

# 4.0 Recommended System Plan

**Based on the results of the planning process described in the preceding chapter, the recommended System Plan consists of a network of eight new interconnected streetcar lines and thirteen Metro Express bus lines. The following sections describe each of these elements and their phased implementation. This chapter also describes the recommended maintenance facilities and funding strategies to support the proposed streetcar system.**

## 4.1 Streetcar System

The recommended plan includes the addition of modern streetcar service to the multimodal transportation network serving the District of Columbia. Figure 4-1 shows examples of typical streetcar vehicles, tracks, and stops. The streetcar system will consist of small rail cars that operate along in-street tracks, at grade level, and mixed with automobile traffic. There may be some instances where the system utilizes exclusive right-of-way where it is available. The streetcar tracks will be located along the curbside travel lanes in some areas and along the centermost travel lanes, or possibly in a roadway median, in other areas. The streetcar system will use modern and sleek, low-floor vehicles with wide doors and large windows. The air-conditioned streetcar vehicles are typically about 8 feet wide and 66 feet long and can accommodate up to 168 seated and standing passengers. Each vehicle can be operated in either direction, eliminating the need for end-of-line turn around loops.

Streetcar stops will be located about every  $\frac{1}{4}$  mile to  $\frac{1}{2}$  mile along the routes. They will include a passenger waiting area, a shelter, and system information regarding fares, routes, and schedules. The stops may be located on a special platform that is about 75-feet long and 14-inches high, which enables level boarding, or they may simply utilize a portion of the sidewalk where possible. For areas with on-street parking, the streetcar stop may be located on a curb bulb-out that extends the sidewalk out to meet the streetcar vehicle operating in the roadway travel lane. Streetcar stops may also be located in a center median of the roadway in areas where center-running tracks are used. The streetcar system is planned to operate seven days per week with service frequencies of around 10 minutes throughout the day and evening, including late night service on weekends. For segments of the system that accommodate multiple lines, the services will be more frequent along these trunk lines.

As shown in Figure 4-2, the system includes the following eight streetcar lines that connect neighborhoods, employment centers, shopping, recreational facilities, and intermodal transportation hubs. The lines represent general corridors for service rather than specific alignments. More detailed environmental studies and alignment studies will need to be completed before specific routings can be determined.

- **Bolling AFB to Minnesota Avenue Metrorail Station Line** – This streetcar line will connect Bolling Air Force Base and the Naval Annex offices to the Anacostia Metrorail Station, running generally along portions of South Capitol Street, Howard Road and Firth Sterling Avenue. The line will also extend further to the northeast generally following a portion of Martin Luther King, Jr. Avenue, Good Hope Road and Minnesota Avenue to the Minnesota Avenue Metrorail Station. This line will connect neighborhoods to existing and planned pedestrian-friendly commercial and mixed-use development in the Historic Anacostia area and downtown Ward 7 at the Minnesota Avenue and Benning Road intersection, which includes the new District Department of Employment Services headquarters.
- **Georgetown to Benning Road Metrorail Station Line** – This line will connect the downtown Washington employment core to residential neighborhoods in Northeast DC, a revitalizing commercial district along H Street NE, established commercial retail businesses in Georgetown, and the Union Station Intermodal Transportation Center. The line also will connect to seven Metrorail Stations and serve planned mixed-use development located in downtown Ward 7 near the intersection of Benning Road and Minnesota Avenue.
- **Congress Heights to Washington Circle Line** – This line will extend streetcar service from the Historic Anacostia business district south to Savannah Street in the Congress Heights neighborhood in Southeast DC

Figure 4-1: Streetcar Features



Shelter with System Information



Raised Platform for Low Floor Boarding



Vehicle Interior



Streetcar Vehicle on Rails Embedded in the Pavement

Figure 4-2: System Plan-Streetcar Element

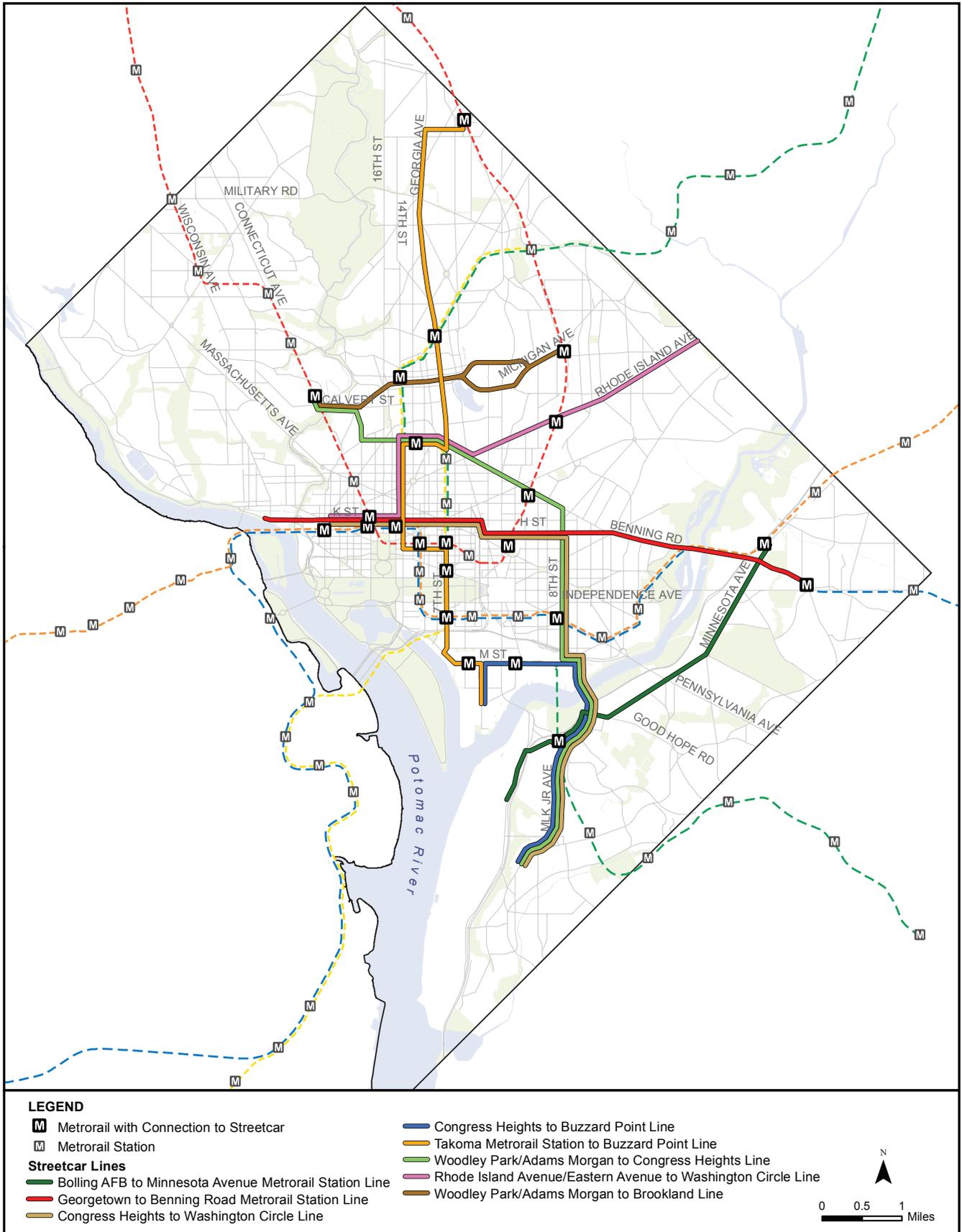
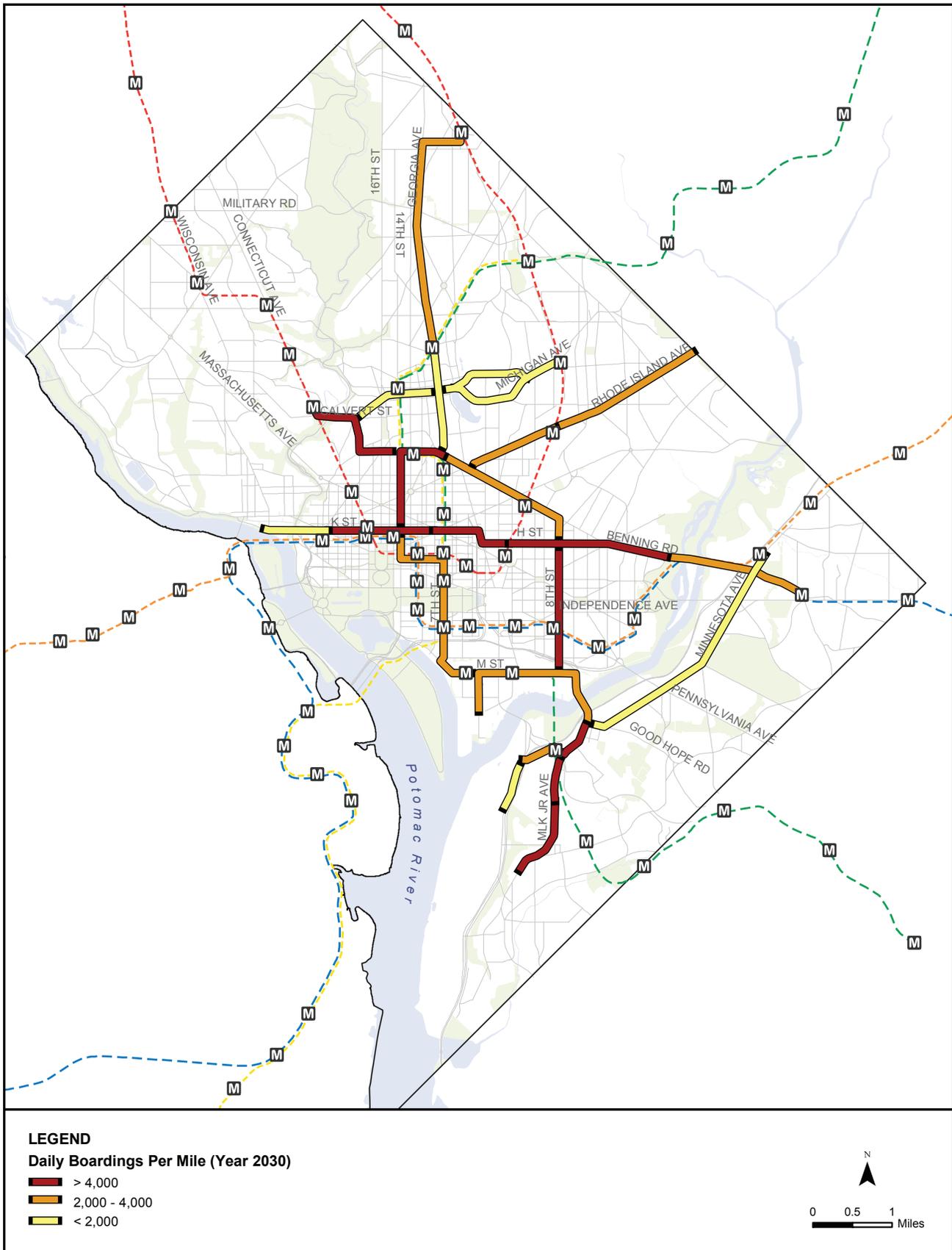


Figure 4-3: Streetcar Ridership Projections



and north across the Anacostia River to the Capitol Hill neighborhood, the H Street NE commercial district, and then to the downtown Washington employment core along K Street NW. Along the way the line will serve the future headquarters of the Department of Homeland Security at the former St. Elizabeths Hospital site, which will bring 14,000 new employees to the area. The line also will serve the Anacostia Waterfront, growing office and mixed-use development in the Near Southeast area, commercial businesses in the M Street SE/Barracks Row area, and connect to Union Station. This line will connect to all five Metrorail lines along the corridor.

- **Congress Heights to Buzzard Point Line** – This line will serve the Anacostia Waterfront area including the Nationals Park baseball stadium, Buzzard Point, and the growing commercial, office, and residential development along the route. The line will extend across the Anacostia River at the 11th Street Bridge and connect to residential neighborhoods east of the river. The line will link with the Metrorail Green Line at the Anacostia and Navy Yard Stations
- **Takoma Metrorail Station to Buzzard Point Line** – This line will connect the Georgia Avenue NW commercial corridor and adjacent neighborhoods with Howard University, the revitalized U Street NW commercial corridor, downtown Washington, the National Mall, and the Southwest Waterfront. This corridor will extend from the Takoma Park Metrorail Station west to the Georgia Avenue Corridor and then south to the U Street area. The line will also serve the 14th Street NW Corridor south of U Street and the 7th Street SW Corridor to the Buzzard Point area.
- **Woodley Park/Adams Morgan to Congress Heights Line** – This line will provide a connection between several commercial districts including Woodley Park, Adams Morgan, U Street NW, NoMa, H Street NE, Barracks Row, Anacostia Waterfront, and Historic Anacostia. The line also will have direct connections to all five Metrorail lines and serve Gallaudet University and the National Zoo.
- **Rhode Island Avenue/Eastern Avenue to Washington Circle Line** – This line will extend from Eastern Avenue in Northeast DC to the Washington Circle/Foggy Bottom area near downtown Washington and generally follow Rhode Island Avenue NE/NW, U Street NW, 14th Street NW and K Street NW. This line will connect the Brentwood area and neighborhoods along Rhode Island Avenue in Northeast DC, that are currently not well served by the existing Metrorail system, to employment centers and commercial districts in downtown Washington and adjacent areas.

- **Woodley Park/Adams Morgan to Brookland Line** – This line will extend from Woodley Park to the Brookland neighborhood in Northeast DC. The line will provide a needed east-west transit connection and serves the Adams Morgan and Columbia Heights commercial districts, Washington Hospital Center, Howard University, Catholic University, and planned large scale mixed-use developments located near the Soldiers' and Airmen's Home and McMillan Reservoir.

Forecasts of ridership for the streetcar system were prepared using the Metropolitan Washington Council of Governments Regional Travel Demand Forecasting Model. The Year 2030 forecast ridership for the entire streetcar system is about 147,000 riders on the average weekday. The total system ridership translates to an average daily ridership per mile of 3,900 for the system. As shown in Figure 4-3, the heaviest forecast ridership is likely to occur along the K Street NW, Martin Luther King, Jr. Avenue SE, 14th Street NW, and H Street NE segments of the planned system.

## 4.2 Metro Express Limited-Stop Bus System

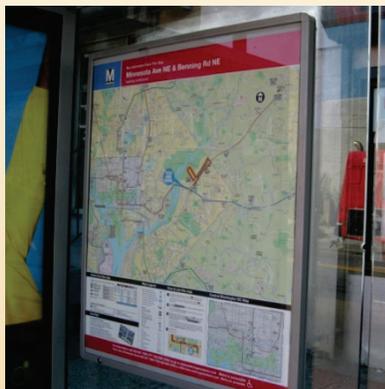
The Metro Express (originally called “Metro Extra”) bus service element implements new branded limited-stop bus service in several corridors. Metro Express service consists of limited-stop bus service that would only serve specially designated high-ridership stops that are ¼ to ½ mile or more apart. The routes use specially branded blue buses so riders can easily recognize them as limited-stop buses. The service is frequent and offers better travel times than the regular Metrobus local service, because it makes significantly fewer stops. The routes will also incorporate other features to help reduce travel times for passengers, including signal priority for transit at intersections and special lanes to bypass congested roadway segments where possible. Figure 4-4 shows some of the key features of the Metro Express bus service.

As shown in Figure 4-5, the Metro Express limited-stop bus element of the plan envisions the implementation of Metro Express limited-stop service in 13 corridors. These were identified based in part on the results of the evaluation of corridors described in Chapter 3.0. This element also includes some additional Metro Express limited-stop corridors that were identified as part of the 2008 WMATA Metrobus Priority Corridor Network Plan. Some of the initial Metro Express limited-stop bus corridors have been designated as future streetcar corridors. In these corridors the Metro Express limited-stop bus service would likely precede streetcar service in the short term.

Figure 4-4: Metro Express (Limited Stop) Bus Features



Bus Shelter with System Information

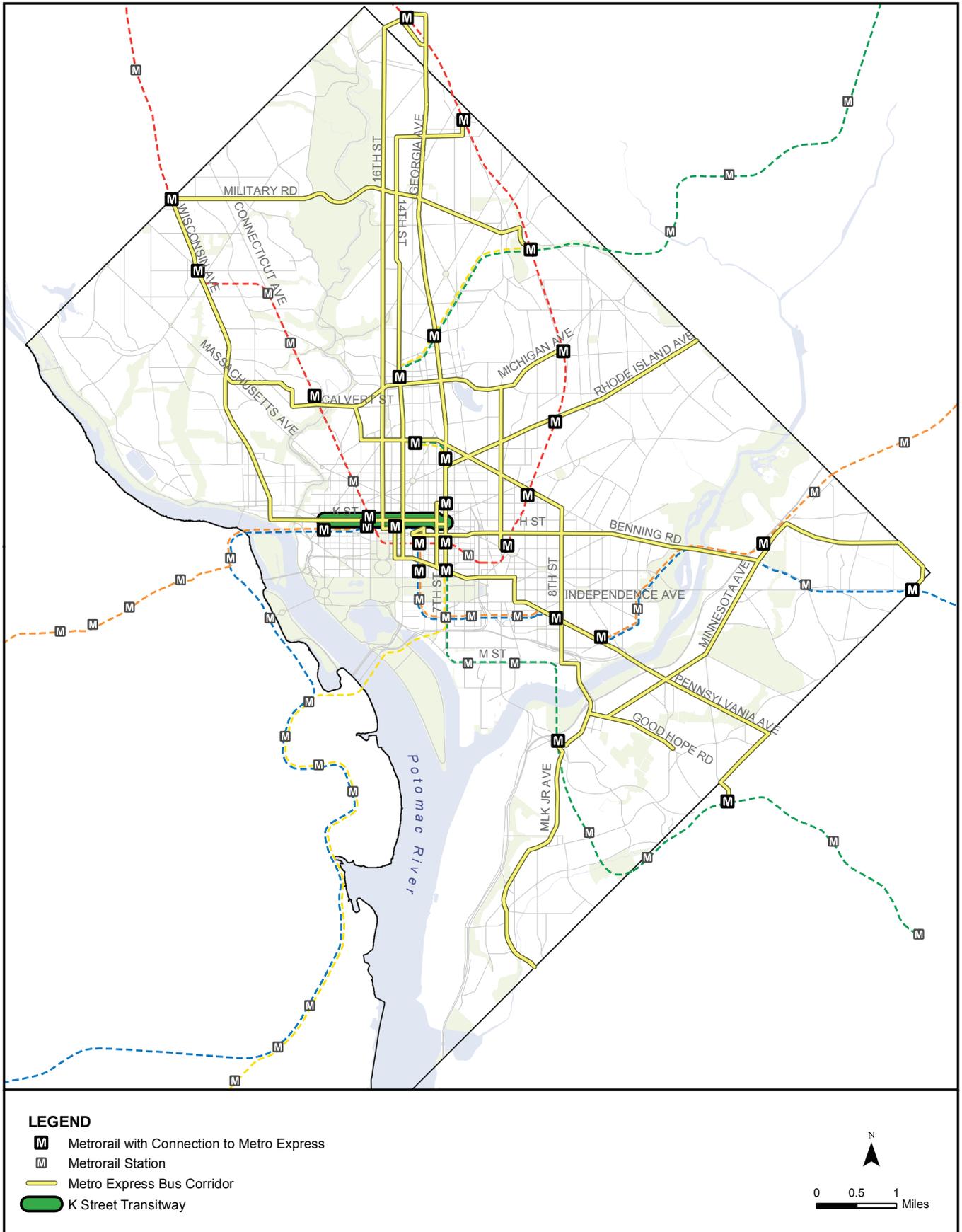


System Mapping and Real-time Information



Limited Stops, Low Floor Boarding and On-board Fare Collection

Figure 4-5: System Plan - Metro Express (Limited-Stop) Bus Element



As streetcar service is introduced in these particular corridors, the Metro Express limited-stop bus service will be optimized so that the bus and streetcar lines provide complementary services. Under this arrangement Metro Express will serve longer corridor trips than the streetcar service, with stops that are further spaced apart. This restructured service will further reduce travel times for passengers traveling relatively long distances via transit.

The Metro Express element of the long-term system plan includes service in the following corridors:

- **Georgia Avenue/7th Street NE Corridor** – Metro Express (Route 79) service was implemented in 2007 along this corridor. The service connects Silver Spring with the Gallery Pace/Chinatown area in downtown Washington. The route also serves Howard University and the Convention Center area.
- **Pennsylvania Avenue SE Corridor** – Metro Express (Route 39) service was implemented in 2008 along this corridor. It operates along Pennsylvania Avenue SE and connects downtown Washington to Capitol Hill, Barracks Row, and neighborhoods east of the Anacostia River.
- **Wisconsin Avenue/K Street NW Corridor** – Metro Express (Route 37) service was implemented in 2008 along Wisconsin Avenue NW and Massachusetts Avenue NW. The route connects Friendship Heights, Tenleytown, National Cathedral area, Dupont Circle, and downtown Washington. In the future this service would utilize the planned K Street Transitway, which will incorporate transit-only lanes into a reconstructed roadway. The K Street Transitway also will accommodate the DC Circulator Route, local Metrobus and streetcar service pending additional study.
- **16th Street NW Corridor** – Metro Express service (Route S9) was implemented in 2009 on 16th Street NW. The service connects residential neighborhoods in the northern part of the city with the McPherson Square area in downtown Washington.
- **14th Street NW Corridor** – This corridor will include new service along 14th Street NW from Pennsylvania Avenue NW to Aspen Street NW and a connection to the Takoma Park Metrorail Station. The route will serve the Columbia Heights and U Street commercial districts and residential areas to the north.
- **North Capitol Street/Michigan Avenue** – This corridor will include service along Michigan Avenue NE from the Brookland/Catholic University Metrorail Station to North Capitol Street and along North Capitol Street from Michigan Avenue NE to Massachusetts Avenue NW and Union Station.
- **Rhode Island Avenue NE Corridor** – This corridor will include service along Rhode Island Avenue NE/NW from Eastern Avenue to 7th Street NW. It will serve an area of the city that has traditionally been underserved by transit. The corridor is designated as a Great Streets corridor which will have comprehensive streetscape and pedestrian improvements.
- **Benning Road/H Street Corridor** – This corridor will include service along portions of Benning Road and H Street NE from Downtown Washington to East Capitol Street. The existing bus routes serving this corridor are some of the most heavily used and overcrowded in the city. The corridor will serve a revitalizing H Street NE commercial district and planned redevelopment east of the Anacostia River.
- **Florida Avenue/U Street NW/8th Street SE Corridor** – This corridor will connect the Anacostia Waterfront, Barracks Row, H Street NE, NoMa, U Street NW, Adams Morgan, and Woodley Park commercial districts.
- **South Capitol Street/Martin Luther King, Jr. Avenue/Minnesota Avenue Corridor** – This service will operate along portions of South Capitol Street, Martin Luther King, Jr. Avenue SE, and Minnesota Avenue SE. The route will serve the planned Department of Homeland Security headquarters campus, Historic Anacostia business district and planned redevelopment near the intersection of Minnesota Avenue and Benning Road.
- **Good Hope Road** – This corridor will include service along Good Hope Road SE and Martin Luther King, Jr. Avenue SE from the Anacostia Metrorail Station to the Skyland commercial area at Alabama Avenue SE.
- **Calvert St/Columbia Rd Corridor** – This corridor will provide needed east-west transit service connecting the National Cathedral area on Wisconsin Avenue to Woodley Park, Columbia Heights, Catholic University and the Brookland area. It also will serve planned mixed-use development near the Soldiers' and Airmen's Home and McMillan Reservoir.
- **Military Rd/Missouri Avenue Corridor** – This corridor will provide needed east-west transit service along Military Road and Missouri Avenue NW to the Fort Totten Metrorail Station, which is served by three Metrorail lines. The corridor also will serve redevelopment sites planned for the Fort Totten Area.

## 4.3 Project Phasing

This section describes the implementation phasing of projects included in the 2010 Update. Because the improvements cannot all be constructed and operated immediately, improvements will be gradually phased in over a period of years. For the implementation chronology, projects were divided into a set of initial phase of projects that were already under construction as of 2009 and three future phases of system development. The streetcar project phasing strategy considers the following key principals:

- **Focus on the Highest Ridership Segments for Early Implementation** – Ridership forecasts have been prepared for the recommended streetcar system using the regional travel demand forecasting model and Metropolitan Washington Council of Governments population and employment forecasts. The corridor segments with the highest ridership per mile include K Street NW, H Street NE, 14th Street NW, U Street NW, 8th Street NE, Martin Luther King Jr. Avenue SE, and Calvert Street NW.
- **Establish an Interconnected Streetcar Network** – This includes establishing an initial system of interconnected streetcar lines in Phase 1 that expands outward in subsequent phases of system implementation. This allows for greater flexibility for operations, vehicle fleet management, and maintenance and storage facility construction and utilization.
- **Coordinate Streetcar Construction with Other Infrastructure Projects** – To the extent possible, the streetcar phasing has been designed to coordinate the construction of streetcar facilities with planned roadway, bridge reconstruction, and development projects located along the line. For example, the streetcar projects in the H Street NE, Benning Road, Martin Luther King, Jr. Avenue, and 11th Street Bridge were identified for the earliest phases of implementation to be able to incorporate streetcar track construction into the road and bridge reconstruction projects that are currently underway.

Figures 4-6 through 4-9 show the recommended project phasing.

### Initial Projects

This phase consists of projects that have already initiated design and construction activities by 2010 as well as implementation of new Metro Express services. The Initial Projects include the following:

- **Implementation of Initial Metro Express Bus Services** – Current implementation of the relatively low-cost Metro Express service has resulted in immediate improvement to several transit corridors. These initial corridors include some of those recommended in the WMATA Metrobus Priority Corridor Network Plan as well as the Transit System Plan. Service is being implemented along portions of 16th Street NW, Georgia Avenue NW/7th Street NW, Wisconsin Avenue NW, and Pennsylvania Avenue SE.
- **Anacostia Streetcar Initial Line Segment** – In 2004 DDOT and WMATA identified the Anacostia Initial Line Segment as the first phase of a future streetcar system for the District of Columbia. The segment connects the Anacostia Metrorail station with the Naval Annex in Southeast DC. Construction activities for this project began in 2009.
- **H/Benning Streetcar Segment** – DDOT also prioritized the H/Benning Streetcar line because of its high ridership potential and service to an area targeted for economic development. This phase includes streetcar construction along H Street NE and Benning Road between Union Station and Oklahoma Avenue. Track construction for this segment was initiated in 2009 as part of the reconstruction of these roadways.
- **K Street Transitway** – The project will construct a dedicated transitway to accommodate buses and eventually streetcars. It is currently in the environmental study and preliminary design phase of project development.

### Phase 1

Phase 1 will connect the initial projects described above and expand the streetcar system to the north, east, and south. It includes the streetcar segments with the highest forecast ridership and establishes a single interconnected streetcar system. The Phase 1 system will be completed by 2015; activities consist of the following projects:

- **Extension of the Georgetown to H/Benning Streetcar Line to Ward 7 and Downtown** – After completion of the initial H/Benning Streetcar segment, expansion plans will focus on extending this line east from Oklahoma Avenue to the Benning Road Metrorail Station and extending it west from Union Station to K Street NW and Washington Circle (near the Foggy Bottom-GWU Metrorail station). Corridor analyses have indicated that the K Street NW segment has the highest ridership potential in the system. The streetcar alignment will utilize the dedicated transit lanes that will be established along K Street NW as part of the planned transitway project.

Figure 4-6: System Plan-Initial Projects

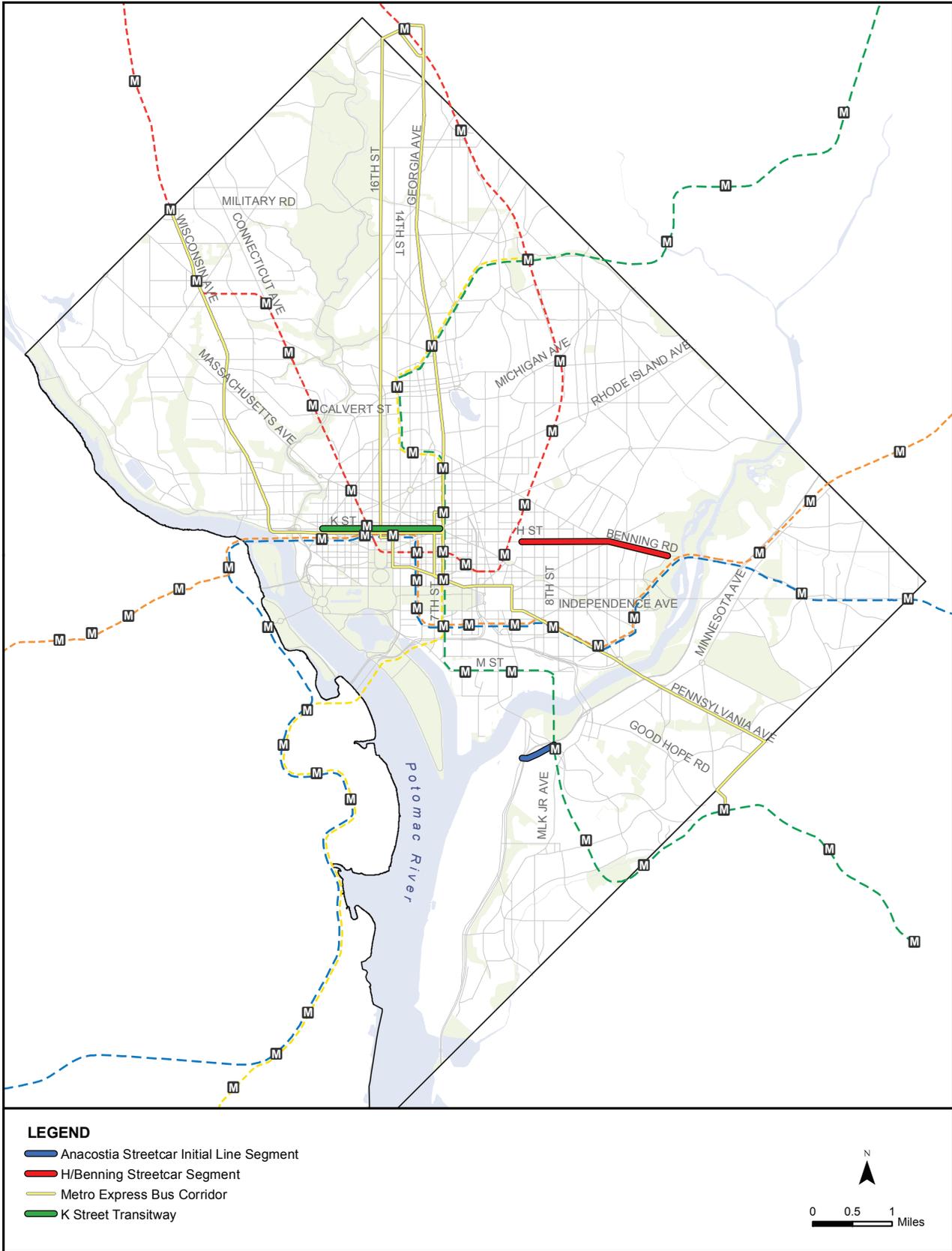


Figure 4-7: System Plan-Phase 1

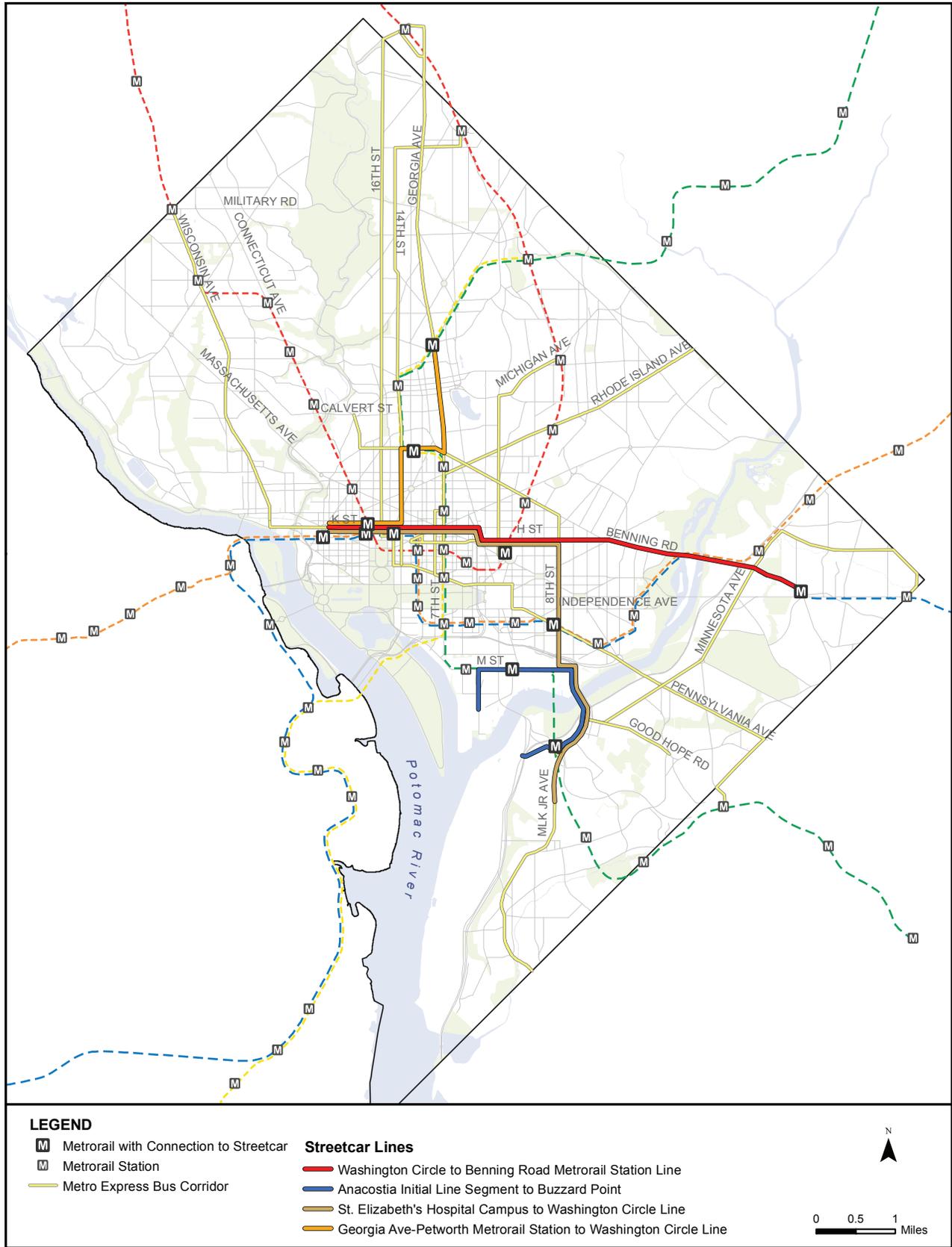


Figure 4-8: System Plan - Phase 2

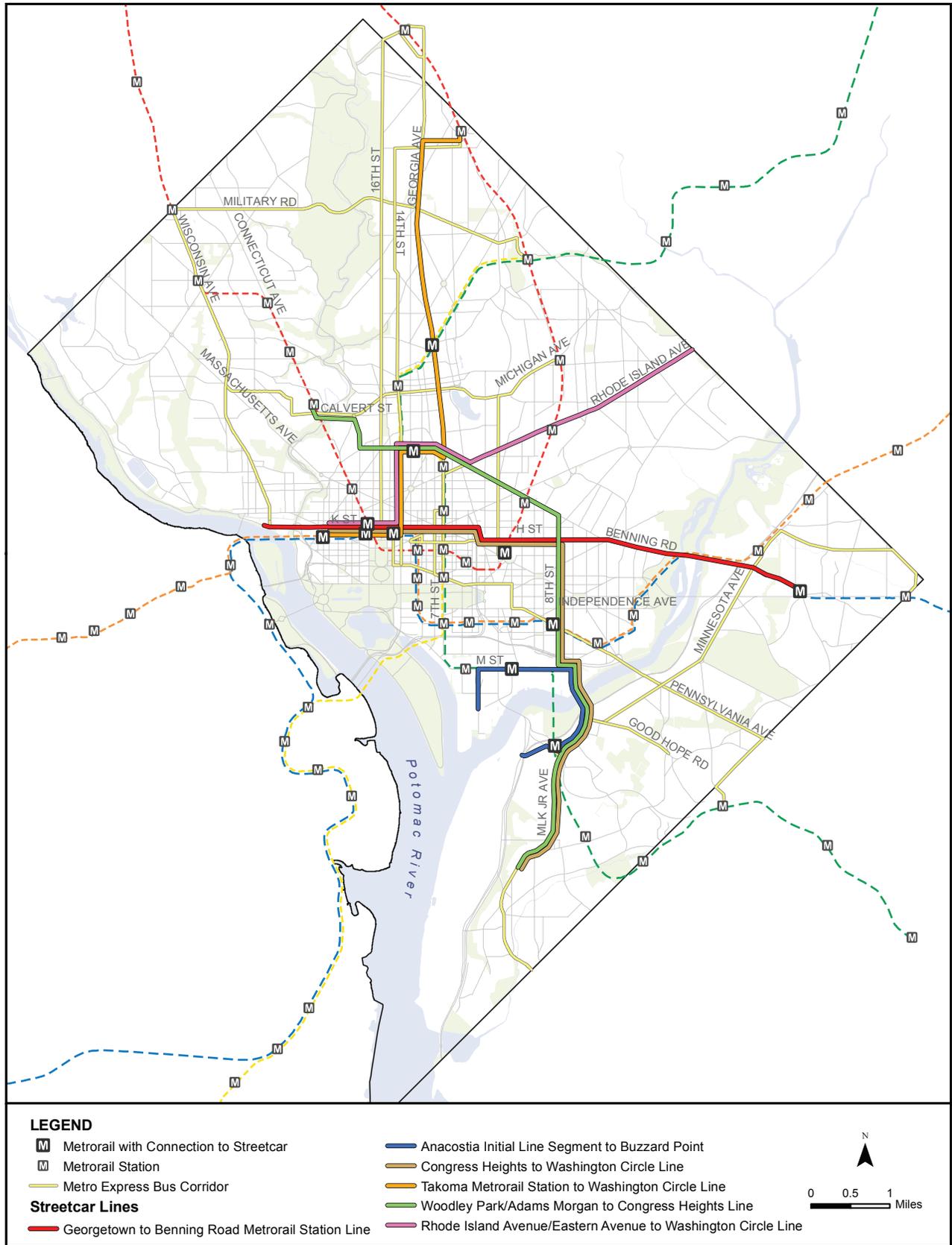
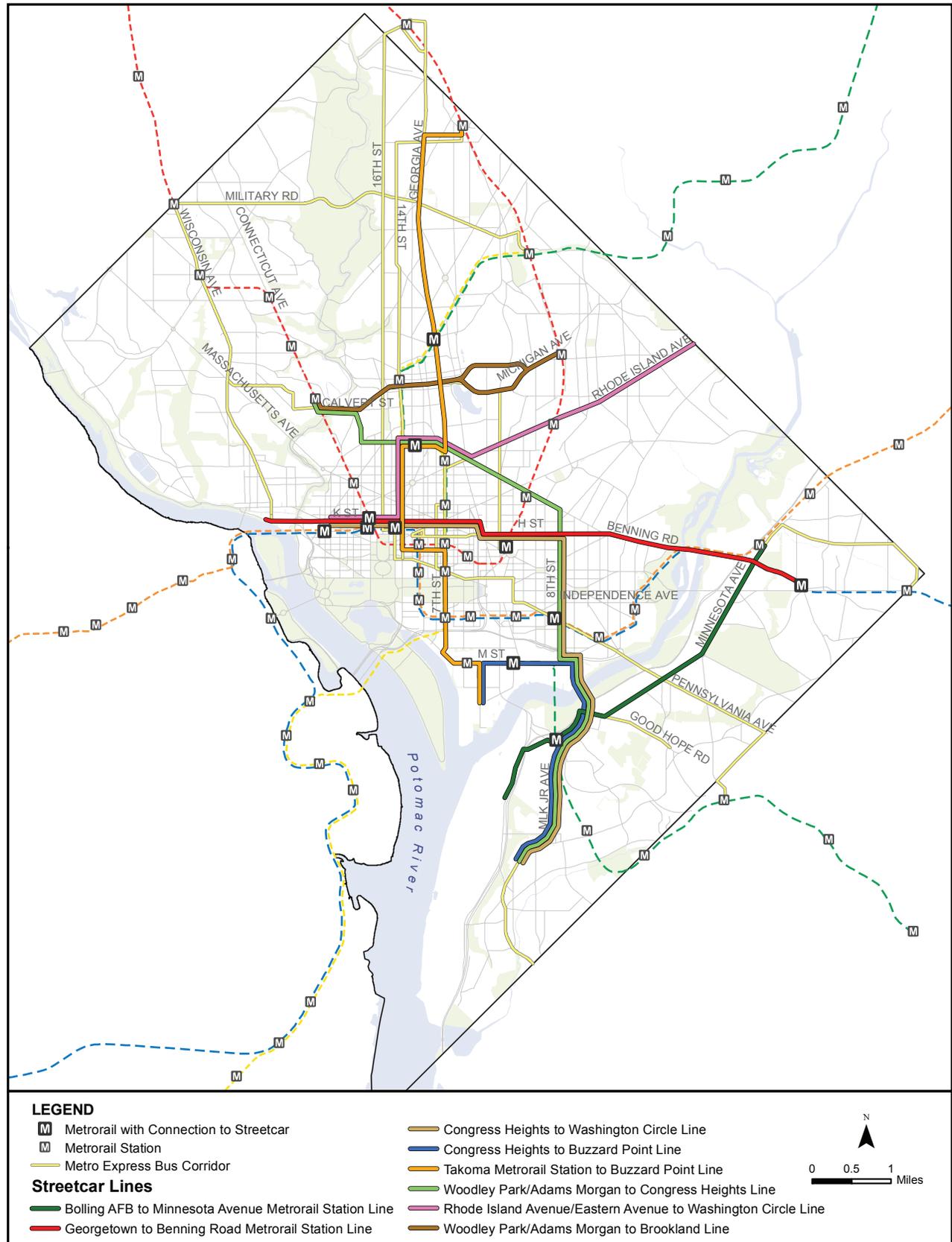


Figure 4-9: System Plan-Phase 3



- **Extension of the Anacostia Streetcar Initial Line Segment to Buzzard Point** – This phase will extend the Anacostia Initial Line Segment across the 11th Street Bridge to the M Street SE office and commercial corridor, Nationals Park stadium area, and terminus at Buzzard Point.
- **Construction of the Congress Heights to Downtown Streetcar Line to the St. Elizabeths Hospital Campus** – This line will provide a connection across the Anacostia River from Southeast to downtown Washington. The initial southern terminus of the line in Phase 1 will be the future Department of Homeland Security Headquarters at the St. Elizabeths Hospital campus. From this initial terminus, the line will run north to the Navy Yard area, Capitol Hill neighborhood, and downtown DC, terminating at Washington Circle. The line will also provide a streetcar linkage between the Anacostia Streetcar Initial Line Segment and H/Benning Streetcar line, creating a single connected streetcar system. The development of a single connected system will allow for easy movement of vehicles between streetcar lines and sharing of maintenance and storage yard facilities between the lines.
- **Construction of the northern segment of the Georgia Avenue to Buzzard Point Streetcar Line from Petworth to Downtown** – Ridership forecasts indicated strong ridership for streetcar service in the Georgia Avenue and 14th Street NW portions of the line as far north as the Georgia Avenue/Petworth Metrorail station. The Phase 1 portion of the line will extend service from Washington Circle, east along K Street NW to 14th Street NW, north on 14th Street NW, east on U Street NW, and north on Georgia Avenue NW to the Georgia Avenue/Petworth Metrorail station.
- **Expansion of Metro Express Bus Services** – Implementation of Metro Express services will continue in the following corridors: 14th Street NW, Michigan Avenue NW/North Capitol Street, Florida Avenue/U Street/8th Street SE, South Capitol Street/Martin Luther King, Jr. Avenue/Minnesota Avenue, and Rhode Island Avenue NE.

## Phase 2

Phase 2 will expand the Phase 1 streetcar system further north to the Takoma Metro Station, further west to Georgetown, and further south to the Congress Heights area. This phase will also establish two new streetcar lines and continue implementation of Metro Express services. The Phase 2 system will be completed by 2018. Activities consist of the following projects:

- **Extension of the Georgia Avenue to Buzzard Point Streetcar Line further north to Takoma** – This phase will extend streetcar service further north along Georgia Avenue and connect to the Takoma Metrorail Station.
- **Completion of the Georgetown to H/Benning Streetcar Line west to Wisconsin Avenue** – This phase will extend the line further west to connect to the Georgetown waterfront on K Street NW, completing this line.
- **Construction of the Woodley Park/Adams Morgan to Congress Heights Streetcar Line** – This improvement will provide cross-town service connecting Northwest and Southeast DC. The northern terminus of the line is the Woodley Park-Zoo/Adams Morgan Metrorail station. At the south end, it will extend streetcar service south along Martin Luther King, Jr. Avenue SE to Congress Heights and the future Department of Homeland Security Headquarters.
- **Construction of the Rhode Island Avenue to Downtown Streetcar Line** – This project will initiate streetcar service for Northeast DC along Rhode Island Avenue NW/NE, including connections to the Brentwood area and Rhode Island Avenue Metrorail Station. It will extend from Washington Circle to Eastern Avenue and Fort Circle Park at the District boundary.
- **Implementation of the Remaining Metro Express Bus Services** – This phase will implement the remaining Metro Express corridors, such as the Military Road/Missouri Avenue Corridor, Good Hope Road SE and the Calvert Street NW/Columbia Road NW Corridor.

## Phase 3

Phase 3 will include the expansion of the Phase 2 system to the Columbia Road/Michigan Avenue Corridor serving the Columbia Heights, Washington Hospital Center, and Brookland areas. This phase will also include the Minnesota Avenue corridor, connecting the Historic Anacostia area to Ward 7, and the 7th Street SW Corridor providing service to the monumental core and the Southwest Waterfront. The Phase 3 system will be completed by 2020. Activities consist of the following projects:

- **Construction of the Woodley Park/Adams Morgan to Brookland Line** – This phase will build and initiate service along a new line serving Columbia Heights, Washington Hospital Center, and Catholic University areas. The line will extend from the Woodley Park-Zoo/Adams Morgan Metrorail station to the Brookland-CUA Metrorail station.

- **Extension of the Anacostia Initial Line Segment to the Minnesota Avenue Metro Station** – This phase will extend the Anacostia Streetcar north along Minnesota Avenue to Benning Road and the Minnesota Avenue Metrorail Station.
- **Completion of the Georgia Avenue to Buzzard Point Streetcar Line** – This extension will complete the line, constructing the southern portion of the line from K Street NW to the Southwest Waterfront, M Street SW and Buzzard Point.

the Skyland area, and further south along Martin Luther King, Jr. Avenue SE and South Capitol Street to National Harbor.

### Potential Streetcar Projects by Phase

Based on the proposed streetcar system phasing, potential individual project segments have been identified to advance through the project planning and development process. Table 4-1 shows these proposed projects including the identification of logical operational termini for each project. The individual proposed streetcar segments are described in more detail in the segment profiles that follow the table. The profiles summarize key information about each of the segments including: length, ridership forecasts, capital cost estimates, population and employment along the route, performance relative to the evaluation criteria, key strengths, and segment termini.

### Future Extensions

Beyond Phase 3, the system plan envisions future expansions of the streetcar system in the Wisconsin Avenue corridor north of Georgetown, further north along Georgia Avenue to Silver Spring, further east to

**Table 4-1: Potential Streetcar Projects by Phase**

Project Segment	Operating Terminus 1	Operating Terminus 2	Rationale for Project Termini and Independent Utility
<b>Initial Projects</b>			
Anacostia Initial Line Segment	Naval Annex	Anacostia Metrorail Station	<ul style="list-style-type: none"> <li>• Naval Annex is an employment center and trip destination point</li> <li>• Anacostia Metrorail station is a major multimodal passenger transfer point for SE Washington</li> </ul>
H/Benning	Union Station	RFK Stadium Area (At Oklahoma Avenue)	<ul style="list-style-type: none"> <li>• Union Station is a major intermodal passenger transfer location for the region</li> <li>• RFK Stadium is a destination for special events</li> <li>• Spingarn High School and the Spingarn-Langston Recreation Center are located adjacent to Terminus 2</li> </ul>
<b>Phase 1</b>			
Benning Road	Union Station	Benning Road Metrorail Station	<ul style="list-style-type: none"> <li>• Extends the H/Benning Project currently under construction west of Oklahoma Avenue NE</li> <li>• Benning Road Metrorail Station is a major passenger transfer point</li> </ul>
Historic Anacostia	Naval Annex	Good Hope Road/11 <sup>th</sup> Street Bridge	<ul style="list-style-type: none"> <li>• Naval Annex is an employment center and trip destination point</li> <li>• Connection to Good Hope Road serves Historic Anacostia business district</li> </ul>
Union Station/Mount Vernon Square	Mount Vernon Square/ Convention Center	Benning Road Metrorail Station	<ul style="list-style-type: none"> <li>• Extends the H/Benning Project currently under construction east of Union Station to the Downtown</li> <li>• Mount Vernon Square/Washington Convention Center is a destination point for special events</li> </ul>
K Street	Washington Circle	Benning Road Metrorail Station	<ul style="list-style-type: none"> <li>• Union Station is a major intermodal passenger transfer location for the region</li> <li>• Foggy Bottom-GWU Metrorail Station is a major passenger transfer point</li> <li>• George Washington University and Hospital at Washington Circle is a major employment, educational and medical trip destination point</li> </ul>
M Street SE/11 <sup>th</sup> Street Bridge	Naval Annex	Buzzard Point (At V Street SW)	<ul style="list-style-type: none"> <li>• Extends the Anacostia Initial Line Segment/Naval Annex to the M Street Corridor, connecting two major employment centers and trip destination points.</li> <li>• Serves Capitol Riverfront, Anacostia Waterfront, Southwest Waterfront and adjacent redevelopment at Buzzards Point</li> </ul>
MLK Jr. Avenue	St. Elizabeth's Hospital Campus (Future DHS Headquarters Site)	Good Hope Road/11 <sup>th</sup> Street Bridge	<ul style="list-style-type: none"> <li>• Future DHS Headquarters Site will become a major employment center and work trip destination point</li> <li>• Connection to Good Hope Road serves Historic Anacostia business district</li> </ul>
8 <sup>th</sup> Street	St. Elizabeth's Hospital Campus (Future DHS Headquarters Site)	Washington Circle	<ul style="list-style-type: none"> <li>• Future DHS Headquarters Site will become a major employment center and work trip destination point</li> <li>• Foggy Bottom-GWU Metrorail Station is a major passenger transfer location</li> <li>• George Washington University and Hospital at Washington Circle is a major employment, educational and medical trip destination point</li> </ul>
14 <sup>th</sup> Street	Washington Circle	Georgia Avenue/ Florida Avenue	<ul style="list-style-type: none"> <li>• Foggy Bottom-GWU Metrorail Station is a major passenger transfer location</li> <li>• George Washington University and Hospital at Washington Circle is a major employment, educational and medical trip destination point</li> <li>• Howard University and Hospital is a major employment, educational and medical trip destination point</li> <li>• U Street commercial activity center is a destination point</li> </ul>
Lower Georgia Avenue	Washington Circle	Georgia Ave-Petworth Metrorail Station	<ul style="list-style-type: none"> <li>• Foggy Bottom-GWU Metrorail Station is a major passenger transfer location</li> <li>• George Washington University and Hospital at Washington Circle is a major employment, educational and medical trip destination point</li> <li>• Georgia Ave-Petworth Metrorail Station and activity center is a major passenger transfer site</li> </ul>

**Table 4-1: Potential Streetcar Corridor Projects by Phase (continued)**

Project Segment	Operating Terminus 1	Operating Terminus 2	Rationale for Project Termini and Independent Utility
<b>Phase 2</b>			
Georgia Avenue	Washington Circle	Takoma Metrorail Station	<ul style="list-style-type: none"> <li>• Extends the Georgia Avenue Corridor constructed in Phase 1, connecting major destinations such as: U Street, Howard University and Hospital, Georgia Ave-Petworth Metrorail Station</li> <li>• Foggy Bottom-GWU Metrorail Station is a major passenger transfer location</li> <li>• George Washington University and Hospital at Washington Circle is a major employment, educational and medical trip destination point</li> <li>• Takoma Metrorail Station is a major passenger transfer location for the region</li> </ul>
Congress Heights	Congress Heights commercial district (At Savannah St SE)	Washington Circle	<ul style="list-style-type: none"> <li>• Congress Heights at Savannah Street and Martin Luther King Jr. Avenue is a neighborhood oriented activity center</li> <li>• Connection to Good Hope Road serves Historic Anacostia business district</li> </ul>
Florida Avenue	Congress Heights commercial district (At Savannah St SE)	Georgia Avenue/ Florida Avenue	<ul style="list-style-type: none"> <li>• Congress Heights at Savannah Street and Martin Luther King Jr. Avenue is a neighborhood oriented activity center</li> <li>• Howard University and Hospital is a major employment, educational and medical trip destination point</li> </ul>
U Street/Calvert Street	Congress Heights commercial district (At Savannah St SE)	Woodley Park-Zoo/Adams Morgan Metrorail Station	<ul style="list-style-type: none"> <li>• Congress Heights at Savannah Street and Martin Luther King Jr. Avenue a neighborhood oriented activity center</li> <li>• Woodley Park-Zoo/Adams Morgan Metrorail Station is a major passenger transfer location</li> <li>• Extension connects major destinations such as: Woodley Park/Adams Morgan, U Street, Howard University and Hospital, Gallaudet University, Capitol Hill, Anacostia.</li> </ul>
Rhode Island Avenue South	Washington Circle	Rhode Island Ave-Brentwood Metrorail Station	<ul style="list-style-type: none"> <li>• Foggy Bottom-GWU Metrorail Station is a major passenger transfer location</li> <li>• George Washington University and Hospital at Washington Circle is a major employment, educational and medical trip destination point</li> <li>• Downtown Washington via K Street major employment and work trip destination</li> <li>• Rhode Island Ave-Brentwood Metrorail Station is a major passenger transfer point</li> </ul>
Rhode Island Avenue North	Washington Circle	Rhode Island Avenue/ Eastern Avenue	<ul style="list-style-type: none"> <li>• Foggy Bottom-GWU Metrorail Station is a major passenger transfer location</li> <li>• George Washington University and Hospital at Washington Circle is a major employment, educational and medical trip destination point</li> <li>• Downtown Washington via K Street major employment and work trip destination</li> <li>• Residential neighborhoods and commercial center near Rhode Island Avenue and Eastern Avenue Intersection</li> </ul>
Georgetown	K Street NW and Wisconsin Avenue	Benning Road Metrorail Station	<ul style="list-style-type: none"> <li>• Georgetown Waterfront/Wisconsin Avenue is a major activity center and trip destination</li> <li>• Downtown Washington via K Street major employment and work trip destination</li> <li>• Extends the Washington Circle to Benning Road Metro Line constructed in Phase 1</li> <li>• Union Station is a major intermodal passenger transfer location for the region.</li> <li>• Benning Road Metrorail Station is a major passenger transfer point</li> </ul>
<b>Phase 3</b>			
Minnesota Avenue	Naval Annex	Minnesota Avenue Metrorail Station	<ul style="list-style-type: none"> <li>• Extends Anacostia Initial Line Segment currently under construction</li> <li>• Naval Annex is an employment center and trip destination point</li> <li>• Minnesota Avenue Metrorail Station is a major passenger transfer point</li> </ul>
Bolling AFB	Bolling Air Force Base	Minnesota Avenue Metrorail Station	<ul style="list-style-type: none"> <li>• Extends Anacostia Initial Line Segment currently under construction</li> <li>• Connects to Bolling Air Force Base Access Point</li> <li>• Connects Bolling Air Force Base to Downtown Historic Anacostia</li> <li>• Minnesota Avenue Metrorail Station is a major passenger transfer point</li> </ul>
Columbia Road	Woodley Park-Zoo/Adams Morgan Metrorail Station	Georgia Avenue/ Columbia Road	<ul style="list-style-type: none"> <li>• Woodley Park-Zoo/Adams Morgan Metrorail Station is a major passenger transfer point</li> <li>• Columbia Heights Metrorail station is a major passenger destination and transfer point</li> <li>• Lower Georgia Avenue commercial district and connection to lower Georgia Avenue Streetcar</li> </ul>
Michigan Avenue	Woodley Park-Zoo/Adams Morgan Metrorail Station	Brookland-CUA Metrorail Station	<ul style="list-style-type: none"> <li>• Woodley Park-Zoo/Adams Morgan Metrorail Station is a major passenger transfer point</li> <li>• Washington Hospital Center is a major employment and work trip destination point</li> <li>• Brookland Avenue Metrorail Station is a major passenger transfer point</li> <li>• Catholic University near Brookland-CUA Metrorail Station is a major trip destination point</li> </ul>
7 <sup>th</sup> Street	Takoma Metrorail Station	Buzzard Point (At V Street SW)	<ul style="list-style-type: none"> <li>• Takoma Metrorail station is a major passenger transfer location for the region</li> <li>• Extends the Georgia Avenue Corridor constructed in Phase 2</li> <li>• Serves stadium area activity center, Capitol Riverfront, Anacostia Waterfront, Southwest Waterfront and adjacent redevelopment</li> </ul>