



Figure H-11: Parking on Georgia Avenue

Parking

Parking Inventory

On-street parking was inventoried for all arterial and collector roads in the study area. The number of parking spaces, and any parking restrictions were noted for each roadway. The parking inventory was used to evaluate the total parking capacity on the roads. Throughout the study area, on-street parking is restricted in some way for all of the studied roadways. The most common types of parking restrictions involve time-regulated parking in residential zones and metered parking. On-street parking is also prohibited during designated street-cleaning periods. In addition, on-street parking in some locations is prohibited entirely.

Metered parking is regulated by meters that limit parking to one, two, three, or five hours. Residential zone parking is designated as Zone 1, Zone 4, or overlapped (Zones 1 and 4). For this study, all metered parking spaces were counted. Parking spaces restricted by distance or zone (e.g., time-regulated parking), were calculated by converting the distance between parking restriction signs to the number of vehicles that could park within this distance using an assumption of 25 feet per vehicle.

Parking Demand

Parking demand refers to the amount of parking used at a particular time, place, and price. It is a critical factor in evaluating parking efficiency. The parking demand data collected for this study focused on on-street parking along Sherman Avenue and Georgia Avenue. To determine the weekday daily parking demand, the occupancy of the available parking spaces along Sherman Avenue and Georgia Avenue inside the study area were counted and documented each hour between 6:30 a.m. and 6:30 p.m. on Wednesday, December 15, 2006.

Parking demand also reflects parking adequacy, which indicates whether sufficient parking exists at a particular time and location. The ratio derived from demand versus capacity shows the relationship between parking need and supply. Parking capacity is derived from the available parking spaces counted in the inventory. A ratio greater than one indicates that parking demand in a particular location and at a particular time exceeds parking capacity.

Existing Conditions - Transportation

Transit Facilities

A number of public transportation modes serve the study area:

- Metrobus routes 70/71, 66, 68, and 79 travel north-south.
- Metrobus routes H1, H2, H3, H4, H8, and X3 travel east-west.
- Metrorail has a stop at each end of the study area.
 - In the north, the Georgia Avenue –Petworth Station is near the intersection of Georgia Avenue and New Hampshire Avenue.
 - In the south, the African-American Civil War Memorial / Cardozo Station is at U Street and 11th Street.

Bus

The 70/71 routes (the Georgia Avenue and 7th Street Line) serves Georgia Avenue in both directions. The Silver Spring Station is at the northern end of this line adjacent to the DC / Maryland border. The southern end of the line is at Buzzard Point, which is north of the Anacostia River. The 70/71 route stops at three locations inside the study area: Georgia Avenue at New Hampshire Avenue, Georgia Avenue at Irving Street, and Georgia Avenue at Florida Avenue.

The 66, 68 routes (the Petworth– 11th Street Line) begins in the north at the Georgia Avenue –Petworth Station at the intersection of Georgia Avenue at Quincy Street. Its southern terminus is at Federal Triangle Station, which is near 10th / 12th Street at Constitution Avenue. In the study area, only route 68 serves Sherman Avenue.

The route 66 is not in the study area. This route runs along 11th Street, which is parallel to Sherman Avenue. Routes 66 and 68 diverge at the intersection of New Hampshire Avenue at Monroe Street and converge at the intersection of 11th Street at Vermont Avenue.

The route 68 begins at the Georgia Avenue –Petworth Station and makes one stop at Sherman Avenue at Irving Street. Its next stop is at Vermont Avenue at U Street, which is just outside and southwest of the study area.



Figure H-12: WMATA Bus and Rail Routes in the Study Area

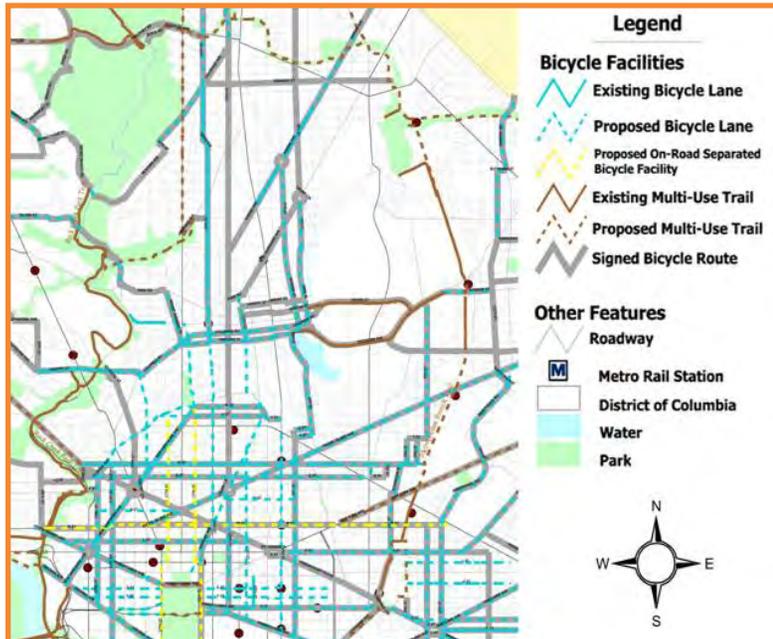


Figure H-13: Bicycle Routes in the Vicinity of the Study Area

The new MetroExtra BRT service (79 line) operates along Georgia Avenue with a headway of 10 minutes during PM peak hours. The 70/71 line takes approximately one hour to travel through 54 bus stops along the corridor from Archives to Silver Spring. The travel time of the 79 line is decreased to approximately 45 minutes through 15 bus stops.

Metrorail Facilities

The Metrorail Green Line running between the Greenbelt and Branch Avenue Stations has three stops near the study area. The U Street/African-American Civil War Memorial/ Cardozo Station is at the southern end of the study area. The Columbia Heights Station is at 14th Street and Irving Street on the west side of the study area. The Georgia Avenue –Petworth Station is at Georgia Avenue and New Hampshire Avenue at the north end of the study area.

Bicycle Facilities

Bicyclists in the study area must currently share lanes with motor vehicles or ride on the sidewalk, except in the eastern edge of the study area on 4th Street and Warder Street where bike lanes have been installed. It can be dangerous for bicyclists to share lanes with motor vehicles, especially when bicyclists are traveling between moving and parked vehicles.

Mixing bicycles and pedestrians on a limited sidewalk area can also be dangerous. The bicycle route map showing current bicycle facilities in the study area is found in the District of Columbia Bicycle Master Plan. An enlarged map is shown in Figure H-13.

Signed bicycle routes are on New Hampshire Avenue, Lamont Street, Kenyon Street, Columbia Road, and Harvard Street. A signed bicycle route is typically designated along more lightly traveled residential or secondary roads that may follow the same general corridor as more heavily traveled arterial highways. The routes are indicated by signs that may or may not have a specific route number.

Figure H-17 shows that the percentage of people who prefer to commute by bicycle is higher in the central part of the study area than in other parts of the study area.

The mid-day, PM, and Saturday peak hour bicycle volumes by intersection are shown in

Existing Conditions - Transportation

Figure H-14: Mid-day Peak-Hour Bicycle Volumes

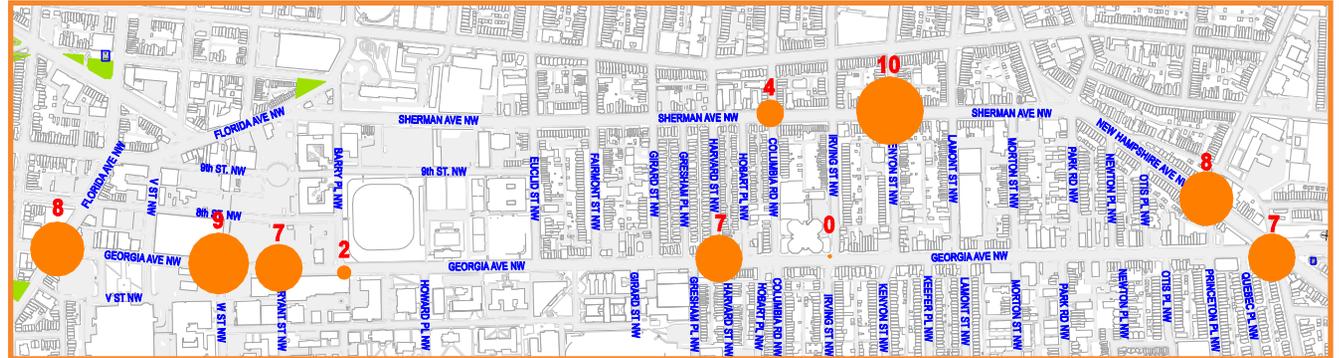


Figure H-15: PM Peak-Hour Bicycle Volumes

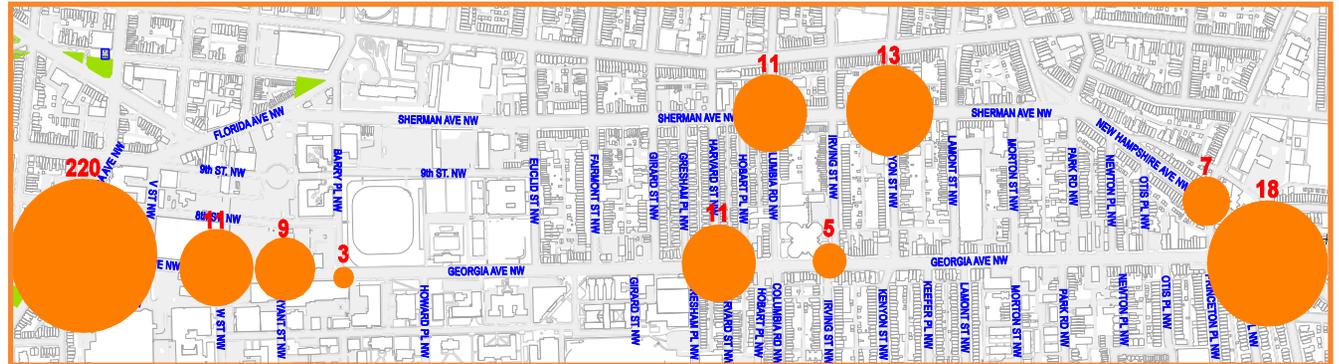
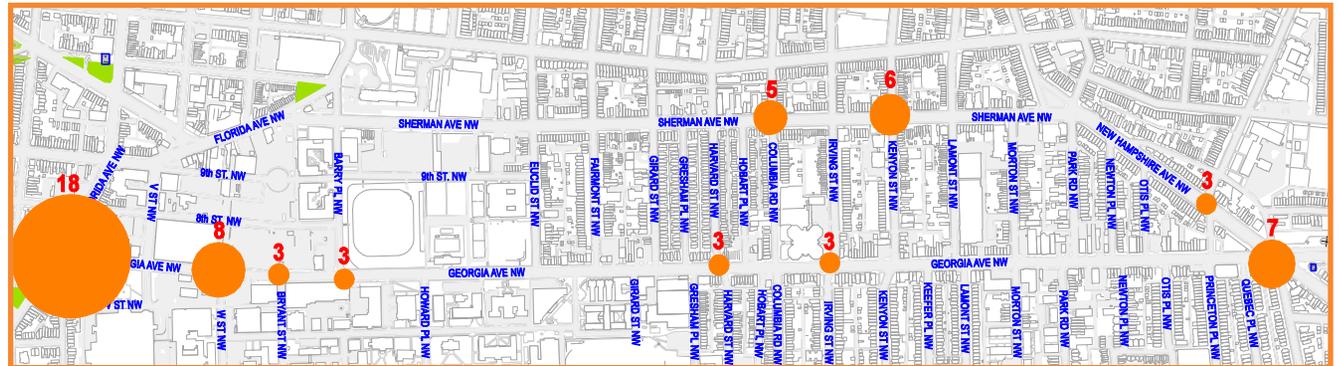


Figure H-16: Saturday Peak-Hour Bicycle Volumes



Figures H-14 through H-16.

Pedestrian Facilities

Most east-west streets in the study area are residential. Sherman Avenue is primarily residential with sporadic commercial sites. Georgia Avenue has a high number of pedestrians because it contains primarily commercial and academic uses mixed with some residential areas. The width of a sidewalk is a prime indicator of its pedestrian capacity and pedestrian friendliness.

The mid-day, PM, and Saturday peak hour pedestrian volumes by intersection are shown in Figures H-18 through H-20.

Accident Summary

To assess the safety conditions in the study area, accident summary reports for 2003 – 2005 were obtained for intersections along Sherman Avenue and Georgia Avenue. The accident summary reports listed accidents by collision type(s), and the time of the occurrence. The data indicated that 2004 had more accidents than either 2003 or 2005 for both of the two corridors. The total number of injuries on both corridors showed an increase each year from 2003 to 2005.

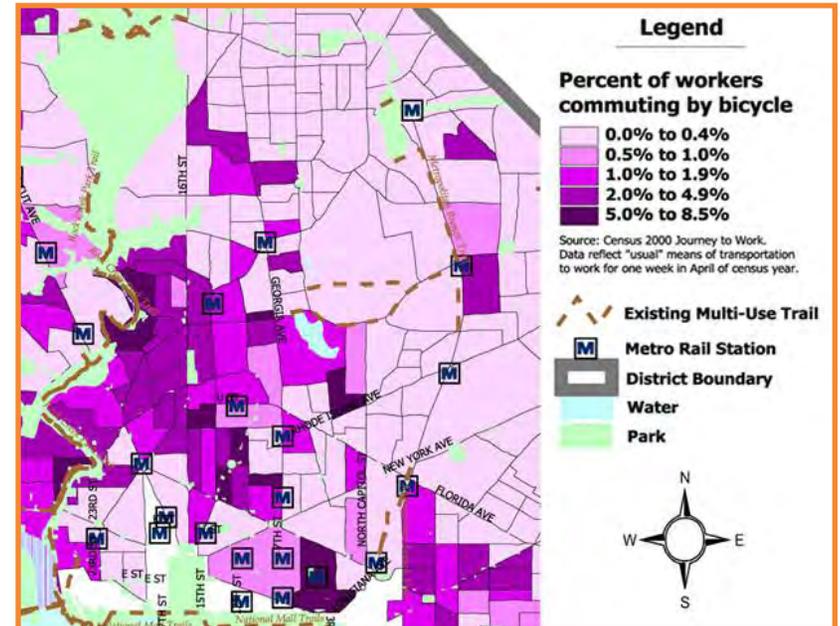


Figure H-17: Percentage of Workers who Commute by Bicycle to Jobs in the Study Area

Existing Conditions - Transportation

Figure H-18: Mid-day Peak-Hour Pedestrian Volumes

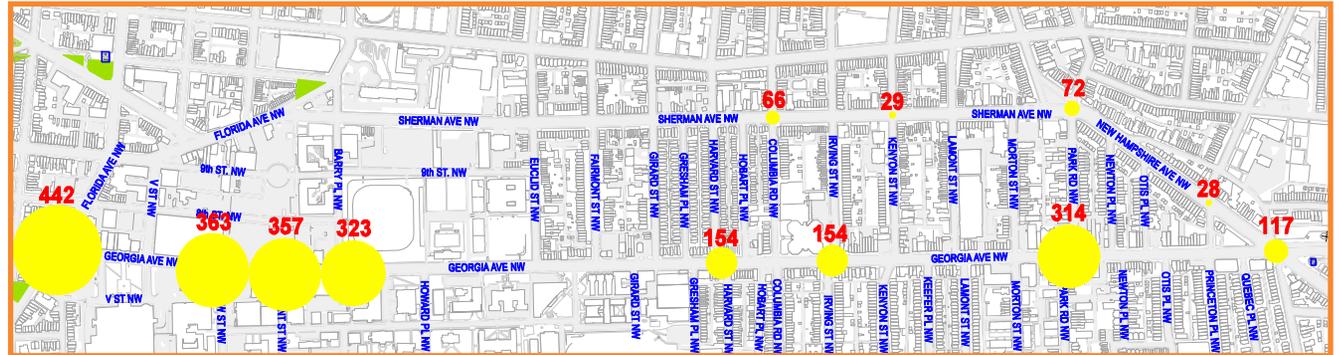


Figure H-19: PM Peak-Hour Pedestrian Volumes

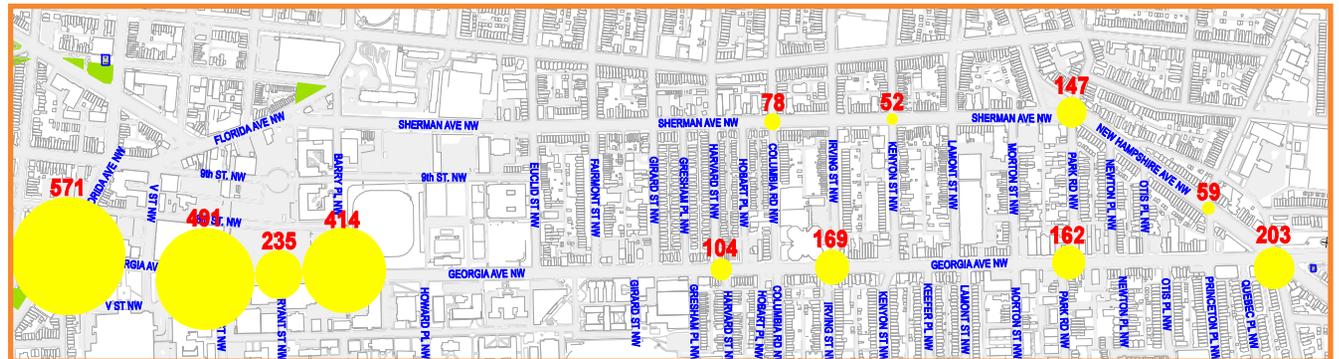
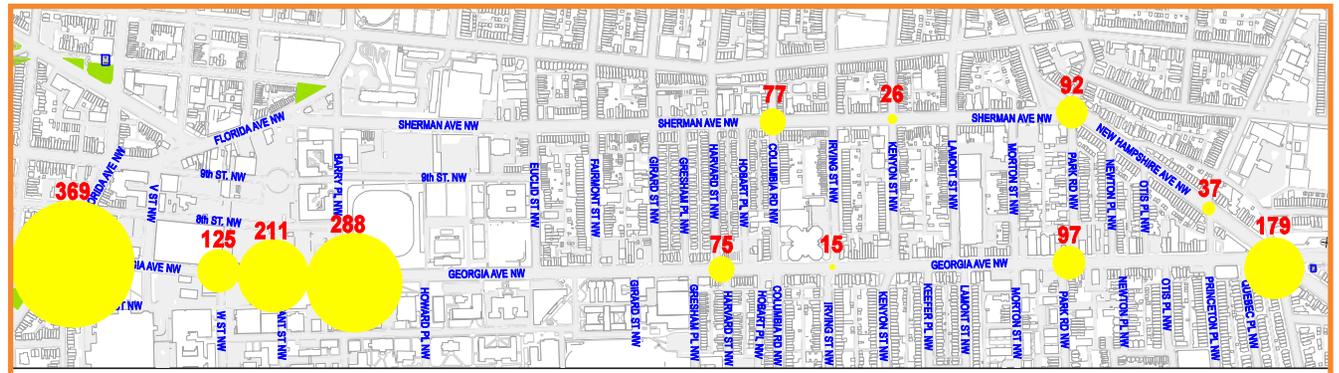


Figure H-20: Saturday Peak-Hour Pedestrian Volumes



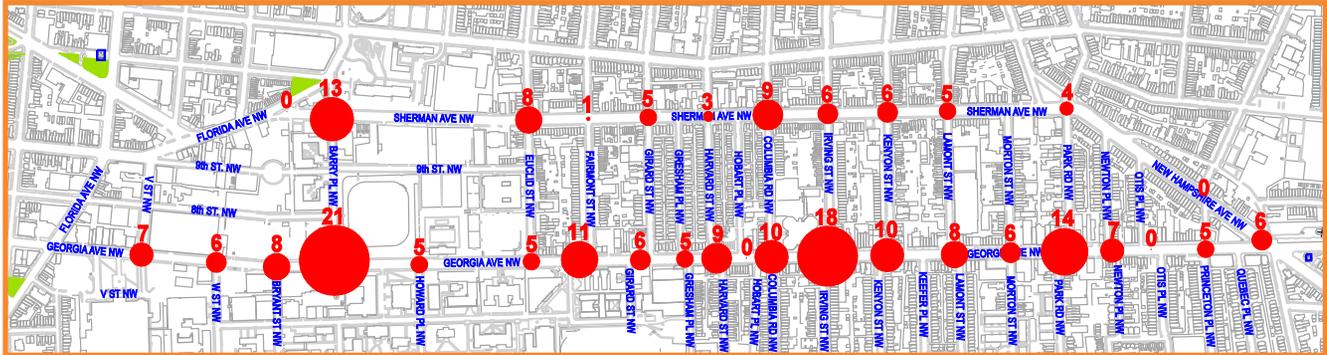


Figure H-21: Crash Data from DDOT Accident Summary Report *

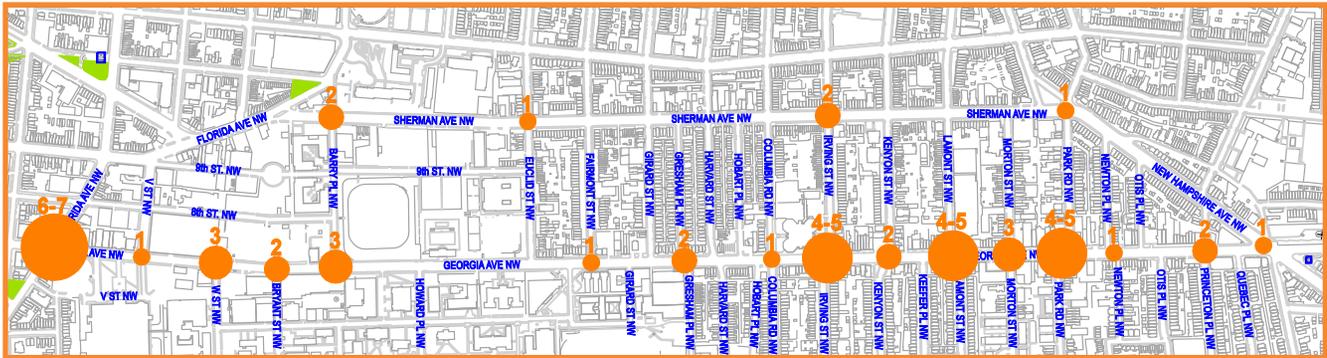
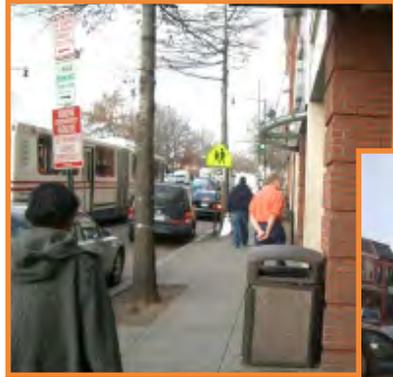


Figure H-22: Pedestrian Accident Data (2002-2004) from DDOT

* Crash data missing for the following intersections: Georgia Avenue and Florida Avenue; Sherman Avenue and Gresham Place; Sherman Avenue and Hobart Place; Sherman Avenue and Morton Street.

I. Existing Conditions - Public Realm



Figures I-1 & I-2: Sidewalk Conditions on Georgia Avenue



Figure I-3: Deteriorated Concrete Sidewalk on Georgia Avenue



Figure I-4: Deteriorated Brick Sidewalk on Georgia Avenue

Streetscape and Urban Design

Sidewalks

Sidewalk conditions vary greatly from good to very poor. Sidewalk widths on Georgia Avenue range from four to six feet, depending on location. From Florida Avenue to W Street, the sidewalk is typically sufficient for pedestrian activity. However, a hedge exists adjacent to the sidewalk creating a confined feel for pedestrians. From W Street to Barry Place, there are tight sidewalk widths in front of Wonder Plaza, thus resulting in inefficient pedestrian flows. North of Barry Place, although the sidewalks are wide in this area, there is a high chain-link fence on the west side of Georgia Avenue and a wall on east side of Georgia Avenue limiting the pedestrian experience. From Euclid Street to Columbia Road, sidewalk widths vary and several curb cuts for driveways exist that disrupt pedestrian movement. Also, there is steel piping located on the east sidewalks that creates a barrier for crossing pedestrians and parking patrons. North of Columbia Road, the sidewalks are wide.

On Sherman Avenue, sidewalk widths are generally narrow, ranging from as little as two feet to six feet. These sidewalks are located right next to residential front yards and low retaining walls. There is usually not enough room to walk on sidewalks especially near streetlight poles, traffic poles, and traffic cabinets. Utilities placed in the sidewalk make it impossible to navigate this area in a wheelchair.

Curb and gutter materials vary throughout Georgia and Sherman Avenues. Most curbs are constructed with concrete or granite curbs and brick gutters. However, in some locations, both the curb and gutter are constructed of concrete.

Urban Design

There is not a consistent urban design along Georgia Avenue. Georgia Avenue from Florida to New Hampshire Avenues is not one place, but several large segments with a number of smaller focal points located within each segment. Businesses located north of Harvard Street appear to serve mostly neighborhood needs, while the businesses located south of Harvard Street appear to serve Howard University and Howard University Hospital.

Georgia and Sherman Avenues represent different street types and serve different functions. On Georgia Avenue, the land use varies from educational to residential to small businesses. Each small business has its own distinctive characteristics. Most reside in older structures which shows their age. The residential section varies from small row houses to small and moderately-sized apartments. On Sherman Avenue, the function is mostly residential, however because of the street's current function as a commuter cut-through; the residential feel of the Sherman Avenue community is sometimes lost.

There are no identifying gateway features at either Florida or New Hampshire Avenues to introduce the driver, pedestrian, bicyclist, or transit user to the distinctive and historic nature of Georgia Avenue.

The sidewalk continuity is interrupted by a number of newspaper boxes, telephone poles and signage. This clutter creates visibility problems for drivers and pedestrians in addition to taking up useful sidewalk space.

Roadway

The right-of-way (ROW) for Georgia Avenue is 90 feet, but most of the ROW in most locations is being encroached upon by buildings. Georgia Avenue from New Hampshire Avenue to Columbia Road has a roadway width – curb-to-curb – of 60 feet. South of Columbia Road, this width reduces to a 55-foot width at the Barry Place intersection. South of Barry Place, the width of Georgia Avenue reduces from 55 feet to 48 feet at the Florida Avenue intersection. This change in roadway width contributes to the narrowing of travel lanes on Georgia Avenue, leading to ineffective traffic operation. It also contributes to an inconsistency in urban design for the corridor.

Sherman Avenue has a ROW of 100 feet, and a roadway width of 60 feet from Florida Avenue to Park Road.

Accessible Green Space

The study area is lacking in functional green space, and much of what exists is on the campuses of Howard University and Banneker High School. The Banneker Park, one area of public green space in the central part of the study area, is surrounded by chain link fences that reduce its accessibility to the public.



Figure I-5: Sidewalk Conditions on Sherman Avenue



Figure I-6: Visual Clutter on Georgia Avenue



Figure I-7: Banneker Park on Georgia Avenue, Surrounded by Chain Link Fences

Existing Conditions - Public Realm



Figure I-8: Crosswalk In Poor Condition on Georgia Avenue

Paving

There is inconsistent sidewalk pavement along the Georgia and Sherman Avenues, varying from concrete to brick pavers, to asphalt paving. Some of the brick, and even the concrete, is in poor condition. The community has complained that the brick pavers are difficult for disabled persons to traverse.

In most locations, the roadway paving on both streets also shows wear and tear in many of the high-volume locations. Some pavement is cracked or removed. Both corridors are in need of milling and re-paving.

Crosswalks and Intersection Boxes

Crosswalk and intersection box striping in many locations have been worn out. Many need to be re-striped. Also, there is no decorative striping or thermoplastic designs on any of the crosswalks or intersections on Georgia or Sherman Avenues.

Street Signs and Wayfinding

Street signs are falling down in some locations, and there is an overpopulation of traffic-related and regulation signs near retail sections. There are no wayfinding signs directing individuals to specific destinations along Georgia Avenue. There also are no signs displayed designating Georgia Avenue as a historic destination.

Bus Stops and Site Furnishings

Bus Stops

Bus stops have a variety of amenities. Some stops have shelters to protect patrons from inclement weather. However, the shelters on Georgia Avenue are in varying conditions – from good to poor.

The bus stop located in front of Wonder Plaza does not have any associated furnishings and patrons usually loiter near business entrances.

Site Furnishings

There are inconsistent street furnishings along the corridor, and no unified type, style, design, and location for these street furnishings. In sections there are multiple trash receptacles available and in other sections there are none. For example, in front of Wonder Plaza, there is a trash receptacle for every retail business. However, there are not enough trash receptacles at businesses north of Columbia Road. Newspaper corrals are in poor condition. Street benches are non-existent, except at bus shelters. Tree boxes are not fenced or separated from the public walkways, and are thus trampled on by pedestrians. Bicycle racks do not exist along the corridor.

Lighting

Lighting fixtures are inconsistent along Georgia Avenue. Recently, the streetlights were replaced with Twin 20 Globe lights on Georgia between Florida Avenue and Girard Street. The older streetlights north of Girard Street, however, were not replaced. The inconsistency in the street lights contributes to the lack of a consistent urban design. It also separates the Howard University area from the rest of the community.

Amenity Areas

Very few sidewalk cafes exist on Georgia or Sherman Avenues. Because of sidewalk widths and conditions, the possibility of sidewalk cafes is limited. Very few parks and public plazas exist on Georgia Avenue. One of the important amenity areas on Georgia Avenue is Banneker Park which is located between Euclid Street and Barry Place. Banneker Park is also the location of a community center, a pool, and a running track. The park is also the location of the annual Caribbean Carnival held every summer and is a focal point for the community. The park is surrounded by a high chain-link fence which gives a unwelcoming impression to the community. The only entrance to the park is from Barry Place, NW. There is no entrance from Georgia Avenue.



Figure I-9: The Lack of Bicycle Racks on Georgia Avenue Leads to Substitues

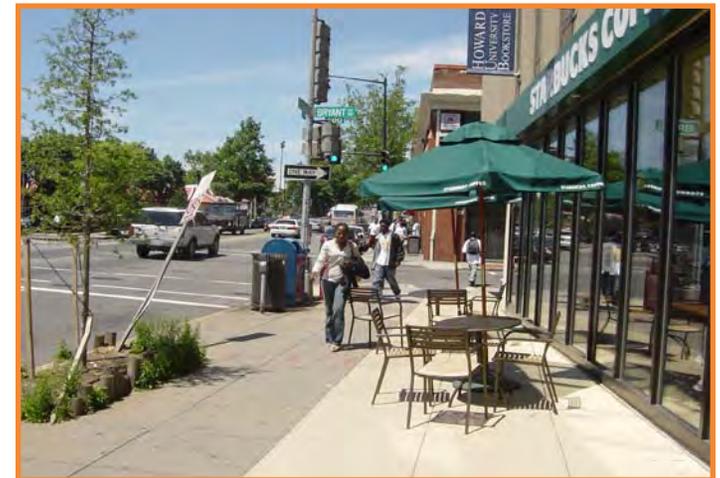


Figure I-10: Existing Amenity Area on Georgia Avenue

Existing Conditions - Public Realm

History, Culture and Public Art

History and Culture

There is a wealth of local and national history and culture in this area. The history of Georgia Avenue and its “sense of place” are important assets for District residents, and for people throughout the country. However, there is no clear identification of the corridor or its significance to African-American culture, nor are there historic designation signs located along the corridor.

There is a section of Georgia Avenue located between Euclid Street and Columbia Road known as the “Blue Nile” area which has restaurants and businesses tailored to African culture and history. However, there is no designation given to this area and its existence on the corridor.

Public Art

Public art is limited on Georgia Avenue to a few privately owned murals. There are many locations available for public art opportunities on Georgia and Sherman Avenues. Many business owners are willing to donate the use of their walls for murals. Howard University boasts several retaining walls along Georgia Avenue that could capture artwork. Metal banners could hang from streetlights that feature special gateway artwork as well.

Plantings and Low Impact Design

Trees on Georgia Avenue vary in condition from excellent to poor or even missing. The primary species along Georgia Avenue is Oak – Willow, Pin, Scarlet, White, Red – in excellent to good condition. A number of other trees are in poor condition spread throughout the corridor. A few dead trees are located on Georgia Avenue, particularly near the Florida Avenue and Morton Street intersection.

Trees provide varying degrees of shade along the corridor. In the lower portion of the study area, trees near Howard University and Banneker Park are well established and provide a good amount of shade for the community. North of Euclid Street, trees are much younger and provide little to no shading. The section of the corridor between Euclid and Irving Streets have very few trees.



Figure I-11: A possible Location for a Public Mural



Figure I-12: Mature Trees in Front of Howard University

Currently there are no street trees planted on Sherman Avenue between Florida Avenue and Park Road due to lack of adequate sidewalk space.

Community Concerns

The following are community concerns as expressed at the various public meetings that need to be incorporated into the public realm design.

- The future of existing businesses.
- The different qualities and activities that distinguish Sherman Avenue from Georgia Avenue.
- Public safety throughout the area.
- Convenient access to transit and parking.
- Significant development at either end of the corridor that will make the entire corridor increasingly attractive as the downtown and other areas of the city build out.
- Cross town traffic that will likely increase as development occurs, both to the west (Columbia Heights) and east of Georgia Avenue (McMillan Reservoir, Soldier's and Airmen's Home).

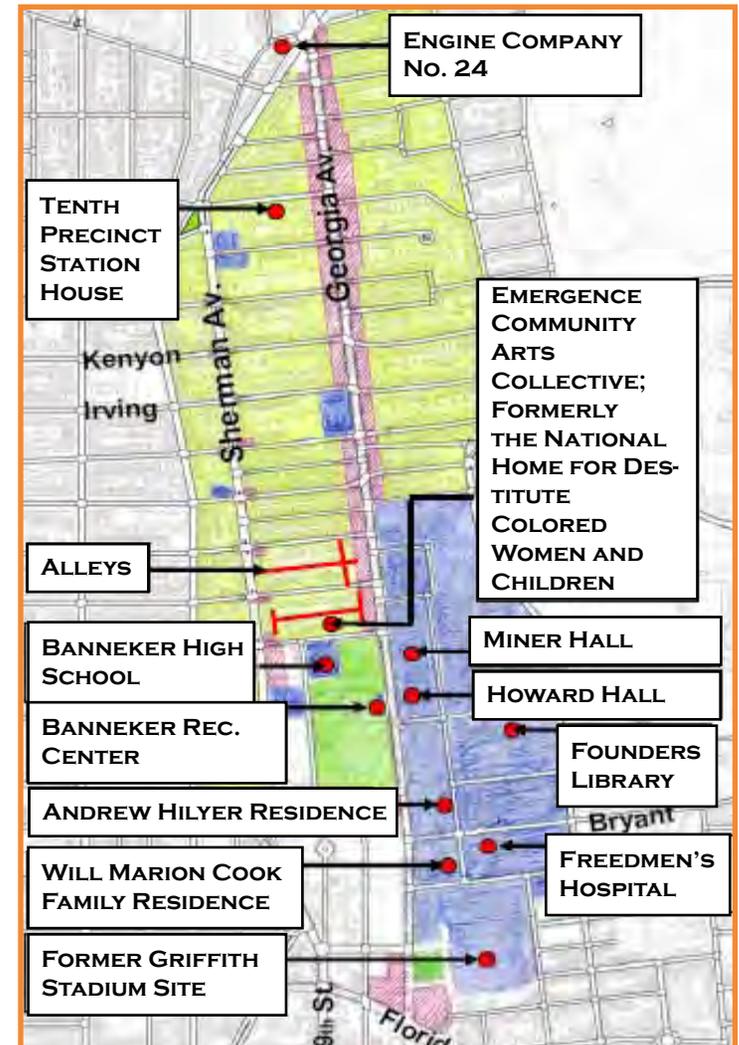


Figure I-13: Location of Historical Structures in the Study Area

Alternatives

- J. Transportation Alternatives
 - i. Overview
 - ii. Alternatives
 - iii. Screening of Alternatives

J. Transportation Alternatives

Overview

Georgia Avenue

Georgia Avenue, carrying approximately 50,000 person trips on a daily basis, is one of the most traveled streets in Washington, DC. When combined with the 21,000 daily trips on Sherman Avenue and the 30,000 daily trips on the cross-town routes of Columbia Road, Harvard Street, and Irving Street, the overall picture is of a neighborhood subject to a variety of traffic problems.

Several physical characteristics, such as the narrowing of lane widths between Florida Avenue and Barry Place, and the prevalence of streetside parking (and double-parking), impede movement through the area. Congestion in the lower section of the study area frequently limits transit vehicles' movement in what is one of the busiest transit corridors of the city.

In developing the transportation alternatives for Georgia Avenue, the ultimate goal was to provide safe and efficient operation for all modes of transportation, not just the automobile. This requires that a balance be struck among vehicles, pedestrians, and transit vehicles, which can be accomplished by focusing on design.

Sections of the corridor need to be improved from a transportation operations perspective to create an efficient transportation system. For example, if the transportation design could “clean up” problem intersections, such as at Georgia Avenue and Florida Avenue, then the efficient movement of vehicles and buses through this intersection would result in a “domino” effect, improving the mobility of vehicles and buses throughout the corridor. Therefore, as part of the development of the design alternatives, the study considered improving high accident locations for all users and reducing areas of friction, or congestion, in the corridor.

The overall objectives are to achieve efficient transit operation in a high-volume transit corridor and improve the pedestrian environment. The key is to strike a balance among transportation users by solving the transportation problems through effective design. The

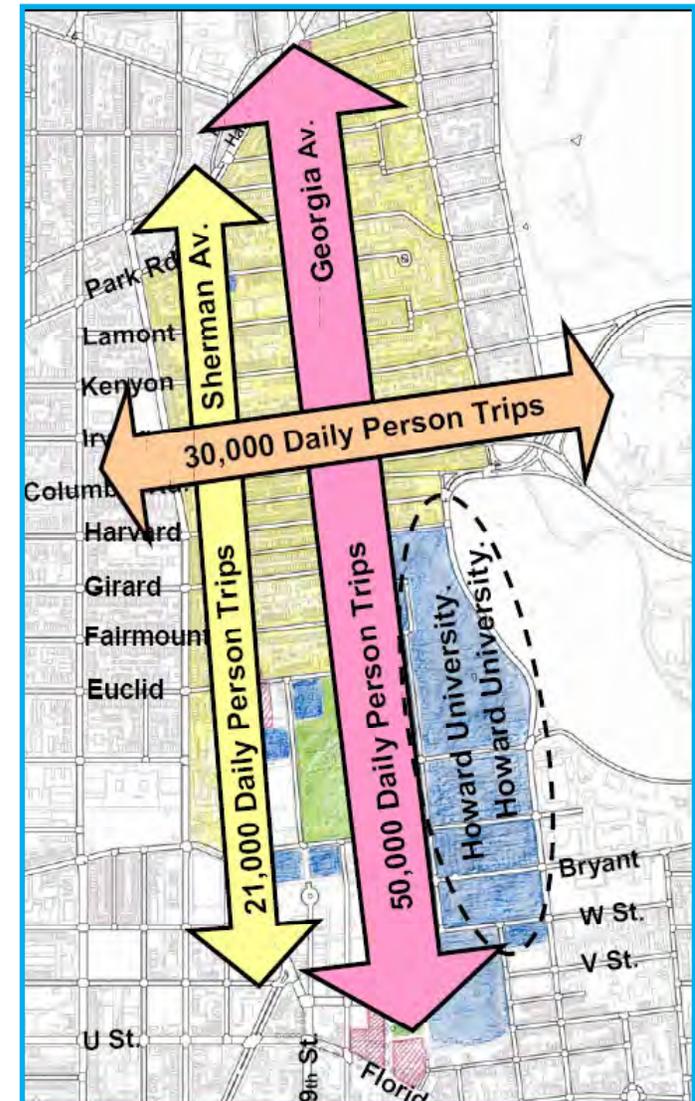


Figure J-1: Diagram of traffic flows in the Lower Georgia Avenue Area



Figure J-2: Traffic Conditions on Georgia Avenue



Figure J-3: Crosswalk Conditions on Georgia Avenue

result would be roadway configurations for both Georgia and Sherman Avenues that work together to create an efficient transportation system.

Three transportation alternatives were developed to address the goals and objectives for Georgia and Sherman Avenues. The transportation alternatives are shown on pages 66-70.

Sherman Avenue

The desire is for Sherman Avenue to return to a more residential street, as opposed to the commuter cut-through that it is now. To have a more residential character, the street will need features that speak to a neighborhood quality, such as widened sidewalks and landscaped medians, as well as features for residential travel including high-visibility crosswalks and bicycle facilities.

Incorporating all of these factors would result in a different roadway configuration for Sherman Avenue, one that would focus more on the multimodal and neighborhood features of the corridor, and less on the vehicular speedway that is its current description. The result: proposing a road diet for Sherman Avenue. The road diet, just as it sounds, means reducing the number of lanes for Sherman Avenue, from two lanes in each direction, to one lane in each direction. The additional width would be attached to sidewalks and to a landscaped median for the corridor. Parking will continue to exist on both sides of the roadway. The lanes on Sherman Avenue would be 13 feet in width, a widened shared lane to accommodate both transit vehicles and bicycles.

The proposed alternative for Sherman Avenue will operate in parallel to all three transportation alternatives for Georgia Avenue (see page 70 for details).

Screening of Alternatives

Transportation Alternatives

Alternative 1 - Focus on Transit

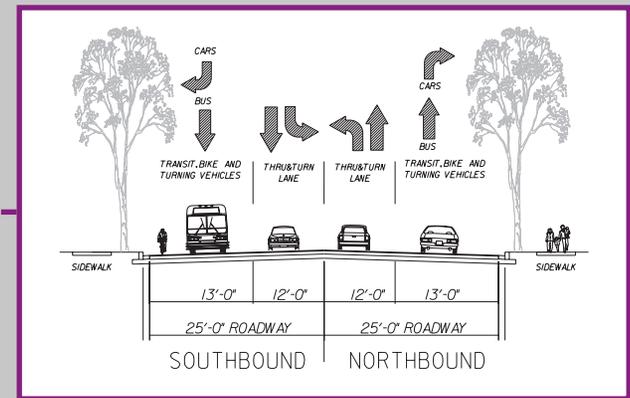
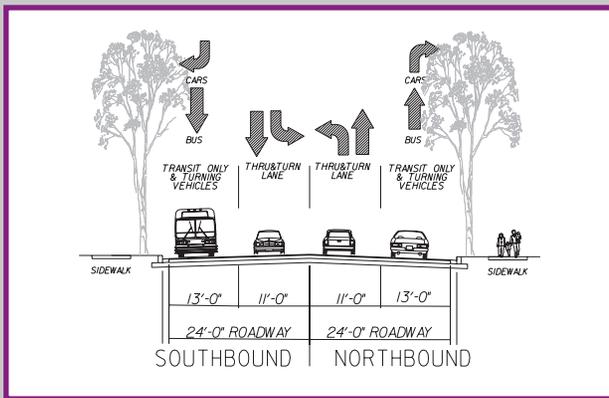
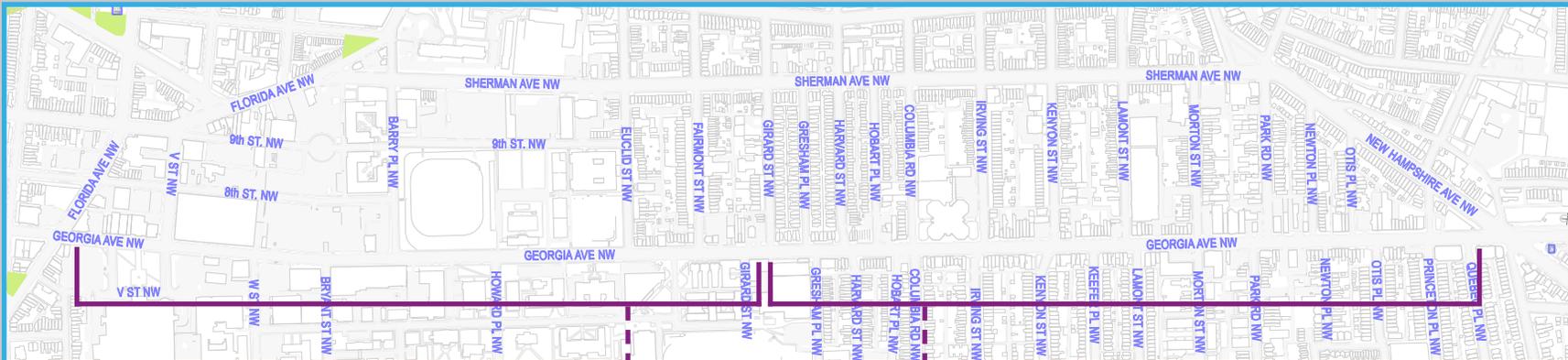
This alternative would focus primarily on the transit operations of Georgia Avenue. A transit-only lane would exist on both sides of Georgia Avenue from New Hampshire Avenue to Florida Avenue. Buses only could travel in the right-most lanes, along with vehicles making right turns at intersections and bicyclists. All other traffic would travel in the left-most lanes of Georgia Avenue. Parking would be removed along the entire section of the roadway to allow for widened travel lanes throughout the corridor.

Alternative 1A

- Remove parking on both sides of Georgia Avenue along its entire length
- Add a transit-only lane in each direction (right-turning vehicles would be allowed to travel in transit-only lane)
- Sherman Avenue remains as-is

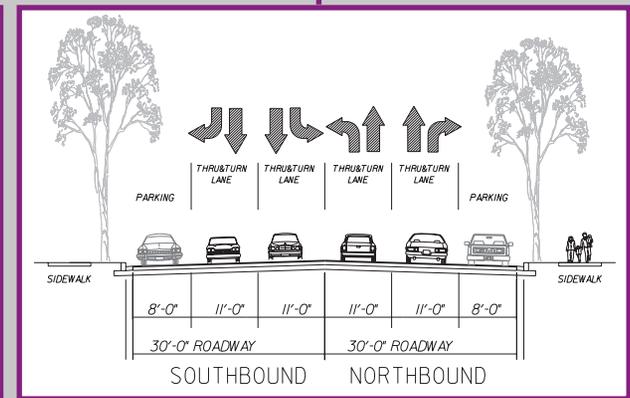
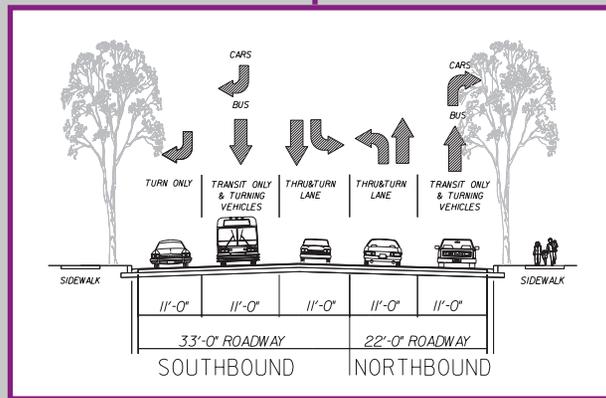
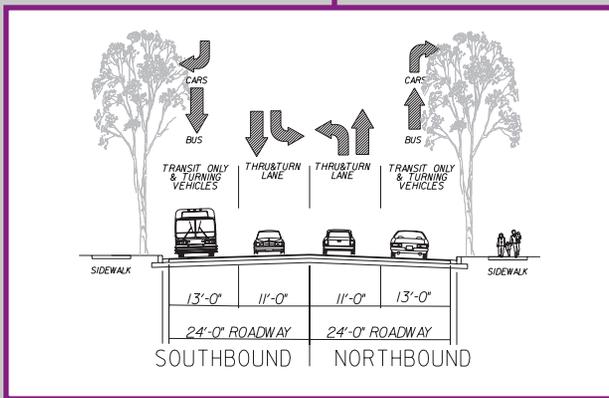
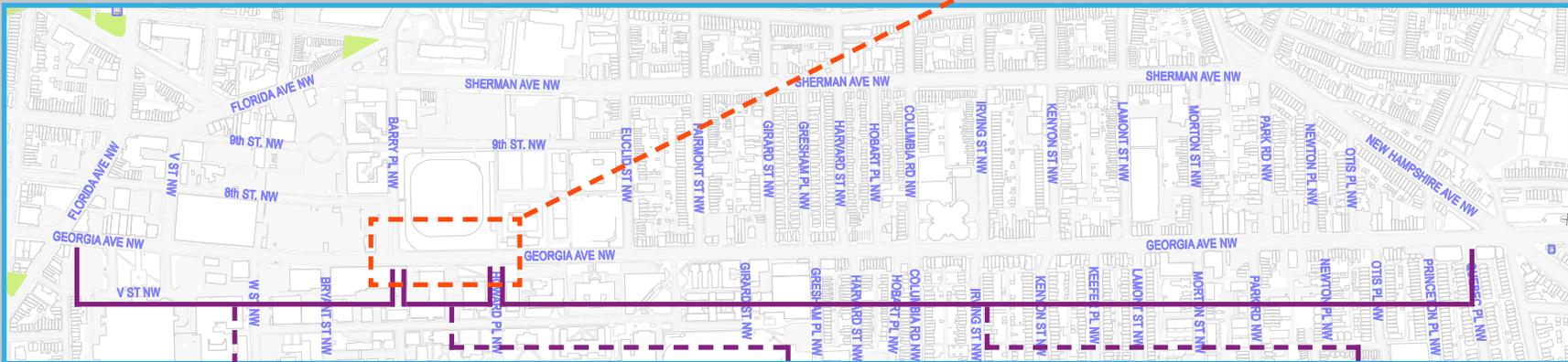
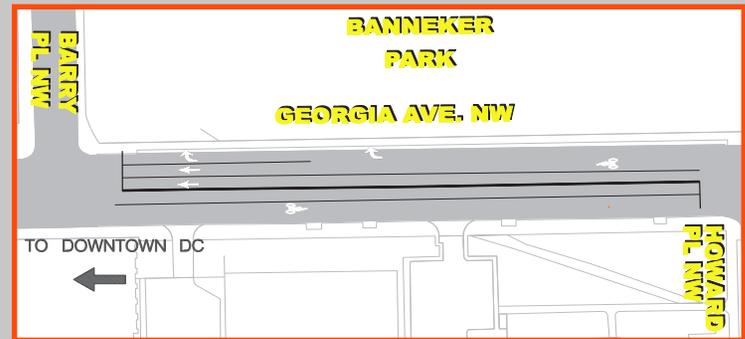
Alternative 1B

Same as Alternative 1A, but reconfigure Sherman Avenue with two travel lanes, widened sidewalks, median, and extended Bryant and W Streets.



Alternative 2 - Focus on Lower Georgia Avenue Congestion

This alternative would focus on reducing or eliminating congestion at “hot spot” locations in the lower portion of the study area while improving mobility for transit vehicles. Four general-purpose travel lanes would exist from New Hampshire Avenue to Barry Place, with parking located on both sides of the street. From Barry Place to Florida Avenue, parking would be removed from both sides of the street and a bus-only lane would be installed in the far right lane. As with Alternative #1, right-turning vehicles and bicycles could also travel in these lanes.



Transportation Alternatives

[Alternative 2 cont.]

Alternative 2A

- Keep parking on both sides of the street from New Hampshire Avenue to Howard Place and current lane configurations
- Add a bulb-out on southbound Georgia Avenue at Howard Place
- Place a dedicated right-turn lane on southbound Georgia Avenue from Howard Place to Barry Place (in the former parking lane)
- Remove parking on both sides of Georgia Avenue from Barry Place to Florida Avenue
- Make outside lane a transit-only lane in this section
- Sherman Avenue remains as-is

Alternative 2B

Same as Alternative 2A, but reconfigure Sherman Avenue with two travel lanes, widened sidewalks, median, and extended Bryant and W Streets.

Alternative 3 – Focus on Automobiles

This alternative focuses on vehicles, as parking would continue to exist on both sides of Georgia Avenue. Dedicated turn lanes would be installed at intersections that currently have blockages, such as Howard Place, Barry Place, Bryant Street, and Florida Avenue. Buses would travel in mixed traffic.

