### 1. Context

# Understanding The South Capitol Street Corridor and its Potential

The opportunities for improving the South Capitol Street Corridor are great, but so are the constraints. This urban design study seeks to identify how to pursue some of these opportunities by establishing a set of urban design principles to be followed in the formulation of any redevelopment plan for the corridor. The study also suggests - through three distinct urban design scenarios - how these principles might be achieved.

While not definitive alternatives, each of the three urban design scenarios focus on three fundamental components of any revitalization strategy:

- The scale, location and character of public open spaces throughout the South Capitol Street corridor
  - These address the connection between the Mall and the Anacostia Riverpark system, how the axis from the Capitol might be resolved at the Anacostia riverfront, how wide the public space of South Capitol Street should be, and the potential along this corridor to create meaningful sites and settings for memorials, monuments and civic institutions.
- The mixture of land uses both civic and privately developed that should be distributed in the South Capitol Street corridor
   An overarching assumption is that if properly planned, this corridor can become a distinguished new address in the District of Columbia for civic, residential and business uses.
- 3. The nature of transportation improvements that should be undertaken in the South Capitol Street Corridor.
  - This component includes analysis of how much through traffic South Capitol Street should carry while better serving its immediate surroundings and fulfilling its role as an important approach to the Nation's Capital from the south. Tunnel options, location of future bridges, best use of the street grid, increased transit choices, and enhanced pedestrian amenities are among the variables.

The following chapter describes the study boundaries, existing open spaces, land uses / zoning, and transportation. This provides base data from which the scenarios that follow emerge.

#### General Description of the Study Area

The study area is generally bounded by Independence Avenue on the north, I-295 and the Suitland Parkway on the south, 2<sup>nd</sup> Street SE on the east and 3<sup>rd</sup> Street SW on the west. For the purpose of this report, the South Capitol Street study area is divided into five smaller subareas (p. 17). The divisions of the study areas follow natural and infrastructure boundaries that currently exist along the overall corridor, including I-395, M Street, Potomac Avenue, the Anacostia River and I-295 are such boundaries to be removed.

While this study focuses primarily on the South Capitol Street Corridor and the important crossing of the Frederick Douglass Bridge, it also takes into account the adjacent neighborhoods on both sides of the River. Taken together, the study area encompasses approximately 950 acres. The length of the South Capitol Street Corridor, approximately two miles from the Capitol to the I-295 interchange, is roughly equivalent to the distance between the Capitol and the Lincoln Memorial, and the same as the distance between the Capitol and RFK Stadium. In sheer size, it is comparable to the scale of other great urban spaces such as Commonwealth Avenue in Boston, between the Common and the Fens, or the Champs Elysees in Paris, between the Tuilleries and the Etoile.

The character of South Capitol Street varies greatly, encompassing residential neighborhoods, major highways and bridges, local neighborhood parks, industrial uses, and auto-oriented retail. Important planning efforts such as the Legacy Plan and the Anacostia Waterfront Initiative have highlighted the great potential of the corridor and its intersection with the waterfront. These studies, and the improvements taking place along M Street, the Southeast Federal Center and the Navy Yard, along with the eventual replacement of the Frederick Douglass Bridge, set the stage for significant change within the study area. Increasingly important connections to the south, along the Suitland Parkway and I-295, amplify the perception of this part of the city as an important gateway to the original I'Enfant City.



I-395 Overpass

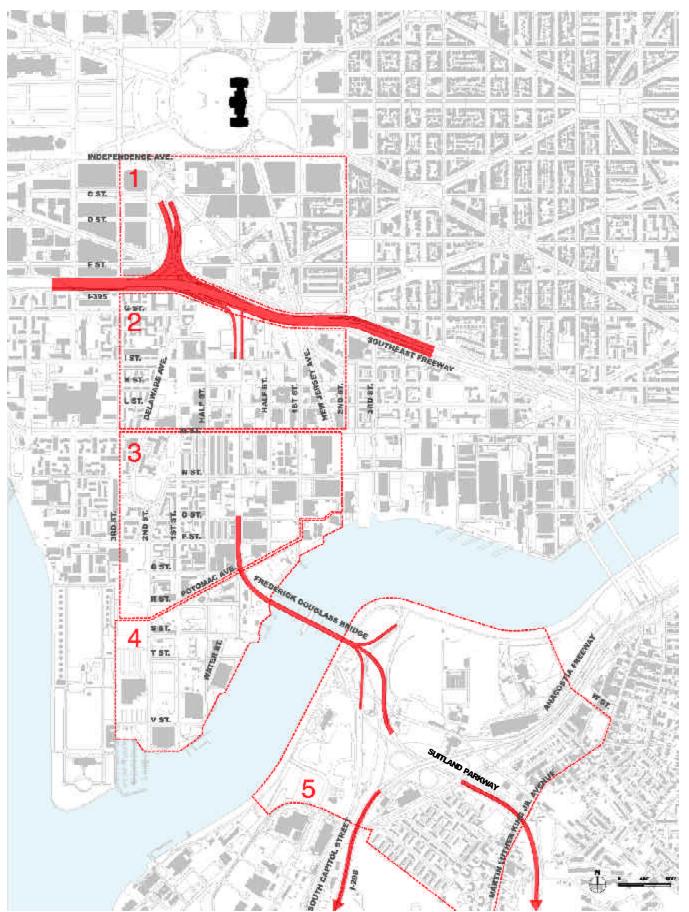


Carrollsburg Place



Pedestrian walkway on Frederick Douglass Bridge

### Context



South Capitol Street study areas

#### Existing Open Space

In a city that is characterized by an abundance of beautiful parks, gardens and parkways, the South Capitol Street study area represents a notable exception. However, several regional and local open spaces exist at the edges of the study area, or in the case of Poplar Point, within the study area. These existing open spaces are described in greater detail below and highlighted on the plan on the following page.

#### Regional parks

The Capitol Grounds and the National Mall

Directly north of the study area are the grounds of the Capitol and, to the west, the beginning of the National Mall. The grounds of the Capitol provide a beautifully manicured and grandly appointed landscape designed by Frederick Law Olmsted. The Capitol Grounds are mostly ceremonial, and public access is partially limited for security concerns.

#### Poplar Point

The condition of the open spaces within the 100 acres of Poplar Point vary greatly. Along the water's edge a small park road and minimal maintenance provide at least a publicly accessible green space that connects to the more actively used Anacostia Park to the east. Site contamination exists on non-accessible parts of Poplar Point as well as on some areas currently considered wetlands. Poplar Point is generally cut off from the surrounding neighborhoods by I-295 and the Anacostia Freeway. Open spaces adjacent to the Frederick Douglass Bridge are mostly the remains of land carved out for exit ramps and access roads.

#### Small scale neighborhood parks Garfield Park

This park of approximately 8 acres is typical of the small neighborhood parks located along the great diagonal avenues set out by L'Enfant as a way of providing relief to the urban fabric. Parks such as these are plentiful in the residential areas to the east of Capitol Hill. Garfield Park is however severely compromised by the Southeast/Southwest freeway, constructed directly on top of its southern edge. Nevertheless, it is widely used by local residents, and provides running paths and landscaped open spaces.

#### Randall Playground

This community park provides local neighbors with venues for active recreation. Tennis courts, a swimming pool, basketball courts, and two softball fields enjoy active use as conditions permit. While these active recreational areas appear to be well maintained, the paved open space along I Street does not. While this park is easily accessible from the neighborhoods to the southwest, both the exit ramp from the Freeway and the width of South Capitol Street preclude access from the north and east.

#### N Street Park

Defined on two sides by streets that were previously canals, this 3.3-acre park contains tennis courts and open space for adjacent neighbors.



Parking lots and landscaping at D Street SW

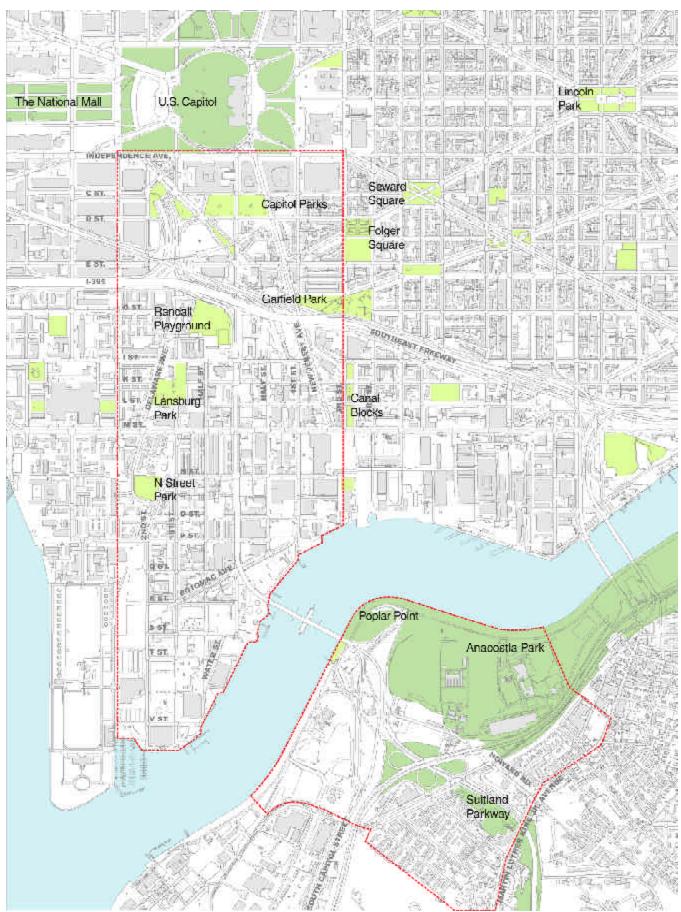


Randall Playaround



Parkland at Poplar Point

#### Context



Existing open spaces

#### Existing Land Uses

Land uses along the South Capitol Street Corridor vary greatly. North of I-395, a number of large underutilized properties front the street. A few residential units are located to the east and the edge of the Southwest Federal Center office buildings are located to the west of the corridor, beyond the open ramps of I-395 north. South of I-395 to the Anacostia River, light industrial and autooriented uses are established east of South Capitol Street and along the waterfront. Southwest residential neighborhoods lie directly west of South Capitol Street between M and P Streets. Most of the open space is found on Poplar Point between I-295 and the water. Inland of I-295 the blocks of the historic Anacostia neighborhood begin.

The South Capitol Street study area is one of the few sectors of the city that allows industrial uses, an important component of the economic diversity found in the District. Typically the uses are low density and can be relocated, but only if other suitable areas in the city are identified. Long -term planning for industrial and service-oriented uses for the District of Columbia must take place in order for significant change to occur in the South Capitol Street Corridor. Each of the land uses within the study area is described below and reflected on the land use map on the following page: Commercial Uses

- Along South Capitol Street, fast food and gas stations are a predominant feature,
- typically with substantial paved areas and surface parking lots. Small-scale neighborhood services including liquor stores, hair salons, and conve nience shopping stores are located in the blocks adjacent to the residential area between M and P Streets.
- Long- and short-term storage facilities in older, previously industrial buildings are present near P Street.
- Auto repair and storage facilities are located throughout the study area.
- Nightclubs and adult entertainment establishments are present east of South Capitol Street in the largely industrial areas.
- A commercial district exists along Martin Luther King, Jr. Avenue in the neighboring Anacostia community.

#### Industrial Uses

- Light industrial uses found throughout the blocks east of South Capitol Street and along the waterfront include auto-servicing and repair, small-scale manufacturing, concrete crushing, gravel yards, bus storage, city salt storage facilities, and oil storage.
- A Pepco Power station is located south of Potomac Avenue adjacent to Fort McNair.

#### Residential Uses

- North of I-395 and along New Jersey Avenue, the Capitol Hill neighborhood is a lowdensity residential neighborhood that has seen a significant increase in new and rehabilitated housing.
- Between M and P Streets, the residential area that extends from the southwest is predominantly low-income with a significant number of subsidized housing units. While residential units along South Capitol Street suffer from exposure to high volumes of traffic, units located on the next blocks, such as Carrollsburg Place, are well maintained and fully occupied. Rowhouses and low-density apartments are typically found in this area.
- The historic neighborhood of Anacostia borders the southern portion of the study area east of the Suitland Parkway and is also a low-income neighborhood with a significant share of subsidized housing. West of the Suitland Parkway are the Barry Farms Homes owned and operated by the DC Housing authority.



South Capitol and D Streets

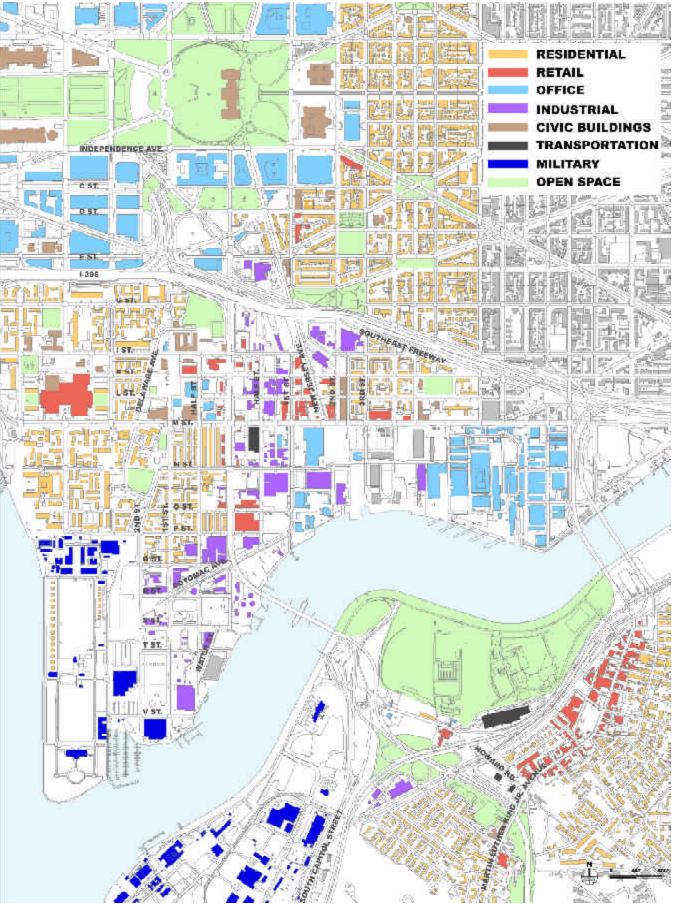


South Capitol and I Streets



South Capitol and N Streets

### Context



Existing Land Uses

#### Existing Transportation

More than any other aspect of the study corridor, transportation issues predominate. Future land uses and open space configurations will be the result of decisions made about transportation enhancement in this corridor. Given the current South Capitol Street ROW and expected future increases in vehicular volumes, little open space is possible without significant changes to the way in which vehicles, pedestrians, and transit moves through the corridor. The Gateway Study currently in progress will evaluate various options for transportation improvements on South Capitol Street and the Frederick Douglass Bridge. Key transportation aspects are described in greater detail in the Transportation section of this report.

#### Regional Network

South Capitol Street functions as an integral part of a larger highway system including I-295, the Anacostia Freeway, the Southeast/Southwest Freeway, Barney Circle, I-395 and the Frederick Douglass Bridge. The Suitland Parkway joins this network and connects to South Capitol Street at the I-295 interchange. Traffic volumes across the entire interchange are approximately 100,000 cars daily. The Southeast/Southwest Freeway, I-395 and their attendant exit ramps to and from South Capitol Street are a significant feature within the study area.

#### Transit

The study area is served by several Metrorail Stations along the green line. North of the Anacostia River the Navy Yard and Waterfront-Southeast University stations are located along M Street. South of the River, the Anacostia Metrorail Station and Metrobus facility are located adjacent to the I-295 interchange. The Anacostia Station serves as a park and ride stop, with a large capacity garage. Because of its location and the existing access roads, this station is difficult to access both for pedestrians and drivers. Existing Metrobus service along South Capitol Street provides the only means of public transit for many residents of the study area.

#### Vehicular Transportation

The existing 130 foot South Capitol Street ROW contains eight vehicular lanes of traffic and medians which together account for approximately 110 feet of the total ROW. Four center lanes are channelized by concrete barriers into a high-speed throughway. The Frederick Douglass Bridge contains five lanes of traffic, two south-bound and three north-bound. Traffic along South Capitol Street moves unimpeded from the Suitland Parkway until a signalized intersection at I Street. A grade separation at M Street allows through traffic to maintain highway speeds. Frontage roadways on each side of the high-speed lanes access local streets and provide onstreet parking. There are no designated bicycle lanes along South Capitol Street and pedestrian amenities are few.

#### Local Connections and Pedestrian Conditions

A few local streets, including I Street, M Street, and P Street connect across the South Capitol Street corridor. Crossing is difficult by car, foot or bicycle. Of these east-west crossings, M Street carries significant traffic from the Navy Yard to the Southwest Waterfront. Roadway improvements and development incentives are underway along M Street. Along the South Capitol Street Corridor sidewalks are narrow, typically 10 feet wide. There are few street trees and minimal landscaping. Narrow pedestrian paths on each side of the Frederick Douglass Bridge are inadequate and dangerous. Pedestrian conditions improve only at the northernmost blocks of the study area, a few blocks south of the Capitol grounds.



South Capitol Street below I-395

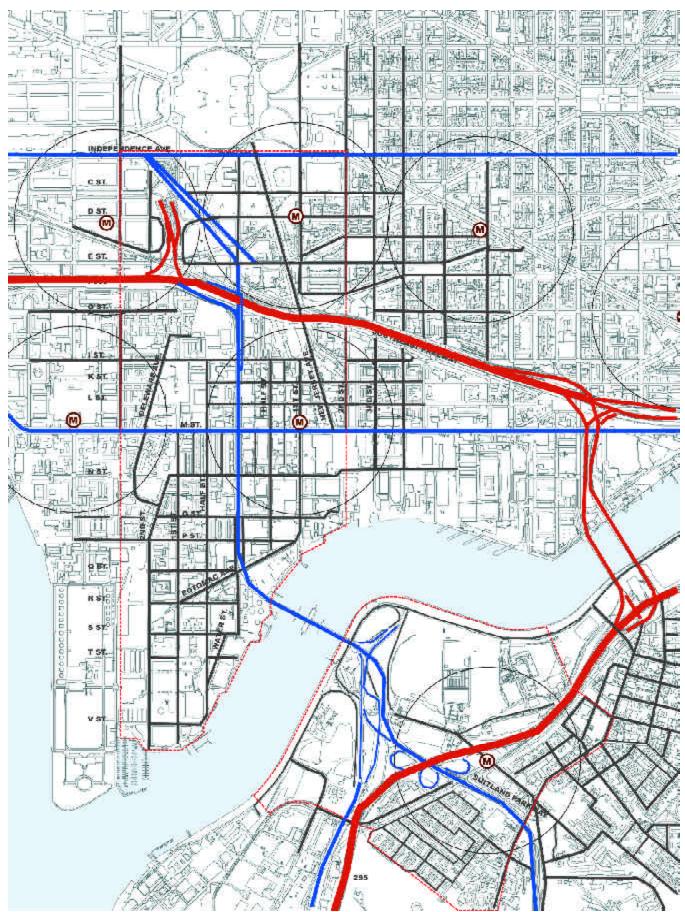


Channelized traffic on South Capitol and M Streets



Bridge ramps at Poplar Point

#### Context



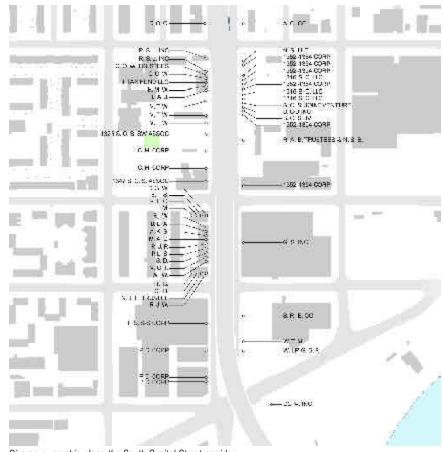
Street heirarchies and Metro stations, circles indicate 5-minute walking radius.

#### Land Ownership

There are over 120 individual property owners along the South Capitol Street corridor, making any acquisition and assembly of parcels a challenge. While there are a number of large tracts of land belonging to public agencies, individual blocks can have as many as 15 owners. A review of the owners reveals that a number of Limited Liability Corporations own properties along the corridor possibly indicating land banking by private parties in anticipation of future development. Significantly, four companies privately own the 16.5-acre waterfront parcels directly adjacent to the Frederick Douglass Bridge.

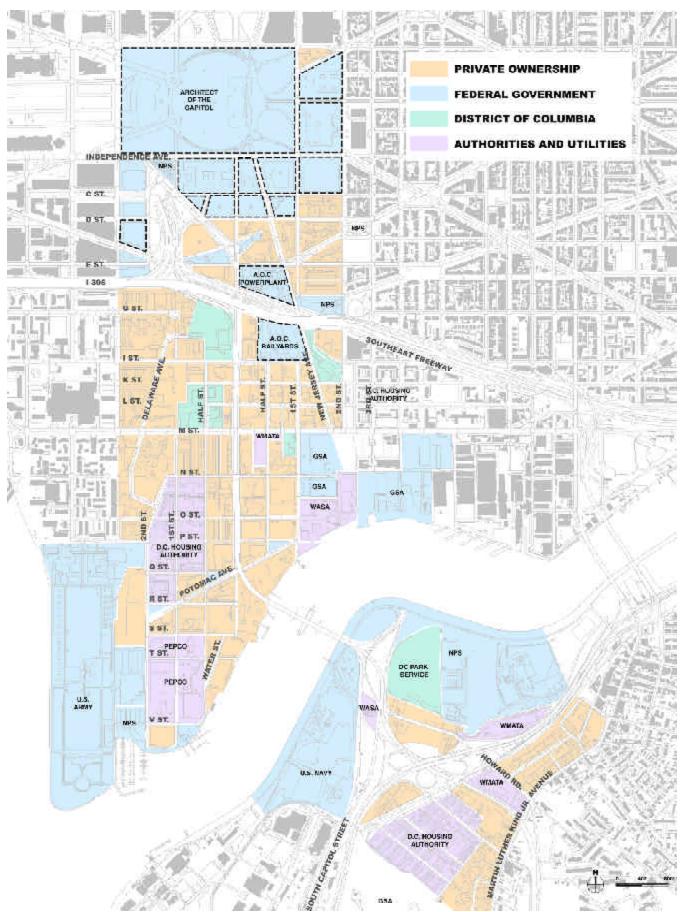
With the exception of three areas of public ownership, concentrated near the Capitol, I-395, and Poplar Point, the majority of land along the corridor itself is privately owned. The Architect of the Capitol controls blocks in the study area south of the Capitol as well as the Capitol Power Plant and associated rail yards located adjacent to I-395. Park space owned by the District's Parks and Recreation Department is located on the northeast corner of South Capitol and I Street, just south of I-395. At Poplar Point along the Anacostia River north of the Frederick Douglass Bridge, the National Park Service and the District own large tracts of land. South of the Frederick Douglass Bridge, ownership is divided between the U.S. Navy and Bolling Air Force Base.

Other publicly held lands located several blocks east and west of South Capitol Street exert a strong influence on its character. Along M Street, transportation facilities owned by the District government include the DC Vehicle Inspection Station and a WMATA storage facility. Located south of M Street and to the east of South Capitol Street is the Southeast Federal Center and the Navy Yard. To the west of South Capitol Street below M Street, the DC Housing Authority owns and manages several public housing developments. West of 2<sup>nd</sup> Street and south of P Street, the U.S. Army's Fort McNair and the PEPCO facility cover a significant amount of land. In terms of overall land area, the federal presence within the study area is already significant. While there are many individual land owners along South Capitol Street itself, the properties are relatively small in comparison to the very large federally owned tracts such as Fort McNair, Bolling Air Force Base, National Park Service Park Space, land controlled by the Architect of the Capitol, and the Navy Yard.



Diverse ownership along the South Capitol Street corridor

### Context



Existing ownership plan

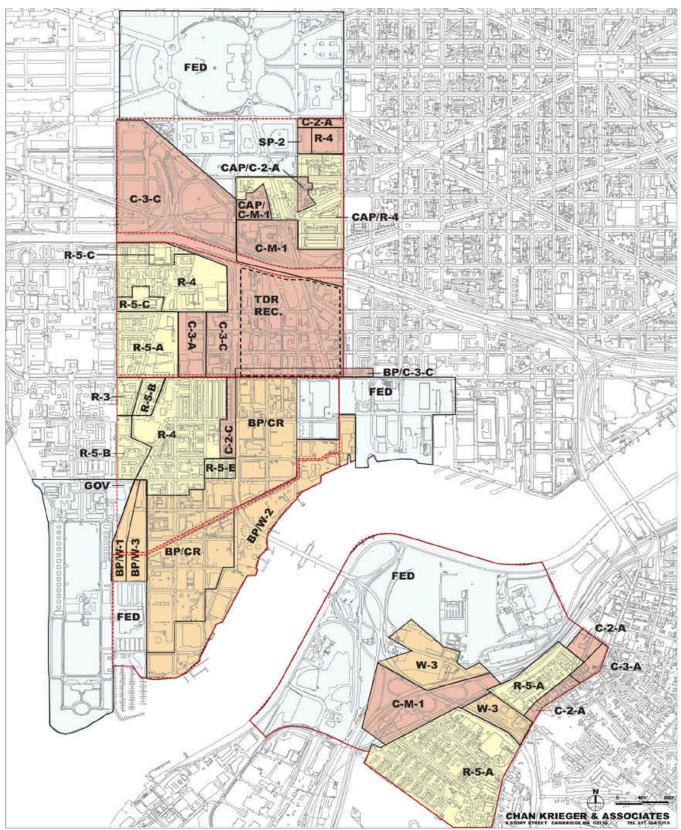
#### Existing Zoning

Existing zoning varies a great deal within the study area. Recent zoning changes include the Buzzard Point/Capitol Gateway Area overlay district that allows for the continuation of existing industrial uses, but prohibits the expansion of these industrial uses, and promotes residential and mixed-use development. Other visitor-related uses such as retail, service, entertainment, cultural and hotel and inn uses are also encouraged under the new zoning guidelines. Key aspects of the existing zoning are described below. Existing zoning districts are shown on the accompanying table and map.

- In the blocks outside of the Buzzard Point/Capital Gateway Area (indicated by the BP prefix)
   zoning reflects existing land use patterns.
- Blocks zoned for residential uses exist largely to the west of South Capitol Street south of M Street. Among these, zoning districts along South Capitol Street have greater floor-arearatios (FARs), allowing a higher density of development.
- Commercial uses are encouraged in the large district areas northwest and southeast of I-395. Along M Street, current zoning allows for high-density commercial development east of South Capitol Street.
- The Transfer of Development Rights (TDR) receiving zone located north of M Street, compensates for development areas limited elsewhere in the city. Currently this area has the highest FARs, 9 and 10, of the study area.
- A mixture of uses is permitted in the Buzzard Point/Capitol Gateway Area overlay blocks that
  extend adjacent to South Capitol Street and along the waterfront. In these districts, residential FARs are higher than those for other uses in order to provide incentives for housing
  development.
- Federal land is not subject to local zoning requirements.

Throughout the study area, lot occupancy requirements range from 75% to 100% ensuring a relatively dense urban fabric. Height restrictions are consistently 90', typical for D.C., with the exception of important transitional zones. At the waterfront, heights are reduced to 60' in the interest of providing views and reducing bulk. Heights are reduced in C-3-A and BP/W-1 to provide a transition to lower rise buildings at Fort McNair and Greenleaf Town Houses, respectively, and at the C-M-1 area at Poplar Point to preserve significant views of the city from the Suitland Parkway. A 75' setback from the water's edge is required in the BP/W-2 district to allow continuous public access along the waterfront.

DISTRICT	USE	FAR RES.	FAR OTHER	LOT OCCUP.	HEIGHT
BP/W-1	residential, commercial, industrial	2.5	1	-80%	40 max.
BP/W-2	residential, commercial, industrial	4	2	75%	60 max.
BP/VV-3	residential, conimercial, industrial	6	5	75%	90 max.
C-2-C	office, retail, residential	6	2	30%	90 max.
C-3-A	refail, office	4	2.5	75%	65 max.
C-3-C	office, retail, housing, mixed use	6.5	6.5	100%	90 max.
C-3-C (TDR REC)	office, retail, housing, mixed use	6.5	9	100%	90 max.
BP/C-3-C (TOR REC)	office, retail, housing, mixed use	6.5	10	100%	90 max.
BP/CR	residential, commercial, industrial	6	3	75%	90 max.
C-M-1	commercial, manufacturing	0	3	100%	40 max.
FED	5.72				
R-5-E	residential, commercial, industrial	6	5	75%	90 max.
W-3	residential, commercial, industrial	6	5	75%	90 max.



Zoning Map

### 2. Open Space

Understanding Potential of Civic Open Spaces Along The South Capitol Street Corridor

L' Enfant's vision of graceful boulevards and commodious green spaces still characterizes major parts of the nation's capital. The introduction of gracious open spaces into the South Capitol Street setting along one of the major axes of the city should be an important objective. The scale, configuration and use of these spaces will surely define the future character of this corridor.

The three urban design scenarios presented in this report explore a variety of open space configurations and scales. Four distinct open space typologies are presented:

- 1. a Suitland Parkway extension
- 2. a waterfront promenade and South Capitol Street terminus
- 3. a linear park for monuments and memorials
- 4. a great urban boulevard

Each of these typologies forms the basis for a particular South Capitol Street future. One of the principal reasons for improving South Capitol Street is to provide a better civic connection between the National Mall and the 1,600 acres of open space along the Anacostia River. It is such a continuity of landscape that characterizes the best public realm qualities of Washington, D.C.

#### 1. Suitland Parkway Extension

Beginning in Maryland east of the study area, the Suitland parkway continues uninterrupted as a well-landscaped parkway for nearly nine miles only to end in the ramps leading to the Frederick Douglass Bridge. The Suitland Parkway is a limited access roadway that serves commuters approaching the nation's capital from the east and those traveling between Andrews Air Force Base in Prince George's County, Maryland, to Bolling Air Force Base, and to the monumental core. It is a dual-lane roadway used by visitors and commuters. The White House frequently uses the Parkway along with congressional and military personnel, as well as foreign dignitaries who fly into and out of Andrews Air Force Base. The Parkway corridor is often the first physical image foreign heads of state form of the United States. The Parkway is listed on the National Register of Historic Sites.

Visitors to the nation's capital often remark upon the abundance of graceful landscapes woven throughout the city at its monumental core, its many parks and plazas, along its waterways and along its busy avenues, streets and parkways. While Poplar Point, the Anacostia Park, and the Suitland Parkway contribute to this experience, areas along South Capitol Street north of the Anacostia River do not. An abrupt change in the visual environment currently occurs as one travels from one side of the river to the other.

A revitalized South Capitol Street corridor should provide a continuity of experience from the Suitland Parkway to the monumental core, reflecting the transition from the Maryland suburbs to the higher density urban corridor. A generously planted urban boulevard stretching the length of South Capitol Street, and a more graceful, less highway-like Frederick Douglass Bridge would provide such continuity, and also transform South Capitol Street into a landscaped corridor more characteristic of Washington, D.C.



Suitland Parkway



Development of an urban boulevard enables a continuity of experience from the Suitland Parkway to the Monumental Core

### 2. Waterfront Promenade and South Capitol Street Terminus

The Anacostia Waterfront Initiative (AWI) describes in detail the new Anacostia Riverpark, through which South Capitol Street and the Frederick Douglass Bridge pass. Ample open space will abut the seven-mile stretch of the Anacostia Riverpark. From the natural setting of Kingman Island and the National Arboretum at the northern reaches of the river to Poplar Point, landscaped green space will abound. In contrast, Buzzard Point, the Southeast Federal Center, and the Navy Yard provide an opportunity for an urban waterfront. Like Alexandria and Georgetown, these areas could be some of the special places where the city meets the river. A 75 foot wide promenade is mandated by the zoning code in these areas, and the AWI recommends suitable programming. Similar promenades offer one of the defining characteristics of the best known waterfronts in cities throughout the world. Active uses enliven such edges as these, providing sweeping views of the water and amenities close at hand.

As a spatial counterpoint to the urban promenade, the terminus of the Capitol axis at South Capitol Street can offer a landscaped opening and an invitation to travel further inland along a greenway. Such a variety of spatial and programmatic diversity is found in the best waterfronts, including Chicago's Grant Park on Lake Michigan and New York's Battery Park City. Linear urban promenades, marinas and plazas, residential pocket parks, and large recreational spaces all occur along Battery Park's three-quarter-mile stretch.

As one of the prime sites identified in the *Memorials and Museums Master Plan*, the Capitol axis terminus of South Capitol Street at the Anacostia River provides a rare opportunity for a monument, memorial or civic feature of national significance. As important as the Lincoln Memorial is in terminating the west axis from the Capitol, the Capitol axis terminus at the Anacostia River should serve as a gateway to the Monumental Core from points south. A wide range of options exists for the form of this terminus. Like the Mall, many sites along the South Capitol Street axis can be appropriate for memorials. At the terminus, a waterfront space that relates to the larger Anacostia Park trail system can complement an architecturally significant bridge structure further south that reflects at night in the water. A significant feature should engage the open space at the water's edge, taking priority over roadways and infrastructure; and it should be a place of celebration and remembrance as is appropriate for its prominent location. Design excellence should be promoted through the entire corridor and especially at this important civic site. The best designers should be called upon to create structures and landscapes of beauty and significance, appropriate for the Nation's Capital in the 21st century.

The ensemble of open spaces along the length of the Anacostia River should provide a variety of different yet complementary experiences. Memorial opportunities, active recreation, tranquil parks, and busy marinas all should be found along its shores. Thus, the waterfront park proposed for the terminus of South Capitol Street should complement, but not replicate, the proposed reuses of Poplar Point.

#### Open Space



Boston's esplanade along the Charles River



Washington Harbour

Waterfront trail system and open spaces proposed by the AWI Framework Plan, "Heritage Basin" indicated by dashed circle



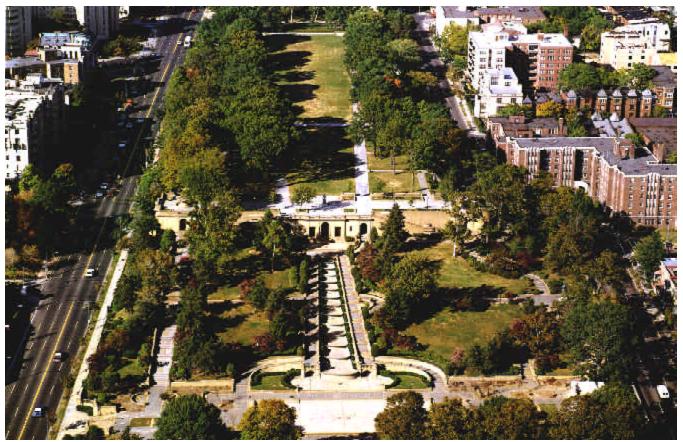
#### 3. Linear Park for Monuments and Memorials

There is a scarcity of landscaped, public open space within the South Capitol Street study area north of the Anacostia River. As the area redevelops and becomes more dense, additional open space will be needed. Throughout much of Washington, green spaces promote gracious and stable neighborhoods. It is important to achieve a similar condition in this area. The South Capitol Street Corridor should better connect two significant open space systems: the National Mall and the Anacostia Riverpark. To provide a suitably scaled connection, green space for the adjoining neighborhoods, and sites for future museums and memorials, a significant open space corridor is desirable, most likely requiring an expansion of the existing right-of-way (described later in this chapter).

A green connection from the Mall to the waterfront accessible to joggers, strollers and bicyclists would be a welcome benefit to the city. At the local scale, this public space could provide a substantial amenity for additional development investment in the area. To complement this linear park, smaller neighborhood parks located several blocks east and west of South Capitol Street would enhance the adjoining neighborhood. These smaller parks would be appropriate for dog runs, playgrounds and local celebrations.



Dupont Circle



Meridian Hill Park in Northwest Washington, D.C. is a 12 acre park west of 16th Street NW, similar in width to the proposed linear park

#### Open Space

#### 4. A Great Urban Boulevard

The L'Enfant Plan is relatively silent in describing the urban characteristics of the southeastern quadrant of the city and in particular South Capitol Street. Productive canals traversed this district south of the Capitol for several blocks, characterizing the site's history as an industrial sector. Unlike East Capitol and North Capitol Streets, South Capitol Street was never developed as one of the District's great avenues. These great diagonal avenues, such as Pennsylvania and Massachusetts, have right-of-ways (ROW) of 160 feet (the ROW is the distance between property lines, including sidewalks, roadways, and planting areas). North Capitol Street and East Capitol Street also have a 160 foot ROW, but South Capitol Street has a narrower ROW of 130 feet. Grid streets in the District, the numbered and lettered streets, typically have a 95 foot ROW.

Compared with East Capitol Street, South Capitol Street has twice as many vehicular lanes and an ROW narrower by 30 feet. The goal is to transform South Capitol Street into a great urban boulevard that maintains the vitality of an active street within a landscaped realm. Three kinds of boulevards are described on the following pages:

A boulevard within the existing 130 foot South Capitol Street right-of-way, A center median boulevard with an expanded 220 foot right-of-way, and A boulevard combined with an adjoining linear park in an expanded 325 foot right-of-way

The characteristics of the street may even change along the 1.5-mile distance from the Anacostia River to the Capitol. But whichever is ultimately selected, it must meet the often conflicting needs of vehicular circulation and a landscaped setting suitable for a public corridor of national significance.

Each of these roadways distributes traffic and open space differently across increasingly wider ROWs. While the first typology would require a substantial reduction of traffic capacity in the corridor without requiring an expanded ROW, the two other roadway types require a greatly expanded ROW, resulting in a substantial increase in landscaped open space. Precedents of other great boulevards in Washington and other cities form the basis for the three configurations described on the following pages.



La Via Julia, Barcelona

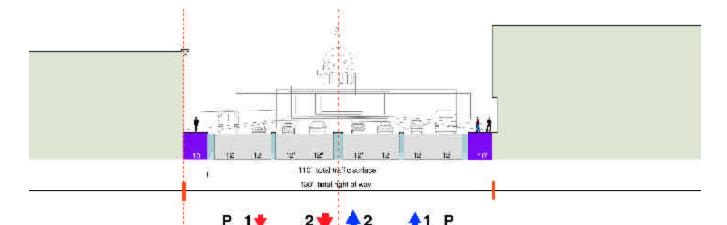
#### KEY TO SECTIONS



PARKING LANE

**FUTURE TRANSIT LANE** 

**CENTER LEFT TURN LANE** 



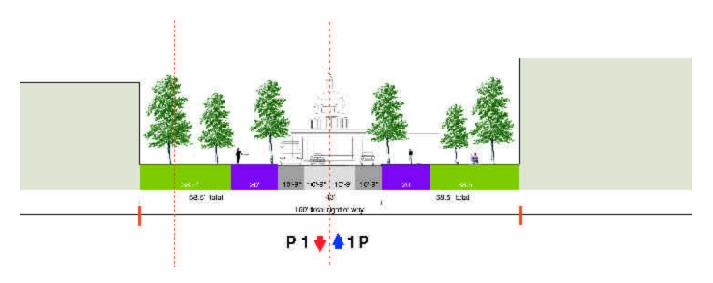
Existing South Capitol Street section

Aerial view of East Capitol Street

#### Boulevard Within the Existing 130 foot Right-of-Way

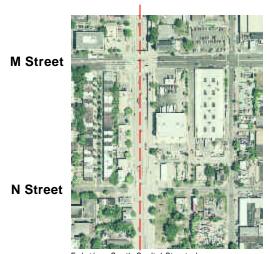
With an ROW of 160 feet, East Capitol Street provides a local, historically sympathetic precedent for a possible transformation of South Capitol Street. Here a 43 foot wide roadway contains four lanes of traffic on axis with the Capitol. Generous 20 foot wide sidewalks flank the roadway and 38 foot wide building yards (required by setback, yet privately owned) extend to the building faces. While this example provides a precedent developed in the L'Enfant Plan, two exceptions to its direct application to South Capitol Street exist. First, the scale of the roadway, while appropriate for a residential precinct, is too small. For commercial development to be feasible along South Capitol Street, this report recommends a minimum of three lanes in each direction, in addition to transit. Thus landscaping would have to be significantly reduced even in the 160 foot ROW, compromising its qualities as a boulevard. Second, the landscaped building yards, again appropriate for residences, would not function with ground floor retail. Individual property owners are largely responsible for the maintenance of these yards, leaving the quality and character of the landscaping to chance. This may not be appropriate or helpful to the expanded public realm of a nationally significant gateway.

The cross-sections shown on the bottom of the next page indicate the application of this typology to the South Capitol Street corridor. Here the existing ROW of 130 feet is maintained, the number of roadway lanes reduced to six with a center left turn lane, and the sidewalks are expanded to 30 feet. This wider sidewalk area could accommodate a wider range of activities and uses appropriate for high density commercial and residential uses, as well as a planting strip adjacent to the roadway. Sites for memorials could occur at intersections or traffic circles in this scenario, yet not along the widened sidewalks. The application of this typology within the existing ROW provides a greener, more quiet boulevard, and does not require land takings. While it may be the most historically appropriate configuration, in the manner of other streets in the Capital, the scale may be inconsistent with the larger aspirations for the corridor.



Precedent: East Capitol Street section

### Open Space



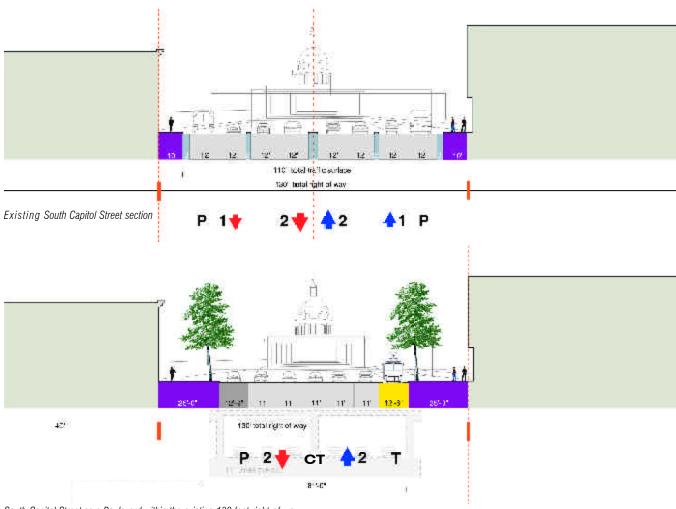
Existing South Capitol Street plan

South Capitol Street



South Capitol Street as Boulevard Street plan

(yellow and blue represent potential residential and commercial development, respectively).



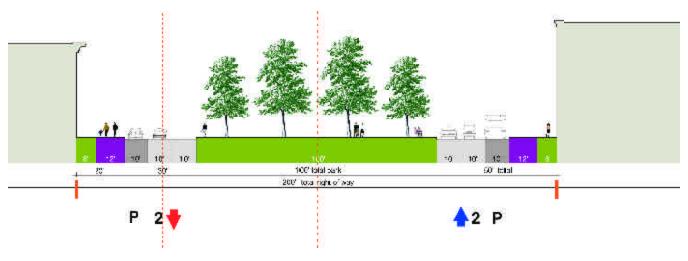
South Capitol Street as a Boulevard within the existing 130 foot right-of-way

Commonwealth Avenue, Boston

# Center Median Boulevard with an Expanded 220 foot Right-of-Way

Commonwealth Avenue in Boston is a densely planted, center median boulevard, located in a late 19th-century residential neighborhood. A 100 foot wide linear greenway occupies the center of the 200 foot ROW on Commonwealth Avenue. Three cartways, two travel lanes, and one parking lane are located on each side of the center median, with sidewalks and small building yards extending to the building face. Given that the Commonwealth Avenue ROW is 70 feet wider than South Capitol Street, and has fewer traffic lanes, substantial open space is possible in this typology. A balance between landscaped open space and vehicular movement is evident. The relatively wide ROW allows for a commodious greenspace suitable for quiet recreation. In addition, this central median is occupied by small-scale memorials and commemorative sites. This makes it an appropriate model for South Capitol Street, which would benefit from additional memorial sites. Both traffic and a generous landscaped area are graciously accommodated in this typology.

Applied to South Capitol Street the ROW is expanded by approximately 45 feet on each side of the present South Capitol Street. A 100 foot wide landscaped median would result along the central axis with three lanes of traffic located on each side. Sidewalks are expanded to 25 feet – six inches, a dimension that adequately accommodates street trees and a generous pedestrian realm. At 100 foot wide, the central median would be a suitable location for small–scale memorials and passive recreation, as well as generous landscaping. While the precedent is located in a largely residential area, it can work equally well as a mixed-use or commercially oriented boulevard. Hardscaping within the central median may increase to accommodate this transformation. Notable examples include the Via Julia and the Ramblas Catalunya in Barcelona.



Precedent: Commonwealth Avenue section

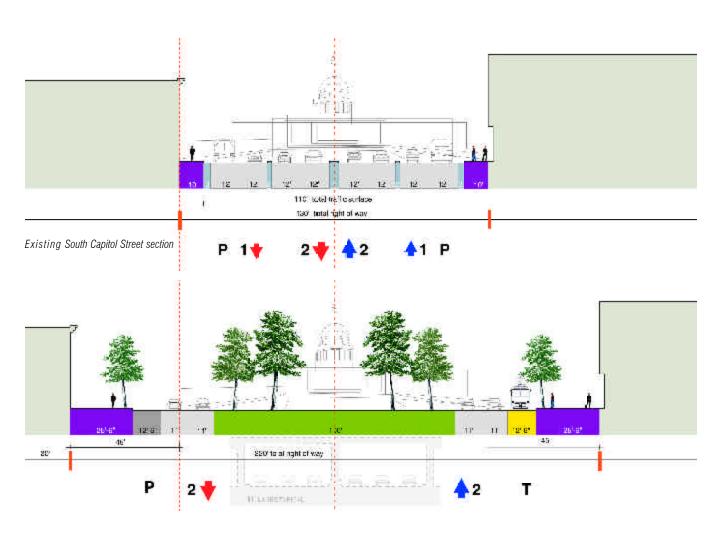
### Open Space





South Capitol Street as Median Boulevard plan

#### South Capitol Street



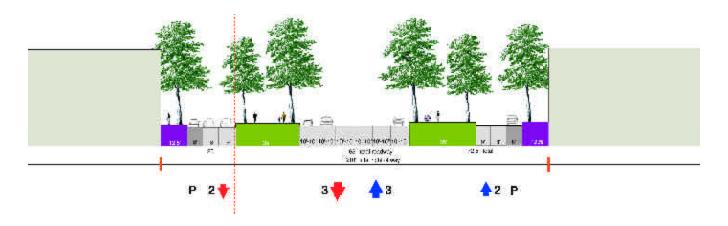
South Capitol Street as Center Median Boulevard with and expanded 220 foot right-of-way

Multilane boulevard, Paris

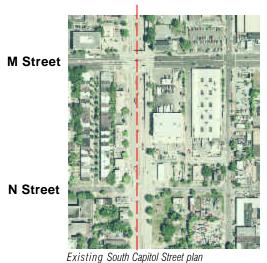
# Boulevard Combined with an Adjoining Linear Park in an Expanded 325 foot Right-of-Way

This archetypal boulevard separates faster moving through traffic from local-access traffic and parking lanes. Green space is provided on two medians of varying size, depending upon available ROW, and separates the central lanes from the side lanes. In addition to accommodating a variety of landscaped spaces, this typology provides significant traffic-calming advantages. Pedestrian crossing is separated into three parts allowing refuge on the medians, and sidewalk activity is substantially protected from faster moving traffic. The quieter sidewalks facilitate land uses along the Avenue de la Grand Armee in Paris that are characterized by small-scale businesses such as bakeries, cafes, and delicatessens. This is unusual for a street with such high traffic volumes. Even though the traffic volumes that this Parisian boulevard carries are similar to those on South Capitol Street (92,000 cars per day) such small-scale uses would seem incompatible with the current conditions of the corridor. The total ROW of the Avenue de la Grand Armee is 210 feet, substantially wider than the 130 feet of South Capitol Street. Accordingly it accommodates twelve roadway and parking lanes.

The cross-section on the bottom of the next page shows the the multi-lane boulevard precedent as applied to South Capitol Street. Four lanes of through traffic occupy the central lanes and are separated by medians from local access and parking lanes to either side. Sidewalks are expanded to 18 feet. The relatively small medians, 5 feet wide, are balanced in this section by a substantial linear park, located to the east of South Capitol Street. This linear park, removed from the traffic of South Capitol Street, runs parallel with the boulevard to provide a suitable setting for small-and large-scale memorials and museums. An additional three-lane, two-way street is located in the current location of Van Street SE.



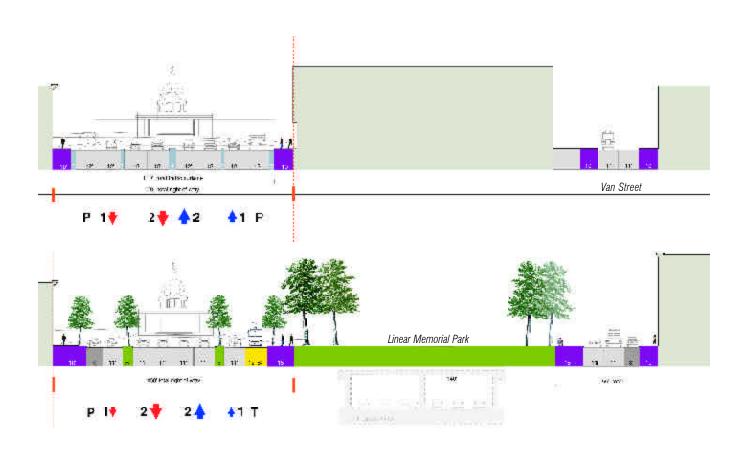
### Open Space



South Capitol Street as Boulevard Street plan

Existing South Capitol Street plan

South Capitol Street



#### Impact on Developable Parcels

#### Block Size

The three boulevard typologies illustrated in the preceding pages impact the configurations of adjacent blocks in different ways. In order to assess the development potential that each of the scenarios promotes or precludes, it is important to look at the these development sites. The accompanying illustrations depict blocks along a typical segment of the corridor to compare the impact of the three sections. These diagrams indicate blocks at the intersection of M Street and South Capitol Street. The real estate demand analysis, included in the appendix, identifies the potential for Class A office space in the study area. An ideal floor plate (or footprint) of 40,000 square feet is required for this use. While this number represents the minimum square footage desirable for Class A office space, larger floorplates appropriate for federal agencies or museums can be accommodated on most of the larger blocks. Closing streets to provide larger block size for such uses is not recommended in any scenario.

#### Boulevard within the existing 130 foot right-of-way

Here the blocks on either side of South Capitol Street remain unchanged. The 40,000-square-foot floor plate necessary for Class A commercial use can be accommodated twice within the depth of the blocks east of South Capitol Street. In comparison, the WMATA bus storage facility shown on the existing diagram below, at the southeast corner of M Street and Half Street SE, is approximately 70,000 square feet. To the west of South Capitol Street, multi-family residential units can be developed along South Capitol Street without impacting the existing homes on Carrollsburg Place. The total 185 foot block depth between Carrollsburg Place and South Capitol Street allows two back-to-back residential uses (each requiring approximately 85 feet resulting in a minimum required block depth of 170 feet).



Existing condition



Boulevard within the existing 130 foot right-of-way

### Open Space

Center Median Boulevard, right-of-way expanded to 220 feet

With this typology an expanded ROW impacts blocks on either side of South Capitol Street. To the east, the resulting 280 foot block depth can easily accommodate two 40,000-square-foot floor plates and a central service alley. To the west, block size may be significantly impacted. A ROW expansion of 45 feet to the west reduces the overall block depth to 140 feet, less than the minimum dimension of 170 feet required for two back-to-back residential lots. This block depth would be appropriate for larger residential buildings that may replace existing residences along Carrollsburg Place.

Boulevard with adjoining linear park, right-of-way expanded to 325 feet

In this configuration, the ROW is expanded to the east. Blocks adjacent to the linear park are approximately 175 feet deep and can accommodate single depth 40,000-square-foot floorplates. Elsewhere in the District, such commercially developed narrow blocks of a similar width are located between 5<sup>th</sup> and 6<sup>th</sup> and 11<sup>th</sup> and 12<sup>th</sup> Streets NW. In this section, there is no impact to blocks west of South Capitol Street; the existing 185 foot depth is maintained, providing sufficient space for two back-to-back residential uses. Existing homes along Carrollsburg Place remain.



Center Median Boulevard, right-of-way expanded to 220 feet



Boulevard with adjoining linear park, right-of-way expanded to 325 feet

#### Land Assembly

Each of the ROWs described on the prior pages, as well as in the scenarios presented later in the report, would require land acquisition in order to accommodate the proposed changes. This will be an important consideration in the subsequent public planning process. While the impact on parcels is very different in each of the scenarios according to the recommended ROWs, the number of waterfront properties that will be assembled depends upon the preferred realignment of the Frederick Douglass Bridge. It is anticipated that substantial changes will occur at these waterfront blocks; existing uses such as oil storage and structures such as the building at Water Street (previously leased by the FBI) must be removed for significant change to occur.

# Boulevard within the existing 130 foot ROW

Here the 130 foot ROW is maintained and land acquisitions (approximately22 acres total) would be necessary only at waterfront blocks required by the possible realignment of the Frederick Douglass Bridge.

# Center median boulevard with and expanded 220 foot ROW

This configuration would impact the greatest number of properties on both sides of South Capitol Street. In order to expand the ROW as indicated, substantial land acquisition (approximately 49 acres total) would be neccessary.

Boulevard combined with a linear park in an expanded 325 foot ROW

This configuration reduces land acquisition (approximately 38 acres total) along South Capitol Street by expanding only to the east, avoiding impacts on residential areas to the west.







Required land assembly in the corridor for each of the Boulevard configurations

## Open Space Goals

- Achieve a South Capitol Street corridor equivalent in character and scale to other prominent Avenues in the Capital.
- Create a beautiful, clear, ceremonial "gateway" to the Monumental Core from points south, including Maryland along the Suitland Parkway, I-295 and the Anacostia Freeway.
- Create and distribute appropriate public spaces throughout Buzzard Point.
- Use public open spaces as catalysts to support redevelopment throughout Buzzard Point and the adjacent neighborhoods.
- Identify and establish appropriate sites for future memorials and commemoration along the South Capitol Street corridor.
- Create an appropriate ceremonial terminus at the intersection of the South Capitol Street axis and the Anacostia Riverwalk.
- Establish direct pedestrian connections from the South Capitol Street corridor to the Riverwalk and Anacostia Riverparks.
- Along the South Capitol Street corridor, complement but do not replicate civic or recreational uses programmed for Poplar Point

# Anticipating and Directing Land Use Changes in the South Capitol Street Corridor

Land uses within the study area can be expected to change significantly in the upcoming years, as zoning changes take effect and as the revitalization of the Southwest waterfront and Southeast Federal Center continues. The improvements along the Anacostia being proposed by the Anacostia Waterfront Initiative will also attract investments. It is difficult to predict with absolute accuracy how the local and regional markets will affect development patterns in the study area; however several key recommendations can be made, based on the desired urban design character and on forecasted demand. These are outlined below and incorporated into the land use scenarios.

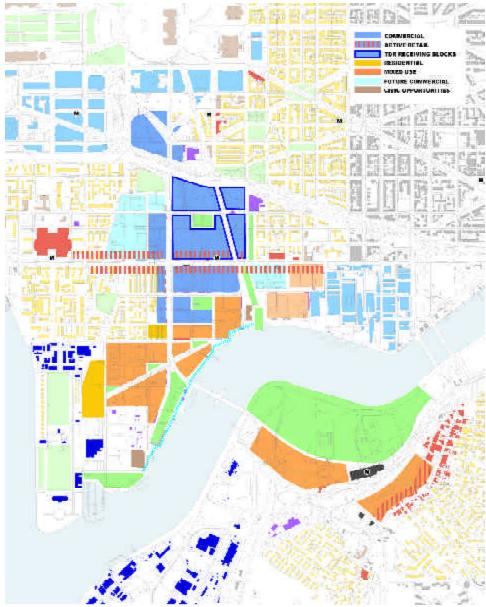
- The principal commercial node of the corridor should be centered at the intersection of M and South Capitol Streets, and adjacent to the existing Metrorail station.
- The bulk of high-density commercial redevelopment should be targeted on the blocks along South Capitol and M Streets.
- Mixed-use development is encouraged throughout the study area.
- Commercial/office oriented uses should be located close to M Street, mostly east
  of South Capitol Street, to extend the emerging employment centers of the Navy
  Yard and the Southeast Federal Center.
- Retail uses should be encouraged along M Street and Martin Luther King, Jr.
   Avenue, consistent with current planning initiatives.
- Strengthen existing residential areas by adding services and open space, and a broader range of housing choices.
- Residential uses should be located in areas closer to the water and along avenues
  and streets that can be developed as green boulevards such as Potomac Avenue,
  New Jersey Avenue and near a new segment of the Anacostia Park Road being
  proposed for Poplar Point.
- Each new residential area should have its own associated neighborhhood open spaces similar in scale to other neighborhood parks in the District.
- Civic uses such as museums, memorials, and prominent private buildings are encouraged and should be clustered along the South Capitol Street Corridor and near the river's edge.

Two hypothetical land use scenarios, a commercial-oriented and residential-oriented scenario, are presented on the following pages. These are based on demand projections for the South Capitol Street corridor study area set forth in the Economics Research Associates (ERA) report. (See Appendix for a detailed summary of the ERA report and the capacity analysis.)

#### Commercial-oriented Scenario

The diagram below shows proposed land use in a scenario that maximizes commercial development within the study area. The blocks shown in blue represent commercial and office space uses, while orange and yellow represent residential and mixed-use development. This scenario reflects current zoning patterns within the study area. Areas that are zoned for commercial use for example, are shown below as having commercial development. Blocks within the Transfer Development Right Receiving Zone (TDRRZ) are shown as commercial. The TDRRZ provides development rights for landowners unable to maximize development on parcels elsewhere in the city. The TDRRZ accounts for a large portion of the total commercial/office space in the corridor and represents substantial concentration of commercial development for the corridor as well as the entire District. Analysis of anticipated office demand indicates that this capacity for development exceeds demand.

Both M Street and Martin Luther King Jr. Avenue are indicated as retail-oriented streets, and blocks along Potomac Avenue are shown here as mixeduse. On Poplar Point, a mixed-use residential community could be developed on land that is made available by the relocation of the Frederick Douglass Bridge. This follows preliminary designs advanced by the AWI Poplar Point target area plans.



Commercial Oriented Scenario

#### Residential-oriented Scenario

Forecasting a greater demand for residential development (as outlined in the ERA report), this scenario outlines several mixed-use residential neighborhoods. Here, commercial office development is concentrated primarily along the South Capitol Street and M street corridors, and New Jersey Avenue is depicted as a green neighborhood street. The TDRRZ is also shown as a neighborhood of residential and commercial uses that would require modification to existing zoning. This new neighborhood would extend both south from the Capitol Hill residential areas, and west from the Arthur Capper/Carrollsburg Dwellings. Mixed-use residential areas elsewhere (waterfront neighborhoods) are similar for the two scenarios.

With an emphasis on new neighborhoods, open space becomes increasingly important. Along with neighborhood scaled parks as indicated for each of the proposed neighborhoods, and the ample open space proposed for Poplar Point, the need for additional open space along South Capitol Street is clear. In both the commercial-oriented and residential-oriented scenarios, civic monuments, museums and memorials should be located close to prominent open spaces and along significant axes.



Residential oriented Scenario

## Highlights of the Market Analysis (refer to Appendix for the complete ERA report)

A densely developed, high profile urban corridor will be highly dependent upon public transportation to bring workers from throughout the metropolitan region. Office development will tend to concentrate within walking distance of the new Navy Yard Metro station to maximize regional access. Residential development can then fill the southern portion of the corridor toward the Anacostia River, with intensity of development dependent upon the quality of transportation access.

In addition to image, aesthetics, amenities and commuter accessibility, practical concerns such as efficient office layouts, and building servicing need to be addressed. Larger floorplates are increasingly sought by employers, since they allow for a more flexible and interactive workspace. Additionally, a construction cost premium is added for each floor required to accommodate building square footage. Typical new office floorplates in an urban setting are 40,000 - 50,000 square feet, while suburban office park floorplates can be significantly larger.

Under a premier office and high-density mixed-use/residential scenario, retail development along South Capitol can be geared toward supporting the office workers and residents in the area. This will bring people to the sidewalk, potentially creating a critical mass to become a destination for such context-sensitive uses as restaurants and theaters.

Site capacity and real estate demand

Residential demand within the District over the next 20 years is expected to be approximately 44 million square feet, and commercial demand to be approximately 15 million square feet.

While the South Capitol Street corridor will have to compete with other developing areas in the city to attract this development, the greater need for residential uses endorses the residential-oriented scenario. While demand for office space is expected to remain strong in Washington D.C., the demand for convenient, transportation-accessible rental apartments geared toward those seeking a vibrant urban lifestyle will require the creation of new urban neighborhoods. Surrounded by ample open spaces and supported by good schools and service oriented retail, such neighborhoods could thrive in the four targeted areas of New Jersey Avenue, Buzzard Point East and West, and Poplar Point.

### Land Use Goals

- Modify existing zoning to achieve high density, mixed-use districts centered on South Capitol Street and M Street corridors.
- Ensure that future land uses must be complementary to neighboring uses such as the Southeast Federal Center, Navy Yard, and Southwest Waterfront.
- Concentrate density near public transportation and along main boulevards: South Capitol Street, M Street, Potomac Avenue & Martin Luther King Jr. Avenue.
- Encourage residential uses along or near the river's edge and along "green streets."
- Strengthen existing residential areas by adding services and open space, and a broader range of housing choices.
- Use institutions, memorials and monuments to enhance the public realm along South Capitol Street, and the open spaces along the Anacostia.
- Use open spaces, institutions and memorials as catalysts to support adjoining redevelopment.
- Take advantage of any public takings necessary for transportation improvements to support identified principles.

# 4. Transportation

Understanding The Demands and Effects of Transportation on The South Capitol Street Corridor

A major purpose of this report is to develop urban design principles in advance of and in coordination with the more detailed South Capitol Street Gateway and Improvement Study (the Gateway Study) that will identify specific improvements for the corridor. Transportation investments will likely lead the revitalization effort for the South Capitol Street Corridor. Therefore, these must be selected with the following city-making criteria in mind:

- Creating an environment for private reinvestment and civic institutions throughout the South Capitol Street District
- Rationalizing the movement of vehicles by expanding options including a tunnel and other crossings – rather than further concentrating traffic on South Capitol Street
- Greatly enhancing pedestrian open space amenities along the corridor
- Accommodating ample options for future transit improvements throughout the corridor
- Improving north/south connectivity between the Mall and the Anacostia River, and east/west connectivity across the South Capitol Street Corridor
- Activating more of the streets in the study area to function as an integrated system to disperse traffic
- Achieving the goal of an enhanced approach to the Capital from the south for residents and visitors alike

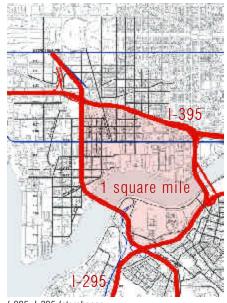
With these goals kept foremost, the Gateway Study will make wiser long-term proposals for traffic volumes and roadway and transit configurations for the corridor.

#### District-wide Arterial Network

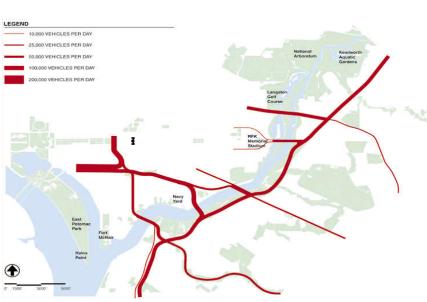
The diagram at the lower left indicates the unique position that South Capitol Street holds relative to the arterial highway system in Washington, D.C. It is part of a larger loop connecting I-295 and the Suitland Parkway with I-395. In a sense it is a segment of an enormous highway interchange that includes the Southeast/Southwest Freeway, the 11<sup>th</sup> and 12<sup>th</sup> Street Bridges and the Anacostia Freeway. This interchange encompasses approximately one square mile.

Because it is part of the arterial network, current traffic volumes on South Capitol Street are high. Estimates reflected on the map below indicate the movement of approximately 100,000 cars a day across this corridor. With anticipated growth in the southern areas of Prince George's County, and viable employment centers at Buzzard Point, area traffic volumes will increase in the near future, even with the addition of multi-modal transportation options, such as light rail transit lines.

In accordance with the goal of increasing community access to the water's edge, it is recommended that the interchange itself be changed. To eventually reduce the barriers that the current system presents to the neighborhoods which are cut off from the water, it is proposed that the majority of vehicular traffic be carried from I-295 to I-395 via a tunnel in the South Capitol Street corridor. This would enable the replacement for the present Frederick Douglass Bridge to accommodate more local traffic, a better ceremonial route from Bolling Air Force Base, a future transit line and higher pedestrian and bicycle usage.



I-295, I-395 Interchange

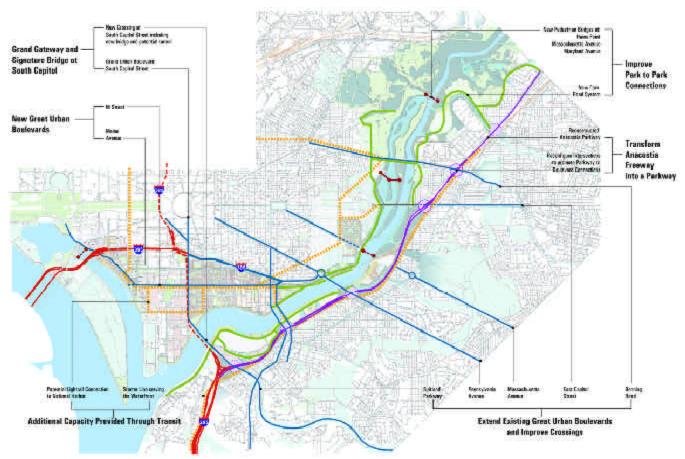


Vehicular volumes affecting study areas

# Transportation

The plan below identifies some of the major transportation recommendations made in the AWI plan, including modifications to the South Capitol Street Corridor. The 11<sup>th</sup> and 12<sup>th</sup> Street Bridges can also be modified in the future to provide better pedestrian paths, transit lines, and fewer cars. The long-term planning and high costs of a tunnel may be combined with shorter-term modifications of street widths, signalization, and even the construction of new crossings while such planning occurs.

The Gateway Study will assess various crossing alternatives including bridge and tunnel options. More significant changes to the network may occur over a much longer time frame. In the immediate future, change may occur along the corridor on both sides of the river that will positively impact neighborhoods and land values.

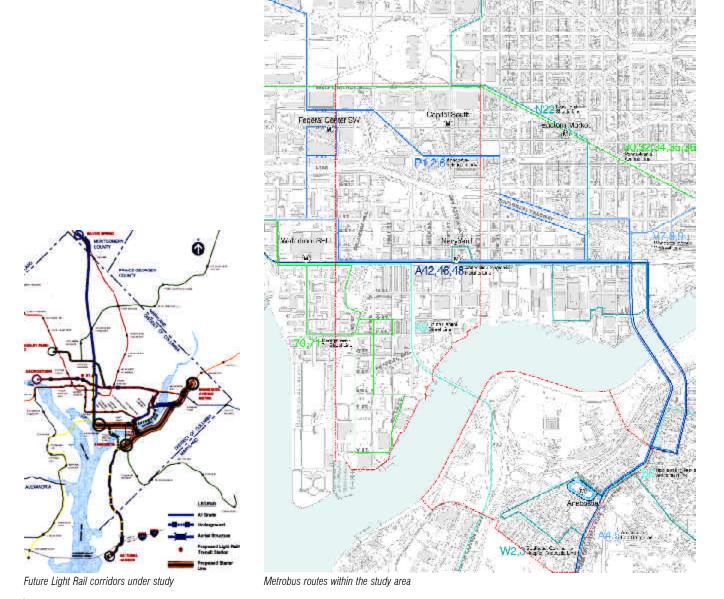


AWI transportation diagram

# Transit

Although the Green Line Metrorail and Metrobus run through the South Capitol Street Corridor, significant areas such as the South Capitol Street terminus and waterfront, and areas west of the corridor remain well beyond a five-minute walk, as the lower left plan on the facing page indicates. New development will be severely constrained without significant improvements to the public transportation system in the South Capitol Street Corridor. Making sure that future transit corridors are provided for is one of the most important recommendations of this study.

The Department of Transportation is committed to increasing transit options throughout the District. Future plans for the South Capitol Street study area include light rail with starter lines located within the study area and future connections much farther south. Typically, commuters will tolerate transfering between transit modes once per journey to or from work. Commuters can be expected to use both Metrobus and Metrorail, or commuter rail and Metrorail, during a one-way trip. Additional mode splits are not recommended. Employment centers will be most attractive near existing Metrorail stations, and residential development more appropriate in areas well served by Metrobus or somewhat farther away from Metrorail.

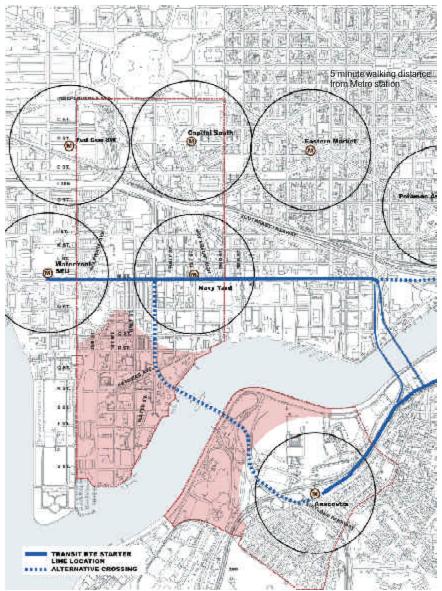


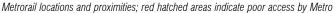
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# Transportation

The Metrorail Orange and Blue lines serve the northern part of the study area at the Federal Center SW Station and the Capitol South Station. There are no new stations planned for this line. A five-minute walking distance from Metrorail stations is shown in the diagram below to the left. Farther south, the Green line serves the Navy Yard and Waterfront SEU stations. Here a five-minute walking radius from the Navy Yard station covers areas along South Capitol Street and east. No new stations are planned for this line. None of the stations described above have substantial parking associated with them. South of the river, the Green line serves the Anacostia Station, a multi-modal stop with a 1,148-car capacity parking lot, and a Metrobus station south of the Suitland Parkway. This Metrobus station serves parts of Anacostia that are not within walking distance of the Metrorail. This parking facility is typically full on weekdays. It serves as an access point to the District for suburban commuters.

Plans for light rail lines in the project area are underway. After a review of several alignment options in the city, four starter line locations were selected by transportation officials and planners. This surface rail system, sometimes with a dedicated lane, has been proposed for M Street, Martin Luther King Jr. Avenue, South Capitol Street and the 11<sup>th</sup> and 12<sup>th</sup> Street Bridge crossings. Future plans extend lines farther south toward the Capital Beltway to accommodate growth in Maryland. A light rail system such as this could transform South Capitol Street into a transit corridor. The capacity to accommodate a future transit line must be one criteria for any replacement of the Frederick Douglass Bridge. Slope requirements favor a lower bridge height that would better accommodate light rail and greatly decrease ramp lengths.







Metrorail system map

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# Street Conditions

Street conditions on both sides of the Anacostia River vary greatly. In general, Buzzard Point has a relatively consistent north-south orthogonal grid, typical of block patterns throughout D.C. The diagonals of New Jersey Avenue, a partial Delaware Avenue and Potomac Avenue, intersect this grid. Larger interruptions to the grid exist at the I-395 freeway and by the current configuration of South Capitol Street as a limited access high-speed roadway.

South Capitol Street currently contains eight lanes south of the I-395 interchange and north of O Street. The center of the roadway accommodates two northbound and two southbound lanes, separated by concrete barriers from two northbound and two southbound local access lanes. M Street and South Capitol Street are separated by a grade change. Traveling north from I-295, vehicles encounter a single signalized intersection at I Street. The channeling of these high-speed through lanes prohibits crossings from east to west throughout the length of the corridor. There are only two crossings, for pedestrians and vehicles, in the one-mile stretch between I-395 and P Street; these are located at M and I Streets (indicated in diagram on facing page.)

An improved South Capitol Street must create better east-west connections at all intersections along its length. Similar arterials in the District provide transitions from high-speed roadways to the local street grids, such as K Street, Independence Avenue, and Constitution Avenues. Each of these creates a transition for significant volumes of traffic from high-speed multi-lane freeways onto the local street grid.

South of the Anacostia River the interchange of I-295 and the Frederick Douglass Bridge is the dominant feature. Local roads within the Anacostia neighborhood follow local geometries, varying in orientation. East of the interchange the historic Anacostia neighborhood follows a rectangular grid



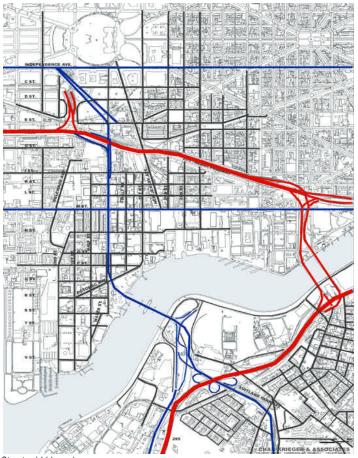
M Street above South Capitol Street



Sidewalk conditions near O Street SW



M street underpass



Street grid hierarchy

# Transportation

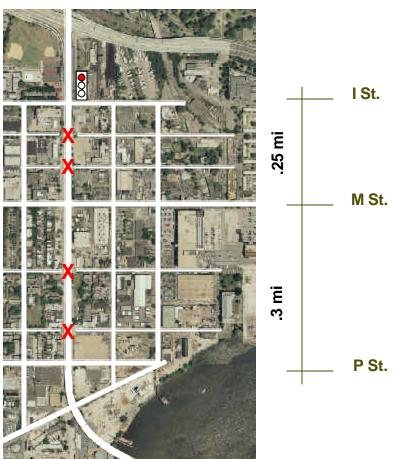
that terminates in the Anacostia Freeway. South of the interchange the Barry Farms housing complex follows an isolated grid. Major roads that collect and distribute local traffic in this study area include Martin Luther King Jr. Avenue and Howard Road. Currently, vehicles can travel from the Anacostia Freeway southbound onto the Frederick Douglass Bridge, via a two-lane extension of Howard Road. This extension merges with an entrance for the Anacostia Metrorail station, and park roads owned by DC Parks and Recreation.

Recommendations for this area include consolidation of access ramps and infrastructure along with construction of a new Frederick Douglass Bridge south of its present location. New development along Poplar Point should ideally connect to Howard Road, which is the only connection the Anacostia neighborhood has to the waterfront. A new Anacostia Park Road, proposed by the AWI Framework Plan should connect to this area as well.

### Pedestrian Environment

The pedestrian environment of South Capitol Street suffers greatly due to the predominance of vehicular traffic. The roadway has been expanded and channelized at the expense of sidewalks and tree planting. Sidewalks are narrow and poorly maintained along the entire length of the corridor. Street trees are scarce. Pedestrian crossings are infrequent and highly dangerous. There are no designated bicycle lanes on South Capitol Street.

Along the ramps and access road of the I-295 and Frederick Douglass Bridge interchange, pedestrian and bike routes are minimal and often discontinuous. Although sidewalk conditions are reasonable on Martin Luther King, Jr. Avenue and Howard Road, any extension of Howard Road should include infrastructure improvements leading into the Anacostia neighborhood.



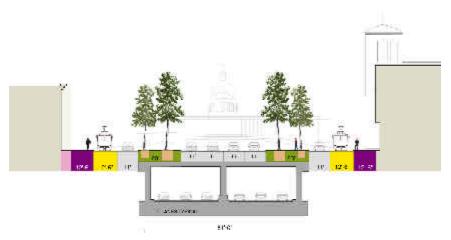
Crossing analysis of existing conditions; x indicates no current continuity across South Capitol Street

# Tunnel Option Considerations

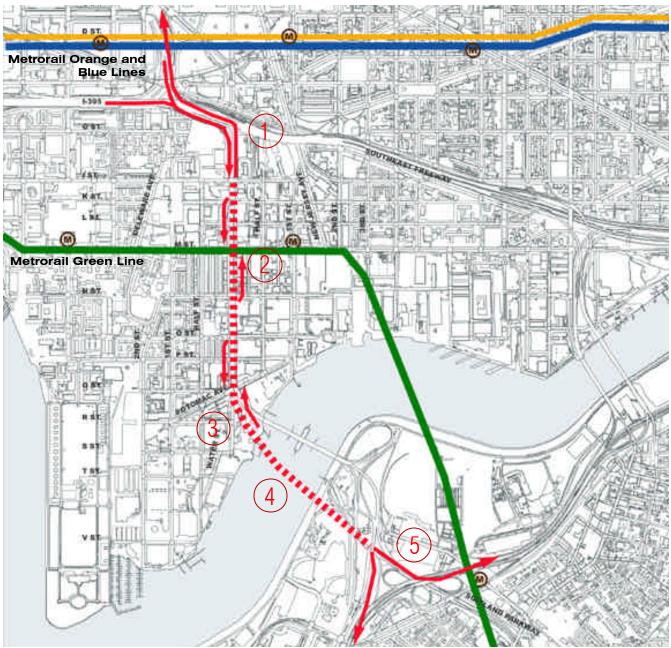
The tunnel recommended by the Anacostia Waterfront Initiative would greatly improve all surface transportation designs for the South Capitol Street Corridor. It would significantly reduce traffic on the street itself and allow a more gracious, green and transit friendly route above ground. A tunnel could provide regional vehicular access to Buzzard Point without overwhelming the corridor itself with traffic. Local connections, transit, and ceremonial approaches could be accommodated on a rebuilt Frederick Douglass Bridge. Ramp configurations and locations, as well as connections to freeways at either end, are among the biggest design challenges. It is important to note that a tunnel extending from I-295 to I-395 would be 1.3 miles in length, and would require substantial public investment. The following considerations apply:

- A roadway tunnel under the Anacostia River appears to be physically and geometrically possible.
   Geotechnical and environmental implications are not yet known.
- A tunnel alignment should follow existing street rights-of-way to the extent possible to avoid affecting building foundations.
- The I-395 interchange near the northern end of the study corridor ① is a major obstacle. The interchange probably would need to be substantially modified or removed before improvements could be made in this segment of South Capitol Street. Initial corridor improvements may need to end south of I Street with the northern extension of the improvements designed for implementation in a later phase that includes I-395 modifications.
- North of the river, a tunnel would fit most easily under South Capitol Street or Half Street, SE because of the topography. An alignment following Half Street, SE would cause less traffic disruption during construction. Connections to M Street (2) from the tunnel should be considered.
- If a tunnel were built using cut-and-cover construction with a submerged tube under the river, the northern tunnel portal probably could be located south of Potomac Avenue (3). If the tunnel were bored, it would have to be deeper and the northern portal would have to be farther north. The choice between the two construction methods will depend primarily upon the geotechnical and environmental implications of the river crossing (4).
- The large land area available on Poplar Point probably will allow the definition of a successful solution without major complications 5.
- The need to maintain traffic through the corridor during construction could affect the design of the improvements and might even preclude some otherwise-possible solutions.

# Transportation



Possible tunnel configuration below South Capitol Street



Tunnel options with recommended connections to street grid at Potomac, M, and I Streets

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Memorial Bridge, Washington D.C.



Charles River, Boston



Existing Frederick Douglass Bridge ramp

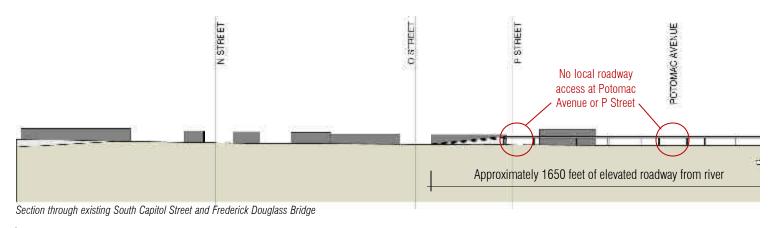
# River Crossing and Bridge Height Considerations

One of the principal goals of the South Capitol Street Urban Design Study is to assess a variety of river crossing alternatives to replace the existing Frederick Douglass Bridge. The Frederick Douglass Bridge is scheduled for replacement in the next ten to fifteen years. This offers a tremendous opportunity to fundamentally alter the character of this important gateway to the city and to greatly improve conditions on both sides of the Anacostia River. Two design factors, bridge height and location, will greatly affect the urban design character, connectivity, and land use on either side of the river.

#### Bridge Height

The existing Frederick Douglass Bridge rises 80 feet above the Anacostia River to accommodate the increasingly infrequent passage of large maritime vessels to and from the Navy Yard. Smaller watercraft can easily pass below the bridge and continue upriver. Heights of successive bridges quickly decrease farther upriver. The crossing of the CSX rail line, located near Congressional Cemetery, is approximately five feet above the river's surface and limits access to nearly all watercraft. Marina locations are greatly affected by crossing heights along the Anacostia River. The size and number of watercraft that can access the AWI "Heritage Basin" (see Waterfront trail system illustration on p. 31 for location) will depend upon the height of the new crossing. The future bridge height will to a great extent determine the nature of activities within this basin, but needs not be 80 feet to accommodate the vast majority of recreational boating. A 40 to 50 foot bridge height - with a moveable center span - should accommodate normal needs adequately.

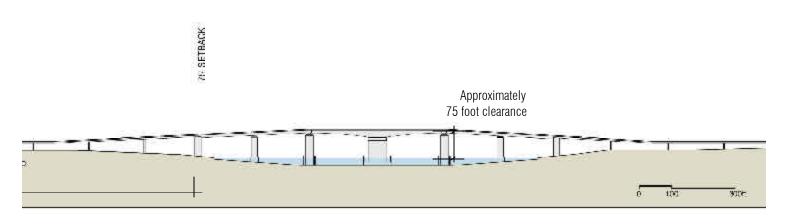
The height of any new bridge will also affect connectivity to city streets for vehicles, transit, pedestrians, and cyclists crossing the river. Ramp lengths from the bridge to existing streets, governed by allowable grades, will shorten as the bridge height decreases. The current height of the bridge requires that ramps land far inland, limiting direct vehicular access to the waterfront. The Buzzard Point end of any new bridge can be shortened considerably, as it was originally extended only to clear a rail line on Potomac Avenue that is no longer used. Ramps and stairs that connect to bridge walkways close to the water's edge are desirable to connect to riverwalks and trails. A lower bridge would facilitate this transition. The Memorial Bridge in Washington D.C., at a height of approximately 30 feet above the Potomac River is easily accessible by pedestrians and cyclists. Although volumes are much lower on this bridge, it carries the same number of vehicular lanes and connects readily to the local street grid without long ramps.



# Transportation



The height of the Frederick Douglass Bridge increases the length of ramps connecting to city street grid



# Alternate Bridge Locations

Identifying a site for a new Frederick Douglass Bridge will be a lengthy process that involves the advice and consent of many agencies, landowners, transportation authorities, the public, and a thorough review of environmental, physical, and economic considerations.

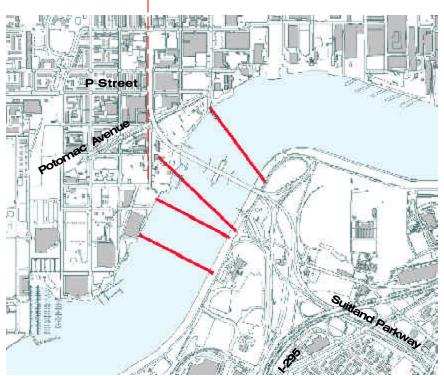
#### Considerations must include:

- 1. Recognition of the formal axis of South Capitol Street
- 2. Potential to recapture a significant amount of land for parks and development at Poplar Point
- 3. Potential to connect to local streets and waterfront trails
- 4. Relationship to the Anacostia Riverwalk and park system
- 5. Ability to accommodate transit lines serving both sides of the river

To satisfy these five goals, this study recommends locations for the new bridge crossing as far south as possible. On the Buzzard Point side of the Anacostia River the bridge landing should either celebrate the great axis from the Capitol, or be moved well away from it. Landings that occur directly at the intersection of the water and the Capitol axis will most likely not be able to provide a suitably gracious public setting. On the Poplar Point side, a southern location creates greater flexibility for any future neighborhood or open space development.

A southerly location of the new crossing can better connect new public spaces with the river and its associated trails and riverwalks. The vertical structural element of a well-designed bridge could provide a fitting icon for this important gateway to the monumental core and to the Anacostia Riverpark. The angle of Potomac Avenue favors a more southern location as well, to enable the bridge and its ramps to intersect with Potomac Avenue. Direct access to this important local avenue from a new Frederick Douglass Bridge may be impossible at more northerly alignments. The need to maintain traffic through the corridor during construction favors a crossing well away from the existing bridge.

Finally, a southerly location for a new bridge does not preclude an additional future crossing north of the existing Frederick Douglass Bridge. As recommended in the AWI Framework Plan, additional river crossings promote connections between neighborhoods that are across the river from each other, and better connect the open spaces along both river banks.



Possible bridge locations in addition to the alignment of the existing Frederick Douglass Bridge

# Land Use Goals

- Redirect high-volume traffic away from South Capitol Street with a new I-395 and I-295 tunnel connection.
- Accommodate transportation needs for projected land uses.
- Increase transit choices throughout study area.
- Distribute vehicles across a broader network of streets.
- Improve east-west connections across South Capitol Street.
- Accommodate light rail capability on major roadways in accordance with latest WMATA plans.
- Target existing Metro stops for increased development.
- Create broader sidewalks on South Capitol Street, appropriate to a boulevard.
- Provide direct pedestrian connections to the Anacostia Riverpark system.
- Replace the Frederick Douglass Bridge with a new bridge that is aligned south of its present location.
- Promote access to the waterfront by reducing transportation barriers separating residential neighborhoods.
- A new Frederick Douglass Bridge must accommodate several modes of transportation, e.g. vehicular, pedestrian, transit, and bicycle.
- Decrease the height of the future Frederick
   Douglass Bridge to a 50' height above the river. A
   substantial benefit of this would be shorter ramp
   lengths and greater ease in accommodating both
   transit and pedestrians.

# 5. Urban Design Scenarios

# Physical Implications of the Urban Design Principles and Goals as Applied to The Corridor

The South Capitol Street Urban Design Study is an important first step in the planning process for redevelopment of the corridor. Additional analysis and public discussion are needed to advance the full range of possibilities and their impacts for the corridor. The following scenarios illustrate how the ten urban design principles set forth can be satisfied in a variety of ways. Each scenario:

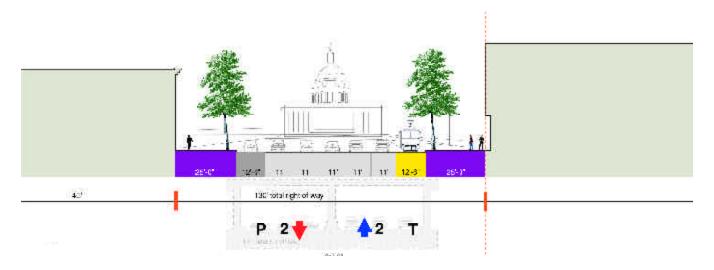
- 1. Transforms South Capitol Street into an urban boulevard at a different scale: from maintaining the existing right-of-way at 130 feet, to its enlargement including a continuous parallel linear park with a total right-of-way of 325 feet.
- 2. Creates a ceremonial public corridor that will stimulate revitalization while providing a major expansion for future civic, memorial and cultural facilities in the nation's capital.
- 3. Establishes a more direct public open space connection between the Mall, the Capitol and the Anacostia Riverpark system.
- 4. Designates a civic terminus containing a major open space and potential memorial site at the point where South Capitol meets the river.
- 5. Optimizes ceremonial, commuter, and local traffic needs while enhancing pedestrian amenities and providing for future public transit improvements.
- 6. Shifts a new Frederick Douglass Bridge southward to better align South Capitol Street with Suitland Parkway and to offer greater flexibility to develop the Buzzard and Poplar Point areas.
- 7. Proposes a new signature bridge across the Anacostia, at once more memorable, functional and friendly for cars, transit and pedestrians.
- 8. Considers future crossings, including a tunnel, to handle the large volumes of daily highway-to-highway traffic that overwhelms South Capitol Street.
- 9. Provides the framework for a new mixed use commercial and residential growth corridor for the city.
- 10. Strengthens existing neighborhoods with mixed use development, residential and neighborhood services.

The three scenarios increase in complexity (from A to C) primarily in relationship to the width of the ROW for South Capitol Street, the amount of open space created at the South Capitol Street axis and terminus at the Anacostia River, the extent of the re-alignment of the new Frederick Douglass Bridge and additional future river crossings.

# Scenario A

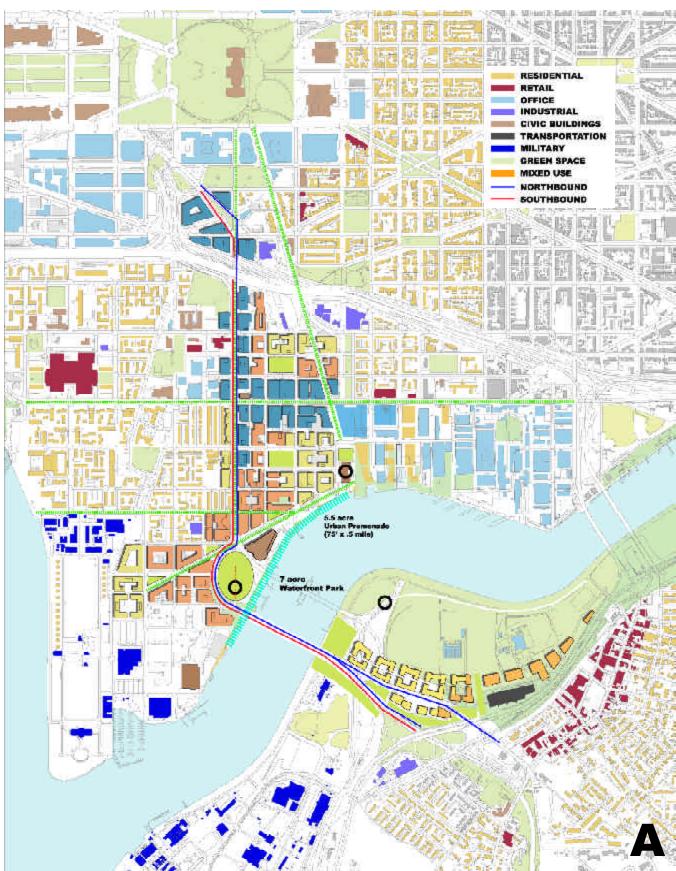
Corresponds to "Boulevard Within the Existing 130feet Right-of-Way", introduced on p. 34

This scenario maintains the present South Capitol Street public right-of-way at 130 feet, but limits the street to six lanes of moving traffic from the present eight lanes. The fewer lanes allow more landscaping and pedestrian amenities along the street (as the cross-section highlights) converting South Capitol Street from its present highway-like character into an urban boulevard. In order to achieve the reduction in lanes, a tunnel is recommended to accommodate the regional traffic between I-295 and I-395 that currently uses South Capitol Street. This scenario also creates a seven-acre public space at the intersection of the Anacostia River and the extended South Capitol Street axis. A significant memorial or civic institution can also be located at this 'terminus'. The location of the future Frederick Douglass Bridge is southward of its present alignment, and its connection to South Capitol Street helps shape the terminus park and memorial site. This scenario highlights the importance of the Florida Rock properties as settings for prominent buildings facing both the river and the terminus park. Across the river, the bridge's new alignment allows potential new mixed use residential development to line Howard Road and the proposed park at Poplar Point.





Urban Design Scenario A: View of Capitol Axis Terminus at the Anacostia River

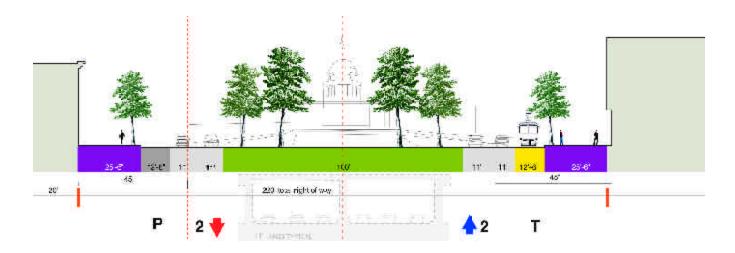


Urban Design Scenario A

## Scenario B

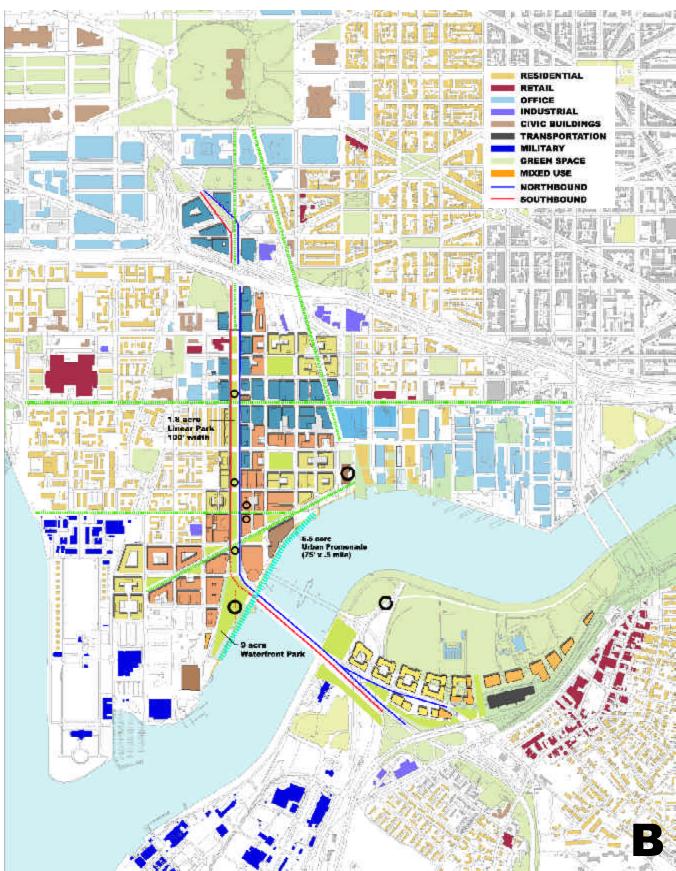
Corresponds to "Center Median Boulevard with an Expanded 220 foot Right-of-Way", introduced on p. 36

Scenario B incorporates a center median boulevard in an expanded ROW terminating in a nine acre waterfront park. The park is oriented towards the confluence of the Potomac and Anacostia Rivers and creates a more spacious setting at the terminus of South Capitol Street. The bridge frames the northern approach to this park and moves transportation infrastructure well away from the terminus, which remains open for memorialization and gatherings at the river. South-bound traffic is directed into a short tunnel below the open space before connecting to the new bridge. The landscaped central median connects to the waterfront open spaces uninterrupted by major traffic. Prominent civic or private buildings should surround the waterfront park to create a graceful and active waterfront. Along South Capitol Street the ROW is expanded from 130 feet to 220 feet allowing for a substantial, 100 foot landscaped public space centered on the axis from the Capitol. This would create a grand urban avenue worthy of the L'Enfant Plan. It would provide a fine setting for small-scale memorials along the length of South Capitol Street.





Urban Design Scenario B: View of Capitol Axis Terminus at the Anacostia River

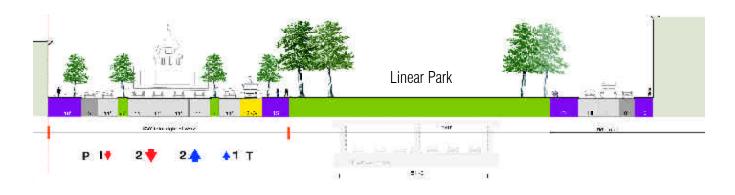


Urban Design Scenario B

# Scenario C

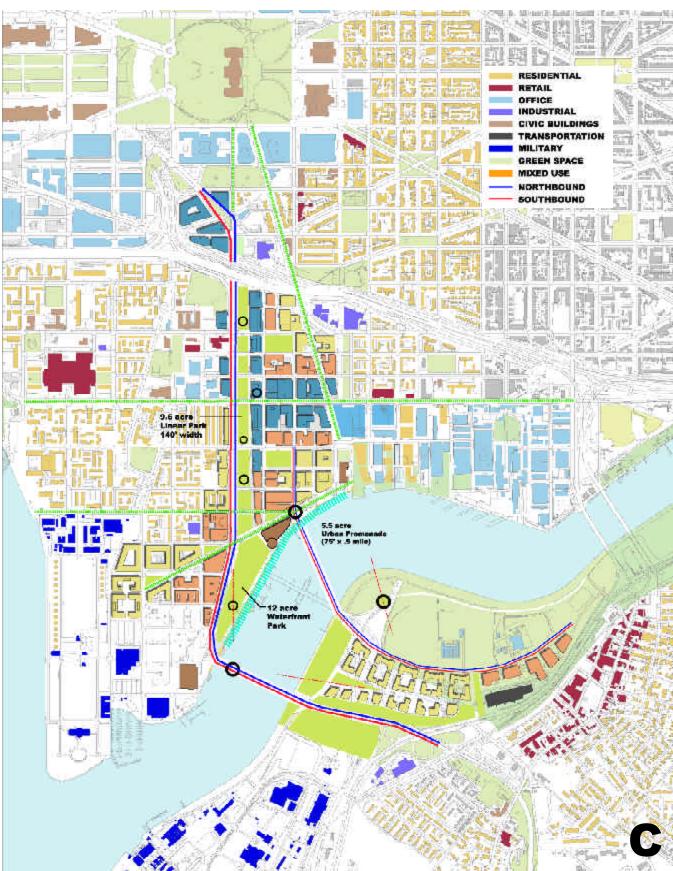
Corresponds to "Boulevard Combined with an Adjoining Linear Park", introduced on p. 38

Scenario C is the most ambitious of the three, creating monumental new public spaces in the study area. The scenario combines an urban boulevard with a linear park and a waterfront park, each with its own identity. The 140 foot wide linear park to the east of the axis of South Capitol Street connects Capital Hill and the National Mall to the Anacostia Riverpark. Locations along the park are appropriate for both memorials and museums. This scenario locates a new bridge significantly south of its existing location, creating a large amount of developable land at Poplar Point and moving transportation infrastructure away from the South Capitol Street terminus. Potomac Avenue and Water Street define a twelve-acre waterfront park with important building sites located to the north and south. A signature vertical element of the bridge could be located on the axis of the Capitol creating a landmark gateway. Additional memorials can be located within the park itself. This southern location of the new crossing could also allow an additional future bridge to connect the Anacostia Riverpark with Buzzard Point. In addition, Poplar Point can grow into a new waterfront mixed-use neighborhood that is better connected with Buzzard Point via a smaller, locally-scaled bridge. Both new bridges would benefit from a new tunnel that distributes regional traffic between I-295 and I-395, thus easing congestion throughout the corridor.





Urban Design Scenario C: View of Capitol Axis Terminis at the Anacostia River



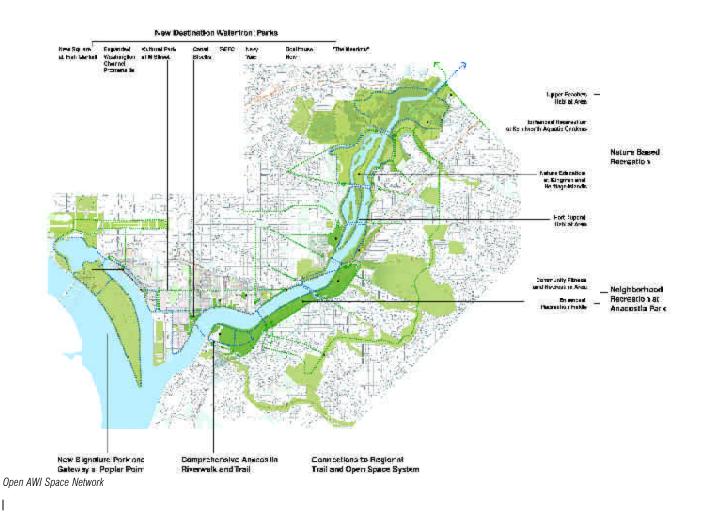
Urban Design Scenario C

# 6. Appendix

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# Related Planning Efforts

The South Capitol Street Planning Study builds upon several planning studies and initiatives completed or nearing completion in Washington D.C. Three large planning efforts have had a direct impact upon the planning of the corridor: The Anacostia Waterfront Initiative, The Legacy Plan, and the Memorials and Museums Master Plan. Other planning studies affecting the area include the Southeast Federal Center Master Plan, the Naval District Washington Anacostia Master Plan, and the Sub-area Plan for the North End of the U.S. Naval Station, Anacostia.



# The Anacostia Waterfront Initiative

The Anacostia Waterfront Initiative (AWI) is a multi-year plan commissioned by the District of Columbia Office of Planning and supported by a host of public agencies and stakeholders. The AWI Framework Plan, to be released in January 2003, sets forth five broad themes for the approximately 2,800 acres of land along the Anacostia River corridor stretching nearly seven miles from the Potomac to the Maryland border. The Initiative establishes a comprehensive planning background for changes along the river and within six adjacent target areas. The five themes – a clean and active river, breaking down barriers and gaining access, a great riverfront park system, cultural destinations of distinct character, and building strong waterfront neighborhoods contain specific design recommendations that impact the planning of the South Capitol Street corridor, one of the six target areas. As a plan that aspires to create a great waterfront park for the 21st century, much of the AWI addresses open space planning. Specific recommendations that impact the South Capitol Street study area include:

#### Land Use

- · Revitalize existing neighborhoods, and create new mixed-use waterfront neighborhoods located at Buzzards Point, southern Poplar Point, and the Southeast Federal Center.
- · Create places of employment at sites along the river and connect historic centers of commercial activity to public amenities.

### Open Space and Cultural Destinations

- Create linkages between the Anacostia Waterfront Park and the other major parks of D.C.: Rock Creek Park, the Potomac River, and the Mall.
- · Create an active 100-acre park at Poplar Point.
- · Combine the natural qualities of the river with more active urban waterfronts such as the Southeast Federal Center (SEFC) promenade.
- Promote distinct programs along the river: at Poplar Point a Cultural/Natural area may include soccer, rugby, biking, jogging, softball, an amphitheatre, and an Art Park; at the SEFC/Navy Yard programs include biking and jogging along a waterfront promenade.
- · Identify basins along the river: at Poplar Point, "The Heritage Basin" should commemorate history and culture creating new accessible sites for gardens, memorials and museums and linking the park to a vital, growing, residential and commercial neighborhood of Historic Anacostia.

#### Transportation

- Create a continuous system of trails and river walks along the river accessible to pedestrians, cyclists, joggers and strollers. Integrate this system with accessible and human-scaled bridges.
- · Promote public transit throughout the study area.
- Balance vehicular transportation across the River in many locations: decrease vehicle demand on 11<sup>th</sup> and 12<sup>th</sup> Street Bridges and a new Frederick Douglass Bridge with the addition of a new tunnel connecting I-295 with I-395 below South Capitol Street.
- Enhance M Street as a busy commercial corridor extending from Maine Avenue to Pennsylvania Avenue SW.

# Appendix Related Planning Efforts



Anacostia Riverparks trail



Anacostia Riverparks aerial view



Anacostia Riverwalk

# Extending the Legacy: Planning America's Capital for the 21st Century

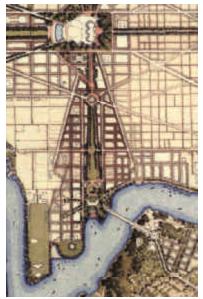
Prepared by the National Capital Planning Commission and released in 1997, *Extending the Legacy* is a vision plan that creates opportunities for new museums, memorials, and federal office buildings in all quadrants of the city. The Legacy Plan seeks to preserve the historic character and open space of Washington's traditional Monumental Core while accommodating growth and new development. Revitalization of South Capitol Street is among the plan's most ambitious proposals.

The Legacy Plan calls for redevelopment of the South Capitol Street Corridor as a fitting gateway to the U.S. Capitol and Washington's Monumental Core. The plan envisions a future South Capitol Street as a lively urban boulevard lined with a mix of uses—offices, apartments, shops, hotels, memorials, and open civic spaces. A major civic or cultural feature is proposed for the street's terminus on the Anacostia River that could accommodate a range of additional uses: restaurants, concerts, marinas, and riverfront entertainment. In NCPC's vision plan, a renewed South Capitol Street will strongly contribute to the economic vitality of the local city and serve as a destination place of symbolic significance for the nation.

The Legacy Plan's vision for South Capitol Street is closely linked to its recommendations for the future use of Washington's waterfront. The plan calls for a variety of uses along the city's 22 miles of waterfront and includes parks, plazas, bike paths, and marinas. The plan anticipates that the urban waterfront it proposes in the area around South Capitol and M Streets, the Southeast Federal Center, will generate significant economic activity that will spill over to Poplar Point and Anacostia.

To reconnect the L'Enfant City with its waterfront, the Legacy Plan establishes a long-term goal ofe eliminating the Southeast/Southwest Freeway and the restoration of the historic street grid. It calls for the construction of a new Frederick Douglass Bridge connecting South Capitol Street to Poplar Point that can accommodate pedestrians and bicycles.

The Legacy Plan was designed as a flexible framework that will guide long-term development while accommodating future development needs.



Legacy Plan rendering of study area



Legacy Plan rendering of South Capitol Street terminus



Legacy Plan rendering of South Capitol Street

# Memorials and Museums Master Plan

The Memorials and Museums Master Plan, published by the National Capital Planning Commission in 2001, provides a clear framework plan for the siting of memorials and museums in the Nation's Capital. It promotes an important strategy: the expansion of significant sites, previously assessed in terms of proximity to the Mall, to include those that have important visual and symbolic connections to the city's existing national landmarks. The four primary elements of the Master Plan framework - the waterfront crescent, commemorative focus areas, monumental corridors, and special sites - all occur within the South Capitol Street study areas. Specific recommendations are made for each of these categories, and the corridor is described as appropriate for "attractive development sites as well as prominent locations for museums and memorials." Further, the Memorials and Museums Master Plan categorizes and prioritizes 100 candidate sites in the Nation's Capital. Ten of these sites are within the South Capitol Street study area, and two are considered "prime candidate sites." These prime sites are located at the intersection of South Capitol Street and the Anacostia River, and on the Anacostia River waterfront just east of the existing Frederick Douglass Bridge. The Memorials and Museums Master Plan reinforces many of the ideas found in the Legacy Plan, namely the expansion of the federal presence along the four great axes emanating from the Capitol, and a focus on the city's "waterfront crescent."

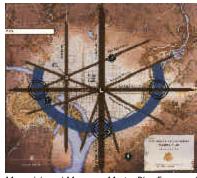
# Appendix Related Planning Efforts



Detail from the Memorials and Museums Mater Plan showing candidate memorial and musuem sites in the South Capitol Street Study Area



Redesign of Anacostia Metrorail Station with memorial at its forecourt



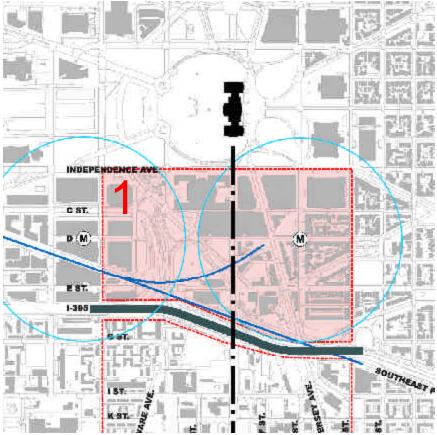
Memorials and Museums Master Plan Framework

# Existing Conditions in Detail by Subarea

# Subarea 1

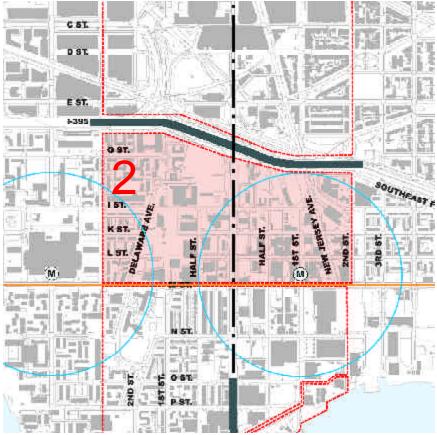
The first subarea is bound by Independence Avenue to the north, I-395 to the south, 2nd Street SE to the east and 3rd Street SW to the west. This subarea most closely resembles the character of Capitol Hill and the monumental grounds of the National Mall. South Capitol Street is closed from C Street to Independence Avenue. Northbound traffic on South Capitol Street follows the diagonal of Washington Avenue (formerly called Canal Street) northwest to Independence Avenue. Land uses in the area include two large surface parking lots and the Capitol Power Plant, both of which disrupt the cohesiveness of the area. Two elevated rail lines that cross the corridor include the CSX and the Virginia Railway Express lines.

The southern end of this area is comprised of the ramps and elevated roadway intersection of I-395. Surface parking is located below the freeway to the west of South Capitol Street and the areas to the east below the freeway are largely untended and unattractive. The substantial length of the on and off ramps paralleling South Capitol Street impedes pedestrian crossing south of the freeway.



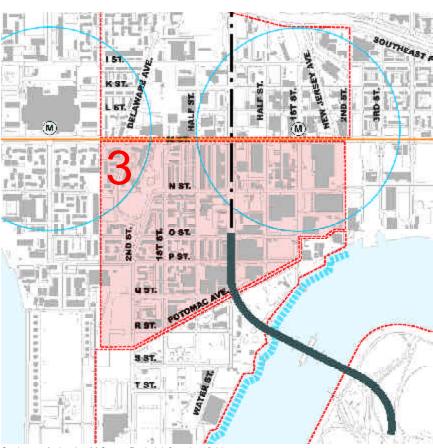
Study area 1 showing Metro stations, I-395, Rail Line

This study area extends from I-395 south to M Street, east to 2nd Street SE and west to 3<sup>rd</sup> Street SW. Land use along the corridor is characterized by surface parking lots, fast-food restaurants, and gas stations. The Capitol Power Plant is located just north of the freeway and extends into Subarea 2. A public park owned by the District is located just south of the freeway and west of South Capitol Street. To the east are nightclubs and light industrial use,s and a District Trash Transfer facility is located east of New Jersey Avenue. A District Motor Vehicle Inspection facility is located west of South Capitol Street, as well as the Millennium Arts Center, the Capital Park Town House Apartments, and a hotel.



Study area 2 showing M Street, Metro stations, I-395

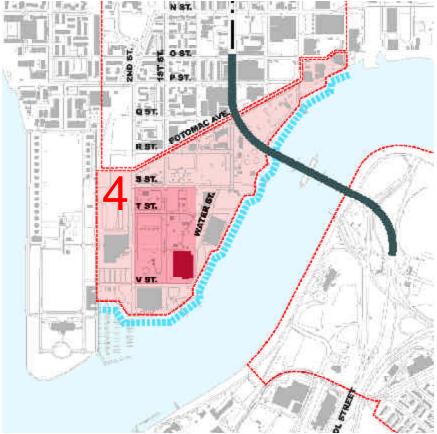
Subarea 3 extends from M Street south to Potomac Avenue and from 3rd Street SW to 2<sup>nd</sup> Street SE. East of South Capitol Street, land use consists of light industrial and low-density services, and includes several storage warehouses. Areas to the west of the corridor are almost exclusively residential. One of the District's first public housing developments is located along Carrollsburg Place south of M Street and half a block west of South Capitol Street. South of N Street, construction has recently started on a residential adaptive reuse project. The five lanes of high-speed traffic that continue unsignalized through this area, combined with a grade separation below M Street, impede the east-west connections across South Capitol Street.



Study area 3 showing M Street, Frederick Douglass Bridge

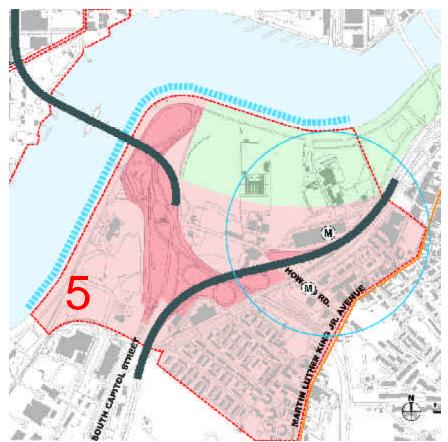
Subarea 4 extends from Potomac Avenue to the Anacostia River and from 2<sup>nd</sup> Street SE to 3<sup>rd</sup> Street SW. It includes all of the waterfront parcels along the Anacostia River. On both sides of the corridor, land use is exclusively light industrial with the exception of the Matthew Henson Conservation Center, the Earth Conservation Corps Pier, the Coast Guard headquarters (expected to vacate this facility by March 2007), and an unleased commercial building adjacent to the terminus of South Capitol Street. An operating Pepco electric plant occupies approximately six blocks west of Half Street SW. The shoreline here is substantially deteriorated and public access to the waterfront is severely limited.

The northern span and ramp system of the Frederick Douglass Bridge touches land in Subarea 4 and the southern span and ramp system touches land on the adjacent Subarea 5. Approximately 1300 feet wide at the crossing, the bridge spans the Anacostia River, and connects to the Suitland Parkway, I-295, and Howard Road. Its present physical condition will require both short-term repair and eventual replacement. Pedestrian and bicycle paths on the bridge are extremely narrow and dangerous. Ramp configurations at Poplar Point connecting the bridge with the Suitland Parkway and I-295 are inefficient and occupy large areas of otherwise empty land. Adjacent property owners include the National Park Service, the U.S. Navy, and the District of Columbia Parks and Recreation.



Study area 4 showing Pepco, waterfront

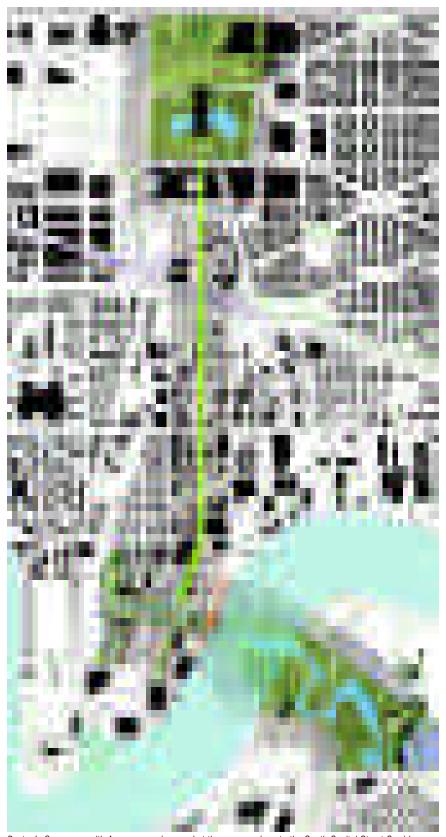
This subarea is roughly defined by the shoreline of the Anacostia River to the north, Stevens Road and the northern edge of the U.S. Naval Station to the west, Martin Luther King, Jr. Boulevard to the south, and W Street to the east. Land uses within this study area vary greatly. The Barry Farms residential development, the U.S. Naval Station, privately owned residential and commercial properties, public transportation facilities, and park land owned by the National Park Service and the District of Columbia Parks and Recreation are all located within this study area. While the existing park roads offer public access to the waterfront, several contaminated sites in this area prohibit active uses. A substantial portion of this study area is occupied by the interchange of Suitland Parkway and I-295. The Anacostia Park and Ride Metro Station and its associated Metrobus facility are located north and south of this interchange. Major freeways segment this study area into sub-sections cut off from one another, and present a barrier for historic Anacostia neighborhoods to access the waterfront.



Study area 5indicating land occupied by interchange ramps, Anacostia Park, Martin Luther King Jr. Avenue

# Appendix Scale Comparisons

# Commonwealth Avenue, Boston Massachusetts

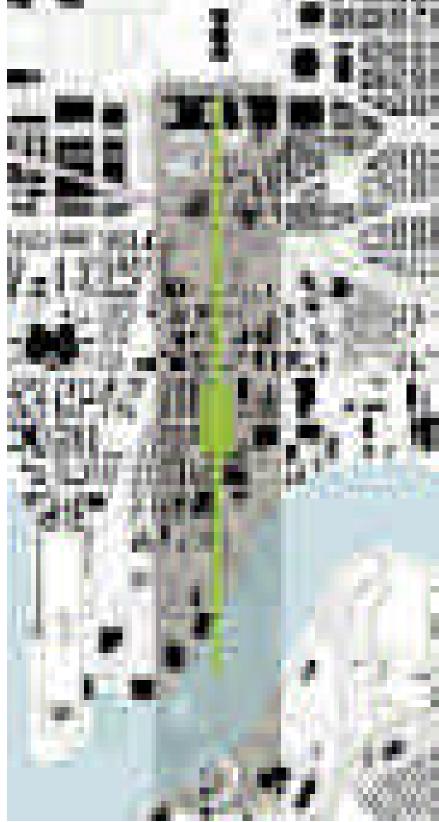


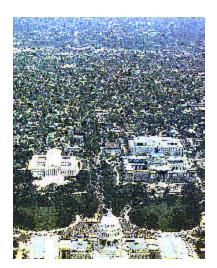
The following illustrations depict the South Capitol Street study area in relation to five well known urban boulevards or greenways. Those familiar with each of these precedents can better grasp the scale of the study area and imagine a similar character for its future development. Two of the five precedents depict Avenues within Washington, D.C.: Pennsylvania Avenue from the Capitol to the White House and East Capitol Street from the Capitol to RFK Stadium.



Boston's Commonwealth Avenue superimposed at the same scale onto the South Capitol Street Corridor

# East Capitol Street, Washington D.C.





Washington, D.C.'s East Capitol Street superimposed at the same scale onto the South Capitol Street Corridor

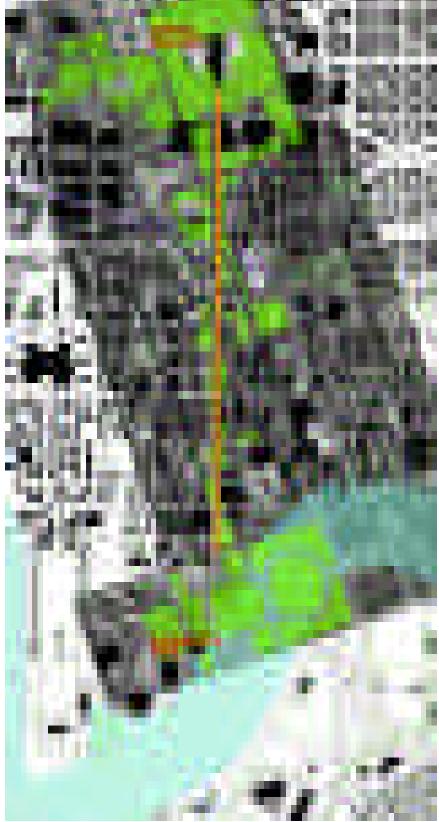
# Champs Elysees, Paris





Paris' Champs Elysees superimposed at the same scale onto the South Capitol Street Corridor

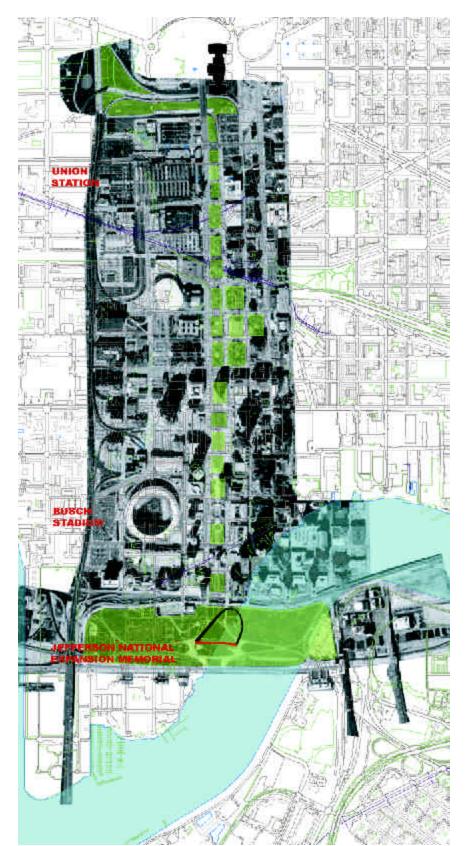
# Pennsylvania Avenue, Washington D.C.





Washington, D.C.'s Pennsylvania Avenue superimposed at the same scale onto the South Capitol Street Corridor

# Market Street , St. Louis, Missouri





Saint Louis' Market Street superimposed at the same scale onto the South Capitol Street Corridor



# Economic Research Associates

# Project Overview

ERA (Economic Research Associates) has been retained by Chan Krieger Associates to conduct a real estate and land use background study on the South Capitol Street corridor in Washington, DC. Currently, South Capitol serves largely as a connector between Suitland Parkway and Interstate 395, carrying a heavy volume of high-speed traffic between the two highways. However, the corridor has the potential to become a grand entrance from the south into the monumental core of Washington.

ERA methodology involved a visual assessment of the project area, as well as analysis of zoning, parcel size, and property ownership. Additionally, we examined redevelopment proposals in other parts of the District and produced an estimate of potential build-out in other areas, based on telephone interviews and previously completed studies. We identified potential demand in the District of Columbia for increased office space, based on both Metropolitan Washington Council of Governments (MWCOG) employment projections, and Cushman & Wakefield historical estimates of office completions. We identified potential residential demand, based both on MWCOG household projections and Census population projections. In addition, we identified competitive areas within the District and estimated additional build-out capacity in those competitive areas.

At the heart of the project, running through four of the five sub-areas, is a redesigned South Capitol Street gateway. The area today is an auto-oriented strip, but could be a grand boulevard under the right conditions. However, reconstruction of the roadway is not anticipated to be completed for a number of years. This could hamper development of the type of buildings sought to line a grand entryway. The prestige of the area will need to be guaranteed before developers will commit to erecting large-scale buildings with outstanding design and materials.

Using New York City as an example: Office rents recently in the area near Rockefeller Center were \$71 per square foot; a few blocks away at Times Square they were \$56 and at Penn Plaza they were \$50 per foot. Location image, aesthetics, and amenities command a higher rent, which subsidize the increased construction cost for higher quality design and materials that become necessary to compete with other high profile locations.

A densely developed, high profile urban corridor will be highly dependent upon public transportation to bring workers from throughout the metropolitan region. Such a scenario will concentrate office development within walking distance of the new Navy Yard Metro station to maximize regional access. Residential development can then fill the southern portion of the corridor toward the Anacostia River, with intensity of development dependent upon the quality of transportation access.

In addition to image, aesthetics, amenities and commuter accessibility, practical concerns such as efficient office layouts, and building servicing need to be addressed. Larger floorplates are increasingly sought after by employers, since they allow for a more flexible and interactive workspace. Additionally, a construction cost premium is added for each floor required to accommodate building square footage. Typical new office floorplates in an urban setting are 40,000 - 50,000 square feet, while suburban office park floorplates can be significantly larger.

In the absence of good transit access and an attractive environment, a less urbanist and more auto-oriented alternative plan could allow more suburban-style office buildings to create their own settings. Developers have expressed to planning officials a desire for waterfront office space with parking, though accommodating large floorplates and sufficient land area for parking will require fairly large parcel sizes. Auto-oriented office construction may also have the effect of cutting off the mixed-use/residential area from the new waterfront.

A combination of the urbanist and auto-oriented alternatives might be designed to allow some auto-dependent office development near the waterfront, but designed in such a way that the side of the offices facing into the mixed-use/residential neighborhood blend in with a more urbanist form. However, easy pedestrian riverfront access would need to be maintained, and office parking hidden as much as possible, in order to maintain the desirability of the mixed-use neighborhood behind the offices. This formula would likely result in structured parking, however, which adds significantly to development cost.

Under a premier office and high-density mixed-use/residential scenario, retail development along South Capitol can be geared toward supporting the office workers and residents in the area. This will bring people to the sidewalk, potentially creating a critical mass to become a destination for such context-sensitive uses as restaurants and theaters.

Other destination retailers, however, may also be interested in developing locations in the South Capitol area, since it is conveniently accessed from surrounding areas. Parcels large enough to accommodate a power center or other collection of big box stores maybe difficult to find. However, a stand-alone big box retailer could build a 130,000 square foot store, with one parking space per 200 square feet of floor space (at 300 square feet of parking lot per space), on roughly 7.5 acres. Some portion of the project area could be set aside for such development, provided it is located so as not to impact a future high-density urban corridor, yet provide good access and visibility.



# Future Demand Projections 2025

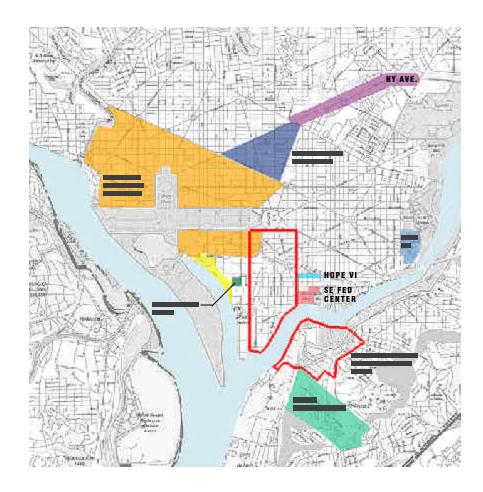
# Office Demand

Washington's Central Business District (CBD), with over 85 million square feet of office space, is surpassed by only New York and Chicago. The District's office market is also currently among the strongest in the nation, with over 5 million square feet of office space leased in 2001 and a vacancy rate well below the national average. The strong demand for space combined with a lack of suitable sites will result in continued increases in average Class A asking rents, which are expected to grow by an average annual rate of 4.9% through 2003.

Roughly half of the office stock in the CBD is Class A, which are premier office buildings characterized by superior interior mechanical systems and high-quality finishes such as marble and granite. Class B office structures may have somewhat lower-quality finishes or outdated interior systems. New office construction in a CBD tends to be of Class A buildings, which command higher rents to offset the higher land cost to the developer.

Demand for office space is expected to remain strong in Washington DC. However, without an adequate supply of new space, economic growth will be hindered. Washington's declining employment of a decade ago has turned around and the District has undergone a significant resurgence in recent years, which has slowed little during the current downturn. In fact, the Metropolitan Washington Council of Governments (MWCOG) predicts that the District will receive a sizable proportion of future regional job growth.

We have provided two alternative methods for forecasting office space demand within the District of Columbia between now and the year 2025. The first of these is a more modest estimate based on MWCOG job growth estimates for sectors that comprise the major office space users in the District, with applied estimated percentages of office-based employment within those sectors. The other, simpler method is a continuation of the average office square footage construction completions within the District over the last 10 years.



# MWCOG Employment Projection Method

While Government and Finance/Insurance/Real Estate (FIRE) employment sectors, two primary office users, are forecast to decline between 2002 and 2020, services sector employment is forecast to grow significantly during the period. Despite a lesser tendency for services employment to be office-based (though services in the District are more office-based than other locations), the sector's growth, less the decline in Government and FIRE, could generate demand for up to 11.5 million square feet of new office space in the District by 2020. Allowing for a stabilized vacancy rate of 7%, brings the demand for new office space in 2020 to 12.4 million square feet. Straight-lining this projection forward to 2025 results in demand for 15.8 million square feet of office space through 2025.

# Construction Completion Trend Method

Office space construction is highly cyclical. Office construction completions, on a per square foot basis, have varied a great deal annually over the last 10 years, from less than 100,000 square feet to over 3.5 million square feet, with peaks in the early 1990s and again in recent years. The overall average square footage built between 1992 and 2002 has been roughly 1.2 million square feet per year. Projecting this same annual average forward to 2025 results in an additional 28 million square feet.

Our high and low estimates for office demand in the District, therefore are 28 million square feet and 15.8 million square feet respectively. Most of the additional space will be Class A office space.

Of the estimated demand for new office space within the District, only about 1.0 million square feet can be accommodated in the heart of the CBD (between Massachusetts Avenue and the Mall), with another 1.5 million in the Capitol Hill area, and 1.0-3.0 million in the L'Enfant Plaza area, according to the director of the Downtown BID. Estimates for the NoMa area include 750,000 to 1.5 million square feet in the Mt. Vernon Triangle area and 5.0-6.0 million in the Tech district northwest of Union Station.

#### Residential Demand

Washington, D.C.'s housing market has been extremely tight in recent years, particularly for Class A apartment rentals. Apartment rental rates have been on the rise throughout the District, including in the South Capitol vicinity. Vacancy rates for Class A apartments hit historic lows of less than 1.0% in the last few years, though pressure has eased somewhat recently, with a slightly softer economy and additions of several hundred thousand square feet of rental stock. Housing demand is expected to remain strong for this type of unit.

While some private demographic data providers forecast the District's population and household base to decease over the coming decades, the Metropolitan Washington Council of Governments (MWCOG) forecasts an increase of 46,500 residents and 34,500 households by 2020. Extending these estimates out to 2025 results in a population increase of 55,000 and a household increase of 44,000. However, the Census provides a population projection for the District of 655,000 residents in 2025, an increase of 83,000. Using the population to household ratio that MWCOG uses for 2020, assuming that declining household size stabilizes, the number of new households in the District will be 51,000 between 2000 and 2025. Since the Census estimate for 2001 changed almost imperceptibly from 2000, it can be assumed that the increases in households are from 2002. Therefore the range of household growth is 44,000 to 51,000 households by 2025. Though households are not the same as units, they can be used as a proxy.

Many of the new residents will be young professionals working in offices in the District. Demand for convenient, transportation-accessible rental apartments geared toward single young professionals seeking a vibrant urban lifestyle is expected to remain strong in the District for the foreseeable future. However, housing targeted for a range of socio-economic groups will be needed. While the concept of filtering (where wealthier residents move to newer units and their old units are occupied by people previously in less-desirable units) may occur to some extent, a tight housing market may result in little opportunity for move-up.



### South Capitol Street Corridor Sub-areas

The South Capitol Street corridor is composed of fairly distinct sub-areas: Independence Avenue to Southeast Freeway; Southeast Freeway to M Street; M Street to Potomac Street; and Potomac Street to the Anacostia River. In addition to these areas along South Capitol Street, we have included the area around the northern terminus of Suitland Parkway in our study. See the attached sub-area map.

#### Area 1: Independence Avenue to Southeast Freeway

#### Current State

The area to the south of the Capitol Building is largely a governmental office area. Moving southeast from Independence Avenue and the governmental buildings are portions of the historic Capitol Hill residential area, which has undergone significant gentrification in recent years. The blocks of South Capitol Street just below the Capitol Building have been blocked to traffic.

# Opportunities

An area along Washington Avenue SW, where South Capitol Street traffic is channeled north of I-395, provides one of the few development opportunities in this part of the South Capitol Street corridor. Two large parking lots cover both sides of Washington Avenue, despite good access to the South Capitol Metro station.

#### Constraints

The underdeveloped area, southwest of Washington Avenue, is impacted by Interstate 395 and freeway on-ramps, which connect with Washington Avenue adjacent to the underdeveloped area. The high volume and speed of traffic channeled onto Washington Avenue from South Capitol and traffic entering and exiting the freeway along this stretch of roadway, as well as roadway width, act as a barrier between the undeveloped parcels and the metro-accessible areas across Washington Avenue. The area also has a railroad right-of-way, which acts as a physical barrier.

#### Area 2: Southeast Freeway to M Street

#### Current State

Most of the area between the Southeast Freeway and M Street is zoned C-3-C, which allows for office, retail, housing, and mixed-use development with 100% lot coverage and an FAR of 6.5. However, the area along South Capitol Street serves largely as an auto-oriented retail strip, with fast food outlets and gas stations predominating. Moving east and west from South Capitol, the uses tend to shift light industrial and residential, respectively. The area to the east of South Capitol Street is a receiving zone for downtown development rights.

The center lanes of South Capitol pass under M Street, a major east-west thoroughfare, with single-lane surface-level frontage roads that rejoin between K and L streets, just before traffic segregates into I-395 and through traffic. The majority of traffic enters I-395.

## Opportunities

The intersection of South Capitol and M Street could provide a strong office node, given its proximity to the Navy Yard Metro station, and the intersection of two major roadways. This area would be the primary commercial focal point of the revitalized South Capitol Street corridor. The blocks along South Capitol Street are an ideal location for massing Class A office buildings that will create a gateway boulevard to the monumental core. This type of development could be extended along M Street, from South Capitol to the Navy Yard Metro station to tie South Capitol Street to the station. The blocks beyond those fronting on South Capitol Street could be developed at somewhat reduced densities, and/or devoted to residential or mixed use, to channel maximum commercial/office development to South Capitol Street.

## Constraints

South Capitol's role as a conduit between Suitland Parkway and I-395, as well as the current roadway design, make auto-oriented uses almost inevitable, particularly when combined with relatively small parcel sizes and the neglected state of the areas beyond South Capitol Street.

#### Area 3: M Street to Potomac Street

#### Current State

The areas along both sides of South Capitol in this sub-area tend to be light industrial and commercial in nature, with a small segment of row houses along the western side of the roadway where the elevated portion begins. The areas off of South Capitol to the east and the west, however, are distinct from one another. The area to the west of South Capitol is a residential area consisting of row-house blocks with 18' minimum lot widths and some larger housing developments, both public and private, that date from the 1970s. The area to the east is a light industrial/manufacturing zone, with many cleared blocks awaiting redevelopment

The center lanes of South Capitol run below-grade in the northern part of the sub-area, as the roadway approaches the M Street underpass. To the south the main roadway runs above grade, as it approaches the Frederick Douglass Memorial Bridge, with surface-level frontage roadways. The road runs at surface-level for a short stretch between O and N Streets.

#### Opportunities

As noted for Area 2, the area of South Capitol near M Street, in the northern part of the sub-area, could provide a strong office node due to proximity to the Navy Yard metro station. Desirability will taper moving away from Metro Access; however, easy access to the waterfront park could alleviate this drop-off. Similar to Area 2, above, commercial/office development could be channeled to South Capitol Street to create a gateway boulevard, while blocks moving away from South Capitol could be developed at somewhat reduced densities, and/or devoted to residential or mixed use.

#### Constraints

Due to the small parcels in the residential zone, this area is anticipated to improve in appearance gradually as directed by the market. The presence of public housing could hinder the pace of improvement to the residential stock in this area. Transportation linkages will also be required for large-scale redevelopment in the southern portion of the sub-area.

#### Area 4: Potomac Street to Anacostia River

#### Current State

The area below P Street, extending to the Anacostia River, is an old riverfront manufacturing zone. South Capitol Street makes its elevated, curving approach to the Frederick Douglass Bridge through this area, with the frontage road continuing as South Capitol Street southward to S Street.

#### Opportunities

This area's proximity to the Anacostia River provides an ideal opportunity for waterfront residential or mixed-use development. While the area is not well-served by the Navy Yard Metro station, improved transit access to the waterfront could create sufficient demand for an urban residential or mixed-use neighborhood.

## Constraints

The area below Potomac Street is beyond a 5-minute walk to the Navy Yard Metro station, which could inhibit the intensity of development in the area, or encourage auto-oriented development, in the absence of adequate transportation infrastructure.

The area's distance from Metro hinders the type and scale of development that can be supported at this location. Substantial office development is unlikely, even with light rail installed, since other competing office submarkets within the District currently have direct Metro access, including: the core CBD; East End CBD; West End CBD; Mt. Vernon Triangle; Tech District; L'Enfant Plaza; and Capitol Hill. Additionally, competitive locations in Arlington are served directly by Metro. Requiring suburban commuters to add a third mode of transportation to their commutes, or drive in, will likely result in reduced rent, which will impact development feasibility.



The intensity of residential development will also be dependent upon transportation improvements. In order to maximize residential demand, access to other areas of the District should be improved. Light-rail will enable higher-density residential development, but may not be convenient-enough to encourage office users to locate below Potomac Street. In the absence of adequate transit infrastructure, the area may feel development pressure for more auto-oriented development. Residents of Area 4 that do not drive to work will likely transfer to Metro, requiring only two modes of transportation to commute to work. Many office workers coming onto the area, however, would have a third transportation leg added to their journey. Most office markets in the District that this area will compete with are located near Metro stations, requiring suburban commuters to rely on no more than two modes of transportation, generally. The additional transit leg could result in decreased demand discounted rents. Discounted rents will negatively impact the development of the area.

## Area 5: South Capitol-Suitland Parkway Interchange Area

#### Current State

The area south of the Anacostia Freeway, surrounding the Howard Road entrance of the Anacostia Metro station and bus plaza, is a collection of schools and places of worship, along with some housing developments. To the north of the Anacostia Freeway is the parking garage and kiss-and-ride for the Metro station, sandwiched between the freeway and the Anacostia Naval Annex and Anacostia River Park.

## Opportunities

The area's convenient access to Metro could be exploited to create a residential or mixed-use neighborhood, though it is probably unlikely that redevelopment will have much impetus to jump the river until redevelopment of the Buzzard Point area has been substantially achieved. Once the desirability of Buzzard Point is fixed, the area surrounding the Anacostia Metro station will likely emerge as a less expensive alternative for residential development.

#### Constraints

The small amount of redevelopable land on the north side of the Anacostia Freeway is isolated from the areas to the south by the freeway, and the northern Metro entrance is not oriented toward the adjacent area. The prevalence of churches and schools around the southern Metro entrance may complicate redevelopment proposals in this area.

#### Future Area Developments

The South Capitol Street corridor will be positively impacted by several other public and private initiatives being undertaken in the Southwest and Near Southeast areas of Washington. These include new waterfront recreational areas, replacement of subsidized housing, Marine Corp housing, the Navy's relocation into the Navy Yards, redevelopment of Southeast Federal Center, and renovation of the Waterside Mall. Some more substantial developments are discussed below.

#### Southeast Federal Center

# Project Overview

The GSA's Draft Illustrative Plan calls for Southeast Federal Center (SEFC) to be built-out with: 1.2 to 1.8 million square feet of office space (in addition to the new USDOT office); 1.8 to 2.9 million square feet of residential; 160,000 to 350,000 square feet of retail; and 20,000 to 100,000 square feet of cultural space. GSA plans to begin signing development agreements in September 2003.

#### **Impacts**

While the SEFC will provide some competition to development in the short-term, it will also serve as a catalyst for development in the Near Southeast area. The SEFC will positively impact the Near Southeast prior to reconstruction of South Capitol Street by creating a more receptive environment, for the sort of redevelopment sought along South Capitol.

# Navy Yard

#### Project Overview

The Navy recently relocated NAVSEA operations from Crystal City, Virginia to the Navy Yard along the Anacostia. The Navy Yard has undergone significant renovation. Employment at the Navy Yard doubled between 1995 and 2001, to nearly 11,000 employees. The Navy is investing approximately \$235 million to restore and improve the yard—about \$130 million of that was invested in the NAVSEA project, which provided space for 4,100 employees.

## **Impacts**

In addition to direct impact of the Navy's NAVSEA Operations, speculative office construction has begun in the Navy Yard area to accommodate contractors who are following the Navy to the area. The Navy personnel and contractors will have a positive impact on residential and retail development in the area. Currently, 1.5 million square feet of office space are planned in the area, with a capacity for 5,000 workers. The 200,000 square foot Maritime Plaza, on M Street near the Metro station, has been fully leased and includes several contractors.

# Hope VI

#### Project Overview

A new mixed income housing development of 1,500 units, as well as Marine housing, will replace a large portion of the Arthur Capper public housing complex. The Hope VI development will be built in a traditional row house style that will help the neighborhood blend with the residential areas of Capitol Hill, across I-395, as well as removing a source of blight from the area.

## **Impacts**

Removal of the Arthur Capper housing projects and replacement with economically integrated, physically attractive housing will not only provide housing to support the future workforce of the area, it will eliminate a detriment to redevelopment of the surrounding area.

#### Waterside Mall

### Project Overview

Waterside Mall, nearly adjacent to the Southwest waterfront and served by a Metro station, will be renovated and expanded from its current 1.15 million square feet of office and retail space. It will eventually include 2 million square feet of office, 100,000 square feet of residential. The dated, uninviting exterior will be substantially replaced and the currently blocked 4th Street will be reopened. Impacts

The renovated Waterside Mall will act as a catalyst for redevelopment west of South Capitol Street. While the EPA, which used to occupy space at Waterside, has vacated, the proposed 2 million square feet of office space could hold roughly 8,000 workers. These workers will have a positive impact on renovation of the residential zone between the site and South Capitol. Additionally, the renovation of the exterior will benefit the surrounding area's property values, potentially spurring renovations nearby.

# **Development Competition**

#### Near-term / NoMa-Mt. Vernon Triangle-Tech District

The Mt. Vernon Triangle and Tech District areas, North of Massachusetts Avenue, will compete with the South Capitol area for development in the short-term. The area has already undergone significant redevelopment as the preferred location for technology-oriented companies in the District. The area's development prospects remain strong, despite the current technology downturn. Additionally, opportunities remain for significant future development in the NoMa area.

# Long-term / Brentwood-New York Avenue

The South Capitol area will see long-term development competition from the New York Avenue corridor, another redevelopment initiative in the District. The New York Avenue corridor currently exhibits many similar characteristics to the South Capitol corridor, but is significantly longer.

#### Suburban vs. Urban

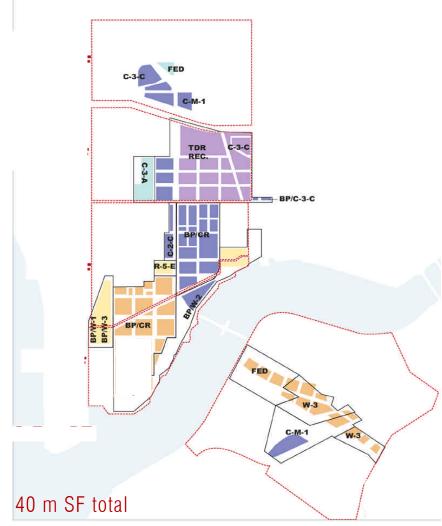
The District currently holds about 35% of the greater Washington region's office space and is the workplace for 24% of the employees, but houses only 12% of the region's population. The proportion of the region's population residing in the District is projected to decline to roughly 10% by 2020.

The continued growth of the suburbs will create competition for both residential and office development. However, the employment sectors that require Class A office space and the related residential demographics that are concentrated in the District are likely to remain and grow, provided there is sufficient opportunity to do so.

# Capacity - Real Estate Demand

Development capacity for the study area was evaluated in order to make zoning, implementation, and land use recommendations for the study area. Development capacity is simply the amount of square footage that can be built under current zoning guidelines. The following assumptions apply:

- 1 Opportunity sites: parcels were identified that were "most likely to undergo change." These include:
  - Sites identified with high development potential in the land use analysis provided by ERA.
  - BP/CGA zoning districts rezoned to encourage changes in land use (please refer to Appendix for definition of zoning classifications)
  - · Sites with high amounts of surface parking or sites that are primarily underdeveloped.
  - · Sites with structures in deteriorated conditions.
  - Sites with uses or conditions that discourage use by a wide public, for example contaminated sites, deleterious uses, and adult-entertainment venues.
  - Sites subject to recent planning efforts that indicate changes in land use, for example Poplar Point
- 2. A land use scenario had to be assumed in order to calculate developable areas because Floor Area Ratios (FAR) vary depending upon use. For example, in zoning district C-2-C a developer could choose between building 60,000 square feet of residential space, or only 200,000 square feet of commercial space. A broad land use scenario was assumed in order to make some estimate of development capacity. Two scenarios were created, one that favored commercial development and another that favored residential development. These are described in the Land Use section of the Report.

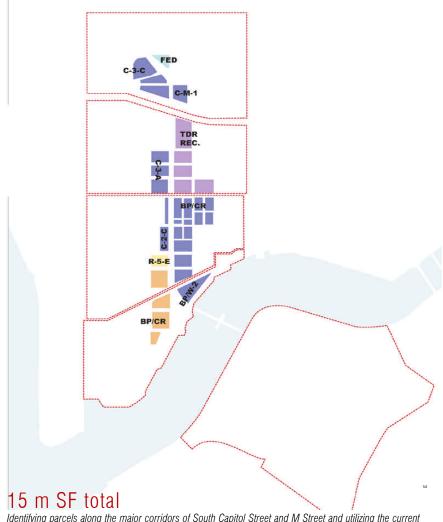


Identifying parcels with highest redevelopment potential and calculating areas based on current zoning, the maximum capacity for the Study Area could be as high as 40 million square feet of new development

Development capacity was then determined by assuming land use and identifying buildable parcels (subtracting roadways and parks). The areas of the parcels were determined and multiplied by the lot occupancy to arrive at the total developable area for a block. This area was multiplied by the FAR to produce all of the developable areas shown below. An enormous site capacity totaling nearly 40 million square feet of development under current zoning conditions was determined. The areas are indicated in the diagram to the left.

# Targeted Development

Realizing that the 40 million square feet of development identified above would be unrealistic for this corridor, the number of parcels identified for development were changed to reflect goals identified in the vision. The second estimate of development capacity was made incorporating the expected concentration of development along blocks adjacent to South Capitol Street and M Street. This scenario matches current planning objectives for M Street and supports a relationship between corridor investment and rising land values for adjacent blocks. As described in the report prepared by Economic Research Associates, areas at Poplar Point would follow a longer development cycle and were not included in the targeted development estimate. The capacity of the targeted area totals 15 million square feet of development under current zoning conditions. This area is indicated in the diagram below.



Identifying parcels along the major corridors of South Capitol Street and M Street and utilizing the current zoning, this diagram indicates the location of targeted development, closer to expected real estate demand

# Development Capacity and Forecasted Demand 2025

The charts on this page show the relationship between the conservative numbers of the fore-casted demand relative to the development capacity of the South Capitol Street study area and other development areas within the city. The charts compare the 15.8 million square feet for commercial / office space and 44,000 residential units (described on pages 82 and 83) with the development capacity of various competitive sites throughout the city. These sites are indicated on the map on page 90 and can be characterized as follows:

Established development areas with remaining capacity:

CBE

Target areas identified in the AWI Framework Plan and other initiated planning projects:

Southwest waterfront

Public Reservation 13

Southeast Federal Center

Waterside Mall

Arthur Capper / Carrollsburg dwellings

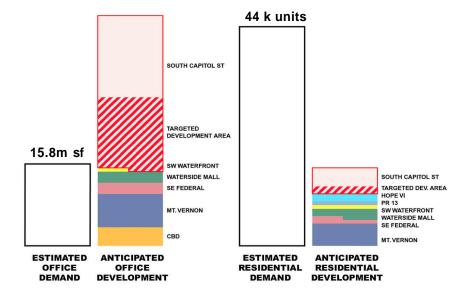
Short term competitive development areas with similar characteristics, such as proximity to Capitol Hill, that are well served by transit:

Mt. Vernon Triangle

Long term competitive development areas (indicated on the area map - previous page, not represented below), without estimated capacities.

New York Avenue

Saint Elizabeths Hospital



Using the office-oriented Land Use scenario, both projections of development capacity for the South Capitol Street study area are represented: the red box shows full site capacity (represented in plan diagram on page 80), and the hatched red and white portion shows the targeted development area (indicated in plan diagram on page 81).

# Observations:

Compared in square feet, residential demand is far higher than commercial demand. The enormous site capacity of 40m square feet for the study area far exceeds anticipated demand in the district well beyond 2025. Even the reduced estimate of 15 million square feet of the targeted development area will have to compete with other sites within the city for the estimated 2025 demand. The Central Business District, Mt. Vernon Triangle area, and the AWI targeted areas could fulfill commercial/office demand projections independent of the South Capitol Street study area for the next 25 years. Therefore the study area must be positioned competitively in order to attract commercial/office space. Improvements to the physical condition of the corridor itself may be the necessary catalyst to such development. Concentrated development of commercial/office space along prominent "addresses" may indeed be realizable given the estimated demand.

The strong demand for residential space bolsters an emphasis on new neighborhood building as identified in the second residential-oriented land use scenario. This bodes well for a land use strategy that emphasizes the creation of new residential neighborhoods in advantageous locations such as the waterfronts of the Anacostia River.

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