Metropolitan Branch Trail
From the Proposed Silver Spring Transit Center
to Montgomery College Takoma Park/Silver Spring Campus

Phase I Facility Planning
Final Project Prospectus

Montgomery County
Department of Public Works and Transportation
Division of Capital Development

August 2006
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Summary</td>
<td>..................................................................................................................</td>
<td>1</td>
</tr>
<tr>
<td>Section I</td>
<td>Project Purpose and Need</td>
<td>9</td>
</tr>
<tr>
<td>Section II</td>
<td>Alignment Development</td>
<td>15</td>
</tr>
<tr>
<td>Section III</td>
<td>Environmental Resources</td>
<td>24</td>
</tr>
<tr>
<td>Section IV</td>
<td>Public and Stakeholder Outreach</td>
<td>28</td>
</tr>
<tr>
<td>Appendix</td>
<td>..................................................................................................................</td>
<td>32</td>
</tr>
</tbody>
</table>

## List of Tables

<table>
<thead>
<tr>
<th>Table</th>
<th>Title</th>
<th>Page Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table #1</td>
<td>Summary Comparison of Alignment Options</td>
<td>7</td>
</tr>
<tr>
<td>Table #2</td>
<td>Detailed Comparison of Alignment Options</td>
<td>19</td>
</tr>
<tr>
<td>Table #3</td>
<td>Property and Public Parking Impacts</td>
<td>21</td>
</tr>
</tbody>
</table>

## List of Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Title</th>
<th>Page Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure #1</td>
<td>Location Map</td>
<td>4</td>
</tr>
<tr>
<td>Figure #2</td>
<td>Alignment Options</td>
<td>5</td>
</tr>
<tr>
<td>Figure #3</td>
<td>Silver Spring CBD Bikeway Network</td>
<td>10</td>
</tr>
<tr>
<td>Figure #4</td>
<td>Regional Bikeway Network</td>
<td>11</td>
</tr>
<tr>
<td>Figure #5</td>
<td>Existing Segment of Metropolitan Branch Trail along Fenton Street</td>
<td>13</td>
</tr>
<tr>
<td>Figure #6</td>
<td>Proposed Zoning for Study Area</td>
<td>26</td>
</tr>
</tbody>
</table>
List of Appendices

Appendix A  Correspondence from M-NCPPC and County Council Transportation and Environment Committee
Appendix B  Project Team Meeting Notes
Appendix C  Coordination Meeting Notes
Appendix D  Traffic Data/Traffic Observations & Traffic Comparison with Capital Crescent
Appendix E  Option Development
Appendix F  Agency Correspondence
Appendix G  Georgia Avenue Bridge Conceptual Renderings
Appendix H  Matrix of Public Comments
Executive Summary

Introduction

The Montgomery County Department of Public Works and Transportation (DPWT) has completed a Phase I Facility Planning study for the Metropolitan Branch Trail (MBT), from the proposed Silver Spring Transit Center to the Takoma Park/Silver Spring Campus of Montgomery College (refer to Figure #1, Location Map). The Metropolitan Branch Trail is included in the Silver Spring CBD Sector Plan, February 2000, as well as the 2005 Countywide Bikeways Functional Master Plan. The proposed path will be a shared-use, off-road facility to accommodate a wide range of users such as children, pedestrians, recreational, and commuter cyclists. A high level of use is anticipated on this trail since it provides commuters with an alternative mode choice and connects the campus of Montgomery College and the proposed Silver Spring Transit Center.

This project will extend the existing MBT by 0.7 miles from the Takoma Park/Silver Spring Campus of Montgomery College to the proposed multimodal Silver Spring Transit Center. This will bring the trail length to 1.1 miles and completes the MBT in Montgomery County. It will also connect to the Capital Crescent Trail through Bethesda to the C&O Canal Trail. This trail segment is one of the vital components of a 27-mile loop around the Capital.

Five trail alignment Options have been developed as part of this Facility Planning study (refer to Figure #2). Input on the Options was sought through the public participation from property owners, businesses, and the public. Input from agencies was also sought. This prospectus provides background information on the alignment options that have been studied, compares the options (Tables #1-3), summarizes the public input (Appendix H), provides an assessment of the environmental resources, and includes recommendations. From the Silver Spring Transit Center to Georgia Avenue all Options follow the same alignment adjacent to the CSX/WMTA rail line. A brief description of each of the Options from Georgia Avenue to the College is provided below:

- **Option #1** follows Selim Road and is the most direct alignment. It has a grade separation at Georgia Avenue (proposed bridge) and Burlington Avenue (proposed tunnel) and a retaining wall between Selim Road and the CSXT/WMATA rail lines. It requires one business relocation.

- **Option #2** follows the south side of Philadelphia Avenue and is less direct than Option #1. It has a grade separation at Georgia Avenue (proposed bridge), an at-grade crossing of Burlington Avenue (MD 410), and impacts 21 properties, including one business relocation.

- **Options #3** follows the north side of Philadelphia Avenue and is less direct than Option #1. It has a grade separation at Georgia Avenue (proposed bridge), an at-grade crossing of Burlington Avenue (MD 410), and impacts 22 properties, including one business relocation.

- **Option #4** follows Selim Road and Philadelphia Avenue and is slightly less direct than Option #1. It has a grade separation at Georgia Avenue (proposed bridge), a retaining wall along Selim Road next to the railroad, an at-grade crossing of Burlington Avenue, and impacts 12 properties, including the relocation of three businesses.

- **Option #5** follows the south side of Philadelphia Avenue and is less direct than Option #1. It impacts 9 properties and requires the relocation of one business. This Option has an at-grade...
crossing of Burlington Avenue (MD 410) and requires bicyclists to dismount to walk across the walkway on the existing Georgia Avenue bridge.

The advantages and disadvantages of each alternative have been summarized in Table #1. A more detailed comparison is provided in Table #2, and Table #3 provides more specific information on property and parking impacts.

**Study Recommendations**

This Study included a review of design information developed through facility planning and information on potential impacts and public input. The benefits and impacts associated with each Option have been weighed. The study indicates that Option #1 is the most direct alignment; however, due to the safety and maintenance of the proposed tunnel, the close proximity to CSXT/WMATA tracks, and the high cost to implement, this Option is not recommended. Therefore, Option #5, which impacts the least number of properties, is recommended by DPWT as an interim trail alignment and should proceed to Phase II.

At a May 18, 2006 meeting, the Planning Board of the Maryland National Capital Park and Planning Commission recommended instead that Option #1 be carried into Phase II Facility Planning. On June 26, 2006 the Transportation and Environment Committee of the Montgomery County Council concurred with the recommendation of the Planning Board. Letters conveying these recommendations to the Director of DPWT are included in Appendix A.

**Considerations for Phase II Facility Planning**

Some Phase II Facility Planning activities for the Metropolitan Branch Trail Project have begun. Horizontal and vertical alignments and right-of-way work has been completed. There are a number of considerations for the trail project as Phase II Facility Planning work moves ahead. The following activities will need to occur:

- Refinement of the engineering on the selected alternative to confirm right-of-way acquisition requirements, ADA compliance, soil borings, storm water management analysis, and to assess impacts to public parking and traffic movements.
- Coordination with MD SHA regarding trail crossings of Georgia Avenue (US 29) and Burlington Avenue (MD 410).
- Coordination with CSXT and WMATA regarding proximity of trail alignment to the railroad corridor and acquisition of needed right-of-way.
- Coordination with the Maryland Historical Trust regarding the alignment impacts on their easement at the historic Silver Spring B&O Railroad Station and on the abandoned underpass/walkway beneath the railroad.
- Consultation with Montgomery County Health and Human Services Department regarding potential impacts to Progress Place. Determination will be needed on whether the project will involve modification of the building or the relocation of social services.
- Coordination with the Silver Spring Transit Center Project to assure that the final alignment and elevation of the trail is accommodated in the transit center design.
• Coordination with property owners or business owners who will be impacted or relocated, including 1050 Ripley Street and the historic Silver Spring B&O Railroad Station.

• Coordination with the following plans:
  o Bi-County Transitway project: to assure that alternatives under study are compatible.
  o Fenton Gateway Park: to integrate the MBT trail into the plan for the Park.
  o Ripley District redevelopment activities.
Table 1 – Summary Comparison of Alignment Options

<table>
<thead>
<tr>
<th>Factor/Option</th>
<th>Option #1 (Selim Road)</th>
<th>Option #2 (South side Philadelphia Avenue)</th>
<th>Option #3 (North side Philadelphia Avenue)</th>
<th>Option #4 (Selim Road/Philadelphia Avenue)</th>
<th>Option #5 (South side Philadelphia Avenue)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trail Quality</td>
<td>Most direct; highest quality</td>
<td>Less direct</td>
<td>Less direct</td>
<td>Slightly less direct than Option #1</td>
<td>Less direct</td>
</tr>
<tr>
<td>Option Length</td>
<td>.70 miles</td>
<td>.69 miles</td>
<td>.69 miles</td>
<td>.75 miles</td>
<td>.71 miles</td>
</tr>
<tr>
<td>Travel Time *</td>
<td>4 minutes</td>
<td>6 minutes, 41 seconds</td>
<td>6 minutes, 46 seconds</td>
<td>7 minutes, 1 second</td>
<td>7 minutes, 34 seconds</td>
</tr>
<tr>
<td>Property Impacts</td>
<td>11 property impacts; 1 business relocation; Most WMATA/CSXT property impacts</td>
<td>21 property impacts; 1 business relocation; Less WMATA/CSXT property impacts than Option #’s 1 &amp; 4</td>
<td>22 property impacts; 1 business relocation; Less WMATA/CSXT property impacts than Option #’s 1 &amp; 4</td>
<td>12 property impacts; 3 business relocations; Slightly less WMATA/CSXT property impacts than Option #1</td>
<td>9 property impacts; 1 business relocation; Least WMATA/CSXT property impacts</td>
</tr>
<tr>
<td>Distinctions on Road or driveway crossings</td>
<td>Grade separation at Burlington Avenue and Georgia Avenue</td>
<td>At-grade crossing of Burlington; Grade separation at Georgia Avenue Driveway crossings on Philadelphia Avenue</td>
<td>At-grade crossing of Burlington; Grade separation at Georgia Avenue</td>
<td>At-grade crossing of Burlington; Grade separation at Georgia Avenue</td>
<td>At-grade crossing of Burlington; Driveway crossings on Phila. Ave; Bicycle traffic would dismount/walk across existing bridge</td>
</tr>
<tr>
<td>Distinguishing Design Factors</td>
<td>New tunnel under Burlington Ave.; New bridge over Georgia Ave.; Significant retaining walls along Selim Rd. and south of Burlington Ave. to King St.; requires staged maintenance of traffic on Burlington Avenue</td>
<td>New bridge over Georgia Avenue</td>
<td>New bridge over Georgia Avenue</td>
<td>New bridge over Georgia Avenue; Less retaining wall than Option #1 required along Selim Road</td>
<td>Uses existing railroad bridge sidewalk to cross Georgia Avenue</td>
</tr>
</tbody>
</table>

*Methodology for travel time calculations has been documented separately.
Table #1 – Continued

<table>
<thead>
<tr>
<th>Factor/Option</th>
<th>Option #1 (Selim Road)</th>
<th>Option #2 (South side Philadelphia Avenue)</th>
<th>Option #3 (North side Philadelphia Avenue)</th>
<th>Option #4 (Selim Road/Philadelphia Avenue)</th>
<th>Option #5 (South side Philadelphia Avenue)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utility Impacts</td>
<td>Significant impacts along Selim Road and under Burlington Avenue at tunnel; Potential impacts at Georgia Avenue bridge.</td>
<td>Potential impacts at Georgia Avenue bridge. Overhead line impacts along Philadelphia Avenue.</td>
<td>Potential impacts at Georgia Avenue. bridge. Overhead line impacts along Philadelphia Avenue.</td>
<td>Potential impacts at Georgia Avenue. bridge. Significant overhead line impacts along Selim Road.</td>
<td>Overhead line impacts along Philadelphia Avenue.</td>
</tr>
<tr>
<td>Coordination Efforts</td>
<td>Significant coordination efforts (both during design and construction) required with WMATA, CSXT, and SHA regarding adjacent construction along Selim Road and tunnel underneath Burlington Avenue</td>
<td>Some coordination with WMATA/CSXT regarding proximity of trail to railroad</td>
<td>Some coordination with WMATA/CSXT regarding proximity of trail to railroad</td>
<td>Significant coordination efforts (both during design and construction) required with WMATA, CSXT, and SHA regarding adjacent construction along Selim Road</td>
<td>Some coordination with WMATA/CSXT regarding proximity of trail to railroad; Options #’s 1 through 4 require additional coordination with SHA for construction of bridge over Georgia Avenue.</td>
</tr>
</tbody>
</table>

*Methodology for travel time calculations has been documented separately.*

August 2006
Section I Project Purpose and Need

Background/Introduction

The Metropolitan Branch Trail (MBT) is planned as a shared-use path running from the District of Columbia border to the Silver Spring Metro Station. The trail in the City of Takoma Park is complete from Montgomery College to the District of Columbia (D.C.) line.

In 2001, the Maryland-National Capital Park and Planning Commission (M-NCPPC) prepared a facility plan for the MBT that recommended an alignment mostly parallel to the railroad corridor. It extended along Fenton Street from the existing trail at Montgomery College to a new underpass of Burlington Avenue. From the underpass, it extended north along Selim Road parallel to the railroad where a new span parallel to the existing bridge would be provided. The alignment continued adjacent to the railroad until reaching Progress Place. A temporary on-street alignment around Progress Place was recommended until modifications to Progress Place are completed.

The Montgomery County Department of Public Works and Transportation project has completed the Phase I Facility Plan for the MBT. This project completes a section of the trail from the Silver Spring Metro Station to the Montgomery College Campus.

The MBT will ultimately be an 8-mile trail traveling from the Silver Spring Transit Center to Union Station in D.C., to form a 27-mile loop through Montgomery County and around northern Washington, D.C.

Master Plan Review

The 1993 Montgomery County General Plan Refinement recommends a system of interconnected multi-modal transportation options that provide mode and route choices. The Plan calls a countywide network for utilitarian bicycle travel.

Countywide Bikeways Functional Master Plan

The Countywide Bikeways Functional Master Plan (2005) establishes a countywide network plan for utilitarian bicycle transportation. The plan emphasizes connections to the County’s major activity centers including central business districts, transit hubs, employment centers, and recreational and park areas.

The plan describes the MBT as a shared-use path running from the District of Columbia border to the Silver Spring Metro Station.

Silver Spring Central Business District Sector Plan

The Silver Spring Central Business District (CBD) and Vicinity Sector Plan (2000) calls for Silver Spring to be served by a network of bikeways and trails (refer to Figure #3). This network is intended to be a mix of on-road and off-road bikeways providing local and regional connections to activity centers and providing transportation alternatives for commuting and recreational trips through and within the CBD.
The plan recommends implementation of the Capital Crescent/MBT as a direct and continuous off-road trail for pedestrians and bicyclists parallel to the Georgetown Branch Transitway and Metro Red Line in the CBD. This plan calls for connections to the future Silver Spring Transit Center (SSTC) and to the Silver Spring Green Trail and other nearby regional trails. Grade separated crossings are recommended to provide safe trail crossing of roads.

**Figure #3 - Silver Spring CBD Bikeway Network**
Source: M-NCPPC-Silver Spring Central Business District (CBD) and Vicinity Sector Plan (2000)

---

**East Silver Spring Master Plan & Takoma Park Master Plan**

The East Silver Spring Master Plan (2000) and Takoma Park Master Plan (2000) recommend building the MBT as a direct and continuous pedestrian and bicycle trail parallel to the Metro Red Line. They both stress the importance of connectivity with the D.C. portion and with neighborhoods and community facilities such as the pedestrian and bicycle bridge from Montgomery College.
Study Area
The MBT is part of a larger system of trails in Montgomery County designed to enable non-motorized travel around the Washington region. This .7 mile project extends from the planned Silver Spring Transit Center, along the CSXT/WMATA corridor, to the Montgomery College Campus in Takoma Park. The trail is intended as an off-road shared-use facility serving bicyclists, pedestrians, joggers, and in-line skaters.

This segment of the trail connects with an existing portion of the trail at the Montgomery College, Takoma campus that extends into the District. Once in the District, the MBT is planned to be parallel to the Metro Red Line, terminating at Union Station. Ultimately, the trail will be an eight-mile linear park and trail running from Union Station to the future Silver Spring Transit Center. There it will connect to the future Capital Crescent Trail.

Figure #4 - Regional Bikeway Network

Source: M-NCPPC-Silver Spring Central Business District (CBD) and Vicinity Sector Plan (2000)
**Project Purpose**

The purpose of the MBT is to connect recreational and commuter bicyclists and pedestrians between activity centers in the Silver Spring CBD and other areas of Montgomery County. The MBT will connect the existing trail in the District and Montgomery County to other bicycle trails and paths in the vicinity. The trail will promote the use of alternate modes of transportation and will enhance safety for bicyclists and pedestrians in the Silver Spring/Takoma Park area. This project will complete the MBT in Montgomery County.

**Project Need/Goals**

The Metropolitan Branch Trail will:

- Provide safe, off-road access to activity centers including the Silver Spring Transit Center, the historic B & O Railroad Station, and the Montgomery College, Takoma Campus.

- Complete the final link of the MBT in Montgomery County.

- Provide connections to other existing and planned trails and paths, including the Silver Spring Green Trail and the Capital Crescent Trail.

- Provide opportunity for an alternate mode of transportation to and through the area.

- Provide increased opportunity for recreation.

**Provide Connections to Activity Centers**

A major consideration of this project is to provide connections to activity centers in the Silver Spring/Takoma Park area and through movement for cyclists to other areas in the region. The trail is envisioned as a critical pedestrian and bicycle circulation route. The future Silver Spring Transit Center will generate a large amount pedestrian and bicycle activity, and improved access to the center is important. At the Transit Center, transfers to bus, Metro, and MARC will be possible. The trail will also provide access to existing and planned employment and retail activities throughout the CBD.

The trail will provide safe and direct connections to the Takoma Park Campus of Montgomery College and the surrounding neighborhoods. The visitor center at the Historic B&O Railroad Station will be served by the MBT.
Complete a Link to Existing Portion of MBT

The project will extend the existing trail to a multi-modal transportation hub in Silver Spring and will complete the 1.1 mile MBT in Montgomery County.

Provide Connections to Other Trails and Paths

The MBT will provide connections to several other existing and planned trails and paths in the area. These connections will serve the need of completing a larger regional network of bicycle and pedestrian trails (refer to Figure #4).

This segment of the MBT connects with an existing portion of the trail to the south at Montgomery College, which extends into the District of Columbia. In D.C., the MBT is planned to follow parallel to the Metro Red Line, terminating at Union Station. Ultimately, the MBT will be an eight-mile park and trail running from the future Silver Spring Transit Center to Union Station. It has been designated at the Nation's first Millennium Trail.

The MBT also connects with a 1.7 mile spur at Fort Totten and to the Anacostia Tributaries Trail System at the West Hyattsville Metro Station in Prince George’s County.

The connection with the proposed Capital Crescent Trail at the Silver Spring Transit Center is an important one. Once all segments of both trails have been completed, users will be able to travel primarily off-road on a continuous 27-mile loop from Georgetown to Union Station via Bethesda, Silver Spring, Takoma Park and back through the District of Columbia to return to Union Station.

The MBT connects directly to the Silver Spring Green Trail near the Transit Center. When completed, it will connect the Sligo Creek Park Trail with the Capital Crescent Trail and downtown Silver Spring.
Provide Alternative Mode of Transportation and Recreational Opportunities

The need for increased transportation options and recreational opportunities is noted in many of the plans mentioned. The MBT will provide county residents with a travel mode option for connecting to many activity centers.

By providing a viable alternative to vehicular travel, the trail will contribute to the quality of life of the area by reducing the number of vehicles on the road and hopefully some of the negative consequences of automobile travel such as congestion and poor air quality.

Increased recreational opportunities and increased open space is clearly identified as a need in the County. Staring with the 1978 Master Plan Bikeways, and in subsequent updates, the county has sought to develop an interconnected system of bikeways and trails that would serve recreational bicyclists as well as commuters. Tens of thousands Montgomery County residents use bike trails every week for recreational and utilitarian trips. The completion of the MBT will help serve that need and preserve open space in a highly populated area of the county.
Section II  Alignment Development

Introduction

In 2001, the M-NCPPC identified a preferred alignment for the MBT from the Silver Spring Transit Center to the D.C. boundary line. The preferred alignment followed along the CSXT/WMATA tracks from the Transit Center to Georgia Avenue, crossed Georgia Avenue on a new bridge and followed parallel to the tracks on the west side of Selim Road, until it reached a proposed new underpass of Burlington Avenue. South of the underpass, it would continue adjacent to the tracks until reaching King Street. The alignment would then follow the south side of King Street to reach Fenton Street, and continue on the west side of Fenton Street until reaching the D.C. line. Since that time, the segment between the D.C. line and Chicago Avenue was constructed. The DPWT project started with a conceptual engineering study of the M-NCPPC preferred alignment. The Montgomery County DPWT performed several alignment studies as part of Phase I Facility Planning.

The M-NCPPC study had identified the following matters to be addressed for the project:

- Limited right-of-way along Fenton Street and Selim Road, as well as at Progress Place.
- An interim on-street trail alignment was proposed around Progress Place to connect with the Silver Spring Transit Center until Progress Place modifications would be completed.
- The need for a Memorandum of Understanding for an easement at the historic B&O Station.
- Coordination necessary with the Bi-County Transitway.
- Adjustments to street width, parking, and parking meter locations.

Significant design factors for consideration in the DPWT study included the crossing of Georgia Avenue and the crossing of Burlington Avenue. The most direct alignment between the proposed Transit Center and Georgia Avenue would be to locate the trail adjacent to the WMATA/CSXT right-of-way and would involve crossing both Georgia and Burlington Avenues. Making the trail adjacent to the rail would place it behind existing buildings in the Ripley District and the historic Silver Spring Rail Station. The analysis for this portion of the trail has focused on the potential property impacts associated with placing the alignment adjacent to the RR tracks.

A preliminary structural analysis of the existing Georgia Avenue bridge indicates that modification to the existing bridge would be complex and costly. Therefore, alternatives for the MBT crossing of Georgia Avenue were developed. Options for new bridge alignments, as well as one that utilizes the pedestrian walkway on the existing bridge, were developed (refer to Appendices E and G).

The consideration of a proposed new underpass at Burlington Avenue (MD 410) involved a traffic analysis. A determination was made that during construction of a new underpass, the traffic impacts on Burlington Avenue would be a significant factor for consideration. Additionally, concerns about tunnel maintenance and user safety were identified by the County.
Traffic and Travel Time Analysis/Summary Data

Traffic data was collected for the analysis of alternative alignments for the MBT. The traffic analysis was important for the review of new options along Philadelphia Avenue and for the consideration of at-grade crossings of Burlington Avenue.

Turning movement counts were taken at affected intersections listed below. Observations were made of pedestrian activity, vehicular movements, and parking and traffic control devices. Appendix D provides turning movement count data for these intersections and notes from study team field observations.

- Selim Road at Philadelphia Avenue
- Gist Avenue at Philadelphia Avenue
- Gist Avenue at Fenton Street
- Philadelphia Avenue at Fenton Street
- Philadelphia Avenue/Burlington Avenue at Fenton Street

The proposed at-grade crossing of the MBT at Burlington Avenue was also compared to the existing Capital Crescent Trail crossing on Woodmont Avenue at Bethesda Avenue. Appendix D provides the findings of that comparison of traffic operations.

Bicyclist travel time differences for the alignment Options were also calculated for comparison. Average travel speed was determined by using the AASHTO Guide for the Development of Bicycle Facilities (1999) minimum design speed and adjusting it down based on conditions along the alignment and knowledge of the project area. Some of the areas where travel speeds were reduced included behind the B&O Rail Station, along the proposed Georgia Avenue Bridge, and along Philadelphia Avenue where there are a number of driveway crossings. Time was considered for a bicyclist to dismount and walk across any signalized intersection and for Option #5 to dismount and walk across the existing Georgia Avenue bridge. An average walking speed of 4 feet per second was assumed. Table #1 provides the travel time estimate for each Option.

Design Criteria

The Countywide Bikeways Master Plan design characteristics for shared-use paths, listed below, have been referenced for this project.

- Concrete or asphalt pavement
- 8’-12’ path width
- 3’ wide graded horizontal clear zone where possible
- 10’ high vertical clearance
- 6’ wide buffer between path and edge of curb

Additionally, since this project is in close proximity to the railroad, the trail edge will be set a minimum of 15 feet off the centerline of the adjacent railroad track.
Description of Options
From the Silver Spring Transit Center to Georgia Avenue, all Options follow the same alignment adjacent to the CSX/WMTA rail line. Five Options were developed for the trail segment from Georgia Avenue eastward and are described below (refer to Figure #2). Tables #2 and #3 provide more information on each of the Options.

Option #1
This Option takes the trail south from a new bridge over Georgia Avenue through the area between Selim Road and the railroad right-of-way to a new tunnel under Burlington Avenue. Selim Road would be narrowed to provide for the trail, and the intersection of Selim Road and Philadelphia Avenue would be realigned. A retaining wall would be provided between the trail and the existing railroad right-of-way along Selim Road. The trail would continue south along the railroad, turning east on King Street and then south on Fenton Street, with an at-grade crossing of King Street to connect with the existing trail.

Option #2
This Option takes the trail south from a new bridge over Georgia Avenue, across Selim Road, and turns northerly to reach Philadelphia Avenue. Selim Road would be realigned to intersect Philadelphia Avenue to the east of the current intersection. The public parking lot at the corner of Selim Road and Philadelphia Avenue would be modified, with some spaces replaced through this reconfiguration. The trail would follow along the south side of Philadelphia Avenue, crossing seven driveways to an at-grade crossing of Old Philadelphia Avenue. The trail then follows the north side of Old Philadelphia Avenue to reach the west side of Fenton Street. The trail would have an at-grade crossing of Burlington Avenue at the signalized intersection with Fenton Street and would continue south along the west side of Fenton Street with an at-grade crossing of King Avenue to connect with the existing trail.

Option #3
This Option takes the trail south from a new bridge over Georgia Avenue across Selim Road, turning northerly to reach Philadelphia Avenue. The trail would make an at-grade crossing of Philadelphia to reach the north side of Philadelphia Avenue and follow along Philadelphia until making an at-grade crossing onto the north side of Old Philadelphia Avenue. It would follow Old Philadelphia Avenue to reach the west side of Fenton Street. The trail would have an at-grade crossing of Burlington Avenue at the signalized intersection with Fenton Street and would continue south along the west side of Fenton Street with an at-grade crossing of King Avenue to connect with the existing trail.

This Option would require the following change in traffic movements: Selim Road traffic would enter Philadelphia Avenue eastbound. Philadelphia Avenue traffic would be one-way eastbound. The connection from Gist Avenue and Sligo Avenue to Philadelphia Avenue would not exist and Selim Road and Gist Avenue would be reconfigured to connect to Sligo Avenue. This Option would also require the reconfiguration of some driveways with entrances provided on Gist Avenue.
Option #3 would also require displacement of the parking lot at the corner of Selim Road and Philadelphia Avenue. Right-of-way would be needed from properties along the south side and north side of Philadelphia Avenue.

Option #4
This Option takes the trail south from a new bridge over Georgia Avenue, where it would follow along the south side of Selim Road, parallel to the existing CSXT/WMATA railroad tracks. The trail would make an at-grade crossing at 903 Selim Road and extend through the existing building and the building at 906 Philadelphia Avenue to reach Old Philadelphia Avenue. (This is the location of the proposed Fenton Gateway Park.) The trail would follow the north side of Old Philadelphia Avenue to reach the west side of Fenton Street and would continue south along the west side of Fenton Street with an at-grade crossing of King Street to connect with the existing trail.

Option #5
This Option utilizes the existing pedestrian walkway on the Georgia Avenue bridge instead of a new bridge. From the east end of the existing walkway, the trail would turn north to cross Selim Road and continue north through the M-NCPPC owned parcel (currently used as a public parking lot). The trail would turn right to follow the south side of Philadelphia Avenue, crossing Old Philadelphia Avenue at-grade, and would follow the north side of Old Philadelphia Avenue to reach the west side of Fenton Street and continue south along the west side of Fenton Street with an at-grade crossing of King Street to connect with the existing trail.

Option Comparison
Option #1 provides the highest quality facility and meets all project goals. However, the new bridge at Georgia Avenue and the Burlington Avenue underpass also results in the highest cost. Option #1 is the alignment from the M-NCPPC's Facility Plan.

Option #2 is less direct than Option #1. It includes a new bridge over Georgia Avenue and an at-grade crossing of Burlington Avenue at the signalized Fenton Street intersection. This option has the most driveway crossings on Philadelphia Avenue. The capital costs are lower than Option #1.

Option #3 is also less direct than Option #1. It includes a new bridge over Georgia Avenue and an at-grade crossing of Burlington Avenue at the signalized Fenton Street intersection. There are at grade crossings of Old Philadelphia Avenue and Burlington Avenue. The capital costs are lower than Option #1.

Option #4 is also less direct than Option #1. The connection from Selim Road to Philadelphia Avenue requires acquisition of business properties. It includes a new bridge over Georgia Avenue.

Option #5 is also less direct than Option #1. It utilizes the existing Georgia Avenue bridge and requires bicyclists to dismount to walk across the bridge. This option has an at-grade crossing of Burlington Avenue at the signalized intersection with Fenton Street. This option has the least capital costs.

Tables #2 and #3 provide more detail on each Option for comparison purposes. Information on the review and refinement of the Options can be found in Appendix E.
<table>
<thead>
<tr>
<th>Factor/Option</th>
<th>Option #1 (Selim Road) All Options the same west of Georgia Avenue</th>
<th>Option #2 (South side Philadelphia Avenue) All Options the same west of Georgia Avenue</th>
<th>Option #3 (North side Philadelphia Avenue) All Options the same west of Georgia Avenue</th>
<th>Option #4 (Selim Road/Philadelphia Avenue) All Options the same west of Georgia Avenue</th>
<th>Option #5 (South side Philadelphia Avenue) All Options the same west of Georgia Avenue</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Length</strong></td>
<td>0.70 miles</td>
<td>0.69 miles</td>
<td>0.69 miles</td>
<td>75 miles</td>
<td>71 miles</td>
</tr>
</tbody>
</table>
| **Trail Quality/Project Goals** | • Most direct-highest quality bike facility  
• Meets all Project Goals | • Less direct route  
• Increased potential for conflict between trail users and cars | • Less direct route  
• Increased potential for conflict between trail users and cars (less conflicts than Option #2) | • Slightly less direct link than Option #1  
• At-grade crossing of Selim Road and Burlington Avenue creates increased potential for trail user conflict with cars | • Less direct route  
• Increased potential for conflict between trail users and cars along Philadelphia Avenue |
| **Road/Driveway Crossings**   | • Grade separated crossing at Burlington Avenue  
• New bridge over Georgia Avenue | • At-grade crossings of Selim Road, Old Philadelphia Avenue, Burlington Avenue, and King Street  
• Eliminates channelized right turn lane from Fenton Street to Burlington Avenue  
• 7 driveway crossings on Philadelphia Avenue  
• Reconfiguration of intersection at Selim Road/Philadelphia Avenue  
• New bridge over Georgia Avenue | • At-grade crossings of Philadelphia Avenue, Burlington Avenue, and King Street  
• Eliminates channelized right turn lane from Fenton Street to Burlington Avenue  
• New bridge over Georgia Avenue | • At-grade crossings of Selim Road (at 903 Selim Road), Philadelphia Avenue, Burlington Avenue, and King Street  
• At-grade crossing of Burlington Avenue eliminates channelized right turn lane from Fenton Street to Burlington Avenue  
• New bridge over Georgia Avenue | • At-grade crossing of Selim Road, Old Philadelphia Avenue, Burlington Avenue, and King Street  
• Eliminates channelized right-turn lane from Fenton Street to Burlington Avenue  
• 7 driveway crossings on Philadelphia Avenue  
• Reconfiguration of Selim Road/Philadelphia Avenue intersection  
• Existing bridge over Georgia Avenue |
| **Distinguishing Design Factors** | • New Bridge over Georgia Avenue  
• Burlington Avenue Tunnel  
• Retaining wall along Selim Road  
• Selim Road narrowed | • Primarily a widened sidewalk along the south side of Philadelphia Avenue, but maintains property access with trail crossings  
• Philadelphia Avenue is within approved/adopted 2000 Silver Spring CBD District/Vicinity Sector Plan. May require variance/exemption for this proposed typical section along Philadelphia Avenue  
• Need coordination with Fenton Gateway Park | • Existing connection between Gist Avenue and Philadelphia Avenue and Selim Road is eliminated  
• Philadelphia Avenue is within approved/adopted 2000 Silver Spring CBD District/Vicinity Sector Plan. May require variance/exemption for this proposed typical section along Philadelphia Avenue  
• Need coordination with Fenton Gateway Park | • Retaining wall along Selim Road  
• Selim Road narrowed  
• Links trail directly to proposed Fenton Gateway Park | • Philadelphia Avenue traffic lanes are narrowed  
• Philadelphia Avenue is within approved/adopted 2000 Silver Spring CBD District/Vicinity Sector Plan. May require variance/exemption for this proposed typical section along Philadelphia Avenue  
• Links trail directly to proposed Fenton Gateway Park |
| **Utility Impacts**            | • Significant temporary/permanent overhead and underground line construction impacts along Selim Road and beneath Burlington Avenue  
• Potential impacts to utilities beneath Georgia Avenue (Verizon) at bridge pier | • Potential impacts to utilities beneath Georgia Avenue (Verizon) at bridge pier  
• Permanent overhead line construction impacts along Philadelphia Avenue (less severe than along Selim Road) | • Potential impacts to utilities beneath Georgia Avenue (Verizon) at bridge pier  
• Permanent overhead line construction impacts along Philadelphia Avenue (less severe than along Selim Road) | • Significant temporary/permanent overhead and underground line construction impacts along Selim Road  
• Potential impacts to utilities beneath Georgia Avenue (Verizon) at bridge pier | • Permanent overhead line construction impacts along Philadelphia Avenue (less severe than along Selim Road) |

August 2006
<table>
<thead>
<tr>
<th>Factor/Option</th>
<th>Option #1 (Selm Road)</th>
<th>Option #2 (South side Philadelphia Avenue)</th>
<th>Option #3 (North side Philadelphia Avenue)</th>
<th>Option #4 (Selim Road/Philadelphia Avenue)</th>
<th>Option #5 (South side Philadelphia Avenue)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Traffic Impacts</strong></td>
<td>● Narrowing of Selm Road and adjusting intersection with Philadelphia Avenue</td>
<td>● Southbound right-turns would be signalized at the Fenton Street/Burlington Avenue intersection in lieu of the existing channelized right-turn lane. Slight differences in overall intersection operation.</td>
<td>● Southbound right-turns would be signalized at the Fenton Street/Burlington Avenue intersection in lieu of the existing channelized right-turn lane. Slight differences in overall intersection operation.</td>
<td>● Southbound right-turns would be signalized at the Fenton Street/Burlington Avenue intersection in lieu of the existing channelized right-turn lane. Slight differences in overall intersection operation.</td>
<td>● Southbound right-turns would be signalized at the Fenton Street/Burlington Avenue intersection in lieu of the existing channelized right-turn lane. Slight differences in overall intersection operation.</td>
</tr>
<tr>
<td>(Permanent)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Historic Resources</strong></td>
<td>● Silver Spring B&amp;O Railroad Station</td>
<td>● Silver Spring B&amp;O Railroad Station</td>
<td>● Silver Spring B&amp;O Railroad Station</td>
<td>● Silver Spring B&amp;O Railroad Station</td>
<td>● Silver Spring B&amp;O Railroad Station</td>
</tr>
<tr>
<td>Impacted</td>
<td>● Railroad underpass at B&amp;O Station would be permanently closed</td>
<td>● Railroad underpass at B&amp;O Station would be permanently closed</td>
<td>● Railroad underpass at B&amp;O Station would be permanently closed</td>
<td>● Railroad underpass at B&amp;O Station would be permanently closed</td>
<td>● Railroad underpass at B&amp;O Station would be permanently closed</td>
</tr>
<tr>
<td></td>
<td>● Existing Georgia Avenue Railroad Bridge (if determined historic)</td>
<td>● Existing Georgia Avenue Railroad Bridge (if determined historic)</td>
<td>● Existing Georgia Avenue Railroad Bridge (if determined historic)</td>
<td>● Existing Georgia Avenue Railroad Bridge (if determined historic)</td>
<td>● Existing Georgia Avenue Railroad Bridge (if determined historic)</td>
</tr>
<tr>
<td><strong>Environmental</strong></td>
<td>● No wetlands</td>
<td>● No wetlands</td>
<td>● No wetlands</td>
<td>● No wetlands</td>
<td>● No wetlands</td>
</tr>
<tr>
<td><strong>Impacts</strong></td>
<td>● No forest stands or significant/ specimen trees</td>
<td>● No forest stands or significant/ specimen trees</td>
<td>● No forest stands or significant/ specimen trees</td>
<td>● No forest stands or significant/ specimen trees</td>
<td>● No forest stands or significant/ specimen trees</td>
</tr>
<tr>
<td><strong>Other Considerations</strong></td>
<td>● Safety/security of tunnel Coordination with SHA for the Georgia Avenue bridge crossing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Significant coordination efforts (both during design and construction) required with WMATA, CSXT, and SHA regarding adjacent construction along Selm Road and tunnel underneath Philadelphia Avenue</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Proximity to planned Fenton Gateway Park</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Coordination with SHA for the Georgia Avenue bridge crossing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Coordination with SHA for the Georgia Avenue bridge crossing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Proximity to planned Fenton Gateway Park</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Coordination with SHA for the Georgia Avenue bridge crossing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Significant coordination efforts (both during design and construction) required with WMATA, CSXT, and SHA regarding adjacent construction along Selm Road</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Some coordination with WMATA/CSX regarding proximity of trail to railroad</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table #3 – Property and Parking Impacts

<table>
<thead>
<tr>
<th>Factor/Option</th>
<th>Option #1</th>
<th>Option #2</th>
<th>Option #3</th>
<th>Option #4</th>
<th>Option #5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Property Impacts</strong></td>
<td>11 properties impacted</td>
<td>21 properties impacted</td>
<td>22 properties impacted</td>
<td>12 properties impacted</td>
<td>9 properties impacted</td>
</tr>
<tr>
<td>(All Costs in 2005 Dollars)</td>
<td>Total ROW Strip Takes: Fee ~ 40800± SF; TCE/PE 12500± SF; Of this amount approx. 15300± SF Fee and $100± SF PE is required from WMATA</td>
<td>Total ROW Strip Takes: Fee ~ 25600± SF; TCE/PE 11500± SF; Of this amount approx. 1200± SF Fee and no PE is required from WMATA</td>
<td>Total Cost of ROW (including below relocations and parking impacts) = $5.75 Million</td>
<td>Total Cost of ROW (including below relocations and parking impacts) = $7.25 Million</td>
<td>Total Cost of ROW (including below relocations and parking impacts) = $3.7 Million</td>
</tr>
<tr>
<td><strong>Property Takes/Relocations</strong></td>
<td>1 business relocation</td>
<td>1 business relocation</td>
<td>1 business relocation</td>
<td>3 business relocations</td>
<td>1 business relocation</td>
</tr>
<tr>
<td>(All Costs in 2005 Dollars)</td>
<td>1050 RIPLEY ST; EHB Properties – Eliezer Benbassat, Owner; 4 leased buildings (1 currently occupied) Current Appraisal Value ($1.6 Million, plus $1 Million in relocation costs)</td>
<td>1050 RIPLEY ST; EHB Properties – Eliezer Benbassat, Owner; 4 leased buildings (1 currently occupied) Current Appraisal Value ($1.6 Million, plus $1 Million in relocation costs)</td>
<td>1050 RIPLEY ST; EHB Properties – Eliezer Benbassat, Owner; 4 leased buildings (1 currently occupied) Current Appraisal Value ($1.6 Million, plus $1 Million in relocation costs)</td>
<td>3 business relocations</td>
<td>1050 RIPLEY ST; EHB Properties – Eliezer Benbassat, Owner; 4 leased buildings (1 currently occupied) Current Appraisal Value ($1 Million in relocation costs)</td>
</tr>
<tr>
<td><strong>PUBLIC PARKING</strong></td>
<td><strong>Option #1</strong></td>
<td><strong>Option #2</strong></td>
<td><strong>Option #3</strong></td>
<td><strong>Option #4</strong></td>
<td><strong>Option #5</strong></td>
</tr>
<tr>
<td>Location</td>
<td># Lost</td>
<td># Replaced</td>
<td>Net Loss</td>
<td># Lost</td>
<td># Replaced</td>
</tr>
<tr>
<td>Progress Place</td>
<td>9</td>
<td>5</td>
<td>4</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>Selim Road</td>
<td>43</td>
<td>25</td>
<td>18</td>
<td>19</td>
<td>0</td>
</tr>
<tr>
<td>Philadelphia Avenue</td>
<td>0</td>
<td>4</td>
<td>-4</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Selim/Philadelphia Parking Lot</td>
<td>4</td>
<td>0</td>
<td>4</td>
<td>14</td>
<td>7</td>
</tr>
<tr>
<td>Old Philadelphia Rd</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>Fenton Street</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td><strong>NET LOSS</strong></td>
<td><strong>23</strong></td>
<td><strong>NET LOSS</strong></td>
<td><strong>37</strong></td>
<td><strong>NET LOSS</strong></td>
<td><strong>29</strong></td>
</tr>
<tr>
<td><strong>PRIVATE PARKING</strong></td>
<td><strong>Est. Parking Impacts (Incl. Historic B&amp;O Station, Philadelphia Avenue, King Street, &amp; Fenton Street)</strong></td>
<td><strong>8</strong></td>
<td><strong>0</strong></td>
<td><strong>26</strong></td>
<td><strong>0</strong></td>
</tr>
</tbody>
</table>
On-Going Project Coordination

The Silver Spring area has a number of plans and projects underway. There has been some initial coordination with those plans and projects that directly impact the MBT project. Notes from coordination meetings can be found in Appendix C.

Silver Spring Transit Center

The terminus of the MBT will be the planned Silver Spring Transit Center, which is currently intended to open in Spring 2008. The transit center is to incorporate a multi-level facility to allow for bus and rail connections, and will accommodate an at-grade connection with the Metropolitan Branch Trail. The two projects will be coordinated.

Ripley District Plan

Properties adjacent to the CSXT/WMATA railroad right-of-way between Bonifant Street and Georgia Avenue are within the Ripley District Planning Area. The area Plan calls for redevelopment of existing sites to achieve high density commercial development and a new interconnected street system with improvements to pedestrian and trail connections.

Progress Place (8210 Colonial Lane)

Progress Place is a county-owned building in the Ripley District adjacent to the CSXT/WMATA railroad right-of-way between Ripley Street and Silver Spring Avenue. Several social service agencies operate in the building. The west side of Progress Place building and the parking lot will be impacted by all MBT Options. Discussions regarding the potential building impacts have occurred with social service agency representatives as well as with the Health and Human Services Department. Montgomery County will coordinate efforts to mitigate impacts to the building and services.

Silver Spring Fire Station (8131 Georgia Avenue)

The County's new Silver Spring Fire Station provides for a 35’ easement for the MBT. The easement is suitably located adjacent to the CSX right-of-way. The construction of the Fire Station is to be completed in 2006.

Silver Spring B&O Rail Station (8100 Georgia Avenue)

The Silver Spring B&O Rail Station is located adjacent to the rail right-of-way between the new Fire Station and Georgia Avenue. The Station building serves as a museum and also has leased offices. The MBT trail will extend through the rear of the station property adjacent to the railroad. Discussions on the potential impacts of the MBT project to the parking lot have been held with board members of Montgomery Preservation, Inc. and the manager of the facility. As the alignment for the trail is finalized, additional coordination will be needed to agree on mitigation for the impacts and to assure compatible design.
Study Recommendations

In early 2006, after review of the benefits and impacts associated with each alternative, and in consideration of the design factors as well as the public and agency input, DPWT recommended to the M-NCPPC that Option #5 proceed to Phase II Facility Planning since it has less property impacts.

The advantages and disadvantages of each option were weighed and the conclusion of Study was that Option #1, has the most direct alignment, and would be preferred if not for the estimated high cost. Therefore, DPWT recommended Option #5 which impacts only nine properties and requires only 1 business relocation as an interim trail alignment on which to proceed.

At a May 18, 2006 meeting, the Planning Board of the Maryland National Capital Park and Planning Commission recommended instead that Option #1 be carried into Phase II Facility Planning. On June 26, 2006 the Transportation and Environment Committee of the Montgomery County Council concurred with the recommendation of the Planning Board. Correspondence conveying these recommendations to the Director of DPWT is included in Appendix A.
Section III  Environmental Resources

Natural Resources
As part of the Phase I Facility Plan Study, an investigation of natural resources was undertaken for the study area. A summary of findings is provided below. The Natural Resources Inventory/Forest Stand Delineation Report and the Wetland Investigation Reports have been submitted separately. Regulatory agency correspondence to date on the project can be found in Appendix F.

Wetlands
The methodology for this Study included researching published information and a November 2004 field investigation of a 100-foot corridor along the proposed alignments. There were no wetlands or Waters of the US identified within the study area.

Soils
There are two soil series occurring within the study area. None of the soils are listed as Hydric Soils of the United States (USDA 1991).

Forests
In accordance with the guidelines set forth in the State Forest Conservation Technical Manual and the Approved Trees Technical Manual (M-NCPPC 1992), a full forest stand delineation was conducted. No forest stands or significant/specimen trees were identified in the study area.

Floodplains
The Flood Insurance Rate Map for Montgomery County indicates that the study area is in Zone C, an area of minimal flooding.

Rare, Threatened, and Endangered Species (RTE)
Consultation with the US Fish and Wildlife Service and Maryland Department of Natural Resources Wildlife and Heritage Division indicates that there are no RTE within the study area.

Historic Resources
Background research was conducted to determine whether historic properties are situated within the Area of Potential Effect for the project. The Maryland Historical Trust (MHT) has identified the Silver Spring B&O Railroad Station as on the Maryland Inventory of Historic Properties and is the only property in the study area listed in the National Register of Historic Places.

Other Impacted Properties
The right-of-way impacts for each Option are shown in Table #3.
Right-of-Way Impacts West of Georgia Avenue

Since all Options follow the same alignment west of Georgia Avenue, the property impacts for that section are the same. These include:

- The relocation of a business located adjacent to the railroad at 1050 Ripley Street.
- Impacts to the rear portion of the County-owned facility known as Progress Place (8210 Colonial Lane). There would also be impacts to the facility's surface parking lot and loading dock. Progress Place is situated adjacent to the railroad right of way between Ripley Street and Silver Spring Avenue. A preliminary assessment of the impacts to the structure has been completed and an estimate of costs to modify the structure has been made.
- The right of way for the MBT will extend along a 35’ easement provided on the site of the new Silver Spring Fire Station (8131 Georgia Avenue) and adjacent to the railroad right-of-way.
- The parking lot at the Silver Spring B&O Railroad Station (8100 Georgia Avenue) will be impacted by the MBT. The trail is proposed to extend from Georgia Avenue to the rear of the B&O Station and actually extends under the rear canopy of the building. Option #’s 1-4 include a new Georgia Avenue bridge crossing. Option #5 does not. The new bridge results in greater parking impacts at the B&O Railroad Station.

Right-of-Way Impacts East of Georgia Avenue

The Options vary east of Georgia Avenue:

- Option #1 follows along parallel to Selim Road and is anticipated to have impacts on CSX/WMATA railroad property, particularly at the Burlington Avenue underpass.
- Option #2 impacts commercial property frontage along the south side of Philadelphia Avenue and assumes the ultimate widening of Philadelphia Avenue to the 70’ right-of-way in accordance with the February 2000 Silver Spring Sector Plan.
- Option #3 impacts commercial property frontage along the north side of Philadelphia Avenue and assumes the ultimate widening of Philadelphia Avenue to the 70’ ultimate right-of-way in accordance with the February 2000 Silver Spring Sector Plan.
- The segment of Option #4 that extends from Selim Road to Old Philadelphia Avenue requires the relocation of two businesses (903 Selim Road and 904 Philadelphia Avenue).
- Option #5 has reduced impacts along the north side of Philadelphia Avenue since it assumes reduced travel lane widths.

Land Use/Zoning

The entire project falls within the Silver Spring Central Business District Sector Plan area. The area east of Georgia Avenue and north of Philadelphia Avenue is also within the Fenton Village Overlay Zone, an identified revitalization area that is planned for rezoning from CBD 0.5 to CBD 1 (refer to Figure #6 for the Proposed Zoning for Study area). The overlay zone is intended to encourage redevelopment of existing businesses and ensure compatibility with surrounding
residential areas. Redevelopment has occurred on the north side of Philadelphia Avenue. Both sides of Philadelphia Avenue are intended for commercial services.

Figure #6 - Proposed Zoning for Study Area
Americans with Disability Act (ADA)

The Architectural and Transportation Barriers Compliance Board (Access Board) is responsible for developing accessibility guidelines under the ADA of 1990 to ensure that new construction and alterations of facilities covered by titles II and III of the ADA are readily accessible to and usable by individuals with disabilities. The Access Board initially issued the Americans with Disabilities Act Accessibility Guidelines (ADAAG) in 1991 (36 CFR part 1991, Appendix A).

Under the ADA, the Department of Justice is responsible for issuing regulations to implement titles II and II of the Act. The Department of Justice has adopted the ADAAG as the Standard for Accessible Design for title III of ADA (28 CFR part 36, Appendix A).

The adopted ADAAG sets guidelines for accessibility on trails (shared-use paths) as follows:

- Minimum clear trail tread width of 36 inches.
- Maximum opening size on trail surfaces of ½ inch diameter.
- Minimum 80 inches of vertical clear head room.
- Maximum cross slope of the trail of 5%.
- Maximum running slope of trail of 5% for any length (greater slope is acceptable for shorter distances).
- Minimum length of resting areas of 60 inches.
- Signage indicating accessible segments of trails to be provided.

However, as noted in the ADAAG, trails operating as shared-used paths typically require a greater level of accessibility to safely accommodate bicyclists and/or in-line skaters. The primary design guideline for bicycle and shared-use facilities is the Guide for the Development for Bicycle Facilities from the American Association of State Highway and Transportation Officials (AASHTO), 1999. In most cases, the AASHTO guide requires a greater level of accessibility when designing trails for shared-use by pedestrians, bicyclists, and/or in-line skaters. The AASHTO guide sets design guidelines for shared-use paths as follows:

- Minimum path width of 10 feet with 2 foot buffer on each side.
- Grates located on paths should be flush with surface and openings perpendicular to the direction of travel.
- Minimum vertical clearance of 10 feet for the full width of the path and buffer areas.
- Maximum cross slope of the trail of 2%.
- Maximum running slope of trail of 5% for any length (greater slope is acceptable for shorter distances).
- Signage guidance as provided in the Manual on Uniform Traffic Control Devices (MUTCD).

Options #1 through #5 have been designed to meet the all of the above AASHTO guidelines. Every effort will be made to have the MBT comply with ADA.
Section IV  Public and Stakeholder Outreach

Public Meetings
In January 2005, the Study Team identified three Options on which it sought input. Option #1 followed the same alignment as the recommended by the M-NCPDC's Facility Plan report. Options #2 and #3 proposed new alignments along Philadelphia Avenue. Additional efforts were made by DPWT to solicit input from those potentially impacted property owners along Philadelphia Avenue.

Philadelphia Avenue Property Owner Meeting
Property owners along both sides of Philadelphia Avenue were invited to attend a meeting held on January 27, 2005 at the nearby Takoma Campus of Montgomery College. The purpose of the meeting was to discuss the conceptual alternatives for Metropolitan Branch Trail alignments and to solicit comments on the alternatives. In total, 21 property owners were invited, but only 3 people attended the meeting.

Details on the background of the project and its context in relation to local and countywide planning efforts were provided. Display boards showing Options #2 and #3 along Philadelphia Avenue were available and handouts of all three Options with descriptions of the trail details were provided to attendees. Project Team staff was available to answer questions regarding the project and its possible impacts. It was explained that Options #2 and #3 were developed to work with the existing land uses and the planned 70 foot right-of-way for Philadelphia Avenue. It was also explained that, if and when the Fenton Street Park is funded for design, the trail would be modified to be compatible.

Questions were answered regarding parking impacts, project timeline, and some specific design considerations.

Public Informational Meetings
The first public meeting for the DPWT project was held from 6:30 - 8:30 PM on March 22, 2005 at M-NCPDC offices in Silver Spring. The purpose of the meeting was to share information about the status of the project and the three alignment Options under study for the trail. Notification of the meeting was mailed to those citizens whose names appeared on the County's GIS data base. The meeting announcement was also posted on the DPWT's news website.

Display boards at the meeting showed the County’s project development process, existing and proposed regional bike routes, a project location map, and alignment details for the three proposed MBT Options. Conceptual renderings of the proposed new Georgia Avenue bridge were also shown. A handout provided a description of each Option, a location map, and a comparison of the Options. Written comments from attendees were solicited through a comment card that was distributed.

The public comments were compiled and this summary was reviewed with the Study Team (refer to Appendix H).
Overall support for the trail was expressed. Option #1 was preferred by the attendees who expressed a preference.

Numerous people were concerned with the at-grade crossing of Burlington Avenue.

Two frequent bicyclists indicated that if Option #2 were selected, they would not use the portion of the trail along Philadelphia Avenue due to concerns with sight distances at the driveways, as well as business traffic in and out of the building entrances. They thought they would feel safer on the street.

It was observed that a section of the Capital Crescent Trail with an at-grade crossing on a heavily traveled road is underutilized. It was noted that there was a marked increase in use of a trail when an at-grade crossing was converted to a grade separation.

The owner of the King Street Garage expressed concern about losing a substantial part of his parking lot.

Concern was expressed that a Philadelphia Avenue alignment would adversely impact the Sunday parking situation for Jesus House, DC, on Philadelphia Avenue.

Concern was expressed about impacts to the Linden trees along Selim Road.

One person was pleased that none of the Options required the stairways along Georgia Avenue to be removed.

Someone was pleased that the Capital Crescent and Metropolitan Branch trails will connect with the Silver Spring Transit Center directly, and concern that the Green Trail may not tie directly in to the Center.

There were numerous questions about the project schedule.

A number of people were concerned about project cost.

A second public meeting was held from 6:30 - 8:00 PM on November 22, 2005 at M-NCPPC offices in Silver Spring. The purpose of the meeting was to share information regarding new Options for the MBT developed since the last public meeting in March of 2005. The public was notified about the meeting and the meeting announcement was posted on the DPWT's news website.

Display boards at the meeting showed alignment details for the five Options under consideration, existing and proposed conditions for the Georgia Avenue Bridge, and a project location map. The alignment details for Options #4 and #5 were presented to the public for the first time.

Option #4 would take the trail south from a new bridge over Georgia Avenue across to Selim Road connecting with Old Philadelphia Avenue through buildings at 903 Selim Road and 906 Philadelphia Avenue. From Old Philadelphia Avenue the trail would travel along Fenton Street to connect with the existing trail south of King Street.

Option #5 would utilize the existing pedestrian walkway across Georgia Avenue. The trail would cross Selim Road at-grade and then travel along the south side of Philadelphia Avenue to Old Philadelphia Avenue to reach the west side of Fenton Street. The trail would continue along Fenton Street connecting with the existing trail south of King Street.
At the meeting, written comments were solicited through distribution of a comment card. The public comments are shown in Appendix H and are summarized below:

- Attendees expressed support for Option #1 since it is most direct and provides grade separated crossings.
- Option #4 has an indirect route.
- More information is sought on estimated costs of the Options, especially since cost seems to be driving the project design.
- Coordination with WMATA was cited as a cost factor. WMATA coordination was not an issue on the New York Avenue Station area portion of the Metro Branch Trail.
- For a major regional bike facility, Option #5 has inadequate width along the existing walkway along the Georgia Avenue Bridge.
- Attendees were concerned about an at-grade crossing of Burlington Avenue.
- A suggestion was made for phased project implementation (Silver Spring Transit Center to B&O Station; bridge over Georgia Avenue; Selim Road/Philadelphia Avenue to Fenton Street and Fenton Street at Burlington Avenue to Montgomery College).
- As an interim measure, the trail should be placed on-street along Philadelphia Avenue, which has low traffic volumes. This would eliminate the need for right-of-way acquisition along Philadelphia Avenue in the interim, until Option #1 or #3 can be implemented.
- Attendees suggested utilizing an on-street alignment along Philadelphia Avenue as opposed to a side path since the traffic volumes are low.
- One person asked about the method of notifying people about project meetings.

**A M-NCPPC Planning Board public hearing was held on May 18, 2006.**

**Other Coordination**

**Silver Spring B&O Railroad Station Meetings**

Two meetings have been held to coordinate this project with the historic B&O Station:

**October 19, 2004 Meeting:** Project staff met with Ms. Nancy Urban, the B&O Station Manager. The purpose of the meeting was to discuss the initial concepts for the MBT. Another intent was to solicit the preference of Montgomery Preservation, Inc. (MPI) for a trail alignment in front of or in the rear of the station building. Ms. Urban provided information to the Team on the daily and special event use of the Station building, the tenant’s needs for daily parking, and general concerns about potential impacts of a new Georgia Avenue bridge on the historic character of the site. A request was made for Montgomery Preservation to submit a letter indicating a preference for the front or real trail alignment.

**December 29, 2004 Meeting:** Project staff met with Mr. Wayne Goldstein (President of Montgomery Preservation Board (MPI), Ms. Nancy Urban, and Mr. Jerry McCoy of the Silver Spring Historic Society. Staff presented photo renderings of potential bridge crossings in
response to a request that MPI had made. There was discussion about the potential impacts to parking with the Options. There was discussion about the historic status on the pedestrian tunnel under the railroad tracks between the station buildings. It was explained that this is the beginning of an on-going project coordination. A request was made for MPI to send a letter indicating their preference for front or rear alignment.

**February 10, 2005 MPI Letter:** This letter sent to the County expressed support for the trail project and indicated a preference for the rear alignment. The letter also noted the conditions under which it would grant the easement for rail through their property. The letter can be found in Appendix C.

**Historic Preservation Meeting December 29, 2004:** Project staff met with Ms. Gwen Wright, Montgomery County Historic Preservation Supervisor, to provide her with project information and to discuss future coordination on historic preservation matters. She advised staff to contact MHT to verify any historic status for the bridge over Georgia Avenue. Staff advised her of the potential impacts to the underpass between the Station B&O Silver Spring buildings. She advised that there will need to be preliminary consultation with the Montgomery County Historic Preservation Commission regarding the underpass. Notes from the meeting are included in Appendix C.

**Progress Place**

Progress Place is a county owned building located at 8210 Colonial Lane in the Ripley District. The building is adjacent to the CSXT/WMATA railroad tracks. The rear portion of Progress Place would be impacted by the portion of the MBT alignment extending west of Georgia Avenue to connect with the Silver Spring Transit Center. Since a portion of the building is situated adjacent to the railroad right-of-way, it is not possible to provide a direct connection to the Transit Center and avoid impacts to the building.

On November 18, 2004, project engineers and architects met with agency staff at Progress Place to discuss the potential impacts of the MBT on the facility. This site visit provided the Team an opportunity to view the interior structure and building space and agency staff explained the building uses. Partial building plans served as the basis for developing a preliminary cost estimate for modifying Progress Place to accommodate the MBT.