

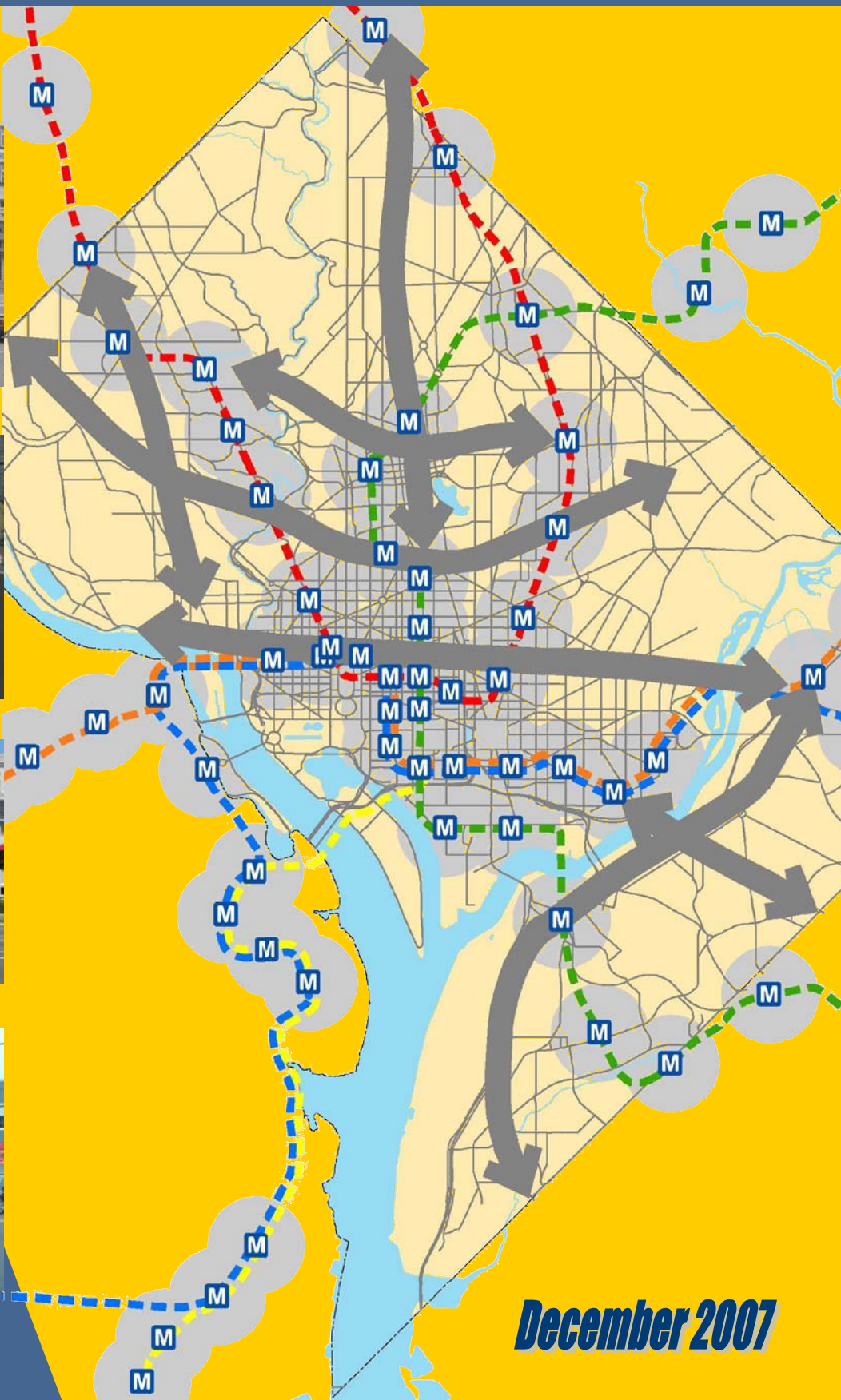
# DC's Transit Future



## FINAL EXECUTIVE SUMMARY

### WHAT IS THE DISTRICT OF COLUMBIA TRANSIT IMPROVEMENTS ALTERNATIVES ANALYSIS (DCAA)?

The DCAA is a comprehensive analysis of intra-district transit connectivity. The study is the result of an 18-month public engagement process that included stakeholders from across the District providing insight on current gaps in transit and identifying the potential transit technologies and services necessary to meet the transit needs of District residents. The results of the study include a long-range vision and a short-term implementation plan for major transit investments in the District.



*December 2007*



### WHY DOES THE DISTRICT NEED TRANSIT IMPROVEMENTS?

- The District of Columbia is adding population and jobs rapidly, and is projected to continue growing over the next 25 years.
- Because of this growth, more people will be commuting to work in the city and making more trips within the city.
- The number of total internal trips—that is, one-way journeys using one mode of transportation in the District—is expected to increase 32 percent by 2030. In addition, many Metrobus routes and Metrorail lines are currently at or above capacity, and congestion on two Metrorail lines is expected to become “unmanageable” by 2013.
- It is clear that the District faces a significant transportation challenge in the future.
- Adding to and improving the District’s transit network is one way of enhancing mobility for DC residents, particularly those not now served by Metrorail. With the right mix of new transit services, travel times for DC residents will improve. The District can also use the transportation investments to attract new development and strengthen communities within the city.

### PREVIOUS STUDIES

The DCAA is not the first study to look at long-term transit improvements for the District. It builds upon several earlier reports, including the District Department of Public Works’ (DPW) 1997 Transportation Vision, Strategy, and Action Plan, which identified several District corridors that would benefit from increased transit investment. WMATA’s District of Columbia Transit Development Study (2001) followed up that plan by selecting transit alternatives to advance into project development.



FAMILY OF SERVICES

The study examined various bus and rail technologies. From that evaluation, four types of transit services—Streetcar, Bus Rapid Transit, DC Circulator, and Metro Extra Bus Service—were selected as the best technologies to achieve the District’s transit goals.

STREETCAR

- Operates on rails embedded in the pavement
- Can operate in dedicated right-of-way or mixed traffic
- Has stops that are spaced every 1/3 to 1/2 mile
- Usually powered by overhead wire



BUS RAPID TRANSIT (BRT)

- Uses distinct vehicles with higher capacities than conventional buses
- Can operate in its own right-of-way, in mixed traffic, or a combination of the two
- Has stops that are spaced every 1/3 to 1/2 mile
- Has stops that are comparable to those of rail transit systems

METRO EXTRA

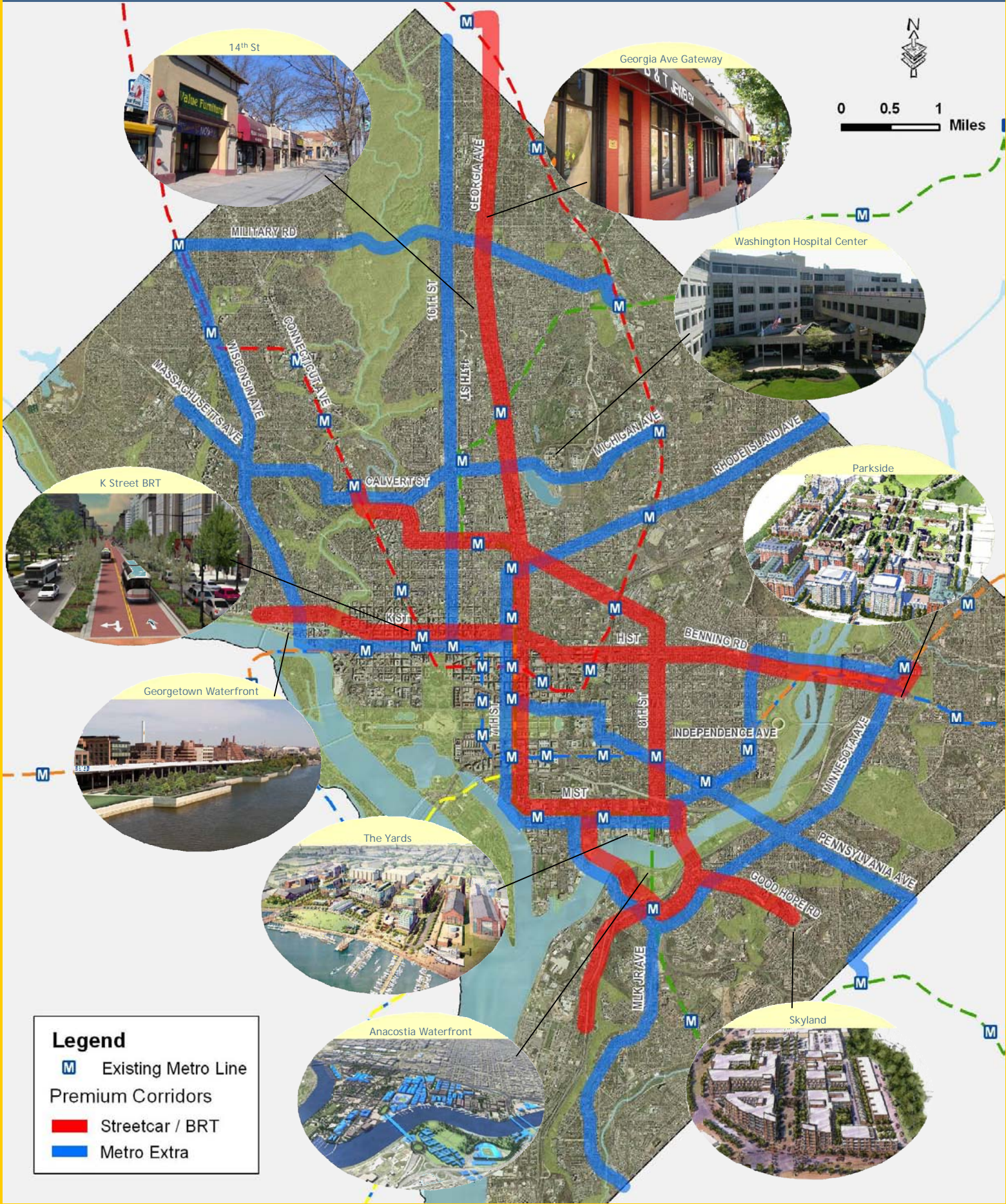
- Operates with limited stops like Streetcar and BRT
- Has stops that are spaced every 1/3 to 1/2 mile
- Has limited use of dedicated transit lanes where possible
- Features distinct vehicles and shelters with enhanced passenger amenities



DC CIRCULATOR

- Unique vehicles
- Destination/activity center oriented service
- Buses run every 10 minutes

LONG-TERM IMPLEMENTATION PLAN  
(by year 2030)



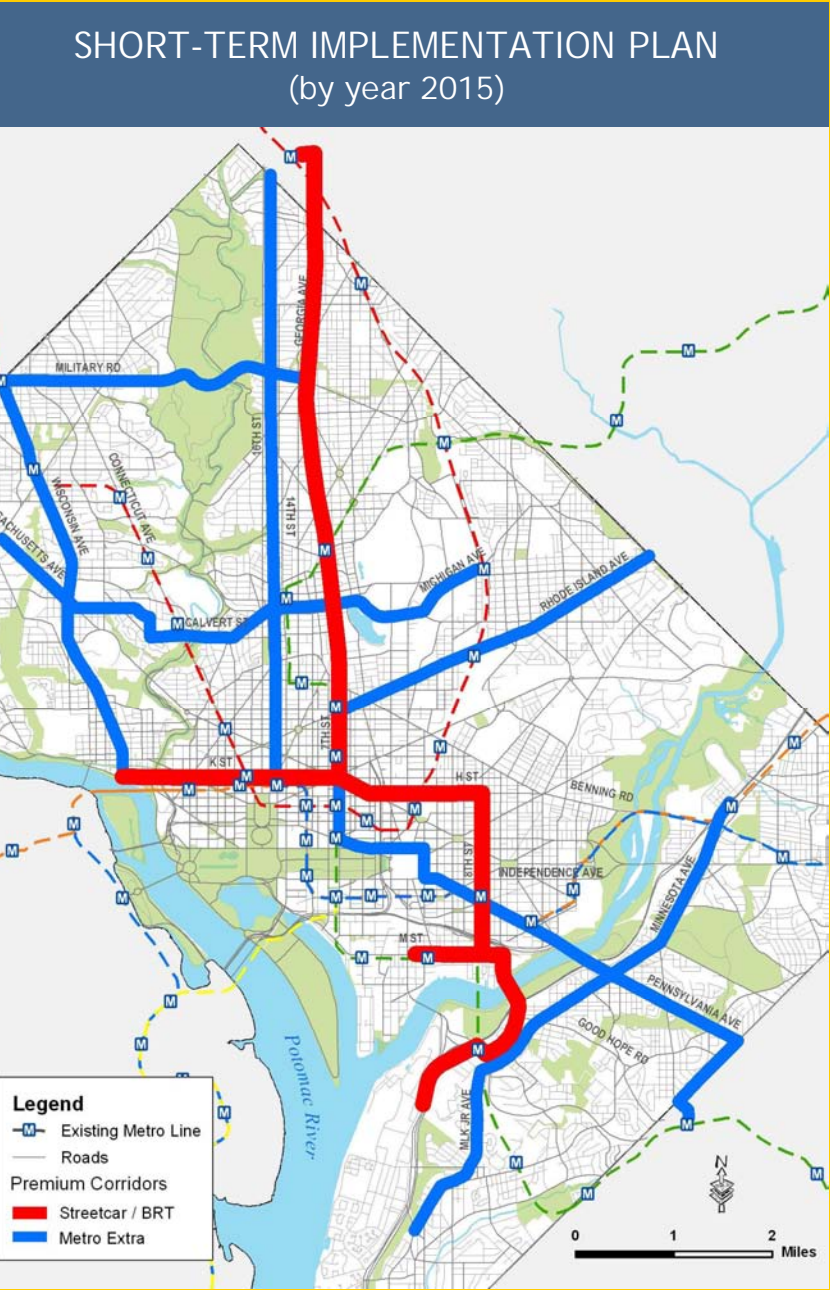


RECOMMENDED TRANSIT IMPROVEMENTS

Based on the results of the corridor evaluations, a recommended long-range plan (by year 2030) has been identified that includes the implementation of Streetcar or BRT service in the following corridors:

- H Street NE/Benning Road NE
- Georgia Avenue NW/7<sup>th</sup> Street NW/SW
- K Street NW
- M Street NW
- M Street SE/SW
- 8<sup>th</sup> Street SE/NE
- Massachusetts Avenue NW
- Florida Avenue NE/NW
- U Street/18<sup>th</sup> Street NW/Calvert Street (Adams Morgan area)
- Anacostia Demonstration Line
- Good Hope Road SE
- 11<sup>th</sup> Street and South Capitol Street Bridge

Metro Extra service would operate in all of the other study corridors.



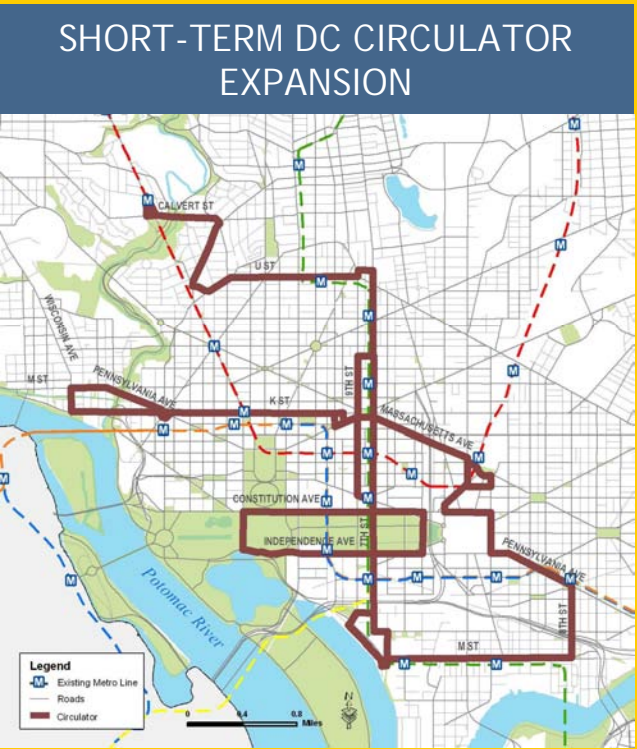
A short-term implementation strategy that recommends improvements by year 2015 of the plan has been identified. This includes the expansion of Streetcar/BRT services from the initial Anacostia Streetcar Project north to connect to the following corridors:

- M Street SE/SW
- 8<sup>th</sup> Street SE
- Georgia Avenue/7<sup>th</sup> Street NW
- H Street NE
- K Street NW
- 7<sup>th</sup> Street SW
- 11<sup>th</sup> Street Bridge

Metro Extra service would be implemented in several of the other study corridors including:

- Georgia Avenue/7th Street NW
- Pennsylvania Avenue SE/Constitution Avenue NW
- Rhode Island Avenue NE
- 14<sup>th</sup> and 16<sup>th</sup> Streets NW
- Minnesota Avenue SE
- Martin Luther King Jr. Avenue SE
- Massachusetts Avenue/Calvert Street/Columbia Road/Michigan Avenue NW
- Wisconsin Avenue NW
- Military Road NW

The short-term plan also includes further expansion of the DC Circulator to create the system shown in the map below. This includes making new connections to the M Street SE corridor, Capitol Hill area, and Adams Morgan.



ADVANTAGES OF DCAA-RECOMMENDED LONG-TERM TRANSIT IMPROVEMENTS

The Long Range Implementation Plan has established a vision of what the District’s transit network might look like in 25 years. The District’s population will have grown considerably by 2030, and the city will face significant long-term challenges in providing transportation services to residents and commuters.

Although specific alignments have not yet been selected, this system plan recommends a mix of Streetcar, BRT, and Metro Extra improvements for important corridors in the District. These transit upgrades are envisioned as the best way to address the transportation challenges ahead.

The implementation of the recommended improvements offers a number of transportation-related benefits for the District. These include increased transit ridership, attracting new riders to transit, increasing the capacity of transit, reducing crowding on buses, providing relief for the Metrorail system, and reducing transit travel times. These benefits are summarized in the table below.



BENEFITS OF THE LONG-TERM PLAN

ISSUE	BENEFIT	AMOUNT (Year 2030)
Ridership	Increases Total Premium Transit Weekday Ridership (Streetcar and BRT)	118,000
	Adds New Weekday Transit Riders	+25,000
Transit Capacity and Crowding	Increases Peak Hour Capacity (Metrobus and Premium Transit in Study Corridors)	+32% (If All Streetcar) +23% (If All BRT)
	Reduces Peak Hour Crowding (Load Levels) on Metrobus in Study Corridors	-30% (If All Streetcar) -24% (If All BRT)
	Reduces Metrorail Weekday Ridership	-14,000 (Metro relief)
Travel Time	Reduces Transit Travel Times in Study Corridors	-38% (faster travel)

PUBLIC INVOLVEMENT

The public, community groups, and interested agencies and organizations were actively involved in developing the recommended plan.

Outreach efforts included:





- Focus groups
- Presentations to community groups
- Community leader briefings
- Interagency coordination meetings
- Ward planner workshops
- Community workshops
- Public meetings
- Newsletters
- Project website
- Project hotline





STUDY GOALS AND OBJECTIVES

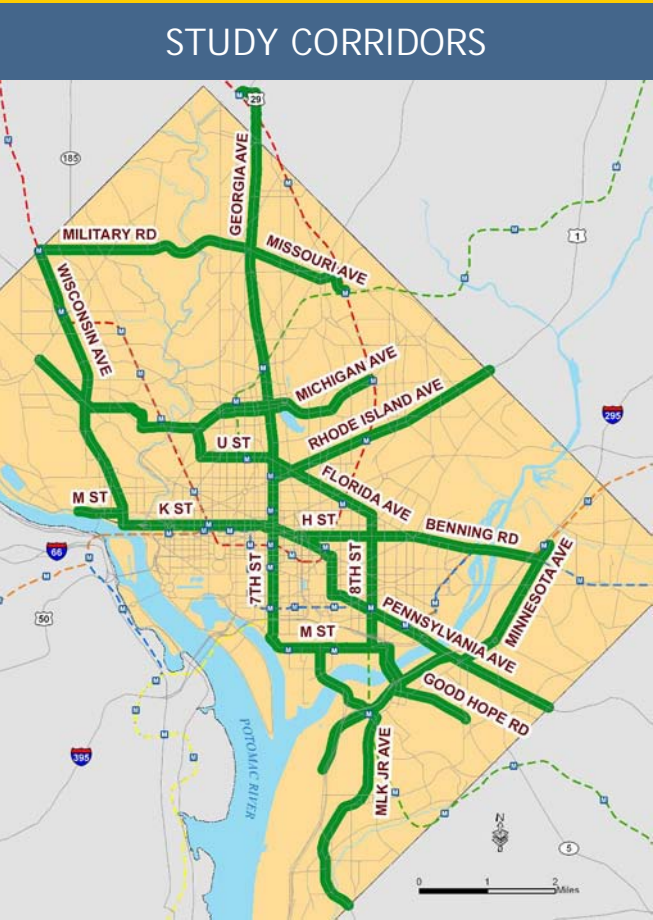
The study process was guided by goals and objectives developed by the public. The goals and objectives were used to identify and evaluate corridors to develop the 2030 long-range transit plan.

-  Goal 1: Improve access and mobility for District residents and businesses - Objectives: Increase connections between neighborhoods and activity centers and improve access to regional centers.
-  Goal 2: Encourage community and economic development - Objectives: Support the city's initiatives for community development and enhance development benefits.
-  Goal 3: Enhance system performance - Objectives: Increase the capacity of the transit network and improve transit efficiency and cost-effectiveness.
-  Goal 4: Promote environmental quality - Objectives: Limit adverse impacts and support environmental benefits.



EVALUATION OF MAJOR TRANSIT INVESTMENTS

The figure below shows the corridors identified for study. These corridors were evaluated based on how well major transit investments such as Streetcar or Bus Rapid Transit would perform relative to each of the goals established for the project.

The chart at right summarizes the results of the evaluation for the best- and moderate-performing segments of the named corridors. The evaluation results were used to develop the 2030 transit system plan.



BEST PERFORMING CORRIDORS FOR STREETCAR OR BRT

CORRIDOR SEGMENT* (* - Segment is a portion of the entire corridor)	Goal 1: Improve Access and Mobility 	Goal 2: Encourage Community and Economic Development 	Goal 3: Enhance System Performance 	Goal 4: Promote Environment Quality 	Overall for Goals
H Street NE	●	●	●	◐	●
M Street SE	●	●	◐	●	●
K Street NW (east of Washington Circle)	●	◐	●	◐	●
Georgia Avenue NW	●	◐	◐	●	●
Benning Road NE	◐	◐	●	◐	●
Pennsylvania Avenue SE (west of Anacostia River)	○	●	◐	●	●
Florida Avenue NW	◐	●	○	●	●
7th Street SW	●	◐	◐	○	◐
Good Hope Road SE	○	●	◐	◐	◐
U Street NW/18th Street NW	◐	◐	◐	○	◐
8th Street SE	◐	◐	◐	○	◐
K Street NW (west of Washington Circle)	○	◐	◐	◐	◐
M Street NW (in Georgetown)	◐	○	◐	◐	◐

● Best-Performing   ◐ Moderate-Performing   ○ Low-Performing



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