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## Record of Decision

### Purple Line Project

Montgomery County and Prince George's County, Maryland  
by the Federal Transit Administration

## 1. Decision

The Federal Transit Administration (FTA) has determined, pursuant to Title 23 of the Code of Federal Regulations (CFR), Part 771, and Title 40 CFR Parts 1500-1508, that the requirements of the National Environmental Policy Act of 1969 (NEPA) have been satisfied for the Purple Line project (the Project). This Record of Decision (ROD) applies to the Preferred Alternative described in the Final Environmental Impact Statement (FEIS) dated August 2013, with design refinements as described in Attachment F of this ROD.

As the Project sponsor and potential recipient of FTA financial assistance for the Project, MTA served as a co-lead agency with FTA in conducting the environmental review process. The National Park Service (NPS) and the National Capital Planning Commission (NCPC) served as NEPA cooperating agencies. Each of these Federal agencies has a Federal action associated with the Project as described in Sections 6.5 and 6.6 of this ROD.

If FTA provides financial assistance for the final design and/or construction of the Project, FTA will require MTA to design and build the Project as presented in the FEIS and this ROD. Any changes to the Project that are inconsistent with this ROD must be evaluated in accordance with 23 CFR Sections 771.129 and 771.130, and if required therein, they must be approved by FTA in writing before the MTA can proceed with the change.

The Preferred Alternative is a 16.2-mile east-west light rail transit (LRT) line between the Bethesda Washington Metropolitan Area Transit Authority (WMATA) Metro station in Montgomery County and the New Carrollton WMATA Metro station in Prince George's County, Maryland. The transitway will be at grade except for one short tunnel section and three sections elevated on structures. It will operate mainly in dedicated or exclusive lanes, providing fast, reliable transit operations. System elements also include 21 stations, two storage and maintenance facilities, 20 traction power substations, 14 signal bungalows, and other ancillary facilities.

This ROD summarizes FTA's decisions regarding compliance with relevant environmental requirements. This ROD is supported by seven attachments:

- Attachment A: Commitments and Mitigation Measures
- Attachment B: Programmatic Agreement
- Attachment C: FEIS Comments and Responses
- Attachment D: Final Section 4(f) Evaluation
- Attachment E: Agency Correspondence
- Attachment F: Design Refinements Since the August 2013 FEIS
- Attachment G: FEIS Errata Sheet

Further details supporting this ROD are in the Purple Line FEIS, the Section 106 Programmatic Agreement (PA), and the Final Section 4(f) Evaluation.

## 2. Basis for Decision

The documents considered in making this decision include the October 17, 2008 Alternatives Analysis/Draft Environmental Impact Statement (AA/DEIS), the August 8, 2012 Re-evaluation of the AA/DEIS, and the August 2013 FEIS, the Commitments and Mitigation Measures (Attachment A), the Section 106 Programmatic Agreement (Attachment B), the Responses to FEIS Comments (Attachment C), the Final Section 4(f) Evaluation (Attachment D), the Design Refinements Since the FEIS (Attachment E), as well as technical memoranda, correspondence, and other documents in the Project file. The FEIS presented the purpose and need for the Project; a chronology of the alternatives development and analysis for the Project, including a description of the alternatives considered; probable construction methods and activities for the Preferred Alternative; transportation conditions in the Project study corridor; environmental impacts; indirect and cumulative effects, commitments and mitigation measures; a summary of public outreach and agency coordination since publication of the AA/DEIS; and a summary of comments received on the AA/DEIS and responses to those comments.

### 2.1 Background

The Project evolved from several prior transportation planning activities in the study area, which informed the consideration of alternatives in the NEPA process. These included *The Potential for Circumferential Transit in the Washington Region* (MWCOG Transportation Planning Board, 1993) and the *Capital Beltway High Occupancy Vehicle (HOV) Lane Study* (initiated by the State Highway Authority in 1993), which in 1998 became the *Capital Beltway Corridor Transportation Study*. The “Georgetown Branch Trolley,” a proposed transit line between Bethesda and Silver Spring, was first included as a project in the 2000 update to the region’s Constrained Long Range Transportation Plan (CLRP). In 1996 the *Georgetown Branch Transitway/Trail Major Investment Study/Draft Environmental Impact Statement* was completed. A Final Environmental Impact Statement was never produced for that study. A study of a proposed transit line from Silver Spring to New Carrollton was added to the CLRP in 2003.

In September 2003, FTA and MTA issued a Notice of Intent (NOI) in the Federal Register which initiated the NEPA planning process for the Purple Line, extending from Bethesda to New Carrollton via Silver Spring. Between 2003 and 2008, FTA and MTA examined various alternatives and design concepts, retaining eight alternatives and several design options for study in the AA/DEIS. The Notice of Availability of the AA/DEIS was published in the Federal Register on October 17, 2008, and a 90-day public comment period extended from October 17, 2008 to January 14, 2009. Four public hearings in November 2008 attracted over 750 participants, and the overall process yielded over 3,300 comments.

Based on the AA/DEIS findings, as well as input from the public, the local jurisdictions, and elected officials, Governor Martin O’Malley identified a Locally Preferred Alternative (LPA) on August 4, 2009. The LPA was largely the Medium Investment LRT Alternative, as defined in the AA/DEIS, with elements of the High Investment LRT Alternative.

After the Governor’s announcement of the LPA, MTA conducted technical studies and continued to work with the study corridor communities and local jurisdictions to refine the

LPA, resulting in the Preferred Alternative that was evaluated in the FEIS as the NEPA preferred alternative.

In accordance 23 CFR Part 771.12923 CFR 771.129, MTA prepared a Re-evaluation in August 2012 because more than three years had passed since publication of the AA/DEIS. On the basis of FTA's consideration of the Re-evaluation, FTA determined that neither a supplemental environmental impact statement, nor a new AA/DEIS was warranted. MTA continued design refinement in response to additional community and stakeholder input, and further understanding of local conditions and constraints. FTA's FEIS examined the Preferred Alternative, including the refinements since the AA/DEIS.

## 2.2 Project Purpose and Need

The purpose of the Purple Line project includes the following:

- Provide faster, more direct, and more reliable east-west transit service connecting the major activity centers in the Purple Line corridor at Bethesda, Silver Spring, Takoma/Langley Park, College Park, and New Carrollton;
- Provide better connections to Metrorail services located in the corridor; and
- Improve connectivity to the communities in the corridor located between the Metrorail lines.

The need for the Purple Line arises from various factors. Growing population and employment in the region has resulted in increasingly congested roadways. Changing land use patterns in Montgomery and Prince George's counties and the development of major activity centers within the corridor have increased the amount of suburb-to-suburb travel. The existing transit system is primarily oriented to accommodate travel into and out of Washington DC. The only transit service available for direct east-west travel is bus service, which is often slow and unreliable because it operates on a congested roadway system. East-west travel on Metrorail within the corridor is possible, but requires a trip into and then out of Washington DC. The constraints of traffic congestion, lack of opportunity to increase roadway capacity, and steep terrain associated with stream valleys and the presence of existing heavy rail corridors which constrain the physical environment, limit the solutions which could be used to address these needs. See FEIS Chapter 1, *Purpose and Need*, for more detailed discussion of the Project needs.

The Preferred Alternative strongly addresses the Project purpose and need as it will offer a faster, more direct, more reliable ride between all Metrorail stations and other transit services within the project corridor. The Preferred Alternative will also improve connectivity to communities in the corridor to better link people to employment and activities in the corridor and beyond. See FEIS, Chapter 9.1, *Effectiveness in Meeting the Project Purpose and Need*.

## 2.3 Alternatives Considered

MTA's alternatives development and evaluation included the initial development of alternatives, screening of alternatives, detailed study, selection of an LPA, and refinement of the LPA, resulting in identification of a Preferred Alternative in the FEIS.

This section summarizes the key steps in MTA’s alternatives development and evaluation process for the Purple Line, which are described in greater detail in the FEIS, the 2008 Definition of Alternatives technical report, and the 2012 Supporting Documentation on Alternatives Development technical report. The 2008 report describes the alternatives analyses that led to the publication of the AA/DEIS, and the 2012 document summarizes the alternatives and includes memoranda prepared on specific alignments since the publication of the AA/DEIS.

### 2.3.1 Regional Transportation Planning

The National Capital Region Transportation Planning Board (TPB) of the Metropolitan Washington Council of Governments (MWCOCG) is the federally-designated Metropolitan Planning Organization (MPO) for the region and is the regional forum for transportation planning. The federally-mandated metropolitan planning process requires MPOs to produce the following two documents:

- A Transportation Improvement Plan (TIP), which lists projects and programs that will be funded in the next 6 years;
- A long-range transportation plan, which in the Washington region is called the Financially Constrained Long-Range Transportation Plan; the CLRP must cover at least a 20-year period, and in this region, it typically has a 25-year horizon.

Prior to 2009, the portion of the Project from Bethesda to Silver Spring was included in the CLRP. In 2009, the TPB amended the CLRP to include the entire Purple Line project. The project is now included in the 2013-2018 TIP and in the July 2012 update to the CLRP.

### 2.3.2 Alternatives Analysis/Draft Environmental Impact Statement (AA/DEIS)

#### a. Scoping and Alternatives Development

The alternatives presented at scoping included the No Build Alternative, the Transportation System Management (TSM) alternative, and a number of alignments for bus rapid transit (BRT) and LRT, which MTA proposed at-grade, underground, elevated, or a combination of these. All alignments began in Bethesda with a connection to the Metrorail station, served the Silver Spring Metrorail station, and continued to the New Carrollton Metro station. The options included the following:

- Option A—Mixed-use bus lanes, where BRT shares lanes with regular traffic
- Option B—Bus Rapid Transit (BRT) operated on existing roadways with a combination of mixed-use lanes and dedicated bus lanes and exclusive right-of-way
- Option C—BRT operated in dedicated and exclusive bus lanes, including some aerial structures or tunnels
- Option A—LRT operated primarily at-grade
- Option B—LRT operated primarily in exclusive lanes, often grade-separated (tunnel and aerial structures)

#### b. Screening of Alternatives

MTA’s screening process evaluated the alternatives based on various factors, including ability to meet the Project’s Purpose and Need, engineering feasibility, natural and social

environmental impacts, preliminary cost estimates, and input from the public and agencies. Alternatives that did not meet these criteria were not considered reasonable, and alternatives that were not considered reasonable were eliminated from further consideration and not included in the AA/DEIS. See FEIS Chapter 2.1.3 for more detailed discussion of alternatives screening.

### 2.3.3 Alternatives Evaluated in Detail in the AA/DEIS

The AA/DEIS advanced eight alternatives and several design options for further study. These included the No Build Alternative, the TSM Alternative, and six Build Alternatives: three BRT alternatives and three LRT alternatives, differentiated by levels of investment. The AA/DEIS also presented several design options (alignment variations). See FEIS Chapter 2.1.4 for more detailed discussion of the alternatives evaluated in the AA/DEIS.

### 2.3.4 Identification of the Locally Preferred Alternative

Based on the AA/DEIS findings, as well as input from the public, the local jurisdictions, and elected officials, Governor Martin O'Malley identified a LPA on August 4, 2009. The LPA was largely the Medium Investment LRT Alternative, as defined in the AA/DEIS, with elements of the High Investment LRT Alternative. The LPA was deemed best suited to meet the region's transportation goals, responsive to community concerns and input, and superior to the other alternatives relative to its social, economic, and environmental effects and benefits. See FEIS Chapter 2.2 for more detailed discussion of the LPA identification.

### 2.3.5 NEPA Re-evaluation

As noted in Section 2.1, described in FEIS Chapter 2.2.2, and in accordance with 23 CFR Part 771.129, MTA prepared a Re-evaluation because more than three years had passed since publication of the AA/DEIS for this project. MTA submitted the Re-evaluation to FTA on August 8, 2012. In that time period, MTA refined the LPA in response to the availability of new and updated data regarding park and historic resources. In addition, MTA made minor refinements to the LPA to reduce environmental impacts and/or improve traffic and transit operations. These refinements are a consequence of input from the public and stakeholders through the NEPA process, combined with more detailed engineering and study by MTA. The Preferred Alternative is the result of this refinement process.

The Re-evaluation compared the environmental impacts set out in the DEIS for the LRT alternatives, from which the Preferred Alternative was derived, with all refinements made to the Preferred Alternative to date to determine if there were any significant changes between the two that would require a supplemental draft environmental impact statement. MTA concluded that a supplemental environmental impact statement to the AA/DEIS is not required because there are no significant changes in the Preferred Alternative. In correspondence dated October 2, 2012, FTA concurred with MTA's findings in the Re-evaluation. The changes set out in the Re-evaluation were presented to the public and are described and evaluated in the FEIS.

### 2.3.6 FEIS Preferred Alternative

The Preferred Alternative evaluated in the FEIS will operate mainly in exclusive or dedicated<sup>1</sup> lanes along existing roadways. The transitway will be at grade except for one short tunnel section (a 0.3-mile tunnel between Wayne Avenue and Arliss Street) and three sections elevated on structures.

The Preferred Alternative will have 21 stations. The station locations were selected based on connections with existing transit services, urban design principles including access and safety, public space availability, local plans, ridership catchment areas, operational considerations, engineering feasibility, and agency and community input. Seventeen stations will be at street level, three will be on aerial structures, and one will be in a tunnel portal. The Preferred Alternative will not provide new station parking; passengers will access the Purple Line by walking, bicycling, transferring from other transit lines, or from existing parking facilities. The Preferred Alternative will include constructing the permanent Capital Crescent Trail between Bethesda and Silver Spring.

The transitway, stations, and related infrastructure will be integrated with existing and planned transportation facilities in a manner that accommodates or enhances automobile, bus, bicycle, and pedestrian circulation. For example, MTA's conceptual plans for the Purple Line include roadway and intersection improvements consistent with applicable design standards for safety, enabling the Purple Line and other transportation modes to operate together as efficiently and safely as possible. The Purple Line will comply with the Americans with Disabilities Act (ADA) of 1990, as amended.

Two maintenance and storage facilities will support the Purple Line. A storage yard will be located along Brookville Road in Lyttonsville, and a maintenance facility will be located along Veterans Parkway on the site of the Maryland National Capital Park and Planning Commission's (M-NCPPC) Northern Area Maintenance – Glenridge Service Center. The Lyttonsville facility will be the primary vehicle storage area and will house the operations and control center, while the Glenridge site will be the primary maintenance and repair shop.

The Purple Line system infrastructure will include an overhead contact system (OCS), providing electricity and operating signals for the vehicles. The traction power substations will convert electric power to the appropriate voltage for light rail operations. The Purple Line will require 20 substations as currently designed, 18 placed approximately every mile along the transitway, as well as one each at the maintenance facility and yard. In addition, 14 signal bungalows will be at track crossover locations.

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<sup>1</sup> An exclusive lane is a right-of-way that is solely for use of transit vehicles and is not occupied by any other type of vehicle or by pedestrians. Exclusive lanes may be either grade-separated or protected by a fence or substantial permanent barrier. All crossings are grade-separated. A dedicated lane is used solely for transit vehicles, separated and protected from parallel traffic, but crosses roads, driveways, and pedestrian pathways at-grade. Separation may be achieved by mountable or un-mountable curbs, barriers, or fences. If the transit is light rail, protection at grade-crossings will be provided at some locations by railroad-style flashers and gates if required, or traffic signals at others.

The Final Section 4(f) Evaluation in Attachment D of this ROD provides a detailed description of the Preferred Alternative. The description is updated to include further refinements made by MTA to the design of the Preferred Alternative to reduce environmental and socioeconomic impacts subsequent to FTA's issuance of the August 2013 Final Environmental Impact Statement (FEIS). Discussion of the refinements is provided in Section 5 of this ROD.

## 2.4 Long-Term Transportation Effects of the Preferred Alternative

FEIS Chapters 3.0 and 9.0 describe the transportation effects and benefits of the Preferred Alternative. The primary long-term transportation effects include modified roadway configurations, traffic patterns, and intersection operations; failing level of service at two intersections; and the loss of some on-street and off-street parking. The main benefits will be faster, more direct, and more reliable east-west transit service connecting major activity centers in the corridor, better connections with Metrorail services located in the corridor, and improved connectivity to the communities located between Metrorail lines in the corridor. In addition, in the Preferred Alternative, the permanent Capital Crescent Trail will be constructed within the Georgetown Branch right-of-way for a distance of 3.3 miles between Bethesda and the CSX Metropolitan Branch (railroad right-of-way). The trail would cross the CSX right-of-way on the reconstructed Talbot Avenue bridge and would continue on the north side of the CSX right-of-way to the Silver Spring Transit Center (SSTC). MTA's use or purchase of CSX property for the trail is under negotiation with CSX. The permanent Capital Crescent Trail will replace the existing Georgetown Branch Interim Trail, which currently extends from Bethesda to Stewart Avenue within the Georgetown Branch right-of-way.

## 2.5 Environmental Impacts of the Preferred Alternative

The FEIS identifies both benefits and adverse effects of the Preferred Alternative, both in the short-term during construction and over the long-term during operations. Long-term effects have been assessed for the year 2040, while short-term effects are those associated with construction activities, which have been assessed for a peak construction year of 2016 and lasting from 4 to 5 years. Table 1 summarizes the long-term, operational effects to environmental and community resources that will result from the Preferred Alternative. Specific commitments and mitigation measures for the effects from the Preferred Alternative are in Attachment A of this ROD. The list of commitments and mitigation measures in Attachment A of this ROD supersedes the list of commitments in the FEIS.

Table 1: Summary of Preferred Alternative Long-Term (Operational) Effects

<b><i>Transportation</i></b>
<ul style="list-style-type: none"> <li>Along some roadways, access from private driveways or unsignalized side street intersections will be limited to right-in/right-out movements</li> </ul>
<b><i>Land Use, Public Policy, and Zoning</i></b>
<ul style="list-style-type: none"> <li>The Preferred Alternative supports current land use plans and zoning because both Montgomery and Prince George’s Counties anticipate the Purple Line project in their plans and zoning.</li> </ul>
<b><i>Neighborhoods and Community Facilities</i></b>
<ul style="list-style-type: none"> <li>Vehicular and pedestrian access will be affected at some community facilities by changes in driveway locations and circulation patterns.</li> <li>Public parking will be permanently lost at some locations where existing parking is removed.</li> </ul> <p>Neighborhood cohesion effects are not anticipated because the proposed transit service will operate largely on existing roadways or transportation corridors.</p>
<b><i>Environmental Justice</i></b>
<ul style="list-style-type: none"> <li>The majority of the corridor is located in low-income and minority (environmental justice (EJ)) communities. The Preferred Alternative has the potential to cause adverse effects on EJ populations, while also benefiting EJ populations. Potential effects could include localized increased business expenses (e.g., rents) from increased property values, business migration and displacement, and changes in the availability and affordability of housing stock. FTA determined that the Project will not result in disproportionately high and adverse effects on EJ populations.</li> </ul>
<b><i>Property Acquisitions and Displacements</i></b>
<ul style="list-style-type: none"> <li>Approximately 388 properties will require either a partial (321) or full (67) acquisitions totaling approximately 70 acres.</li> <li>The estimated 67 full acquisitions will result in approximately 60 commercial, 53 residential, and 3 institutional displacements. A single acquisition can result in multiple displacements, e.g., if a multi-unit building is acquired.</li> </ul>
<b><i>Economic Activity</i></b>
<ul style="list-style-type: none"> <li>Regional and local economic benefits of improved east-west travel, access to and between activity centers, connections to other transit services, better access to jobs, creation of jobs related to construction, operation, and maintenance of the Purple Line</li> </ul>
<b><i>Visual and Aesthetic Resources</i></b>
<ul style="list-style-type: none"> <li>New visual features introduced; of 10 visual units in the study area (described in FEIS Chapter 4.9), the Project will have an overall “Low” visual effect on three units, a “medium” effect on four units, a “medium to high” effect on two units, and a “high” on one unit.</li> <li>In those areas where there will be extensive tree removal, such as along the interim trail that is located within the Georgetown Branch right-of-way, a substantial change to visual character will occur; a substantial change to visual character also will occur along Wayne Avenue, and as a result of the aerial structure and Riverdale Park Station across the intersection of Kenilworth Avenue and Riverdale Road.</li> </ul>
<b><i>Historic Properties</i></b>
<ul style="list-style-type: none"> <li>Adverse effect on three eligible properties: Talbot Avenue Bridge, Metropolitan Branch, and Falkland Apartments.</li> <li>Overall project finding of Section 106 effect is adverse effect.</li> </ul>



Table 1: Summary of Preferred Alternative Long-Term (Operational) Effects

<i>Air Quality</i>
<ul style="list-style-type: none"> <li>• Purple Line is a conforming project under the US Environmental Protection Agency's Transportation Conformity Rule.</li> <li>• No violations of air quality standards are predicted.</li> </ul>
<i>Noise and Vibration</i>
<ul style="list-style-type: none"> <li>• Moderate noise impacts to a few properties</li> <li>• Existing interim trail with the Georgetown Branch right-of-way will be replaced by the permanent Capital Crescent Trail. Trail users will experience increased noise levels due to operation of the transitway.</li> </ul> <p>Vibration impacts to approximately three properties</p>
<i>Section 4(f) Resources</i>
<ul style="list-style-type: none"> <li>• Use portions of 13 properties protected by Section 4(f)</li> <li>• <i>De minimis</i> use determination for 8 of 13 properties</li> <li>• Finding of no prudent and feasible alternative to the use of the three Section 4(f) properties where there will be a use and the use is not <i>de minimis</i>.</li> </ul>
<i>Parks, Recreational Land, and Open Space</i>
<ul style="list-style-type: none"> <li>• Road and intersection widening or transitway construction will require partial land acquisition from eight parks.</li> <li>• Existing interim trail with the Georgetown Branch right-of-way will be replaced by the permanent Capital Crescent Trail. Trail users will experience visual impacts (due to loss of tree cover and presence of transitway) and increased noise levels (due to operation of the transitway).</li> <li>• Beneficial effect: Direct connections will be created between many parks and the Capital Crescent Trail. Access to Long Branch Local Park and Long Branch Stream Valley Park will be changed to right-in/right-out only.</li> <li>• The bridges carrying the Baltimore-Washington Parkway over Riverdale Road will be replaced; the abutments will be moved, encroaching upon the park.</li> </ul>
<i>Water Resources</i>
<ul style="list-style-type: none"> <li>• Increased impervious surfaces, stormwater run-off, and non-point source water pollution</li> <li>• Minor wetland impacts primarily due to roadway widening and culvert extensions at stream crossings</li> <li>• Relocate a portion of Sligo Creek north of Wayne Avenue</li> <li>• Minor floodplain impacts primarily due to roadway widening and culvert extensions at stream crossings</li> </ul>
<i>Indirect and Cumulative Impacts</i>
<ul style="list-style-type: none"> <li>• Induced development in approximately 11 station areas due to new service and related local planning efforts</li> <li>• Cumulative project effect on the environment in the context of the aggregate of all other past, present and reasonably foreseeable actions is incremental and not substantial</li> </ul>
<i>Hazardous Materials</i>
<ul style="list-style-type: none"> <li>• Residual contaminants potentially exist along portions of the study area in the underlying soils.</li> <li>• Accidental petroleum releases from the equipment and materials stored at yard and maintenance facility could occur during operation of the Purple Line.</li> </ul>

Table 1: Summary of Preferred Alternative Long-Term (Operational) Effects

<i>Habitat and Wildlife</i>
<ul style="list-style-type: none"> <li>• Land acquisitions impact primarily the edges of forest habitat; impact on 194 specimen trees.</li> <li>• Forest impacts will affect forest interior dwelling species by slightly reducing the overall size of forest interior dwelling species habitat in the Project area.</li> <li>• Impact of roadway widening and culvert extensions at stream crossings on stream habitat, affecting fish and aquatic biota; not impacts to known threatened or endangered species</li> </ul>
<i>Utilities and Energy Use</i>
<ul style="list-style-type: none"> <li>• Relocation of some utilities in advance of or during construction</li> <li>• Overall reduction in total study area energy consumption by approximately 0.033 percent compared to the No Build Alternative is a beneficial effect</li> </ul>

Table 2 summarizes the short-term, construction-related effects to environmental and community resources that will result from the FEIS Preferred Alternative. Specific commitments and mitigation measures for the effects from the Preferred Alternative are in Attachment A of this ROD.

Table 2: Summary of Preferred Alternative Short-Term (Construction) Effects

<i>Public Transportation</i>
<ul style="list-style-type: none"> <li>• Some local bus service impacts including lane narrowing, lane closures, speed reductions, modifications to stops, and detours</li> </ul>
<i>Roadways and Traffic</i>
<ul style="list-style-type: none"> <li>• Some roadway closures, detours, and disruption of traffic during peak and non-peak times.</li> </ul>
<i>Parking</i>
<ul style="list-style-type: none"> <li>• Temporary loss of some parking spaces and loading zones</li> </ul>
<i>Pedestrian and Bicycle Facilities</i>
<ul style="list-style-type: none"> <li>• Some temporary sidewalk and trail route detours</li> </ul>
<i>Land Use</i>
Land use impacts from easements for staging areas and construction access, as well as temporary parking loss
<i>Neighborhood and Community Facilities</i>
<ul style="list-style-type: none"> <li>• Possible impact on access between Chillum-Adelphi Fire Company and the portion of its service area south of University Boulevard</li> <li>• Possible modifications to access to community facilities, and construction-related noise, dust, and congestion may temporarily affect use of some community facilities</li> <li>• Some disruptions during project construction to University of Maryland, Rosemary Hills Elementary School, Sligo Creek Elementary School, and Silver Spring International Middle School</li> <li>• Some temporary relocation of school bus routes and stops</li> <li>• Some use of local community facilities by project construction workers</li> </ul>

Table 2: Summary of Preferred Alternative Short-Term (Construction) Effects

<i>Property Acquisitions and Displacements</i>
<ul style="list-style-type: none"> <li>• Temporary easements will be required for temporary property uses during construction.</li> </ul>
<i>Economic Activity</i>
<ul style="list-style-type: none"> <li>• Some temporary construction easements, lane or road closures, or other property restrictions could have negative impacts to some study area businesses</li> <li>• Some losses of parking and difficulty accessing businesses could deter customers and disrupt deliveries.</li> <li>• Some small businesses in particular could have difficulty withstanding the resulting loss of commerce.</li> <li>• New employment opportunities in the Project corridor, consisting mostly of short-term (construction) jobs</li> <li>• Some slight decreases in property tax revenue will result from displacements.</li> </ul>
<i>Visual and Aesthetic Resources</i>
<ul style="list-style-type: none"> <li>• Introduction of construction equipment, trucks, fencing, or walls surrounding proposed construction staging and laydown areas, as well as fugitive dust, will create a temporary aesthetic/visual effect to neighborhoods surrounding or adjacent to where these activities will occur.</li> <li>• Some areas likely will be affected more substantially than others, including the construction staging areas and the locations of large project elements such as the aerial structures, the bridges across Rock Creek, the Plymouth Street tunnel, and demolition sites.</li> </ul>
<i>Parks, Recreation Land, and Open Space</i>
<ul style="list-style-type: none"> <li>• Parking and access will be temporarily affected at New Hampshire Estates Neighborhood Park.</li> <li>• Baltimore-Washington Parkway visitors will experience a visual impact during construction of the new bridges.</li> <li>• Temporary Impacts to approximately ten parks, recreational lands, and open space resources. These impacts generally involve MTA obtaining an easement to occupy a portion of the property during construction to access the transitway work area, install temporary bridges (in the case of the Baltimore-Washington Parkway), and install drainage pipes.  Some trails will require temporary detours during construction to protect public safety.</li> </ul>
<i>Built Historic Properties</i>
<ul style="list-style-type: none"> <li>• Construction activities could cause vibration and noise effects to small areas of the project corridor at certain times. The duration of exposure to construction-related vibration and noise at any one property will be limited.</li> </ul>
<i>Air Quality</i>
<ul style="list-style-type: none"> <li>• Localized increase in the concentration of fugitive dust (including airborne particulate matter, PM2.5 and PM10), as well as mobile source emissions both on and off the construction site from on- and off-road construction equipment and vehicles.</li> <li>• Disruption of traffic during construction (such as temporary reduction of roadway capacity and increased queue lengths) could result in short-term elevated concentrations of localized pollutants such as CO and PM.</li> </ul>
<i>Energy</i>
<ul style="list-style-type: none"> <li>• One-time, non-recoverable indirect energy expenditures of approximately 684,498 million Btu will result from construction of the Preferred Alternative.</li> </ul>

Table 2: Summary of Preferred Alternative Short-Term (Construction) Effects

<i>Utilities</i>
<ul style="list-style-type: none"> <li>Impacts to existing utilities could include temporary service interruptions when an existing utility must be disconnected and a temporary or replacement service is installed. The duration of down time will depend on the utility type and complexity of construction.</li> </ul>
<i>Section 4(f) Resources</i>
<ul style="list-style-type: none"> <li>Temporary impacts on portions of properties for work areas during construction.</li> </ul>
<i>Noise and Vibration</i>
<ul style="list-style-type: none"> <li>Construction noise and vibration levels will vary depending on the type and duration of construction activity and the type and amount of equipment used. The location of sensitive receptors in relation to the construction activity and the duration of construction activities affect the potential for noise and vibration impacts.</li> <li>Track-related construction will move continuously along the corridor; therefore, the duration of exposure to construction-related noise or vibration at any one property will be limited.</li> <li>Some specialized construction work (tunneling, pile driving, and heavy equipment use) has the potential to create noise and vibration impacts. However, the impacts for these activities will be realized only for sensitive receptors in close proximity to these specific locations and not along the entire length of the transitway.</li> <li>A potential exists for vibration-sensitive buildings to be impacted by non-track related types of construction such as the Purple Line station at the Silver Spring Transit Center, the Plymouth Street tunnel, and sections along the transitway where extensive bridge and retaining wall work will occur. However, the impact will be realized only for sensitive receptors in close proximity to these specific locations and not along the entire length of the transitway.</li> <li>Construction of the Plymouth Street tunnel, which potentially will include blasting, is expected to be the longest sustained period of construction, and blasting typically will generate the most vibration. While overall excavation of the tunnel will last approximately 16 months, the anticipated duration of the blasting operations, if any, will be approximately four to six months depending on geological conditions.</li> <li>Certain construction activities, such as pile driving for new structures and retaining walls, will occur at numerous locations along the corridor and have the potential to create more vibration than other activities.</li> </ul> <p>Trucking could occur seven days per week and 24 hours per day, but MTA will limit truck traffic to designated routes that contain a limited number of residential or sensitive structures and will result in the least disturbance to nearby residents.</p>
<i>Habitat and Wildlife</i>
<ul style="list-style-type: none"> <li>Decline and/or mortality of trees not removed could occur due to significant critical root zone (CRZ) disturbance, tree limb damage, changes in soil moisture, and soil compaction as a result of grading operations and other construction related activities.</li> <li>Some terrestrial wildlife may be temporarily displaced from their typical edge habitats.</li> <li>Possible construction-related short-term impacts to aquatic biota and habitat include physical disturbances or alterations to habitat, accidental spills either directly into water resources or indirectly through surface runoff, and sediment releases that could affect aquatic life. Earth-moving activities will expose soils that, if left in an unstable condition, could enter waterways during storms.</li> </ul>

Table 2: Summary of Preferred Alternative Short-Term (Construction) Effects

<p><i>Environmental Justice</i></p> <ul style="list-style-type: none"> <li>• Potential short-term effects to EJ and non-EJ neighborhoods include construction-generated dust, noise, vibration and vehicle emissions; changes in vehicular and pedestrian patterns and access; temporary loss or relocation of parking; interruptions in utility service; and other business disruptions, and visual impacts. FTA has determined that the Project will not result in disproportionately high and adverse effects on EJ populations.</li> </ul>
<p><i>Water Resources</i></p> <ul style="list-style-type: none"> <li>• Approximately 101 linear feet of in-stream construction will occur within Rock Creek to deconstruct, remove, and replace the existing bridge and bridge pier.</li> <li>• Approximately 370 linear feet of stream diversions will result within the larger perennial streams, such as Northwest Branch and Northeast Branch to replace in-stream piers to widen existing bridges.</li> <li>• Reconstruction of a vegetated stormwater management basin east of the intersection of East West Highway and Veterans Parkway will affect approximately 0.26 acres of a palustrine emergent wetland and approximately 83 linear feet of an intermittent stream.</li> <li>• Reconstruction of a vegetated stormwater management basin north of East West Highway and west of Baltimore Washington Parkway will affect approximately 0.09 acre of palustrine emergent wetland, approximately 0.13 acre of palustrine forested wetland and approximately 83 linear feet of an intermittent stream.</li> <li>• To facilitate cleaning of existing culverts under Ellin Road and facilitate positive flow through the triple box culvert under the transitway south of Ellin Road, approximately 109 linear feet of an intermittent stream will be temporarily disturbed north of Ellin Road.</li> <li>• Short-term effects to surface waters will include physical disturbances or alterations to the ground surface over which water flows, accidental spills of construction materials, and sediment releases into the surface water that could affect aquatic life.</li> <li>• Short-term effects on designated scenic and wild streams will occur during construction when equipment is placed near stream banks or in-stream diversions are implemented during pier removal.</li> <li>• Construction of the Plymouth Street tunnel will have a short-term impact to localized groundwater resources as de-watering activities will be required to maintain a dry work zone.</li> </ul>
<p><i>Topography, Geology, and Soils</i></p> <p>Construction impacts will include excavation of slopes, resulting in short-term redirecting of runoff and small drainage patterns; soil erosion and instability; drilling and blasting of very thick boulder and rock substrate; dust hazards and vibrations from the excavation process.</p>
<p><i>Hazardous Materials</i></p> <ul style="list-style-type: none"> <li>• Construction-related effects also are expected during shallow utility excavation and surface construction dewatering. These activities will not encounter contamination similar to deep excavation activities since the soils will not be in direct contact with groundwater. However, near-surface construction potentially will encounter residual petroleum, metal, and solvent contamination, which are expected to occur within five feet of ground surface in some areas.</li> <li>• Tunneling and deep excavation activities potentially will encounter contamination within the excavated soils or tunnel muck because of the presence of residual soil contamination and contaminated groundwater.</li> <li>• Dewatering activities near contaminated zones may result in the collection and discharge of contaminated groundwater, consisting of petroleum hydrocarbons.</li> </ul>

Section 6 of this ROD describes the determinations and findings regarding project compliance with other federal laws and agency requirements: air quality conformity under the Clean Air Act, Section 106 of the National Historic Preservation Act, Section 4(f) of the US Department of Transportation Act, Executive Order 12898 on environmental justice, National Park Service acts, and Capper Cramton Act. Section 7 of this ROD summarizes FTA's determinations and findings on issues frequently raised in comments on the FEIS, including the Capital Crescent Trail, land use and neighborhood impacts, property acquisitions and displacements, visual impacts, noise and vibration impacts, and natural resources effects. Responses to all comments on the FEIS are provided in the Responses to FEIS Comments (Attachment C) of this ROD.

## 2.6 Measures to Avoid, Minimize, and Mitigate Effects

Means to avoid, minimize, and mitigate effects from the Preferred Alternative were presented in the FEIS and have been updated, in response to comments on the FEIS, and are set forth in Attachment A of this ROD. FTA will require implementation of the list of commitments and mitigation measures listed in Attachment A as a condition of any grant for the Project; FTA will also require MTA to submit written reports on its progress in implementing the commitments and mitigation measures. FTA will monitor this progress through quarterly reviews of the Project's progress.

## 3. Public Outreach and Opportunities to Comment

From the initiation of the project by the NOI, public involvement has been essential in the design and planning of the Purple Line. MTA has used a wide range of outreach techniques: meetings, focus groups, open houses, newsletters, a project website, e-mail blasts, brochures and fact sheets (both on the Project as a whole and on specific topics), a Facebook page, and tables at events such as community fairs and festivals. Using these techniques, MTA has coordinated with agency partners, local businesses, and residents since the Notice of Intent (NOI) to initiate the NEPA process was published in the Federal Register on September 3, 2003.

As described in more detail in Section 6.4 below, MTA's public outreach program during the NEPA process created meaningful opportunities for public engagement for all members of the community, including traditionally under-represented stakeholders such as environmental justice (EJ) populations. MTA also monitored its public outreach effectiveness and made additional efforts in communities when it was not achieving engagement to other project corridor locales.

MTA held open houses periodically to present and discuss the Project. Altogether, there have been six rounds of open houses during which MTA collected comments and feedback from attendees. For each round, members of the public were invited by corridor-wide mailings and announcements on the website. To maximize attendance, MTA held four to five open houses in convenient locations in each round, and each of those open houses covered the whole project. The open houses have been well attended throughout the Project, with approximately 350 participants at the first round of open houses, and ranging from 500 to 800 attendees over the five rounds of meetings held since then.

During the development and screening of alternatives, MTA created Community Focus Groups. Initially, the study corridor was divided into six geographic areas. Community and civic associations in each area were invited to designate a representative to the Community Focus Group for that area, with the intent that the alignment options through that area could be discussed and compared by local stakeholders. By asking for a representative from each community organization, MTA aimed for a group that was small enough to have a discussion around a table, rather than a formal presentation where people might be reluctant to voice opinions or concerns. It became apparent that two of the Community Focus Groups covered too large an area or included areas that were too dissimilar; they were each split in two. As a result, there were a total of eight Community Focus Groups. Multiple rounds of Community Focus Group meetings occurred between 2005 and 2009.

After the release of the AA/DEIS on October 17, 2008, the general public, and resource and regulatory agencies, were offered the opportunity to review and comment on the AA/DEIS during FTA public review process, pursuant to the National Environmental Policy Act. This process included four public hearings held in the Project area and a 90-day public and governmental comment period from October 17, 2008 through January 14, 2009. Over 750 people attended the Purple Line public hearings in November 2008. Four different hearings were held throughout the Purple Line corridor, and at each one an Open House allowed attendees to review project information, ask questions and provide comments. Over 3,300 comments were received on the AA/DEIS in the form of written and oral testimony at the public hearings, as well as letters, faxes, and emails. Twelve separate petitions were submitted with thousands of names. Comments were provided by elected officials, community organizations, government and regulatory agencies, residents, special interest groups, and non-profit organizations.

After the selection of the LPA in August 2009, MTA created a new format for community meetings. MTA created Neighborhood Work Groups for each of the 21 station areas and topics including the CSX corridor, Capital Crescent Trail, Wayne Avenue, Bonifant Street Businesses, University Boulevard, Kenilworth Avenue, and Ellin Road.

Members of the public were invited through newsletters, the website, and sign-up sheets to sign up for the Neighborhood Work Groups. The meetings focused on detailed issues such as individual station design, station access, or streetscaping on a block-by-block basis.

In spring 2010, the MTA launched a general community outreach effort. The public involvement staff set up information tables at over 25 community events (such as fairs, festivals, and farmers markets) and at various community centers (such as shopping centers), providing general project information, newsletters, fact sheets, brochures, and sign-up sheets for the mailing list. When requested, Spanish-speaking staff attended these meetings.

Throughout the Project planning process, MTA has met with community and civic associations, business groups, residents, advocacy groups, property owners and others in the corridor. Topics ranged from general project overviews to detailed discussions of the then most current proposed design at specific locations.

When FTA approved the Purple Line FEIS on August 28, 2013, the document was made available to the public and federal, state, and local agencies for review and comment (Distribution List in FEIS Appendix C). The formal Notice of Availability was published in the

Federal Register on September 6, 2013, initiating a public review and comment period that extended from September 6, 2013 through October 21, 2013.

FTA received approximately 1,000 comments via the Project website, hard copy, or email during the 45-day public comment period. Comments came from elected officials, community organizations, government and regulatory agencies, residents, stakeholder groups, and non-profit organizations. The most frequent topics of comment included support for the Purple Line; opposition to the Purple Line; opposition to the use of the Georgetown Branch right-of-way; support for other alternatives, modes, and alignments; concerns about environmental impacts; construction; operations; cost and funding; and safety.

Comments in support of the Project included a wide range of topics, most commonly the environmental benefits and improved accessibility in the region that will be provided by the Purple Line. Comments opposing the Project included a local jurisdiction and some members of the public. These comments primarily focused on the use of the Georgetown Branch right-of-way for the Project, loss of trees, the addition of a transitway adjacent to the trail (and behind residences), safety of trail users, noise and visual impacts, cost, adverse environmental impacts including development inducement, and lack of need. FTA and MTA received no comments related to the Baltimore-Washington Parkway.

Attachment C of this ROD provides a summary of the comments received on the FEIS, together with FTA and MTA responses. Responses to each comment letter from a federal, state, regional, county agency, or government are provided in a side-by-side format with the letter on one side of the page and the responses on the opposite side of the page. Responses to the public comments are organized by common themes and concerns; the responses are coded and cross-referenced to the actual comments by means of an index of commenter names and comment codes. This index references a table that, because of its size, is produced only in electronic format and is available on the Project website [www.purplelinemd.com](http://www.purplelinemd.com). The table identifies the commenter name or affiliation; the issues raised by each commenter, and associated comment codes. Each comment included in the table has been categorized based on the main point of the comment. The electronic format also includes each original comment correspondence received, along with a corresponding comment code for cross referencing to the summary table.

MTA is committed to continue working with the federal, state and local agencies, elected officials, the counties, advocacy groups, and the public as the Purple Line project advances. Specific commitments regarding continued outreach and coordination are identified in Attachment A of this ROD.

## 4. Updates to Information in the FEIS

Since publication of the Purple Line FEIS, FTA and MTA have identified a number of minor items in the FEIS that warrant clarification or correction to promote reader understanding. In one case described below, action taken since the FEIS by the Montgomery County Council warrants re-affirmation of a statement made in the FEIS. In other cases, minor typographical errors are corrected by the Errata Sheet provided in Attachment G of this ROD. In all cases, FTA has determined that the nature of these items is minor and does not substantially change the determinations and decisions FTA has made in the FEIS or this ROD.



## 4.1 Montgomery County BRT Network

On November 26, 2013, the Montgomery County Council voted to approve their Long-Range Transportation Plan, which includes a network of bus-only lanes to enable BRT service. Approval of the county's plan is a first step toward planning the BRT project, but the BRT project remains an uncommitted project that is not in the MWCOG's adopted financially Constrained Long-Range Transportation Plan. Uncommitted means the BRT project remains unfunded. Thus, the FEIS statement on page 2-19 remains true: "Because the Montgomery County BRT is still in development, and is not adopted or funded, it is not included in the No Build Alternative." If the County's BRT project were to be developed, it will interface with and complement rail service in the county, including the Purple Line, Metrorail and MARC.

## 5. Design Refinements Since the August 2013 FEIS

The environmental and socioeconomic impacts evaluated in the August 2013 Final FEIS for the project were based on conceptual engineering plans. MTA, in coordination with the FTA, refined the conceptual engineering plans of the Purple Line Preferred Alternative in response to comments and coordination to reduce environmental and socioeconomic impacts, and to respond to updated mapping and more detailed engineering. Some of the refinements were considered prior to the publication of the FEIS and were presented at the May 2013 Open Houses; however, they were not incorporated into the FEIS due to the need to coordinate with the public and agencies, and complete the environmental analysis. Other refinements were made by MTA, in coordination with the FTA, after the FEIS during meetings with agencies, property owners, and stakeholder groups in the project corridor and after consideration of public comments related to the FEIS. MTA performed more detailed engineering at specific locations and/or corridor wide to:

- Refine the location and configuration of project elements, including elements of the Capital Crescent Trail, traction power substations, and signal bungalows;
- Reduce project impacts to sensitive environmental resources;
- Reduce project impacts to adjacent homes and businesses;
- Reduce the Project-related right-of-way acquisition;
- Respond to agency, stakeholder and public comments (see ROD Attachments C and E);
- Improve station access and circulation;
- Improve water quality by expanding some stormwater management facilities;
- Address project-related changes to access and parking;
- Improve traffic operations;
- Respond to adjacent planned development;
- Reflect more detailed drainage, stormwater management and utility design; and
- Address updated survey data, right-of-way information, mapping and design criteria.

Most of MTA's design refinements are entirely within the FEIS Limits of Disturbance (LOD), without changing the LOD. For example, some refinements involved shifting a stairway location in a station area, which leaves the LOD unchanged. In some cases, the design refinements enabled MTA to reduce the LOD, thereby having fewer impacts on the natural and

built environment than presented in the FEIS. In a few instances, MTA's design refinements resulted in a slightly expanded LOD. These refinements are incorporated into the description of the Preferred Alternative in the Final Section 4(f) Evaluation, Attachment D of the ROD, and shown on the 30 percent design drawings posted on the Project website (see December 2013 drawings titled, "Preliminary Engineering, Purple Line Light Rail").

Attachment F of this ROD describes each refinement, the reason for each refinement, and the effect of each refinement. MTA's design refinements are typical of projects that move from conceptual engineering into preliminary design.

FTA's and MTA's cumulative assessment of the design refinements indicates an overall reduction in the number of parcels affected by the project. MTA has reduced the number of properties affected by the project from the over 700 described in the FEIS (both property acquisition and temporary easements) to approximately 615 properties. In addition, slight increases in LOD at specific locations are offset to some degree by reductions in the LOD in other areas as compared to the FEIS LOD. MTA's refinements also provide greater benefits compared with the FEIS design, such as improvements to traffic and transit operations, trail experience, and water quality.

FTA and MTA assessed each refinement individually, and then collectively to determine the anticipated change in effects, if any, to the natural and built environment. FTA has determined that these design refinements since the FEIS are typical of refinements made by a project sponsor as public and agency outreach continues and engineering design advances in response to that outreach during the NEPA process. In addition, FTA has determined in accordance with 23 CFR 771.129 that the design refinements since the FEIS do not result in new significant impacts beyond those evaluated in the FEIS. Refinements that affect park and historic resources have been included in the Section 106 Programmatic Agreement (PA) and Final Section 4(f) Evaluation, as appropriate. Both the PA and Final Section 4(f) Evaluation are attached to the ROD. Therefore, no supplemental environmental documentation is warranted beyond inclusion of these design refinement findings in the Record of Decision. FTA and MTA will continue to address concerns related to the project's design and will strive to reduce impacts as the project moves into final design.

## 6. Determinations and Findings Regarding Other Laws

### 6.1 Conformity with Air Quality Plans

The Transportation Conformity Rule, which was promulgated by US Environmental Protection Agency (US EPA) under the Clean Air Act (CAA), provides criteria and procedures for determining conformity of transportation plans, programs and projects funded or approved under 49 USC §5323(c) and 49 USC §5309 to State Implementation Plans (SIPs). This project is located in Montgomery and Prince George's Counties. The attainment status of this area (including both counties) is as follows:

- Maintenance area for Carbon Monoxide (CO);
- Nonattainment area for particulate matter 2.5 (PM<sub>2.5</sub>);
- Moderate nonattainment area for ozone.

Because of the Project area's air quality status, a conformity determination is required for the Project. This determination requires the following findings:

- The project must originate from a conforming transportation plan and program;
- The project must not cause or exacerbate a violation of the National Ambient Air Quality Standards (NAAQS) in any area; and
- The project must not delay timely attainment of any standard or any required interim emission reduction or other milestones in any area.

Transportation projects that originate from a conforming Transportation Improvement Plan (TIP) are considered to conform to the rule. The Purple Line project is listed as Project ID #2795 in the 2013-2018 TIP and as Project ID #1042 in the 2012 CLRP, both approved by the National Capital Region Transportation Planning Board on July 18, 2012. Inclusion of the Purple Line in the conforming TIP and CLRP designates the Purple Line as a conforming transportation project and precludes the need for a separate regional emissions analysis. Impacts to air quality from EPA-designated criteria pollutants were assessed for compliance with EPA Transportation Conformity Rule (40 CFR Part 93), consistent with the NAAQS.

A microscale analysis is typically completed for fine particulate matter (PM<sub>2.5</sub>). However, the Purple Line meets the CAA and 40 CFR 93.116 requirements for PM<sub>2.5</sub> without a microscale analysis because its electric light rail vehicles will not increase the amount of diesel vehicles in the study area, which are primary contributors of PM<sub>2.5</sub> emissions. In addition, a project-level analysis of PM<sub>2.5</sub> impacts was not required because LRT projects are not projects "of air quality concern" as defined in 40 CFR 93.123(b) (1) and US EPA's 2006 Transportation Conformity Guidance for Qualitative Hot-spot Analyses in PM<sub>2.5</sub> and PM<sub>10</sub> Nonattainment and Maintenance Areas.

MTA completed a microscale analysis for carbon monoxide (CO). This screening method is recommended by EPA as it examines the intersections with the highest volumes and worst levels of service (LOS) to represent a cross section of the "worst case" intersections. It is assumed that if these "worst case" intersections do not violate the National Ambient Air Quality Standards (NAAQS), then all other intersections in the study area with lower volumes and a better LOS should also not violate the NAAQS. The microscale analysis determined that no long-term air quality impacts will result from the Preferred Alternative. The Preferred Alternative is predicted to decrease (compared to the No Build Alternative) regional pollutant burdens by approximately 0.1 to 0.2 percent. No violations of the NAAQS are anticipated, and the Project is not considered a project of air quality concern regarding fine particulate matter (PM<sub>2.5</sub>) emissions. These determinations have been confirmed through the interagency consultation process finalized in November 2012. Therefore, the project will comply with the conformity requirements established by the CAA.

In addition, mobile source air toxic emissions will likely be lower than present levels in the design year as result of US EPA's national control programs. More detailed discussion of air quality is provided in FEIS Chapter 4.10.

## 6.2 Section 106 of the National Historic Preservation Act

The effects of the Preferred Alternative on historic and archaeological resources were assessed in accordance with the regulations (36 CFR Part 800) implementing Section 106 of the National Historic Preservation Act of 1966. Though MTA coordinated with the Maryland State Historic Preservation Officer (MD SHPO) during the AA/DEIS, FTA initiated formal Section 106 consultation on October 27, 2011. The Advisory Council on Historic Preservation declined participation in the Section 106 process for the Project on August 14, 2013.

The area of potential effects (APE) for the Project was determined by FTA in consultation with the MD SHPO. MTA evaluated 278 architectural resources in the APE. Twelve properties were previously recorded and are either eligible for, or are listed in, the National Register of Historic Places (NRHP). An additional eleven properties identified through MTA's research bring the total number of historic properties eligible for or listed in the NRHP within the APE to 23.

In accordance with Section 106, and as presented in FEIS Chapter 4.7.3, the FTA has determined that the Preferred Alternative will have the following effects on historic properties:

- No Effect or No Adverse Effect on 20 historic properties; and
- Adverse Effect on three historic properties:
  - Falkland Apartments
  - Talbot Avenue Bridge
  - Metropolitan Branch B&O Railroad

Therefore, FTA has made an overall finding of adverse effect on historic properties for the Preferred Alternative. In a letter dated November 6 2013, the MD SHPO concurred with FTA's Section 106 findings of adverse effect for Falkland Apartments, Talbot Avenue Bridge, and Metropolitan Branch B&O Railroad. The MD SHPO also concurred with FTA's findings of no effect and no adverse effect for the remaining historic properties in the APE (Attachment E).

The Programmatic Agreement (PA) (Attachment B), was executed by the FTA, NPS, MTA, and MD SHPO on March 14, 2014 in accordance with Section 106 of the National Historic Preservation Act of 1966 (as amended). The PA stipulates processes FTA, NPS, MTA and the appropriate Section 106 consulting parties will undertake as the Project advances regarding historic properties.

In addition, the PA includes requirements MTA will follow to avoid adverse effects to the Columbia Country Club; Sligo Creek Parkway, University of Maryland, College Park; Rossborough Inn; and Baltimore-Washington Parkway through the use of sensitive design and positive protection measures. Among the requirements are guiding principles of design, procedures for signatory and consulting party review of designs, specific design and consultation requirements regarding the University of Maryland, College Park, Baltimore-Washington Parkway, and Area K Domestic Site.

Finally, the PA includes stipulations for identifying, evaluating, and treating unforeseen effects on historic properties due to changes made during design development, alignment modifications, or as a result of associated ancillary activities including, but not limited to,

construction staging areas, stormwater management facilities, wetland mitigation areas, reforestation areas, environmental stewardship activities or other actions. The Section 106 PA outlines the work efforts to be undertaken if previously unknown archeological resources are discovered during project implementation.

The PA provided in Attachment D of this ROD is a refinement of the draft PA that was included in the FEIS. Refinements to the PA since the FEIS are the result of FTA and MTA coordination with the Section 106 consulting parties since the FEIS regarding Project effects on historic properties, as well as Project minimization and mitigation commitments related to the affected historic properties.

### 6.3 Section 4(f)

Section 4(f) of the US Department of Transportation Act of 1966, 49 USC §303(c) is a federal law that protects publicly owned parks, recreation areas, wildlife and/or waterfowl refuges, as well as significant historic sites, whether publicly or privately owned. Section 4(f) requirements apply to all transportation projects that require funding or other approvals by the USDOT. As a USDOT agency, FTA must comply with Section 4(f). FTA's Section 4(f) regulations are at 23 CFR Part 774.

FTA cannot approve a transportation project that uses a Section 4(f) property, as defined in 23 CFR 774.17, unless FTA determines that:

- There is no feasible and prudent avoidance alternative, as defined in 23 CFR 774.17, to the use of land from the Section 4(f) property, and the action includes all possible planning, as defined in 23 CFR 774.14, to minimize harm to the property resulting from such use (23 CFR 774.3(a)); or
- The use of the Section 4(f) property, including any measure(s) to minimize harm (such as any avoidance, minimization, mitigation, or enhancement measures) committed to by the applicant will have a *de minimis* use, as defined in 23 CFR 774.17, on the property (23 CFR 774.3(b)).

As stated in the Final Section 4(f) Evaluation in Attachment D of this ROD, the Preferred Alternative will result in:

- Temporary occupancy (not a use) of three park and recreation properties, one of which is also an historic property;
- *de minimis* impacts to eight park and recreation properties and historic sites; and
- Permanent use, not *de minimis*, of two park and recreation properties and three historic sites

A Draft Section 4(f) Evaluation was prepared, and was included in the FEIS, which was made available to the U.S. Department of the Interior for the required 45-day review period, which occurred concurrently with the review period for the FEIS. No comments were received from the U.S. Department of the Interior within 15 days after the close of the 45-day comment period. In accordance with 23 CFR 774.5(a), FTA assumes a lack of objection from the U.S. Department of the Interior.

FTA obtained concurrence from the officials with jurisdiction regarding its determinations of *de minimis* impact and temporary occupancy exception. FTA received written concurrence

from the Maryland – National Capital Park and Planning Commission (M-NCPPC) Montgomery County Department of Parks (dated October 17, 2013 and January 3, 2014), M-NCPPC Prince George’s County (dated January 24, 2014), and the National Park Service, National Capital Parks – East (dated March 18, 2014). The signed concurrence letters are provided in Attachment E of this ROD. The MD SHPO signed the Section 106 Programmatic Agreement stating no adverse effect to properties for which FTA made a *de minimis* impact determination; therefore the MD SHPO provided concurrence as set forth in the Section 4(f) regulations.

Having considered comments on the Section 4(f) evaluations presented in the FEIS and having consulted with the US Department of the Interior, FTA has concluded that: a) there are no feasible and prudent alternatives to the use of land from the Talbot Avenue Bridge, Metropolitan Branch, B&O Railroad, and the Falkland Apartments; and b) the Project includes all possible planning and measures to minimize harm to that Section 4(f) resource resulting from such use. The Final Section 4(f) Evaluation is included in Attachment D of this ROD. The measures to minimize harm to Section 4(f) resources are included in the list of mitigation measures in Attachment A and in the PA (for historic properties) in Attachment B.

## 6.4 Environmental Justice

FTA and MTA assessed the potential for Purple Line effects on minority and low-income communities (known as EJ populations) as required by Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*. Using the Council on Environmental Quality’s *Environmental Justice Guidance under the National Environmental Policy Act* (CEQ 1997) and the USDOT’s procedures provided in their *Updated Final Order on Environmental Justice*, 5610.2(a) (USDOT May 2012), and FTA Circular 4703.1, the majority of the Project corridor is comprised of minority and/or low-income populations. FEIS Chapter 4.19 provides more detail regarding the environmental justice analysis.

MTA implemented a public outreach strategy that created meaningful opportunities for public engagement for all members of the community, including members of the EJ population. MTA also monitored its public outreach effectiveness in EJ communities and made additional efforts in EJ communities when it was not achieving comparable engagement of EJ populations. Expanded participation of low income and minority populations in the Purple Line decision-making process has been advanced through:

- Expanded outreach to environmental justice communities to encourage attendance at, and participation in project meetings and open houses.
- Translation of outreach materials into Spanish
- Flyers hand delivered to homes in EJ neighborhoods for community meetings with low attendance.
- Direct mailing inviting residents in EJ neighborhoods to Community Focus Groups where neighborhoods were not being sufficiently represented (Community Focus groups were typically composed of representatives of community associations, but where there was low participation, MTA reached out to invite local residents directly).

- Invitations to Community Focus Groups sent to leaders of local houses of worship in EJ neighborhoods.
- Meetings with city and county agency staff, local elected officials, and community leaders to identify leaders of local communities, particularly those traditionally under-represented in the civic process. The groups identified included Action Langley Park, Impact Silver Spring, Puente Inc., and CASA de Maryland.
- Other community representatives identified and invited to participate in the Community Focus Group meetings were:
  - Prince George’s County Latino Affairs Liaison
  - Montgomery County Department of Housing & Community Affairs
  - Montgomery County Business Development Specialist

MTA’s engagement with affected communities enabled MTA to reduce project impacts or make other improvements to address community concerns. At Lyttonsville, for example, MTA refined the configuration of the proposed yard to address community concerns regarding visual, noise and light effects of the yard, and the number of business displacements that will occur through a series of Neighborhood Work Group meetings, a field tour with community representatives, targeted meetings with business owners, and meetings regarding the county’s proposed Sector Plan for the Lyttonsville area. As refined, stormwater facilities, storage tracks and the parking deck are “stacked” to reduce the amount of land impacted and to minimize visual, noise and light effects. Storage activities are located away from residential areas. Land fronting Brookville Road east of Lyttonsville Place is preserved for future redevelopment, a condition strongly favored by the community.

Another example of MTA’s proactive public outreach involved residents in a Riverdale Road EJ community. Community concerns regarding the impacts of the median-running Locally Preferred Alternative, included acquisition of front yards and prohibition of left turns into and out of residential driveways on Riverdale Road. MTA coordinated with the county and community by means of community and public meetings. Meeting notification included invitations in English and Spanish to the residents and owners of property on Riverdale Road and the Eastpines neighborhood behind the homes on Riverdale Road, reminder phone calls, door-to-door in person notifications, and invitations to county departments and elected officials. Spanish language translation was provided at the meetings, which emphasized two-way dialogue. As a result of this outreach, the community strongly supported the idea to shift the Purple Line alignment to the south side of Riverdale Road, displacing the residents. Residents stated they would rather be displaced than lose portions of their front yards and have reduced access entering and exiting their properties by car.

As discussed in FEIS Chapter 4.19, communities including EJ populations within the Project corridor will experience some adverse effects from the Preferred Alternative during construction and operations. For example, during construction, the Project has the potential to temporarily cause dust, noise, vibration and vehicle emissions; changes in vehicular and pedestrian patterns and access; temporary loss or relocation of parking, interruptions in utility service; and visual impacts. The Project will require some permanent business property acquisitions, including business relocations; partial, permanent residential property

acquisitions; residential displacements; and permanent parking impacts. The Project may result in increased rents in the corridor.

MTA will also develop and implement the commitments and mitigation measures regarding EJ communities described in Attachment A of this ROD. For example, prior to construction, MTA will develop and implement a Business Impact Minimization Plan and a communication program. These tools will be used to alert citizens to upcoming activities and to inform and promote access to businesses during construction. MTA will continue to work with specific communities and business areas to address these adverse impacts and develop this plan and program as design advances.

MTA is working with Montgomery and Prince George's counties to create opportunities for project-related local economic benefits including workforce development programs. MTA has partnered with the Maryland Department of Labor, Licensing and Regulation in the creation of a workforce development plan to identify training and certification needs in the local labor pool for the Purple Line, and to help create a local workforce ready and equipped to build and operate the Purple Line.

While all populations within the Project's service area will realize the transportation benefits of the Project to the same extent, they will accrue to a higher degree to minority and low-income populations. Having a station in one's neighborhood provides access and mobility improvements; and 18 of the 21 proposed Purple Line stations are in EJ areas. Ridership analysis of the Preferred Alternative indicates that the largest percentage increase in transit ridership will come from EJ areas. The Purple Line will benefit low-income and minority populations throughout the Project corridor, including transit-dependent residents of those areas. Some of the EJ areas that will experience the effects listed above, such as neighborhoods in Lyttonsville, Long Branch, Langley Park and Riverdale Park, will be among the principal beneficiaries of the Project; the Preferred Alternative will greatly improve access to residences and businesses along University Boulevard and Kenilworth Avenue, helping to promote economic growth. The Preferred Alternative will provide a much-needed improvement in transit service in Montgomery and Prince George's Counties, creating much faster and more direct transit access between residential neighborhoods in EJ areas to employment and commercial centers.

Based on the analysis in the FEIS and public comments, and as stated in FEIS Chapter 4.19.6, FTA has concluded that the Preferred Alternative as a whole will not have disproportionately high and adverse effects on EJ populations. The project complies with Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," as implemented through the US Department of Transportation Order (US DOT Order) 5610.2(a) to Address Environmental Justice in Minority Populations and Low-Income Populations.

## 6.5 National Park Service

The portion of the Baltimore-Washington Parkway in the Project area is owned by the US Government and managed by the NPS under the provisions of the NPS Organic Act of 1916 (16 USC §1) and the NPS General Authorities Act of 1970 (16 USC §1a-1), including



amendments to the latter law enacted in 1978. The laws give the NPS the management authority to protect the resources and values of the parks it operates. The management policies of these laws also prescribe a standard by which the NPS determines whether an effect on a property it manages impairs park resources and values.

In preparing to make that decision regarding the Purple Line project, NPS participated in the NEPA process with FTA and MTA as a cooperating agency. Since 2012, NPS-National Capital Parks-East met monthly with MTA to discuss the Preferred Alternative and the potential impacts it will have on the Baltimore-Washington Parkway. In addition to discussing anticipated impacts, FTA, MTA and NPS worked together to develop the minimization and mitigation measures described in the FEIS and this ROD. FTA and MTA coordination with the NPS will continue following the ROD. As a federal agency, NPS has its own obligation to comply with NEPA before approving the Project's use of land from the Baltimore-Washington Parkway. The NPS has indicated that it intends to adopt FTA's FEIS and issue its own Record of Decision to satisfy its NEPA obligations.

## 6.6 Capper-Cramton Act

The U.S. Capper-Cramton Act of May 29, 1930 (46 Stat. 482) requires the NCPC to formally review all proposed physical changes to lands that were acquired by federal funding appropriated through the Act. The Act provides that "The development and administration thereof [lands acquired with funding under the Act] shall be under the Maryland National Capital Park and Planning Commission and in accordance with plans approved by the National Capital Park and Planning Commission." As such, the NCPC review evaluates all proposed projects for compliance with each approved park General Development Plan and regional federal planning policies from the *Comprehensive Plan of the National Capital: Federal Elements*. The federal review process under NCPC is in addition to review by the M-NCPPC, which has administrative jurisdiction over the parklands.

Portions of the following Capper-Cramton parks are located within the Purple Line study area: Rock Creek Stream Valley Park, Sligo Creek Stream Valley Park, Northwest Branch Stream Valley Park, Paint Branch Stream Valley Park, and Anacostia River Stream Valley Park. However, preliminary engineering plans (from August, 2013) show project impacts to only Sligo Creek Stream Valley Park, Northwest Branch Stream Valley Park, and Anacostia River Stream Valley Park. Planned improvements within the remaining parks - Rock Creek Stream Valley Park and Paint Branch Stream Valley Park - are fully contained within County and State rights-of-way and not subject to NCPC's review authority.

During previous Project planning and design phases, FTA and MTA have coordinated all potential improvements with the NCPC and M-NCPPC as part of a comprehensive and continuing development process. As a result, the Purple Line at the current level of design minimizes potential impacts to affected Capper-Cramton parks to the extent reasonably feasible. All project impacts and mitigation measures are documented within the Final Environmental Impact Statement, the Final Section 4(f) Evaluation in Attachment D of this ROD and *de minimis* use/temporary occupancy exception concurrence letters (Attachment E).

As Purple Line plans are refined and finalized, MTA will invite NCPC to participate in the development of the Environmental Compliance Plan for the affected Capper-Cramton stream valley parks (Sligo Creek, Northwest Branch, and Anacostia River) to ensure that the project continues to comply with federal planning requirements. MTA's Environmental Compliance Plan, at a minimum, will address potential impacts to water quality, vegetation, stormwater management, user experience, and views within each park. MTA will submit all relevant Environmental Compliance Plan sections with the Project's preliminary and final plans for review per NCPC's submission requirements and project guidelines.

## 7. Determinations and Findings Regarding Issues Frequently Raised in Comments on the FEIS

Public comments on the AA/DEIS and FEIS covered a wide range of issues. However, special issues that were a particular focus of public comment included the Capital Crescent Trail, land use and neighborhoods, property acquisitions and displacements, visual effects, noise and vibration effects, and natural resources effects. A summary of FTA's determinations and findings for each of these special issues is provided within this section.

### 7.1 Capital Crescent Trail

As described in FEIS Chapter 2.3.2, the Purple Line Preferred Alternative will be on the Georgetown Branch right-of-way from Bethesda to the point where the transitway transitions to the CSX right-of-way east of Lyttonsville. MTA will plan, design and construct the permanent Capital Crescent Trail between Bethesda and Silver Spring, including the portion of the permanent trail within the Georgetown Branch right-of-way. The permanent trail will replace the existing interim trail in the Georgetown Branch right-of-way (referred to in the FEIS as the Georgetown Branch Interim Trail).

Comments and one petition regarding the Capital Crescent Trail were received during the AA/DEIS and FEIS comment periods. Many support the completion of trail into Silver Spring; and many do not support the Purple Line in the Georgetown Branch right-of-way. FTA and MTA responses to the comments are provided in FEIS Appendix A, and Attachment C of this ROD.

MTA and FTA have consistently acknowledged that the permanent Capital Crescent Trail will be different from the Georgetown Branch Interim Trail that exists today. The existing trees and vegetation in the right-of-way will need to be removed. New landscaping with native species will be planted, but it will not be similar to what exists today. These impacts to the existing interim trail are set out in FEIS Chapter 4.9.3.

The consideration of the Georgetown Branch right-of-way in this study took place against the backdrop of more than two decades of planning by the County regarding the future use of that corridor. Until the mid-1980s, the right-of-way remained in use for an active freight railroad. In 1988, after freight rail use was discontinued, the County purchased the Georgetown Branch right-of-way for potential use as a transportation facility, for a transitway and trail. In January

1990, the Montgomery County Council approved the Georgetown Branch Master Plan Amendment, which officially designated the right-of-way for a combined transitway and trail.

As described in FEIS Table 6-4 and the Responses to Comments in Attachment C of this ROD, the Georgetown Branch Interim Trail - that is, the temporary trail that currently exists within the Georgetown Branch right-of-way - is not a Section 4(f) resource. Montgomery County Council adopted a resolution on August 1, 1995 authorizing the establishment of an interim hiker/biker trail in the Georgetown Branch right-of-way. The resolution stated that “the section between Bethesda and Silver Spring remains designated as a transportation corridor in which an interim trail is permitted until the master planned transit and trail facility is approved and funded consistent with the master plan.” FTA determined that the unpaved hiker/biker trail in the Georgetown Branch right-of-way is not a Section 4(f) resource because it was constructed as a temporary facility with an explicit understanding that the right-of-way was reserved for a transportation purpose. The determination is consistent with 23 CFR 774.11(h), which provides that Section 4(f) does not apply when a property that has been formally reserved for a future transportation facility temporarily functions for park or recreation purposes. This determination also is consistent with 23 CFR 774.11(i), which provides that Section 4(f) does not apply when a park or recreational area and a transportation facility are jointly planned.

FTA and MTA selected the Georgetown Branch alignment only after evaluating a variety of alignments for a transitway connecting Bethesda to Silver Spring. For the reasons documented in FEIS Chapter 2, FTA and MTA have determined that an alignment along the Georgetown Branch right-of-way remains the most desirable route for providing fast, efficient, and reliable transit, and also have determined that the adjacent Capital Crescent Trail can be safe and attractive.

Therefore, the Preferred Alternative includes a transitway and the paved Capital Crescent Trail in the Georgetown Branch right-of-way. The permanent Capital Crescent Trail will be constructed within the Georgetown Branch right-of-way for a distance of 3.3 miles between Bethesda and the CSX Metropolitan Branch. It will then continue beyond the Georgetown Branch right-of-way to Silver Spring where it will connect to the Metropolitan Branch Trail.

FTA and MTA consider completion of the Capital Crescent Trail between Bethesda and Silver Spring to be an integral part of the Purple Line project. In developing the design for the trail, MTA have worked closely with trail designers, adjacent communities, Maryland-National Capital Park and Planning Commission (M-NCPPC), and the Montgomery County government (which will own and maintain the trail).

## 7.2 Land Use and Neighborhood Impacts

During the AA/DEIS and FEIS comment periods, FTA and MTA received comments concerning the FEIS analysis as well as land use and neighborhood effects of the Project: demographic and planning data sources, change in neighborhood character, proposed zoning and development, and crime. FTA and MTA responses to the comments are provided in AA/DEIS Appendix A and Attachment C of this ROD.

Throughout the Purple Line planning and design process, MTA has used context sensitive design practices to avoid and minimize land use and neighborhood impacts in the corridor.

Specifically, MTA has coordinated with affected communities during design development to understand concerns about the Project and to refine the design to avoid and minimize impacts in a reasonable manner. The Purple Line is designed to serve the communities in the corridor and to fit into a developed environment with minimal impacts. In much of the corridor the Purple Line will operate in or adjacent to existing roadways and transportation corridors to minimize the impacts to both the built and the natural environment. In several areas, such as on Ellin Road and Wayne Avenue, the Purple Line will operate in shared lanes further reducing the impact to local communities. MTA's mitigation commitments regarding land use and neighborhoods are in Attachment A of this ROD.

The Purple Line will support proposed development in the Project corridor, as planned by local jurisdictions. One of the benefits of the Purple Line is to fulfill State and County land use plans for higher density in developed areas, particularly inside the Capital Beltway. The Purple Line corridor comprises a variety of urban and suburban land uses, including residential, commercial, recreational, institutional, and industrial. Clusters of higher density mixed-use development characterize the five major activity centers of Bethesda, Silver Spring, Takoma/Langley Park, College Park, and New Carrollton. Current zoning concentrates urban growth around activity centers to support transit-oriented development and surrounding low- to medium-density residential uses. Transit-oriented development opportunities exist in activity centers that Prince George's and Montgomery Counties have identified for transportation improvements, growth and redevelopment opportunities, as well as in areas that could benefit from more efficient transit. Both Montgomery County and Prince George's County have plans or studies approved or under development to promote transit-oriented development around the appropriate Purple Line stations. In conjunction with each plan's recommendations, the Purple Line will provide the opportunity to increase mobility, provide access to jobs, and improve the quality of life in the area. More detailed discussion of land use and neighborhood effects is provided in FEIS Chapters 4.2 and 4.3.

Ultimately, all development decisions (including land use and zoning) around the Purple Line or at station areas will be determined by the local jurisdictions. Montgomery and Prince George's counties have exemplary public involvement in their land use planning and in the responsible management of land use.

## 7.3 Property Acquisitions and Displacements

FTA and MTA received comments concerning Project-related property acquisitions and displacements during the AA/DEIS and FEIS comment periods: residential and business displacements, easement locations, acquisition cost, and schedule of acquisitions. FTA and MTA responses to the comments are provided in AA/DEIS Appendix A and Attachment C of this ROD.

In building a transitway in a developed corridor it is challenging to avoid property acquisitions and displacements. MTA has worked diligently to develop the Preferred Alternative to minimize impacts to private property; however, some displacements will be necessary, as shown in Table 4-8 of FEIS Chapter 4.4. MTA has coordinated, and will continue to coordinate, with affected property owners and tenants to develop means to avoid or minimize property acquisitions and displacements. For example, MTA, in coordination with the

Maryland State Highway Administration (MD SHA), reduced the number of displacements along University Boulevard from 9 to 3 by reducing the future 6-lane section of the roadway to a 4-lane section (FEIS Chapter 2.2.2). In another example, MTA reduced the number of business displacements by reconfiguring the Lyttonsville Yard (FEIS Chapter 2.2.2) and moved the traction powered substation on Montgomery Avenue (Attachment F of this ROD). Since the publication of the FEIS, more detailed design has allowed MTA to reduce the number of properties affected by the Project from the over 700 described in the FEIS (both property acquisition and temporary easements) to approximately 615 properties. Affected owners will be justly compensated as required by law, including relocation benefits where eligible. As discussed in FEIS Chapter 4.4, MTA will provide relocation assistance and compensation for displaced residents and businesses as required by the Uniform Act, Federal Transit Administration (FTA) Circular 5010.1D, Grants Management Requirements, MTA's Relocation Assistance Program, and the Real Property Annotated Code of Maryland.

The property acquisition process can be lengthy, particularly if it is a full acquisition that includes relocation of the existing property user. The scheduling of property acquisition will depend, in part, on the construction schedule for the Project; however, MTA appreciates that property owners or tenants may wish to remain on the properties as long as possible, and MTA will endeavor to accommodate property owners and tenants where feasible.

## 7.4 Economic Effects

As stated in *FEIS Chapter 4.5-Economic Activity*, the Purple Line will have both short-term and long-term economic benefits. It will result in increases in employment, earnings, and output in the region. Future development will create more jobs for local residents and improve mobility and accessibility for commuters. Purple Line will complement and support the many state, regional, and local land use plans that have proposed transit-oriented development focused around the Purple Line stations. In many cases, state initiatives and local land use planning and zoning actions undertaken in parallel with the development of the Purple Line anticipate the benefits of the Purple Line by facilitating mixed-use redevelopment around the stations, often at higher densities. It is important to understand that actual station-area development may not occur at the densities proposed by current plans. In addition to the possibility that the plans may be revised, future development may be limited by various factors including market conditions, developer preferences, environmental permitting issues, and infrastructure availability. Potential indirect effects of land use and development could include localized increased business expenses (e.g., rents) from increased property values, business migration and displacement, changes in the availability and affordability of housing stock, and changes in neighborhood character in the indirect effects study area. MTA has worked during the planning and design stages to avoid or minimize impacts to resources. MTA is continuing these efforts by integrating public involvement with design development.

## 7.5 Visual Impacts

During the AA/DEIS and FEIS comment periods, FTA and MTA received comments concerning visual effects of the Project due to the poles, wires, lighting, station design,

retaining walls, landscaping, tree and vegetation removal, and overall aesthetics in the context of the communities. FTA and MTA responses to the comments are provided in AA/DEIS Appendix A and Attachment C of this ROD.

FTA and MTA acknowledged in FEIS Chapter 4.9 that the Purple Line will result in a change in visual character; poles, wires and other structures will generally be visible. In designing the Preferred Alternative, MTA has made efforts to respect the visual quality and integrity of the neighborhoods in which the Project will be built, using context sensitive design techniques. Through its public involvement and stakeholder coordination program, MTA has met with communities and stakeholders to understand community concerns and visions.

Project elements, such as the station shelters, were developed with input from local stakeholders and designed to be understated and fit into the surrounding community. The location, setting and design of each traction power substation has been analyzed, public input considered, and where reasonable and appropriate, MTA will provide landscaping and other screening design features and architectural treatments.

Efforts have been made to reduce the visual effect through the design of the system using center poles where possible to reduce the number of poles, such as along the Georgetown Branch right-of-way, or side poles where they will better blend with the backdrop of adjacent buildings such as through the University of Maryland campus. MTA will continue to use context-sensitive design principles to identify the material and color of poles. There may be limited opportunities in some locations for the joint use of poles by the Purple Line wires and local streetlights or signage.

MTA will use the Art-In-Transit program to enhance key elements of the Project, as appropriate. MTA has commissioned architect and sculptor Jo Schneider to lead the Art-In-Transit Program for the Purple Line. The Art-In-Transit Program will incorporate art into the design of the stations and other built elements of the Project such as retaining walls and bridges. This will be achieved by turning standard light rail elements – walls, fencing, lighting, etc. – into works of art. The mission is to incorporate artwork to make the Purple Line distinct in its design and artistic impact, encourage civic pride, and to be a positive symbol for the neighborhoods, city, and area. Working with the counties, MTA will identify an Artist Selection Committee which will include community members and arts professionals.

MTA is committed to other mitigation measures to offset visual effects including continued coordination with the counties and local community regarding the visual and aesthetic elements of the Project, including the Capital Crescent Trail, transitway, stations, bridge structures, and traction power substations. During construction, MTA will require the construction contractor to use best management practices to maintain an orderly appearance of active work zones and staging areas. Mitigation commitments are listed in Attachment A of this ROD.

## 7.6 Noise and Vibration Impacts

During the AA/DEIS and FEIS comment periods, FTA and MTA received comments concerning the FEIS noise analysis as well as noise and vibration effects of the Project in the context of the communities: Project construction, LRT operations, use of bells or horns, station public address systems, and location-specific concerns, as well as the effects of noise on public

health. FTA and MTA responses to the comments are provided in AA/DEIS Appendix A and Attachment C of this ROD.

MTA conducted a noise and vibration impact assessments for the Project in accordance with NEPA and FTA assessment guidelines and procedures. Primary sources of Project noise are the interaction of the vehicle wheels with the track including wheel squeal on curves, horns or bells, public address systems at stations, and the transformer hum at traction power substations. A primary source of vibration is the interaction of the vehicle wheels with the track.

The results of the noise assessments indicate that the Preferred Alternative will cause noise and vibration impacts in some locations identified in FEIS Chapter 4.11.3. MTA acknowledges that users of the Capital Crescent Trail will experience increased noise levels. For further detail see Attachment C: FEIS Comments and Responses. Using the results of the noise and vibration assessments, MTA refined the Project design to reduce the effects of noise and vibration. For example, LRT vehicles will include vehicle skirt panels which will cover the wheels and reduce wheel noise. As another example, MTA has added a combination of noise walls and retaining walls between Bethesda and Rock Creek Stream Valley Park to reduce wheel-track generated noise. MTA will design and implement the commitments and mitigation measures regarding noise and vibration described in Attachment A of this ROD.

## 7.7 Natural Resources

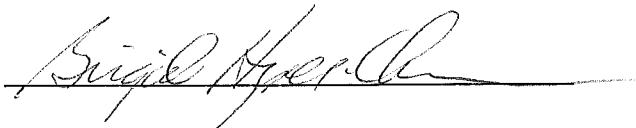
During the AA/DEIS and FEIS comment periods, FTA and MTA received comments concerning natural resources effects of the Project: tree removal, wildlife and habitat effects, protected species, water quality, waterways, wetlands, and stormwater management. FTA and MTA responses to the comments are provided in AA/DEIS Appendix A and Attachment C of this ROD.

The Purple Line is being planned and designed by MTA in accordance with all applicable local, state, and federal laws and regulations. These regulations, including the National Environmental Policy Act (NEPA), set out specific criteria for environmental and social impacts and how they are to be avoided, minimized and/or mitigated. FTA and MTA have worked with resource agencies, stakeholders, and local communities to refine the design of the Purple Line in a manner that avoids or minimize effects on natural resources.

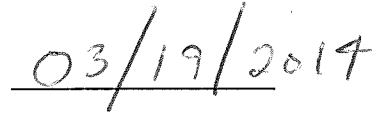
For example, FTA and MTA have consulted with the US Fish and Wildlife Service and Maryland Department of Natural Resources under Section 7 of the Endangered Species Act to determine the presence of state or federally protected species within the project corridor. In particular, FTA and MTA inquired about the potential Project effect on federally-listed species such as the Hay's Spring Amphipod and the candidate species, the Kenk's Amphipod. Through Section 7 coordination, the US Fish and Wildlife Service (USFWS) has determined that the Project will have no impact on protected species. See USFWS letter in Attachment E of this ROD.

In another example, MTA coordinated with the Maryland Department of Natural Resources regarding tree impacts and is updating its Forest Stand Delineation to reflect the current, refined, LOD in accordance with the implementing regulations of the Forest Conservation Act.

Despite these design and agency coordination efforts, the transportation, economic, and community benefits of the Project will come with some unavoidable adverse effects. FEIS Chapters 4.13 through 4.15 and the associated technical reports provide more detail regarding Project effects on natural resources. MTA is committed to additional coordination with regulatory agencies as the Project design advances, MTA compliance with applicable Federal and state environmental regulations, and implementation of the commitments and mitigation measures described in Attachment A of this ROD.



Brigid Hynes-Cherin  
Regional Administrator



Date of Approval