i>High LRT</i> |
|------------------------------------|-------------------|-----------------------|-----------------------|------------------------|-----------------------|-----------------------|------------------------|
| Bethesda - Silver Spring | 33 | 25 | 19 | 19 | 12 | 9 | 9 |
| Bethesda-Takoma/Langley | 61 | 51 | 38 | 33 | 29 | 26 | 23 |
| Bethesda - UM Campus Center | 76 | 66 | 49 | 40 | 38 | 34 | 30 |
| Bethesda-New Carrollton | 108 | 96 | 73 | 60 | 62 | 59 | 50 |
| Silver Spring- Takoma/Langley | 29 | 26 | 19 | 14 | 18 | 17 | 14 |
| Silver Spring- Riverdale Park | 62 | 59 | 43 | 33 | 39 | 38 | 32 |
| Silver Spring - UM Campus Center | 44 | 41 | 30 | 22 | 26 | 25 | 21 |
| Silver Spring- College Park Metro | 53 | 52 | 36 | 28 | 32 | 31 | 27 |
| Takoma/Langley- Riverdale Park | 34 | 33 | 24 | 19 | 22 | 22 | 19 |
| East Silver Spring- Silver Spring | 8 | 8 | 7 | 5 | 7 | 7 | 4 |
| East Silver Spring- Takoma/Langley | 21 | 19 | 13 | 10 | 11 | 11 | 10 |
| New Carrollton - Riverdale Park | 12 | 13 | 13 | 10 | 13 | 13 | 10 |
| New Carrollton - UM Campus Center | 30 | 31 | 25 | 21 | 25 | 25 | 21 |
| New Carrollton- Silver Spring | 73 | 72 | 55 | 43 | 51 | 50 | 42 |

Cost Effectiveness

| | | A | B | C | D |
|-----------------------|---|--|--|--|---|
| | Total Capital Costs (2007 dollars) | Annualized Capital Costs (2007 dollars) | Annual Operating Costs (2007 dollars) | Annual User Benefit (Hours) | Annualized Cost per Hour of User Benefit |
| TSM | 81,960,000 | 7,052,000 | 14,600,000 | 1,965,880 | -- |
| Low Investment BRT | 386,390,000 | 31,266,000 | 17,300,000 | 3,441,270 | \$ 18.24 |
| Medium Investment BRT | 579,820,000 | 46,980,000 | 17,300,000 | 5,008,780 | \$ 14.01 |
| High Investment BRT | 1,088,480,000 | 87,040,000 | 15,800,000 | 6,164,200 | \$ 19.34 |
| Low Investment LRT | 1,206,150,000 | 96,480,000 | 26,400,000 | 5,784,940 | \$ 26.51 |
| Medium Investment LRT | 1,220,150,000 | 97,600,000 | 25,000,000 | 6,388,620 | \$ 22.82 |
| High Investment LRT | 1,634,840,000 | 125,895,000 | 22,200,000 | 7,299,040 | \$ 23.71 |

Cost-Effectiveness

- Cost-effectiveness ~ (approx.) 50% of project justification rating
- Must get a “medium” rating in cost-effectiveness for a project to be recommended.
- Cost-effectiveness benchmarks:
 - “High”: Less than or equal to \$11.99
 - “Medium-High”: \$12.00-\$15.49
 - **“Medium”**: **\$15.50-\$23.99**

Cost-Effectiveness

$$C/E = \frac{\text{Annualized Project Cost}}{\text{Transportation System User Benefits}}$$

- Annualized Project Cost = annual capital and operating costs (incremental costs)
- Transportation System User Benefits = hours of perceived travel time benefits accrued to all travelers affected by the project

Cost-Effectiveness

Cost Effectiveness Factors:

- Project Capital and Operating Costs
 - Travel time savings
 - Other user benefits
 - Parking costs reductions
 - Out-of-pocket costs reductions
 - Comfort, convenience and other perceived benefits
- ↑ As costs go up or benefits down, C/E goes up**
- ↓ As costs go down or benefits up, C/E goes down**

Public Outreach

- The MTA has conducted an extensive public participation program, particularly in areas where public concerns have been heard.
- Over 280 meetings and presentations
- Community Focus Groups
 - Eight groups in the corridor composed of representatives of community associations to provide a forum for discussion of local neighborhood concerns. Eight rounds of these meetings were held.
- Large Open Houses held periodically throughout the corridor
- Newsletters
- Website

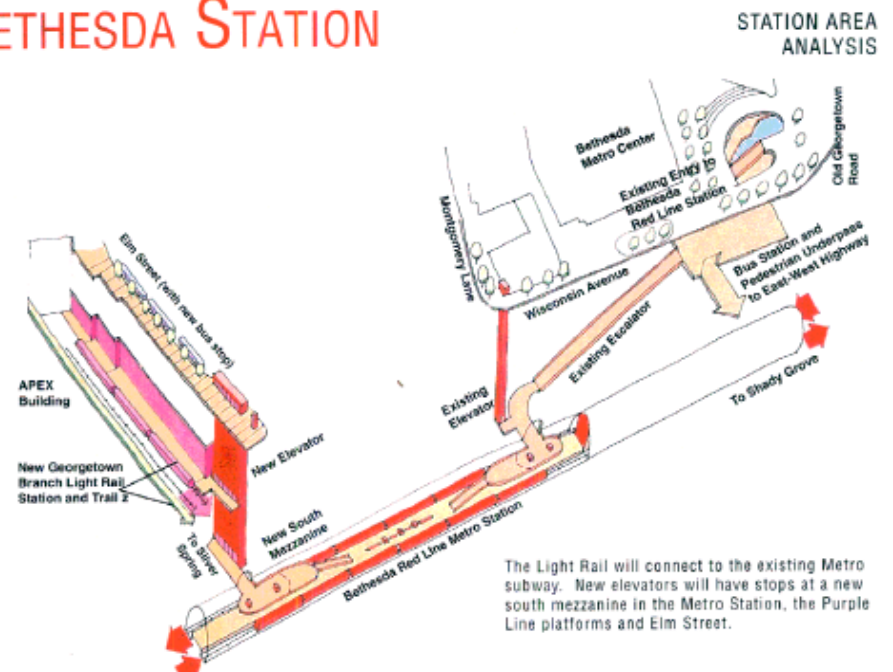
Project Support

- The project is strongly supported by the local political leadership of both Montgomery and Prince George's Counties
- Many State elected officials also support the project
- The recently created Bi-County Purple Line Task Force is composed of senior county managers to coordinate and advance implementation of the project
- Both Montgomery and Prince George's Counties are preparing Functional Master Plans for the entire length of the Purple Line
- Supported by the Maryland-National Capital Park and Planning Commission in both counties
- Extensive efforts by business organizations and transit advocacy groups towards advancing the Purple Line
- Many community associations agree with the need for the project
- Local support is being heard throughout corridor, including Wayne Avenue

Bethesda Station Connection

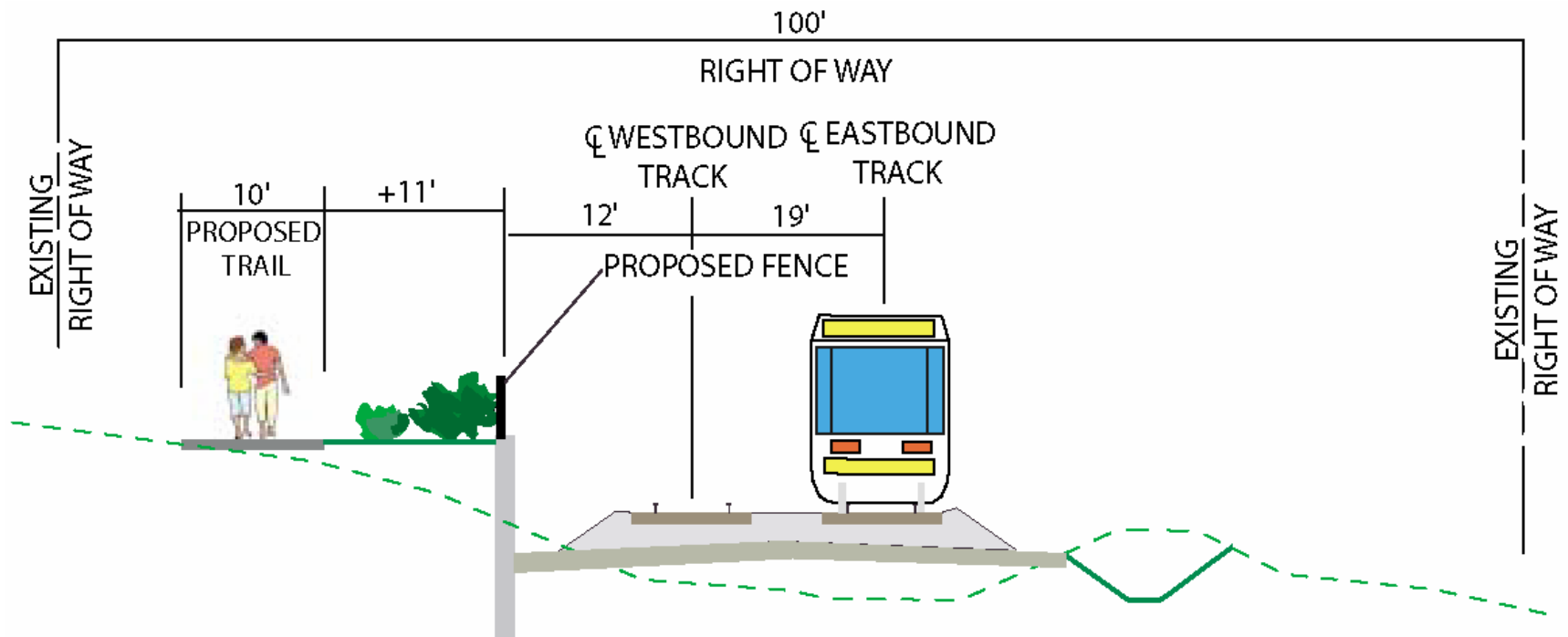
- Purple Line will connect directly to new south entrance of Metro
- Working with developer of Woodmont East on tailtrack and trail
- MTA is carrying out preliminary design of south entrance for County
- South entrance being funded by Montgomery County as separate project

BETHESDA STATION



Bethesda/Chevy Chase

- Between Pearl Street and just west of Jones Mill Road the trail has been moved to the north side of the transitway to reduce visual impacts, improve trail experience by lowering transitway 3-4 feet below trail, provide a 10-foot landscaped buffer where possible, and reduce retaining walls



Master Plan Alignment



Transitway and trail in Chevy Chase

Chevy Chase

“Grass Tracks” proposed to improve visual quality



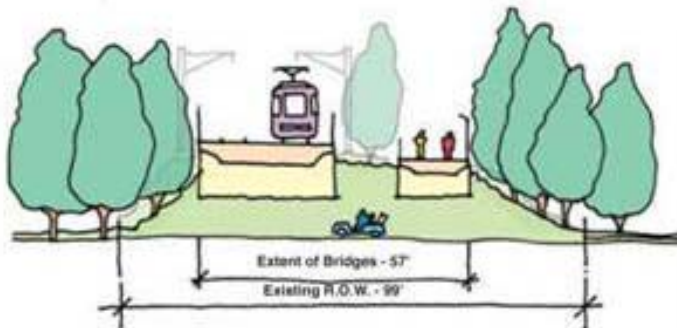
Light Rail Transit – Grass Tracks



Columbia Country Club

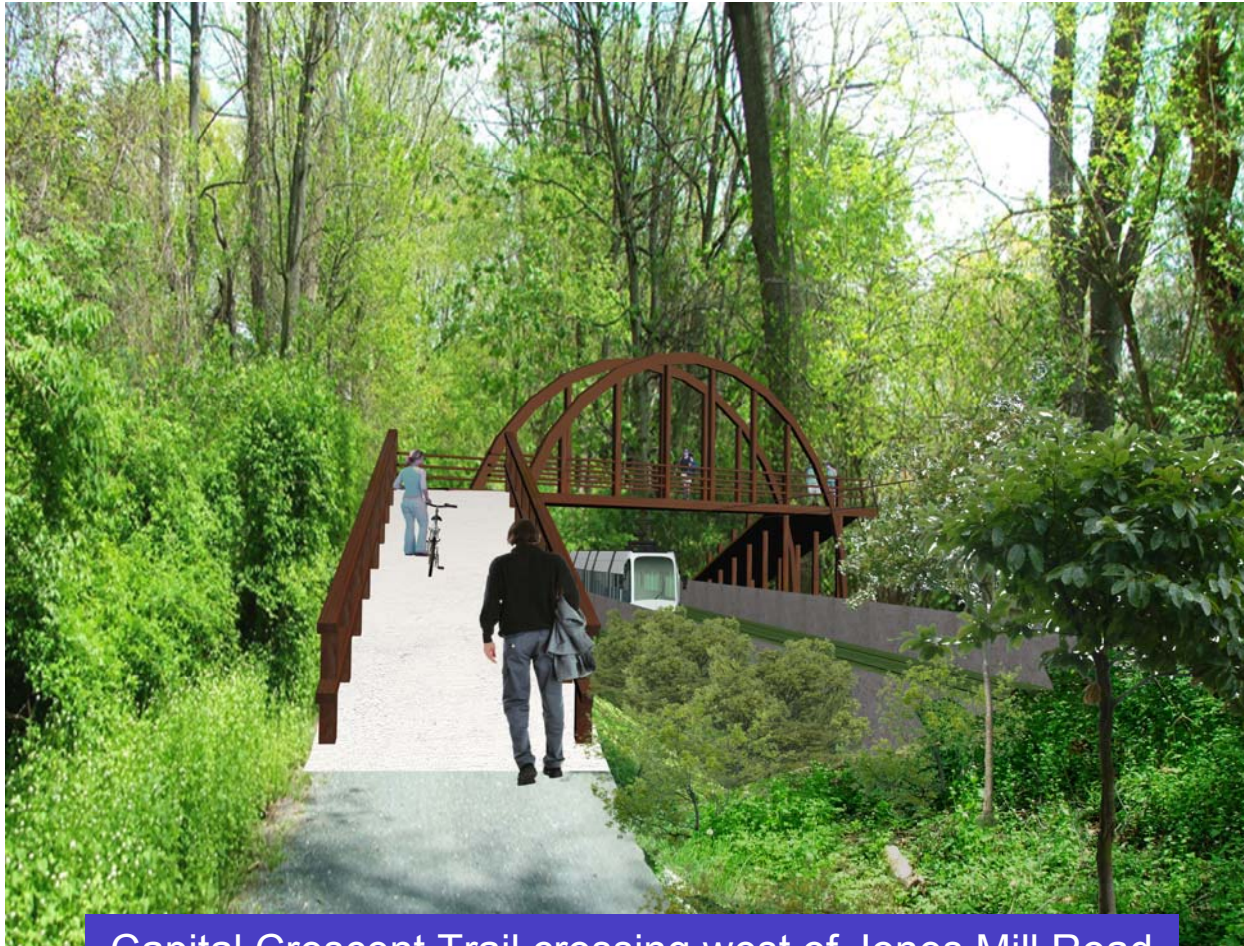


MTA has offered the Country Club design options to integrate the transitway and trail with the golf course and enhance the crossing through the golf course.



Master Plan Alignment

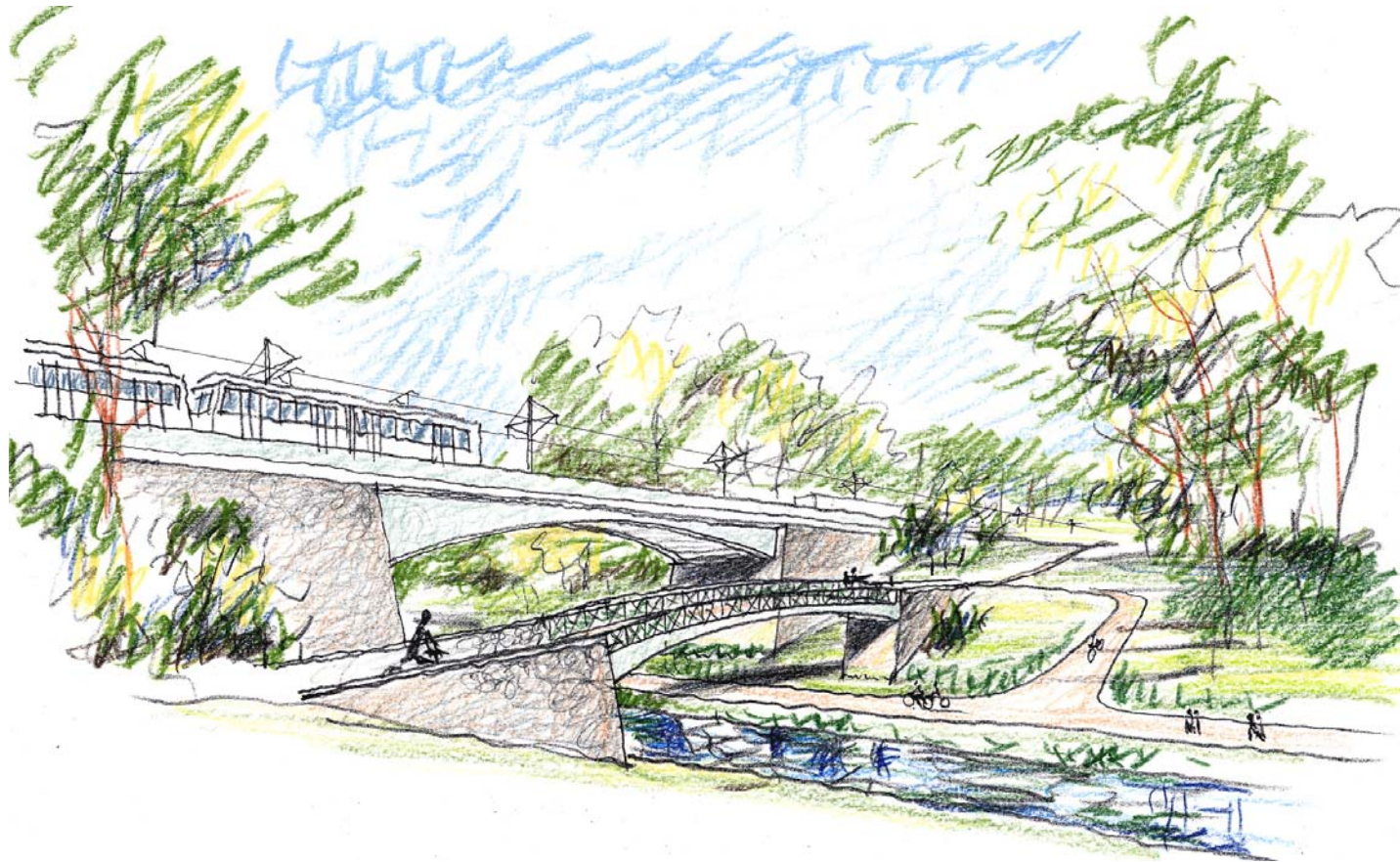
Photo simulation of trail transition from north side of transitway to south side near Jones Bridge Road



Capital Crescent Trail crossing west of Jones Mill Road

Rock Creek Bridge

- Trail would be on a separate, lower bridge over Rock Creek.
- Allows an easier, ADA compliant ramp connection to Rock Creek Trail
- More pleasant experience for trail users



Bethesda/Chevy Chase

- Town of Chevy Chase hired Sam Schwartz Engineering (SSE) to review the study
 - Chevy Chase is promoting BRT on Jones Bridge Road
 - SSE review of project is based on inaccuracies and unrealistic assumptions
 - Chevy Chase's preferred option ignores the Purple Line corridor east of Silver Spring
- Several groups are spreading misleading information about the project alternatives
- MTA has prepared a report and is refuting SSE and the Town's claims
- MTA will be providing accurate information to the public in response to the Town's misleading claims
- A push for BRT will affect ridership, service and operations for the entire 16-mile Purple Line

Misinformation

- Town of Chevy Chase Assertions:
 - Jones Bridge Road Provides Similar Travel Benefits
 - Jones Bridge Road Should be the Preferred Alignment Due to BRAC
 - Trail Not Possible Along the Length of the Corridor
 - Emissions are Higher for the Light Rail
 - Woodmont East is a Maintenance Yard

MTA Findings

- Reductions in Auto Trips
 - Master Plan - 15,300 to 20,500 auto trips
 - Jones Bridge Road – 11,400 trips
- Impacts of BRAC (employees and visitors) to the Purple Line ridership expected to be limited
 - Estimated at 200 riders per day
 - Ridership levels estimated between 40,000 and 68,000 per day
- 10 feet wide paved trail with 2 foot shoulders is designed to extend the entire length from Silver Spring to Bethesda
- Source of Emissions Data was refuted by respected transportation research agency
- Woodmont East to be used very infrequently as a storage area for vehicles out of service; maintenance yard - 3 miles away

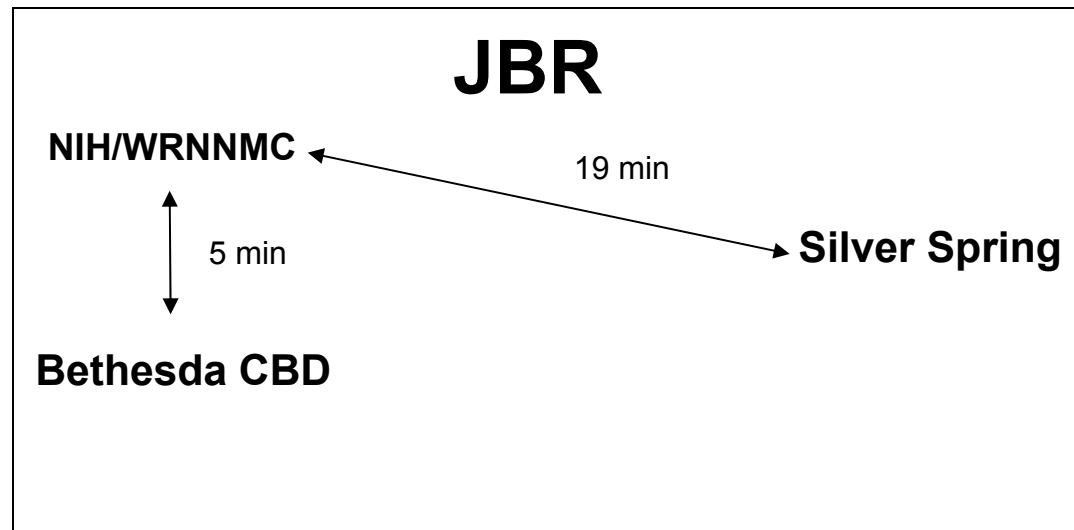
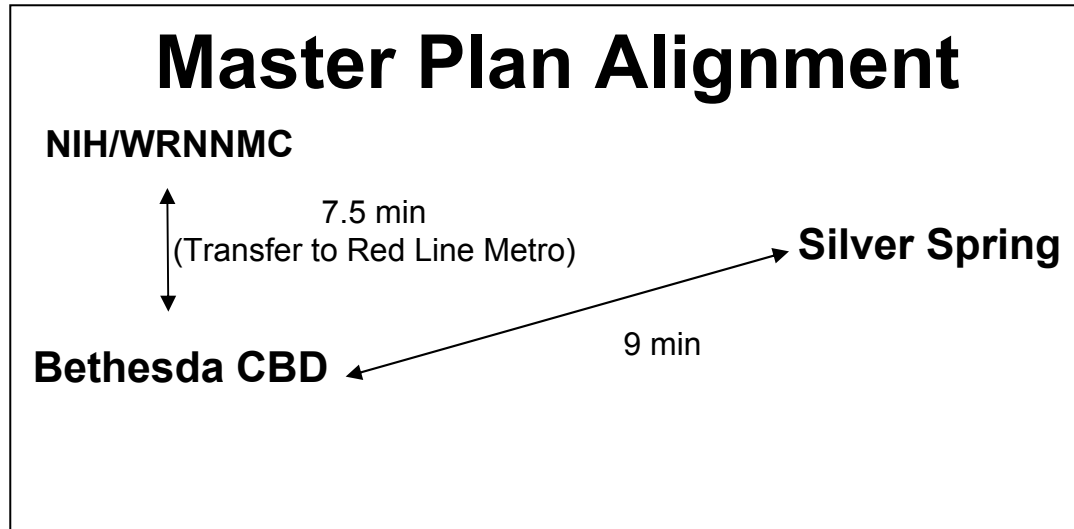
Impact of BRAC

- By 2011, there will be a major expansion of the National Naval Medical Center (NNMC) to include functions from Walter Reed Army Medical Center
 - New Facility will be the Walter Reed National Military Medical Center (WRNMMC)
- 2,200 new staff members + around 1,850 new visitors per day
 - Currently, NNMC employs 8,100 people
- However, ridership comes from both jobs and residents near stations and a comparison of the two areas shows the Bethesda CBD is a much larger market, with far greater projected growth
 - NIH/NNMC market
 - Employment: 26,200 today 32,700 in 2030
 - Population: 1,600 today 2,300 in 2030
 - Bethesda CBD market
 - Employment: 35,800 today 40,800 in 2030
 - Population: 10,500 today 22,900 in 2030

Impact of BRAC

- So, how would the additional 2,200 BRAC employees affect the ridership projections?
- Around 1,750 of these new employees will be coming from Walter Reed (out of 6,000 total WRAMC employees), 450 will be new support staff
- MTA evaluated the location of residences for current Walter Reed employees
 - Approximately 650 employees live within the Purple Line service area
 - Assuming 30% shift to WRNMMC, approximately 200 potential new customers would be added to the Purple Line service market
 - Assuming a 30% transit share, approximately 60 of these employees would be expected to use transit options (including potential Purple Line service)

Travel Time: Silver Spring to NIH/NNMC



TSM
Bethesda to
Silver Spring
32 min.

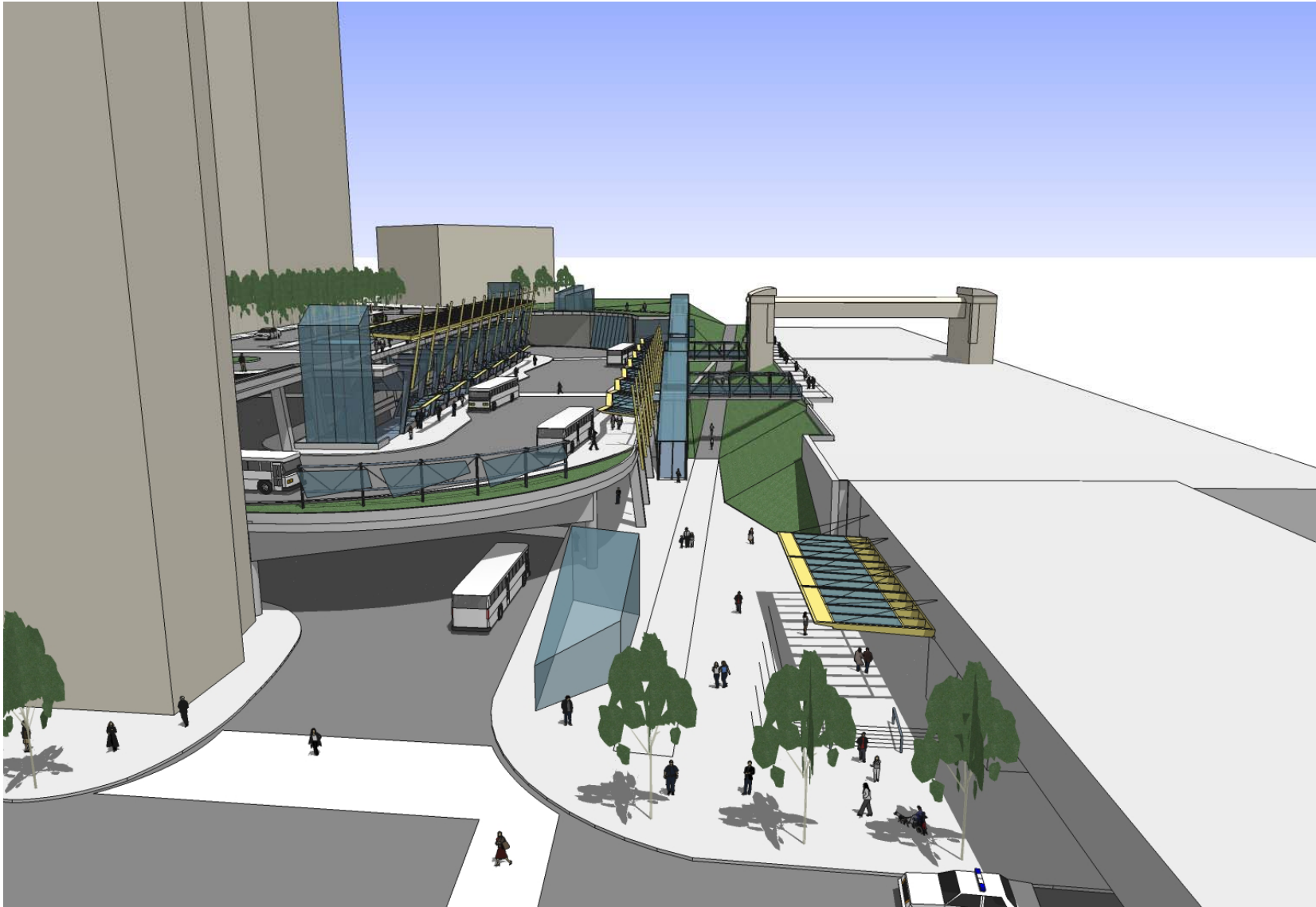
Woodmont East- Design



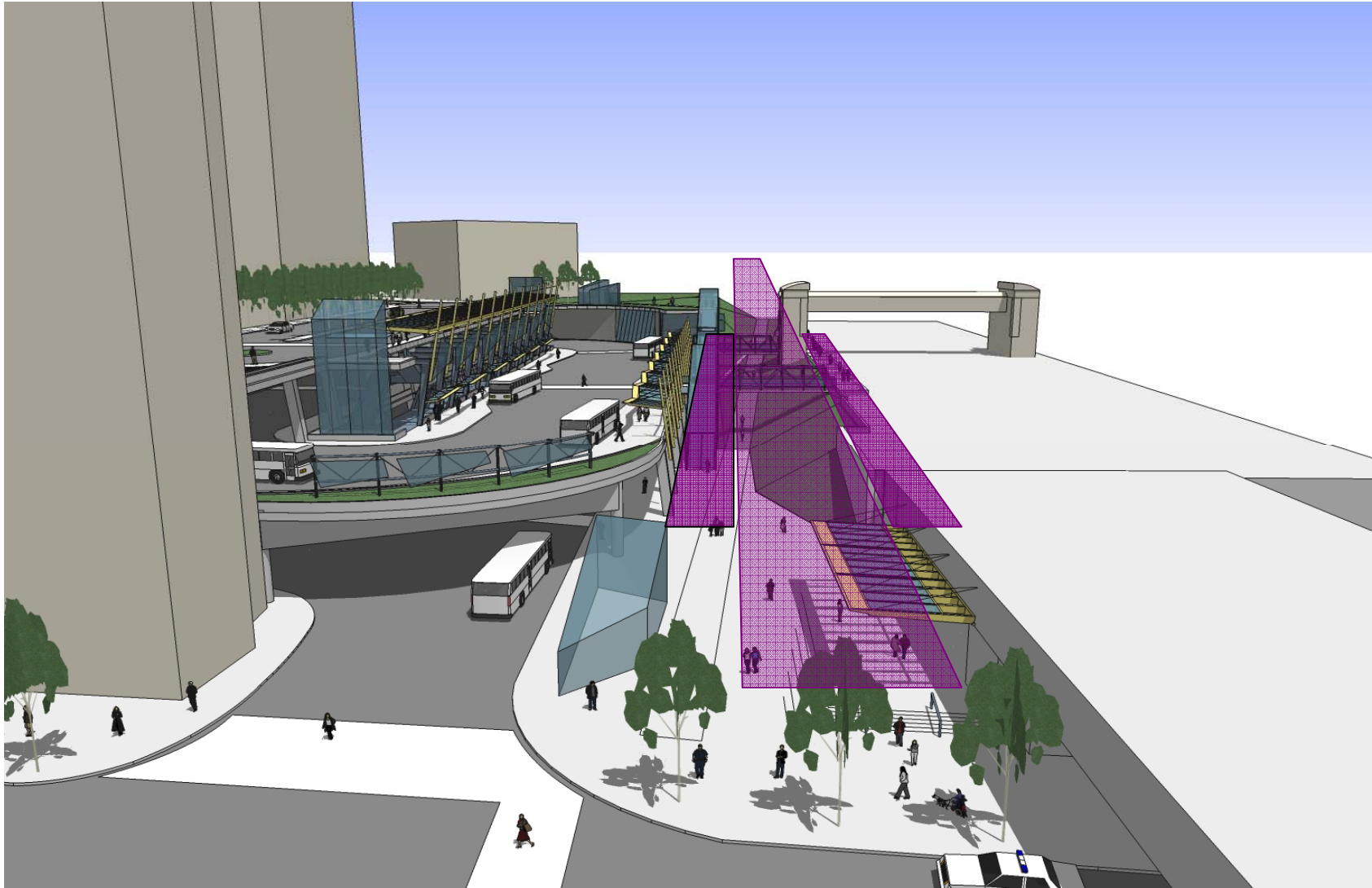
Silver Spring Transit Center



Silver Spring Transit Center



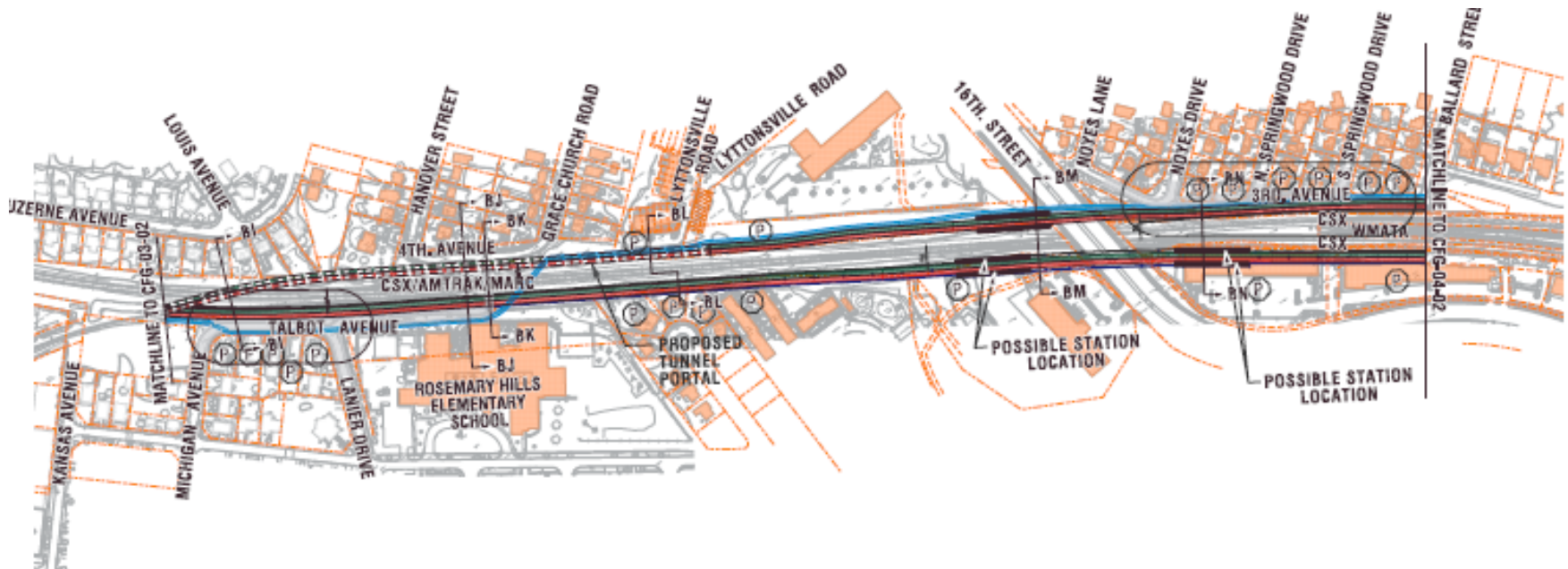
Connection to Silver Spring Transit Center



South side of CSX

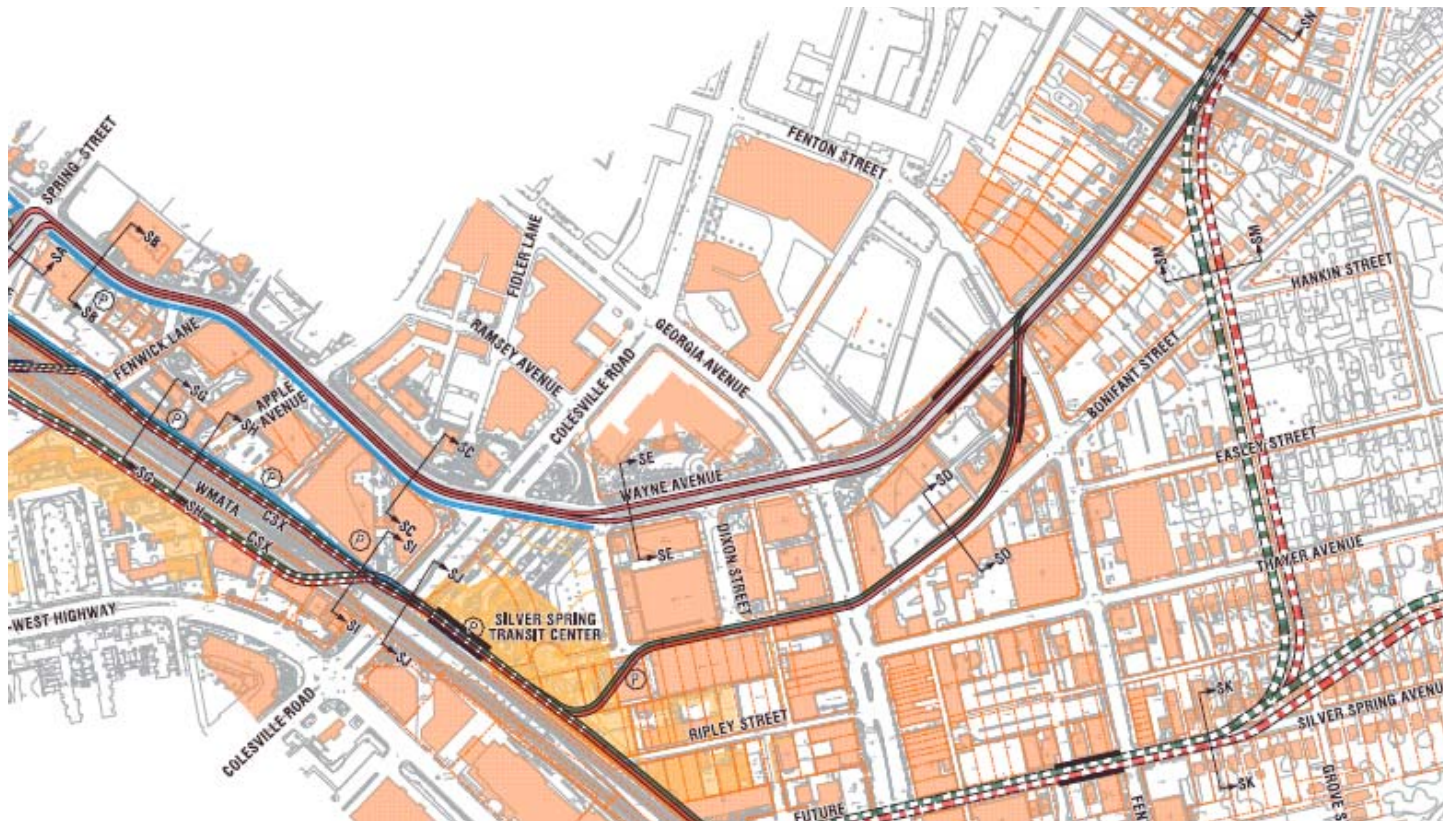
Relocation of Purple Line from north side to south side

- Avoids cost of tunnel (approx \$70 M) under CSX tracks
- Reduces length of aerial structure over CSX tracks
- Impacts to community are similar on both sides
- Requires less coordination with CSX
- Allows for trail to remain on north side without transitway



Downtown Silver Spring

- Coordination with Montgomery County and SS Library to integrate transitway and additional station at Fenton Street into new library development site.



East Silver Spring

- Numerous community meetings have been held to address impacts of east Silver Spring surface alignments
- In response to community concerns the MTA looked at additional tunnel options
- A range of surface alignment configurations (shared, shared with left turns lanes, and dedicated lanes) are being evaluated to compare level of community, parking, and traffic impacts
- MTA conducted additional traffic counts to verify volumes and assess potential for cut-through traffic
- Two additional stations are being evaluated to better serve the community

Wayne Avenue at Cedar Street



Wayne Avenue at Dale Drive



Wayne Avenue at Sligo Creek Pkwy



University Boulevard

- Dedicated lanes for all but Low BRT
- Coordinating with Maryland SHA
- Working to address streetscape and pedestrian issues



Takoma/Langleley Transit Center



University of Maryland

- Campus Drive surface alignment is MTA's preferred option
- University has dropped Stadium Drive and Knox Road alignments
- Developed Preinkert/Chapel Drive Alignment at request of University officials
- Worked with School of Architecture and Administration to improve design of Campus Drive alignment

University of Maryland

- Developed improved renderings of Campus Drive alignment that emphasize open pedestrian plaza concept (which generated a positive response)
- U of MD established a working group of Key Department Heads and representatives to work with MTA
- Analysis underway on both alignment options to address outstanding University concerns regarding Electro Magnetic Interference (EMI) and vibration

University of Maryland



University of Maryland



East Campus

- Reached agreement with developer and University officials on Purple Line alignment through proposed development
- Preferred alignment will cross US 1 at grade using Rossborough Lane and travel directly through the East Campus development
- East Campus Station to be located at Rossborough Lane just east of US 1

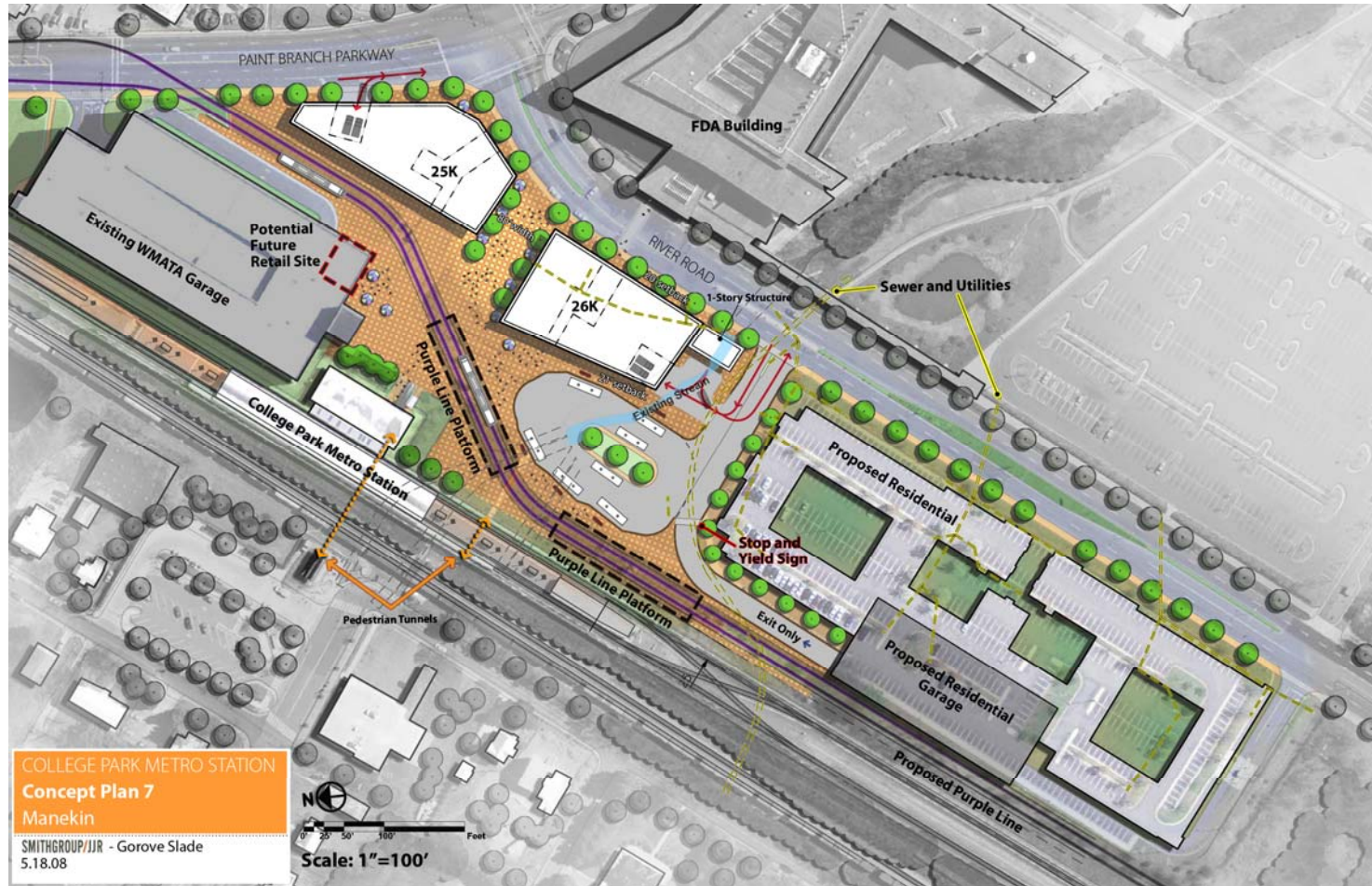
Paint Branch Parkway

- Working with County on operations of Purple Line under CSX/Metro right-of-way
- Evaluating shared vs. dedicated lanes
- Factors include:
 - Restrictions at the CXS bridge
 - High cost associated with widening underpass
 - Access to College Park Metro
 - Traffic and transit operations
 - Adjacent signals
 - Environmental constraints

College Park Metro

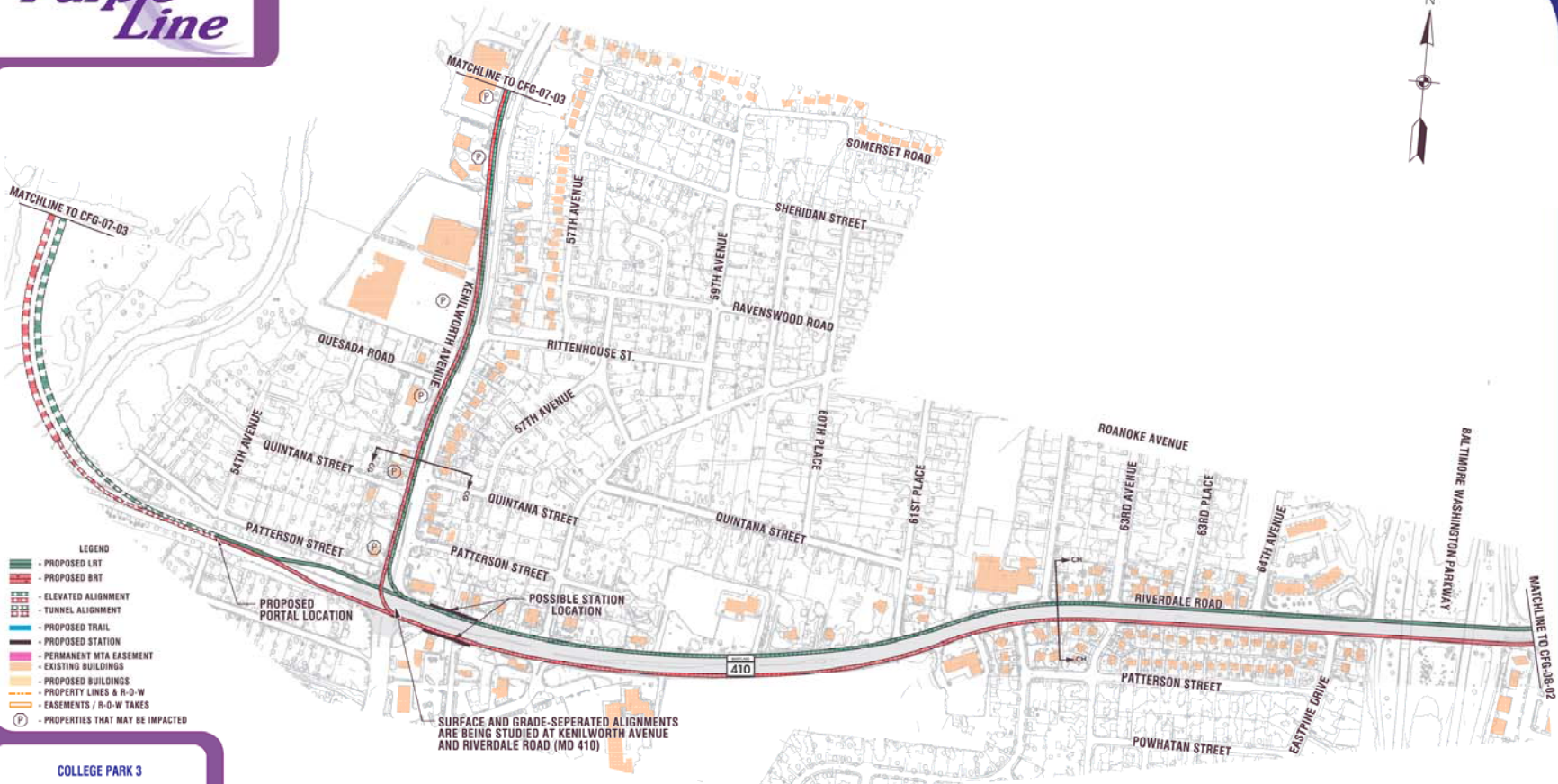
- Reached consensus with WMATA, Prince George's County, and developers on Purple Line connection to Metro and MARC
- Coordination continues between developers and WMATA on bus loop design and private development loading access
- Current design of station has the platforms close to the Metro entrance

College Park Metro Station



Kenilworth Ave & MD 410

Purple Line



- LEGEND**
- PROPOSED LRT
 - PROPOSED BRT
 - ELEVATED ALIGNMENT
 - TUNNEL ALIGNMENT
 - PROPOSED TRAIL
 - PROPOSED STATION
 - PERMANENT MTA EASEMENT
 - EXISTING BUILDINGS
 - PROPOSED BUILDINGS
 - PROPERTY LINES & R-O-W
 - EASEMENTS / B-D-W TAKES
 - PROPERTIES THAT MAY BE IMPACTED

SURFACE AND GRADE-SEPARATED ALIGNMENTS ARE BEING STUDIED AT KENILWORTH AVENUE AND RIVERDALE ROAD (MD 410)

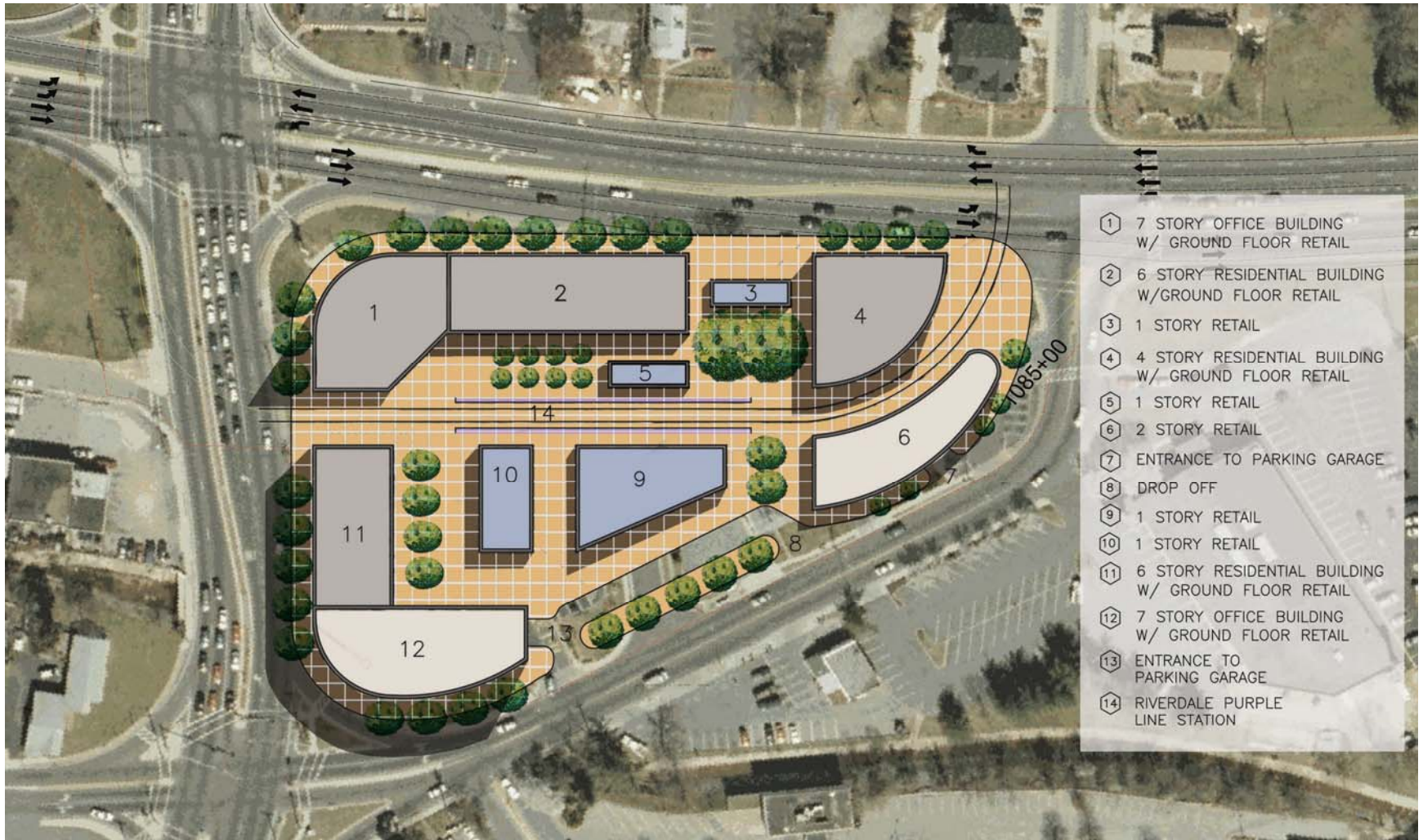
COLLEGE PARK 3
CFG-07-04



Riverdale Park-Kenilworth Avenue

- A range of alternatives are being evaluated to compare community concerns, traffic impacts, travel times, operational considerations, and cost effectiveness
- Due to traffic congestion an aerial option over the intersection of Kenilworth Avenue & MD 410 is being evaluated
- A tunnel option under the park emerges west of Kenilworth Avenue
- Depending upon the type of development planned along Kenilworth Avenue, grass tracks may be considered

Kenilworth Avenue at MD 410



- ① 7 STORY OFFICE BUILDING W/ GROUND FLOOR RETAIL
- ② 6 STORY RESIDENTIAL BUILDING W/GROUND FLOOR RETAIL
- ③ 1 STORY RETAIL
- ④ 4 STORY RESIDENTIAL BUILDING W/ GROUND FLOOR RETAIL
- ⑤ 1 STORY RETAIL
- ⑥ 2 STORY RETAIL
- ⑦ ENTRANCE TO PARKING GARAGE
- ⑧ DROP OFF
- ⑨ 1 STORY RETAIL
- ⑩ 1 STORY RETAIL
- ⑪ 6 STORY RESIDENTIAL BUILDING W/ GROUND FLOOR RETAIL
- ⑫ 7 STORY OFFICE BUILDING W/ GROUND FLOOR RETAIL
- ⑬ ENTRANCE TO PARKING GARAGE
- ⑭ RIVERDALE PURPLE LINE STATION

Baltimore-Washington Parkway

- Shared lanes under BW Parkway for low and medium BRT and LRT
- Dedicated lanes under BW Parkway for high BRT and LRT
- Parkway bridges would need to be reconstructed to accommodate dedicated lanes
- Estimated cost for new bridges: \$10 million

New Carrollton Metro Station

- Coordinating with WMATA and Prince George's County on surrounding development plans to accommodate Purple Line connections to Metro, MARC, and Amtrak
- Shifting alignment closer to Metro entrance and reconfiguring bus bays and parking area
- Providing more storage for buses to alleviate bus lay over along Ellin Road
- Coordinating with WMATA and Prince George's County on allowing a future extension beyond New Carrollton

Yard and Shop

- Yard and Shop locations in both Montgomery and Prince George's counties
- Partial Yard in Prince George's County
- Glenridge Maintenance Yard (along Veterans Parkway) is preferred location
- Working with M-NCPPC staff and Prince George's County DPW&T to identify relocation site for park maintenance facility

Next Steps and Schedule

- Circulation of the AA/DEIS September 2008
- Public Hearings Oct./Nov. 2008
- Selection of Locally Preferred Alternative December 2008-February 2009
- Request to Enter Preliminary Engineering and New Starts Submission March 2009
- PE/FEIS Completion February 2010
- Initiate Final Design July 2011
- Construction begins 2012