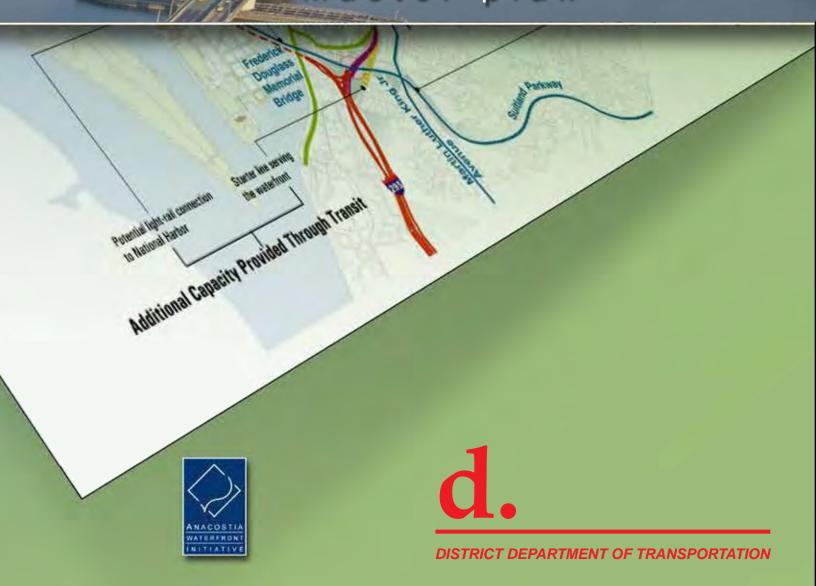
2007 Update

Anacostia Waterfront Transportation Master Plan

## Anacostia Waterfront

# Transportation. master plan



## Gateway to the Future

The Anacostia Waterfront Initiative (AWI) is a comprehensive plan to restore the long-neglected Anacostia Waterfront, remove physical barriers in the surrounding infrastructure, and leverage the community's economic growth while preserving its rich historic and cultural heritage. Since March 2000, in an unprecedented partnership that was formalized by a Memorandum of Understanding, 20 federal and District of Columbia government agencies have been working together to carry out the AWI vision. The District Department of Transportation (DDOT) is leading this effort through the planning, design and construction of an improved transportation infrastructure that will support a transformed Anacostia Waterfront. The AWI Transportation Master Plan describes how DDOT is helping to build the AWI vision.



The transportation infrastructure within the Anacostia Waterfront area must be upgraded to support economic development and better serve neighborhoods and the region. Several federal government agencies are relocating to locations along the river, and a mix of residential and retail development is moving to the area. In 2008, the Washington Nationals' new ballpark on the riverfront is scheduled to be complete. In short, the area has become one of the fastestgrowing centers of employment, entertainment, and residential growth. Improvements to the transportation network will improve access and connect new developments to adjacent communities and the Washington region as a whole.

DDOT actively coordinates with other participating agencies to ensure that all projects will improve the health of the river and restore the landscape. This environmental stewardship is an integral part of DDOT's mission to build transportation facilities that provide better access to local destinations and improve mobility for everyone throughout the AWI area.



Open and ongoing communication with the public is instrumental to the success of the AWI program. Public involvement is vital at every stage: planning, design and construction. Listening to and collaborating with community stakeholders is an essential component of all AWI projects. Public involvement and support is critical to the success of the program. DDOT and other sponsoring AWI agencies continue to seek citizen input through meetings, workshops, phone calls and emails or letters as work moves forward.



More information about the AWI Transportation Master Plan, Mobility Study, and individual projects is available online at: www.ddot.dc.gov/awi



## What Steps Are Involved in a Project?



DDOT's project development process includes planning, environmental study and documentation, design, and construction and is followed by regular maintenance. The AWI transportation projects, shown on the map on the following page, are in various stages of project development. Public involvement is a continuous part of the process of developing context sensitive solutions, with multiple opportunities for community stakeholders to provide feedback.

#### Planning: Getting Started

Planning is the initial stage of a project – when a particular project is first conceived based on a particular purpose and need. During this first phase, DDOT begins its comprehensive public collaboration efforts, working with the local community and DC and federal agencies to align the priorities and policies of a proposed project. Planning studies provide recommendations for near, middle, and long term transportation improvements.

#### **Environmental Studies**

The National Environmental Policy Act requires the Federal Highway Administration and DDOT to follow an established process to complete the environmental evaluation of planned projects. Projects are analyzed to consider how they will affect the human and natural environment. Typical environmental issues that are analyzed include:

- Land use
- Impact to communities
- Traffic and safety
- Historic and archaeological resources
- Parklands and recreational areas
- Noise/air quality
- Water quality and wetlands
- Economic development

Environmental documentation varies in the degree of complexity based on the nature of the project, but must be completed before a project can be built.

#### **Design**

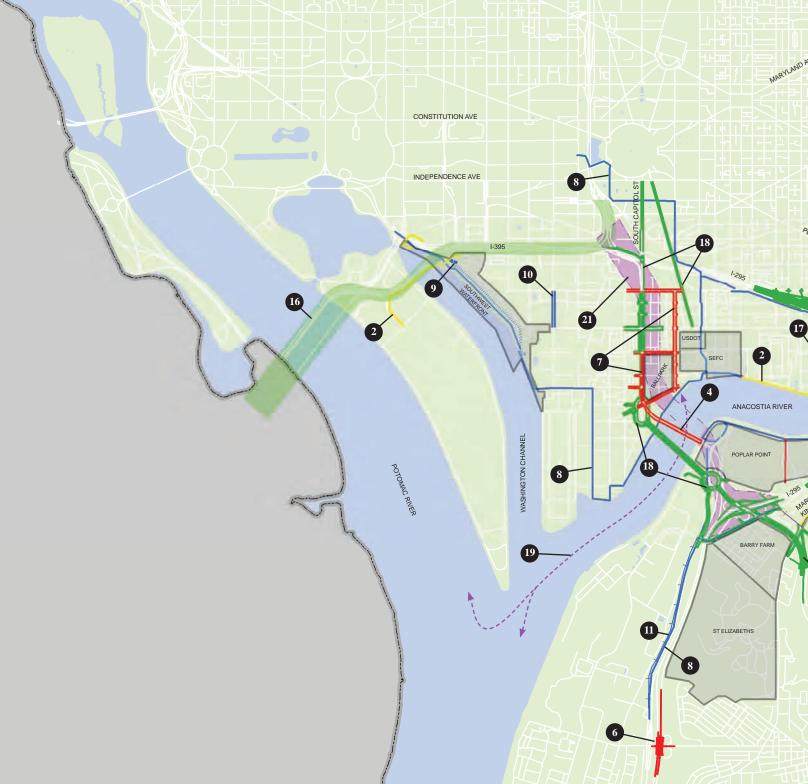
The specific design of a project draws heavily upon the public information gathered during the planning and environmental analysis processes. DDOT's infrastructure projects include the design of roadways, bridges, bicycle and pedestrian facilities, stormwater systems, and utilities. DDOT puts an emphasis on designing projects with the communities that they serve so that the improvements are environmentally sensitive and appropriate to the context.

#### **Construction**

A project finally takes physical shape during the final phase – construction – becoming visible to the neighborhood and the traveling public. DDOT ensures that all projects are built in a safe and efficient manner, and puts a priority on maintaining quality of life for neighbors and affected commuters.

DDOT continues to move forward with implementing all AWI projects based on community priorities and public input, project benefits and available funding.

## Anacostia Waterfront Transportation Projects



NEW YORK AVE

## Projects in Development

EAST CAPITOL ST

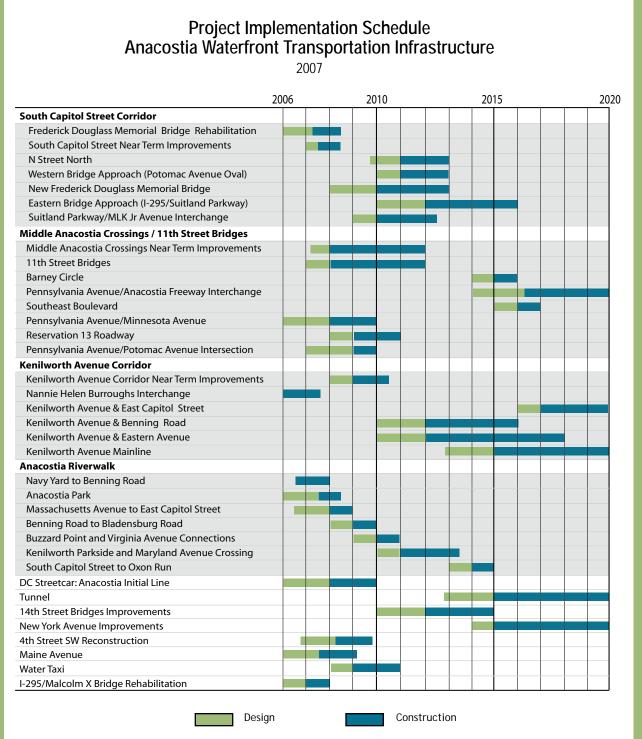
NANNIE HELEN BURROUGHS AVE

Completed

MLK two-way conversion Anacostia Riverwalk: Initial Phases
Under Construction
Anacostia Riverwalk: Navy Yard to Benning Road Frederick Douglass Memorial Bridge Rehabilitation Nannie Helen Burroughs & Kenilworth Avenue Intersection I-295 & Malcolm X Bridge Rehabilitation South Capitol Street Near Term Improvements
In Design
Anacostia Riverwalk: Future Phases Maine Avenue Improvements 4th Street SW Reconstruction DC Streetcar – Anacostia Initial Line Middle Anacostia Crossings Near Term Improvements * Pennsylvania Avenue & Minnesota Avenue Intersection Kenilworth Avenue Near Term Improvements * Pennsylvania Avenue & Potomac Avenue Intersection
Environmental Documentation
14th Street Bridge Corridor Project 11th Street Bridges Project South Capitol Street Corridor Project
Planning
Water Taxi New York Avenue Corridor Improvements Tunnel between I-295 & I-395 Boulevard along SE Freeway & Water Street Connection Barney Circle Pennsylvania Avenue & Anacostia Freeway Intersection DC Streetcar – Future Line Reservation 13 Road Kenilworth Avenue & East Capitol Street Kenilworth Avenue & Benning Road Kenilworth Avenue & Eastern Avenue Kenilworth Avenue Mainline
* These improvements are distributed throughout their respective study areas, and as such are not shown on this map.

## **Project Implementation Schedule**

The chart below details the anticipated start and end dates for the design and construction phases of each AWI project. It is based on information available in May 2007. Some AWI infrastructure projects are grouped in the chart below according to the corridor in which they are located. DDOT continually monitors project progress and refines their plan for designing and building projects. This schedule will be periodically updated, subject to funding, constructability, and changes to priorities.



Note: Schedule dependent upon funding, constructability, and priorities

# Achieving the AWIVision

Significant milestones in the AWI are occurring and several transportation improvements already are taking shape, including:

## Frederick Douglass Memorial Bridge

The major rehabilitation of the Frederick Douglass Memorial Bridge is among the first AWI projects to begin construction. The Douglass Bridge's elevated northern approach is a major barrier to pedestrians and cyclists, and it limits motorist and commercial access in and around the Southeast area. This situation will dramatically improve in the summer of 2007, when the bridge viaduct will be lowered to create an at-grade roadway with a new intersection at South Capitol Street and Potomac Avenue. Other near-term improvements along South Capitol Street include streetscape upgrades and lighting that is environmentally sensitive, efficient and decorative. The Douglass Bridge rehabilitation is one of the first steps to transform the South Capitol Street Corridor into a grand urban boulevard that will improve safety, mobility, and access.

### Anacostia Riverwalk: Navy Yard to Benning Road

Construction also is underway on the Anacostia Riverwalk Trail – a 16-mile, multi-use trail along the east and west banks of the Anacostia River. The two-mile section of the trail between Benning Road and the Washington Navy Yard is the first portion of the trail to be built. The asphalt trail will vary in width from 10 to 12 feet to provide for a wide range of users including bicyclists, in-line skaters, pedestrians, disabled persons and others. Wayside stations will provide seating, system maps, bike racks and interpretive exhibits. The Anacostia Riverwalk is a key component of the AWI Framework Plan, and achieves several goals such as enhancing parkland, improving water quality and increasing access to waterfront destinations.

### **<u>11th Street Bridges</u>**

The final environmental study for improvements to the 11th Street Bridges is nearing completion. Efforts will focus on building new ramps east of the Anacostia River to connect both directions of the Anacostia Freeway with the cross-river bridges. Local traffic will be separated from freeway traffic, providing safer traffic flows. Wide, shared-use paths for easy walking, jogging, and bicycling also will be built to tie into existing and planned trails on both sides of the river.

## Table of Contents

Section 1 - Executive Summary	Page
History of the Anacostia Waterfront Initiative	1-1
Project Development Process	1-1
Project Implementation	1-2
Section 2 - Purpose	
2.1 History and Vision of the AWI	2-1
2.2 DDOT's AWI Study Area	2-3
Section 3 - Project Development Process	
3.1 Project Phases	3-1
3.2 Project Prioritization	3-7
Section 4 - Project Implementation	
4.1 Project Financing	4-1
4.2 Program Management	4-4
4.3 Contract Packaging	4-4
4.4 Construction Management	4-5
4.5 Maintenance of Traffic (MOT)	4-6
Section 5 - Project Descriptions	
Frederick Douglass Memorial Bridge Rehabilitation	5-2
South Capitol Street Near Term Improvements	5-3
South Capitol Street Long Term Improvements	5-4
Middle Anacostia Crossings Near Term Improvements	5-6
11th Street Bridges	5-8 5-10
Barney Circle Pennsylvania Avenue/Anacostia Freeway Interchange	5-10
Southeast Boulevard	5-12
Reservation 13 Roadway	5-13
Kenilworth Avenue Corridor Near Term Improvements	5-14
Nannie Helen Burroughs Interchange	5-15
Kenilworth Avenue/East Capitol Street Interchange	5-16
Kenilworth Avenue/Benning Road Interchange	5-17
Kenilworth Avenue/Eastern Avenue Interchange	5-18
Kenilworth Avenue Mainline Improvements	5-19
4th Street SW Reconstruction	5-20 5-21
Maine Avenue Improvements Anacostia Riverwalk	5-21 5-22
Martin Luther King, Jr. Avenue Two-Way Conversion	5-22
I-295/Malcolm X Boulevard Interchange	5-24
DC Streetcar	5-26
I-295/I-395 Tunnel	5-27
14th Street Bridges Improvements	5-28

New York Avenue Improvements Water Coach	<b>Page</b> 5-29 5-30
Section 6 - Key Developments	
South Capitol Street Corridor Middle Anacostia Crossings Corridor Kenilworth Avenue Corridor Southwest Waterfront Corridor Anacostia Riverwalk Corridor	6-2 6-4 6-6 6-8 6-10
Appendices	
Appendix A: List of AWI Planning and Environmental Studies Appendix B: Required Environmental Documentation for AWI Projects Appendix C: AWI Mobility Study	A-3 A-9 A-11

## **1 Executive Summary**

The District Department of Transportation (DDOT) is helping to transform the Anacostia Waterfront into a better place for citizens to live, work, and play. As part of the Anacostia Waterfront Initiative (AWI), DDOT is pursuing a plan to reshape the area's transportation network into one that provides easy access for residents, commuters and visitors, and improves the area's environmental quality. DDOT's objective is to reconnect communities through the replacement of outdated and deteriorating facilities with context-sensitive infrastructure solutions. To accomplish these aims in the AWI area, DDOT has developed the Anacostia Waterfront Transportation Infrastructure Master Plan (Master Plan).

DDOT's transportation plan for the AWI area is comprised of five key transportation corridors as well as several independent projects. The Master Plan is an umbrella document that organizes these studies and projects into a comprehensive program. Its primary focus is to establish a logical and efficient implementation plan for the ongoing efforts in the in the AWI area, based on such factors as cost, duration of construction, environmental impacts, funding and benefits to the community. DDOT is actively engaged with its partner agencies and the development community to deliver these sweeping infrastructure changes as efficiently and effectively as possible. In all cases, minimizing disruptions to citizens' daily lives and to the economic life of the District has been a guiding principle. Projects have been sequenced in such a way as to provide residents with the highest possible levels of accessibility and personal mobility throughout the duration of the plan.

The Master Plan is a dynamic document, and the project sequence outlined here will continue to evolve, subject to constructability, funding, and changes to priorities. Therefore, this document represents a snapshot of DDOT's current and future plan for the Anacostia Waterfront. The timeliest information on the Master Plan is available at DDOT's website: http://ddot.dc.gov

## History of the Anacostia Waterfront Initiative

The Anacostia Waterfront Initiative was officially launched on March 22, 2000 through a Memorandum of Understanding (MOU) signed by twenty federal and District agencies that all committed to the goal of transforming the Anacostia River from a forgotten and blighted river to source of pride for the entire city and region. As the District's pattern of growth moves steadily eastward, the city's economic future is inextricably linked to the Anacostia Waterfront. The vision of the AWI is centered on revitalizing its parks, environment and infrastructure and re-establishing connections throughout the AWI area and between the Anacostia Waterfront and other parts of the city and the region.

The District Department of Transportation (DDOT) plays a key role in this effort through the planning, design and construction of an improved transportation infrastructure that will support a transformed Anacostia Waterfront.

### **Project Development Process**

DDOT's project development process includes planning, environmental documentation, design, and construction, followed by regular maintenance. Public Involvement is a continuous part of the process of developing context sensitive solutions, with multiple opportunities for community stakeholders to provide input. DDOT engages the community through various methods, including neighborhood meetings, publications, web sites, and outreach to key neighborhood groups such as the Advisory Neighborhood Commissions (ANCs).

Planning is the initial stage of a project, when a particular project is first conceived based on a purpose and need. Planning studies provide recommendations for near, middle and long term transportation improvements. In the environmental documentation phase, projects are analyzed to consider how they will affect the human and natural environments. Environmental documentation varies in the degree of complexity based on the nature of the project, but regardless of a project's scope, must be completed before a project can be built. In the design phase, projects draw heavily upon the public information gathered during planning and environmental documentation. DDOT puts an emphasis on designing projects with the communities they serve so that the improvements are environmentally sensitive and appropriate to the context. During construction, projects take physical shape and become visible to the public. DDOT ensures that all projects are built in a safe and efficient manner, and puts a priority on maintaining quality of life for neighbors and affected commuters.

## **Project Implementation**

Transportation projects within the Master Plan area are in various stages of project development, and range from localized, low-impact improvements to projects with broader scope and potentially more substantial impacts. All of these projects were appraised for their effect on each other in terms of construction duration, maintenance of traffic, and traffic volume impacts. The availability of funding is a critical factor in project scheduling, and DDOT is pursuing a variety of both local and federal funding sources. Given that funding availability is uncertain, DDOT formulates the implementation plan to make the best use of committed funds. Additionally, DDOT makes a concerted effort to coordinate its projects with major developments efforts within the AWI area, seeking to support the success of developments through its improvements.

The current construction implementation schedule, shown in figure 1-1 below, is subject to funding, constructability, and changes to priorities.

#### Figure 1-1:

## Project Implementation Schedule Anacostia Waterfront Transportation Infrastructure

2006 2010 2015 2020 **South Capitol Street Corridor** Frederick Douglass Memorial Bridge Rehabilitation South Capitol Street Near Term Improvements N Street North Western Bridge Approach (Potomac Avenue Oval) New Frederick Douglass Memorial Bridge Eastern Bridge Approach (I-295/Suitland Parkway) Suitland Parkway/MLK Jr Avenue Interchange Middle Anacostia Crossings / 11th Street Bridges Middle Anacostia Crossings Near Term Improvements 11th Street Bridges **Barney Circle** Pennsylvania Avenue/Anacostia Freeway Interchange Southeast Boulevard Pennsylvania Avenue/Minnesota Avenue **Reservation 13 Roadway** Pennsylvania Avenue/Potomac Avenue Intersection **Kenilworth Avenue Corridor** Kenilworth Avenue Corridor Near Term Improvements Nannie Helen Burroughs Interchange Kenilworth Avenue & East Capitol Street Kenilworth Avenue & Benning Road Kenilworth Avenue & Eastern Avenue Kenilworth Avenue Mainline Anacostia Riverwalk Navy Yard to Benning Road Anacostia Park Massachusetts Avenue to East Capitol Street Benning Road to Bladensburg Road **Buzzard Point and Virginia Avenue Connections** Kenilworth Parkside and Maryland Avenue Crossing South Capitol Street to Oxon Run DC Streetcar: Anacostia Initial Line Tunnel 14th Street Bridges Improvements New York Avenue Improvements 4th Street SW Reconstruction Maine Avenue Water Coach Construction Design Current

## 2 Purpose

As part of the Anacostia Waterfront Initiative (AWI), the District Department of Transportation (DDOT) is pursuing a plan to reshape the area's transportation network into one that improves access for residents, commuters, and visitors, and that improves the area's environmental quality. DDOT's objective is to reconnect communities through the replacement of outdated and deteriorating facilities with contextsensitive infrastructure solutions. To accomplish these aims in the AWI area, DDOT has developed the Anacostia Waterfront Transportation Infrastructure Master Plan (Master Plan).

The Master Plan was initiated by DDOT to organize the studies and projects underway in the AWI study area into a comprehensive program. It describes DDOT's project development process for implementing the AWI vision. It also provides details of each project's current progress, as well as a snapshot of the status of DDOT's AWI transportation program as a whole.

This document presents the current implementation schedule. Given the realities of the project development process as well as political and funding cycles, this program will change over time. However, it is a goal of the Master Plan to provide not only a strategy to accomplish the plan, but a set of criteria that will remain applicable as circumstances affecting the set of projects change.

## 2.1 History and Vision of the AWI

The Anacostia Waterfront Initiative is a comprehensive plan to restore the long-neglected Anacostia Waterfront, remove physical barriers in the surrounding infrastructure, and leverage the community's economic growth while preserving its rich historic and cultural heritage. The AWI was formally launched in March 2000 through the AWI Memorandum of Understanding, which created an unprecedented partnership of twenty federal, regional and District of Columbia government agencies, including DDOT.

#### Figure 2-1: The AWI Planning Area



The AWI Framework Plan, released in 2003, concluded that the Anacostia Waterfront had suffered from a transportation system that favored regional mobility over neighborhood accessibility. The highways that dominate the area are ill-suited to serve local neighborhoods and have the effect of cutting off communities from one another and from the waterfront. The Framework Plan puts forth the following strategies to redress the negative effects of the existing transportation system and create a future system characterized by connectivity:

- All activities along the Waterfront must be linked by the Anacostia Riverwalk and Trail.
- Public transportation must be enhanced and increased to afford more residents direct access to the Anacostia River and its neighborhoods.
- The bridges across the Anacostia River must be designed in the tradition of great civic architecture and must allow for bicycle and pedestrian access that is easy, attractive, and enjoyable.
- The highways and freeways that frame the Anacostia River must be transformed to become less of a physical and visual barrier to the waterfront and adjacent neighborhoods.
- All streets and boulevards that lead to the Anacostia River must be multi-modal and designed in the tradition of great Washington boulevards.

DDOT is fulfilling its commitment to the AWI by planning, designing and constructing an improved transportation infrastructure that will support a transformed Anacostia Waterfront. The transportation infrastructure within the Anacostia Waterfront area must be upgraded to support economic development and better serve neighborhoods and the region. Several federal government agencies are relocating to locations along the river, and a mix of residential and retail development is moving to the area. In 2008, the Washington Nationals' new ballpark on the riverfront is scheduled to be complete. In short, the area has become one of the fastest-growing centers of employment, entertainment, and residential growth. Improvements to the transportation network will improve access and connect new developments to adjacent communities and the Washington region as a whole.

DDOT actively coordinates with other stakeholders and agencies to ensure that all projects will improve the health of the river and restore the landscape. This environmental stewardship is an integral part of DDOT's mission to build transportation facilities that provide better access to local destinations and improve mobility for everyone throughout the AWI area.

Open and ongoing communication with the public is instrumental to the success of the AWI program. Public involvement is vital at every stage: planning, design and construction. Listening to and collaborating with community stakeholders is an essential component of all DDOT projects. DDOT and other sponsoring AWI agencies continue to seek citizen input through meetings, workshops, phone calls and emails or letters as work moves forward.

More information about the Master Plan, Mobility Study, and individual projects is available online at: www.ddot.dc.gov/awi

Figure 2-2: Revitalized parkland along the Anacostia River as envisioned in the AWI Framework Plan

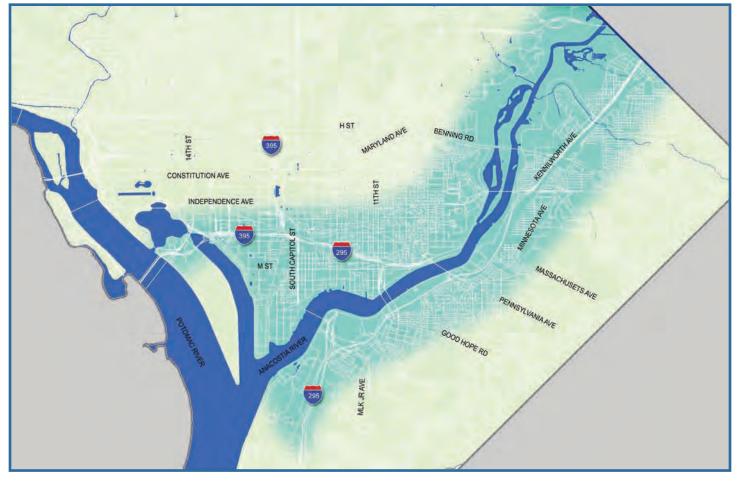


## 2 Purpose

## 2.2 DDOT's AWI Study Area

Development activity often has transportation impacts well beyond its immediate vicinity. While the AWI initiative as a whole is focused on areas in fairly close proximity to the Anacostia and Potomac riverfronts, DDOT must consider a significantly broader area in order to effectively meet the challenges that redevelopment of the riverfronts will bring. Figure 2-3 shows the extent of DDOT's AWI Study Area.

Figure 2-3: DDOT's AWI Study Area



## **<u>3 Project Development Process</u>**

DDOT moves projects forward following an established Project Development Process. This process, organized by project phase, are described in Section 3.1. Project Prioritization, a separate process that occurs concurrently with the phases detailed below, is covered in Section 3.2.

## 3.1 Project Phases

The Master Plan organizes projects already underway in the AWI area. DDOT developed these projects over the past several years through public outreach, planning, environmental documentation, design, and construction. As shown in Figure 3-2 on the following pages, the projects are in various stages of the project development process; while some projects are still in the planning phase, several others are under construction or even complete. Because DDOT involves the public through all project stages, community stakeholders have multiple opportunities to provide input and feedback.

Public involvement is a central part of Context Sensitive Solutions (CSS). As defined by the Federal Highway Administration (FHWA), CSS "considers the total context within which a transportation improvement project will exist." In order to formalize a context-sensitive approach to projects, DDOT has developed the Context Sensitive Design Guidelines. Because CSS is an overarching theme in DDOT's work, these guidelines apply to all phases of project development.

#### Figure 3-1: DDOT's Project Development Process Phases



## 3.1.1 Planning

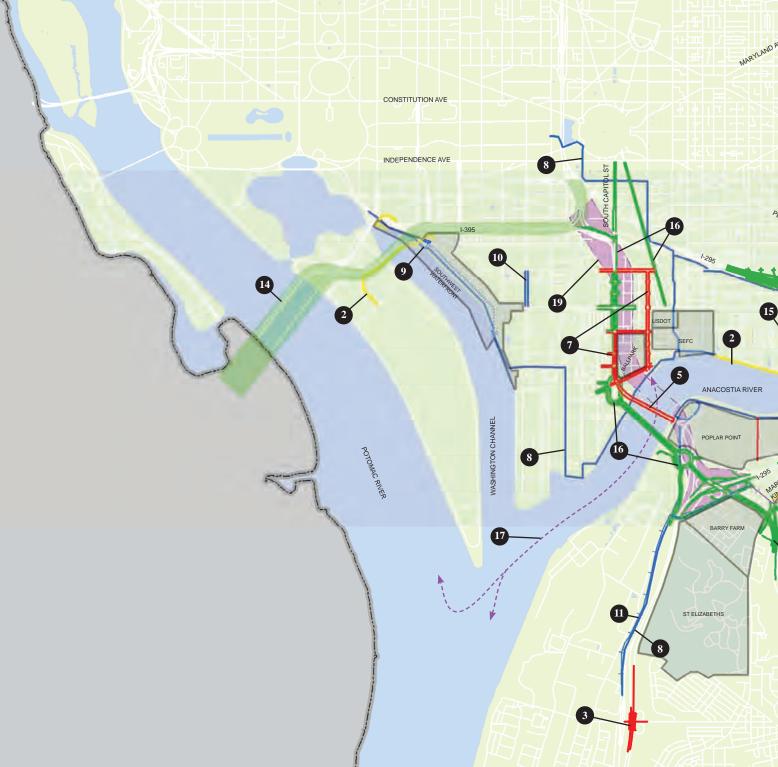
Planning is the initial stage of a project, when a particular project is first conceived based on a particular purpose and need. During this first phase, DDOT begins its comprehensive public collaboration efforts, working with community members as well as District and federal agencies to align the priorities and policies of a proposed project. Planning studies include conceptual recommendations for improvements, typically documented in reader-friendly reports and graphics.

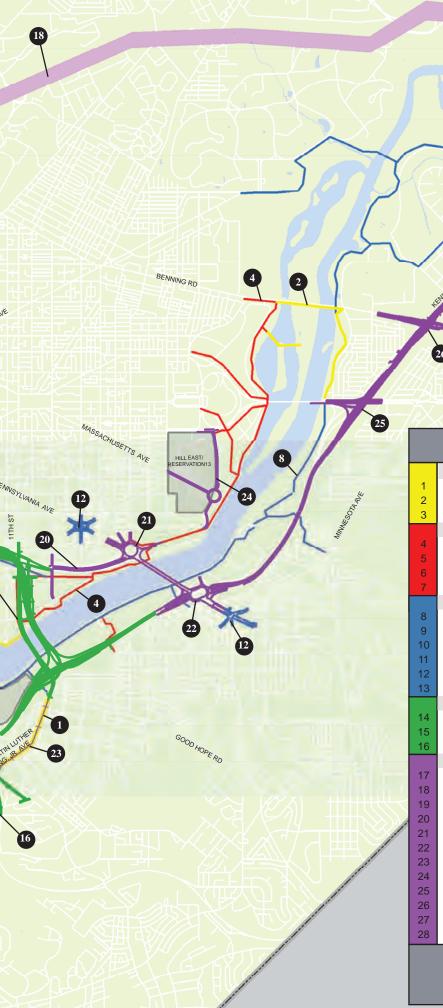
From the broad goals of the AWI, DDOT identified five critical corridors to focus planning efforts on:

- South Capitol Street Corridor
- Middle Anacostia River Crossings
- Southwest Waterfront
- Kenilworth Avenue Corridor
- Anacostia Riverwalk

## Figure 3-2: Anacostia Waterfront Transportation Projects

NEW YORK AVE





## Projects in Development

EAST CAPITOL ST

29

NANNIE HELEN BURROUGHS AVE

Completed

28

MLK two-way conversion
Anacostia Riverwalk: Initial Phases
I-295 & Malcolm X Bridge Rehabilitation
Under Construction
Anacostia Riverwalk: Navy Yard to Benning Road Frederick Douglass Memorial Bridge Rehabilitation Nannie Helen Burroughs & Kenilworth Avenue Intersection South Capitol Street Near Term Improvements
In Design
Anacostia Riverwalk: Future Phases Maine Avenue Improvements 4th Street SW Reconstruction DC Streetcar – Anacostia Initial Line Middle Anacostia Crossings Near Term Improvements * Kenilworth Avenue Near Term Improvements **
Environmental Documentation
14th Street Bridge Corridor Project 11th Street Bridges Project South Capitol Street Corridor Project
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Water Coach New York Avenue Corridor Improvements Tunnel between I-295 & I-395 Boulevard along SE Freeway & Water Street Connection Barney Circle Pennsylvania Avenue & Anacostia Freeway Intersection DC Streetcar – Future Line Reservation 13 Road Kenilworth Avenue & East Capitol Street Kenilworth Avenue & Benning Road Kenilworth Avenue & Eastern Avenue Kenilworth Avenue Mainline
* Additional near-term improvements spread throughout the Middle Anacostia Crossings Study area are not shown on this map. ** These improvements are distributed throughout the Kenilworth Aver

\*\* These improvements are distributed throughout the Kenilworth Avenue study area, and as such are not shown on this map.

DDOT studied each of these corridors and developed recommendations for near, mid, and long term improvements within each study area. These studies are listed and described in Appendix A. From among these recommended improvements, a set of individual projects was developed for each corridor. Based on funding availability and priorities, various projects identified in the major planning studies have moved forward to other stages in the project development process. In addition, several other independent projects that do not conform to any one of the corridors, yet which bear directly on the success of the overall AWI area transportation system, have been added to the overall program.

For all of the projects in the AWI program, DDOT practices CSS during the planning stage by engaging the public, ensuring that the resulting recommendations directly reflect the needs and concerns of affected communities. DDOT informs the public of planning activities and solicits feedback through a variety of methods, such as fliers, newsletters, websites, community meetings, and door-to-door outreach visits at local businesses and community organizations. Of particular importance are the outreach efforts made to and through the Advisory Neighborhood Commissions (ANCs), which are the established forums for neighborhood issues.



Figure 3-3: 2004 South Capitol Street Bridge Design Workshop

DDOT encourages local stakeholders to be a driving force in planning efforts. Public workshops allow members of the community to "put pen

to paper" as active participants in the planning process. The Kenilworth Avenue Study team went a step further, hiring local residents to collect pedestrian and bicycle data for the study. The end result of such a community involvement program is a better planning product and a sense of ownership for the proposed improvements.

## 3.1.2 Federal Environmental Studies

The National Environmental Policy Act (NEPA) requires the Federal Highway Administration (FHWA) and DDOT to follow a regulated process to complete the environmental evaluation of projects using federal funds. Environmental documentation varies in the degree of complexity based on the nature of the project. Several components of the AWI transportation improvements program are of such complexity that they warranted the most in-depth level of documentation required under NEPA, the Environmental Impact Statement (EIS). If a project is expected to have no significant impacts, an Environmental Assessment (EA) or a Categorical Exclusion (CE) is completed instead of an EIS. A complete list of the anticipated level of environmental documentation required for AWI projects is included as Appendix C of this report.

For all levels of NEPA documentation, the preparing agency must demonstrate that the project has independent utility or "be usable and be a reasonable expenditure even if no additional transportation improvements in the area are made" (FHWA, The Development of Logical Project Termini, 1993). Furthermore, the project must connect logical termini, be of a sufficient length to perform a comprehensive evaluation, and not preclude other alternatives for foreseeable transportation improvements.

## **3 DDOT Project Process**

Typically, NEPA documents include an analysis of several possible combinations of improvements (build alternatives) to consider how they will affect the human and natural environment. The merits of each alternative are weighed against one another and against the resulting conditions if no action is taken (the no-build alternative). Typical environmental issues that are analyzed include:

- Land use
- Traffic and safety
- Parklands and recreational areas
- Historic and archaeological resources
- Impact to communities
- Noise/air quality
- Water quality and wetlands
- Economic development

During the environmental documentation phase of the project development process, DDOT determines if strategies to mitigate negative impacts are necessary. For example, because the preferred alternative in the 11th Street Bridges FEIS would adversely impact a wetland, the document proposes to obtain national and local permits required per the Clean Water Act. These permits will likely require mitigation such as the restoration of a comparable wetland habitat elsewhere.

## 3.1.3 Design

The specific design of a project draws heavily upon the public information gathered during the planning and environmental analysis processes. DDOT puts an emphasis on designing projects with the communities that they serve. This helps to create improvements that preserve scenic, aesthetic, historic, and environmental resources, while maintaining safety and addressing the particular mobility needs of surrounding communities.

DDOT's infrastructure projects include the design of roadways, bridges, and bicycle and pedestrian facilities. Final design documents include plans for stormwater systems, erosion control, lighting, signalization and utility connections. Certain aspects of construction management, such as interim traffic patterns and the coordination with utility companies to relocate their infrastructure, are addressed during the design phase.

### 3.1.4 Construction

A project takes physical shape during the final phase - construction - becoming visible to the neighborhood and traveling public. Access to and through surrounding neighborhoods is a critical consideration during construction, as are the prevention of excess runoff, minimizing noise impacts to neighborhoods, and maintaining a safe construction site. Maintenance of traffic, a major concern during construction, is addressed in more detail in Section 4.

DDOT continues its CSS approach during the construction phase by helping to maintain the quality of life for neighbors and affected commuters. For example, during the Frederick Douglass Memorial Bridge Rehabilitation project, DDOT determined that a complete closure of the bridge for two months during the low-traffic summer months would be preferable to a longer period of intermittent partial lane closures on the bridge. As a result, the overall timetable of the project, and thereby the disruption to residents' lives, was considerably shortened.

DDOT continues to move forward with implementing all AWI projects based on community priorities, public input, project benefits, and available funding.

## 3.2 Project Prioritization

After planning and environmental documentation, DDOT decides which projects to develop further with design and ultimately, which projects to construct. Prioritizing projects takes various fiscal, social, and physical factors into account. DDOT has prioritized, or sequenced, the AWI transportation projects. This section describes the factors that influenced the project construction sequence. The construction sequence is always evolving based on funding, constructability, and changes in priorities. The current schedule, reflected in Figure 3-4, represents a snapshot as of December 2007.

The following bullets preview the approach taken to distill the studies into projects for implementation. This process is summarized in Figure 3-5.

- Projects that are in later phases of development typically have already developed construction schedules. Where available, these schedules were used. For other projects, assumptions for construction durations were made based on historical data on similar projects. An assumed construction duration for an entire project corridor was used when project study information was not at a level of detail that provided individual section (e.g. specific interchange) durations.
- Funding availability was included in the project phasing evaluation. Projects with known funding sources are generally scheduled to be constructed earlier.
- Individual construction projects that included work on a bridge structure crossing the Anacostia River were phased to allow for one Anacostia River bridge to be worked on at a time. This provides alternative access points from both sides of the Anacostia River and limits the impacts to truck and evacuation routes.
- Project construction phasing was evaluated according to the impact the work would have both within the individual project area and the Master Plan. The proposed phasing was established based on two conditions:
  - A. the immediate impacts to other facilities caused by an interchange, roadway or bridge being under construction; and
  - B. the potential benefit for a future project if another project is already in place.

## **3 DDOT Project Process**

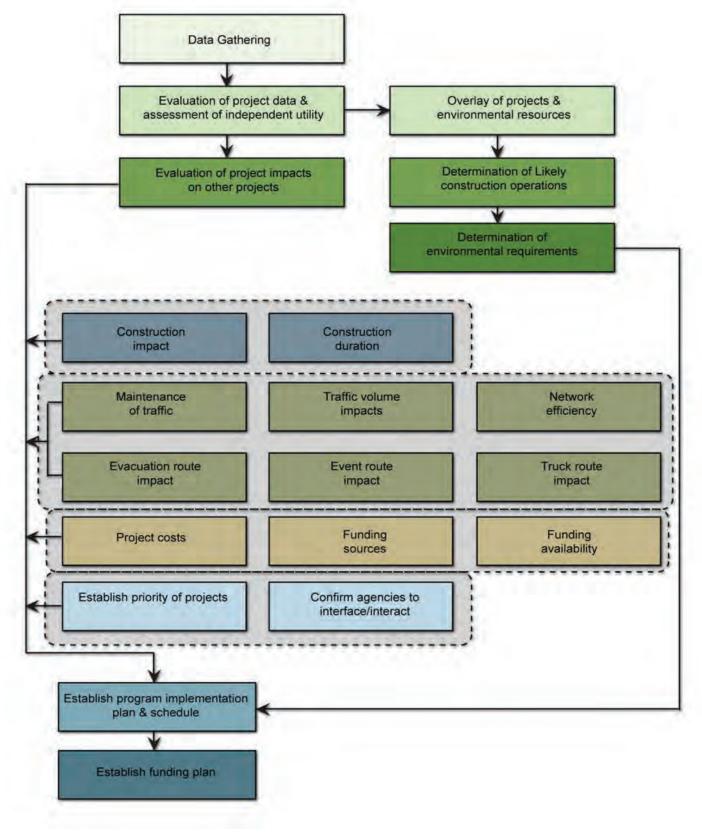
Figure 3-4:

## Project Implementation Schedule Anacostia Waterfront Transportation Infrastructure 2008

	2006		 2010	 	 20	15	 		20
South Capitol Street Corridor		ļ							
Frederick Douglass Memorial Bridge Rehabilitation									
South Capitol Street Near Term Improvements									
N Street North									
Western Bridge Approach (Potomac Avenue Oval)									
New Frederick Douglass Memorial Bridge									
Eastern Bridge Approach (I-295/Suitland Parkway)									
Suitland Parkway/MLK Jr Avenue Interchange									
Middle Anacostia Crossings / 11th Street Bridges									
Middle Anacostia Crossings Near Term Improvements									
11th Street Bridges									
Barney Circle									
Pennsylvania Avenue/Anacostia Freeway Interchange		Ī							
Southeast Boulevard									
Pennsylvania Avenue/Minnesota Avenue									
Reservation 13 Roadway									
Pennsylvania Avenue/Potomac Avenue Intersection									
Kenilworth Avenue Corridor									
Kenilworth Avenue Corridor Near Term Improvements									
Nannie Helen Burroughs Interchange									
Kenilworth Avenue & East Capitol Street									
Kenilworth Avenue & Benning Road		i							
Kenilworth Avenue & Eastern Avenue									
Kenilworth Avenue Mainline									
Anacostia Riverwalk									
Navy Yard to Benning Road									
Anacostia Park				İ			İ	İ	
Massachusetts Avenue to East Capitol Street									
Benning Road to Bladensburg Road									
Buzzard Point and Virginia Avenue Connections									
Kenilworth Parkside and Maryland Avenue Crossing									
South Capitol Street to Oxon Run									
DC Streetcar: Anacostia Initial Line									
Гunnel									
14th Street Bridges Improvements									
New York Avenue Improvements									
4th Street SW Reconstruction									
Maine Avenue									
Water Coach									

- An example of this benefit would be the reconstruction of an interchange to add movements that are currently missing, thus providing access options that may lessen the traffic impact when constructing an adjacent interchange.
- The projects were phased so that major regional connections would be improved prior to beginning work on key local routes. This sequence would prepare the regional roadways, most of which are also truck and evacuation routes, for the traffic impacts of key local road construction. In addition, improving the regional connections would facilitate the separation of local and commuter traffic and reduce congestion on local streets.
- Environmental justice is a specific concern in the Master Plan study area given the high percentage of low-income and minority neighborhoods and DDOT's stated goal of improving the accessibility of community resources and mobility of community residents through its transportation infrastructure improvements.

Figure 3-5: Flow Chart for the Project Prioritization Decision-Making Process



## **4 Project Implementation**

Once a project reaches the later stages of the project process, design and construction, a whole array of considerations begin to effect its implementation. Among these are project financing, program management, contract packaging, construction management, and maintenance of traffic, each of which are detailed in this section. The degree to which each of these factors effects the timing and costs of a particular project will vary on a case-by-case basis, and so they are presented independently here.

## 4.1 Project Financing

The availability of funding is often the first filter in determining the timing of a project's implementation. For its AWI projects, DDOT is utilizing funds from a variety of sources and continuously updating its cost estimates. The information presented below on both funding sources and costs represents the best information available at the time of this report's release.

## 4.1.1 Funding Sources for AWI Transportation Improvements

The Master Plan projects represent a large investment in the Anacostia Waterfront neighborhoods. The funding for the projects could come from a variety of sources. Given the preliminary state of many of the projects, some uncertainty surrounds the availability of funds. The potential funding sources and amounts shown in Table 4-1 reflect DDOT's assumptions as to the availability of funds as of December 2007. Each source of funds is described below, along with assumptions regarding availability.

## East Washington Traffic Relief General Obligation (GO) Bonds - \$225.0 million

The District of Columbia has issued a total of \$225 million in GO bonds to finance traffic relief in the eastern half of the city.

## National Corridor Infrastructure Improvement Projects Funds - \$75.0 million

The National Corridor Infrastructure Improvement Projects is a U.S. DOT discretionary program that provides funding for construction of highway projects in corridors of national significance. The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) allocated \$75.0 million to the Frederick Douglas Memorial (FDM) Bridge through this program.



The existing 11th Street Bridges

## Federal High Priority Projects (HPP) Funds - \$65.6 million

The Federal High Priority Projects (HPP) program is a U.S. DOT discretionary program. SAFETEA-LU authorized \$48.0 million for replacement of the FDM Bridge and \$17.6 million for replacement of the 11th Street Bridges.



The Frederick Douglass Bridge undergoing renovations in 2007

## Federal Appropriations for the Existing Frederick Douglass Memorial Bridge Rehabilitation - \$26.0 million

The federal government has appropriated the following funds for the FDM Bridge Rehabilitation:

- Federal General Provision Appropriations FY 2004 \$7.0 million
- Public Lands Highways FY 2005 \$4.5 million
- Formula Program FY 2006- \$14.5 million

National Highway System (NHS) Funds - \$2.3 million NHS funds are federal monies allocated by formula to fund improvements to roads that are part of the national highway system or that are national highway system intermodal connectors. Up to 50 percent of

these funds may be transferred to other transportation project areas including the Congestion Mitigation and Air Quality (CMAQ) program, the Surface Transportation Program (STP), the Highway Bridge Replacement and Rehabilitation Program (HBRRP), and the Interstate Maintenance (IM)program.

### Re-obligated National Highway System Funds - \$12.6 million

These previously obligated NHS formula monies were re-obligated to eligible AWI projects.



The Anacostia Riverwalk near RFK Stadium

CMAQ FY2003 for Anacostia Riverwalk Trail Design - \$3.6 million, and CMAQ FY2005 for West Bank Riverwalk Trail - \$3.9 million The CMAQ program, jointly administered by FHWA and the Federal Transit Administration (FTA), provides funding for areas that do not meet the National Ambient Air Quality Standards (nonattainment areas) as well as former nonattainment areas that are now in compliance (maintenance areas). The formula for distribution of funds considers an area's population and the severity of its ozone and carbon monoxide problems, with greater weight given to areas that are both carbon monoxide and ozone nonattainment/maintenance areas.

### DC 2004-2007 Appropriations - \$13.9 million

\$13.88 million of Congress's appropriations for the District of Columbia from the 2004-2007 budget years have been set aside for AWI projects.

Section 115 funds for West Bank Riverwalk Trail - \$0.4 million

Committed Funding for AWI Projects	(amounts in millions)
East Washington Traffic Relief GO Bonds	\$225.00
National Corridor Infrastructure Improvement Project Funds (S. Capitol S	t.) \$75.00
Federal High Priority Projects (HPP) Funds	\$65.60
Federal Appropriations for Frederick Douglass Memorial Bridge	\$26.00
National Highway System (NHS) Funds	\$2.30
Re-obligated National Highway System (NHS) Funds	\$12.60
Congestion Mitigation and Air Quality (CMAQ) Funds for Riverwalk	\$7.50
DC 2004-2007 Appropriations	\$13.88
Section 115 for Riverwalk	\$0.40
Total	\$428.28

Table 4-1: Funding sources for AWI transportation improvements as of January, 2008

In addition to the funding sources discussed above, DDOT is investigating other traditional and innovative financial instruments involving combinations of local, federal, and private funding sources to complete the AWI transportation improvements. Availability of funding is a major factor in DDOT's ongoing re-evaluation of the Master Plan timetable.

## 4.1.2 Costs by Corridor

The AWI transportation projects that are planned to commence construction by 2013 are projected to costs approximately \$2.23 billion to design and construct. The following table shows the anticipated order-of-magnitude costs of the AWI projects by corridor, based on planning and design information.

#### Table 4-2: Projected Costs by Corridor as of January, 2008

Corridors	Total Cost (YOE, in millions)*
South Capitol Street	\$1,037
Middle Anacostia Crossings	\$693
Kenilworth Avenue	\$349
Riverwalk	\$105
Southwest Waterfront	\$1.5
AWI-Wide	\$45
Total	\$2,230.5

#### \* Total Costs includes only projects with construction expected to commence by 2013.

Because most of the projects are in the planning or environmental stages, a large contingency was applied to the construction cost. The costs will change as the design for each project progresses and the construction timing is established. Section 5 of this report contains the projected costs for individual projects within each corridor, including those that are scheduled to commence beyond 2013.

## 4.2 Program Management

DDOT will follow a Program Management approach for the major corridors within the AWI. This provides the comprehensive general and technical management support that is required to develop and implement a program of work that includes a number of closely related projects. The improvements in these corridors will be accomplished by means of multiple contracts for construction and procurement, each typically constituting a project. The Program Manager and Program Management support staff supply, supervise, and support the scope and services required for DDOT's program, functioning throughout the planning, design, procurement, construction and operations stages.

Program Management includes an extensive contractor outreach effort as a consideration in timing the advertisement of major contracts. Outreach efforts are focused on projecting the program as well-managed, well-funded, highly important, and an opportunity for contractors to invest time now with the prospect of winning multiple contracts over time. Having one contractor manage multiple concurrent contracts can reduce DDOT's risk for managing interfaces. The contractor outreach program provides the additional benefit of increasing the potential bidders' understanding of the overall master plan and its desired outcomes.

The designated Program Manager takes the lead in coordinating the development of specific provisions for each contract that place constraints on the contractor during construction, and for including commitments from the Environmental Impact Statement (EIS) into each construction package. This provides DDOT with clear demonstration that environmental commitments will be honored during the construction phase.

## 4.3 Contract Packaging

DDOT, with the assistance of the Program Manager, will take the lead in conducting the initial constructability reviews and the subsequent process of developing appropriate contract packages prior to the bid phase.

- Proposed contract packages, possibly combining more than one of the specific projects, will be developed during the Implementation Phase.
- Initial constructability reviews are performed based on the best available information at that time, to provide the basis for development of proposed construction contract packages.
  - The objective of the constructability review process is to create an environment in which contractors can optimize production. The avoidance of contractor delays and interruptions to production is a powerful means of controlling risk. DDOT will facilitate this process by anticipating and accommodating in the bid documents likely contractor logistics, operations and employee needs. When contractors are productive, they tend to be profitable, produce better quality work and are much more likely to meet a schedule; all of which benefits the owner, the community affected by the project and the traveling public.
  - » Part of the constructability review effort will involve forecasting market capacity and contractor backlog as aids to identify potential windows to advertise contracts during owner favorable bidding periods.

• Each proposed package will be evaluated during the procurement phase in a greater level of detail. Since more detailed information on the scope of individual major projects, as well as the availability of funding, will be available during the procurement phase, this may lead to the discovery of interdependencies and other factors that would be significant in determining constructability. It will also assist in the identification of potential benefits that could be obtained by completing a portion of one particular project early in the construction period, in order to assist in maintenance-of-traffic with related projects.

#### 4.4 Construction Management

Construction impacts are assessed for projects and mitigation of these temporary impacts is often a major concern of the public and business communities. For major projects, these temporary impacts can stretch over many months and sometimes years. It is important to assess these impacts effectively and to work with those affected to develop mitigation strategies as early as possible. In the Anacostia Waterfront area, the list of potential projects requires acknowledgment that the construction period for several projects will overlap, possibly for an extended, multi-year period. For example, different contractors working on two separate projects may be able to work together on delivery of like materials and use of certain roadways for access. There can be benefits to unified construction staging zones and material storage areas to minimize the total effects on local streets, businesses and neighborhoods, either in geographic scope or length of time.

### 4.4.1 Construction Durations

Project durations need to be matched to reasonable targets for the construction placement rate. For individual contractors working in DC, there are material delivery challenges, traffic congestion, and work space constraints, all of which may impact construction schedules.

### 4.4.2 Contractor Staging and Storage Areas

DDOT will allocate space for use by particular contracts, and those allocations will be specified in each contract. This will make the best use of the available space, and to avoid potential conflicts and sub-optimized utilization that might occur if contractors had to identify their own space. The allocation of specific staging areas will include known constraints on the use of the properties, including "must vacate by" dates, and contact information. For a corridor program, it is valuable for DDOT to dedicate space and to include, if applicable, a plan to reconfigure, share or release the area to follow-on contractors on specific dates.

## 4.5 Maintenance of Traffic (MOT)

A primary consideration during the design phase of a project is the maintenance of traffic (MOT) during construction. Part of DDOT's emphasis on context sensitive solutions (CSS) is to minimize the disruption that construction creates in neighboring areas.

DDOT attempts to maintain the same number of open lanes in the peak rush-hour direction as were available prior to construction, where possible. In some cases, shifting lanes between morning and evening rush-hours is effective at maintaining traffic flows, although this configuration can lengthen the overall period of construction. DDOT seeks to strike a balance between a greater disruption for a shorter period, or a lesser disruption for a greater span of time.

The viability of alternate routes represents an additional factor to be weighed when formulating an MOT plan. When a project is part of a greater overall program, such as the projects in the Master Plan, the desire to minimize disruption must also be weighed against the overall program schedule, as other efforts may be delayed by lengthened construction timeframes, as well as the construction of nearby developments in the project area.

Consideration of traffic inherently involves not only specific localized impacts unique to a given project, but also how those changes in traffic fit into the overall traffic network. Since several projects will be under construction at the same time in the AWI area, DDOT will examine the cumulative effects of all projects, including those that are not part of the AWI program. This requires coordination of all lane shutdowns for various projects, addressing traffic management with a holistic approach.

DDOT has requirements to ensure that MOT is a key element in the contractor's construction sequencing approach. In addition to identifying contract specific restrictions, DDOT creates corridor Special Provisions to address guidelines for multiple contractors who work concurrently on adjoining and/or overlapping projects. These may include special provisions for cooperation among contractors, milestone and access release dates for corridor dependencies, lane closure requests, haul routes, and staging.

## 4.5.1 MOT Example: Frederick Douglass Memorial Bridge Rehabilitation

The recent rehabilitation of the Frederick Douglass Memorial Bridge illustrates how DDOT applies CSS to construction projects. DDOT had planned to rehabilitate parts of the Frederick Douglass Memorial Bridge, remove the South Capitol Street viaduct on the west side of the river, construct an intersection at South Capitol Street and Potomac Avenue, and reconstruct portions of South Capitol Street as an urban boulevard. All of this work was to be completed in a short time period—prior to the opening of the new Washington Nationals Ballpark, located adjacent to the project site.

Initially, the MOT concept was to divert the northbound lanes of South Capitol Street traffic during construction onto either 1st Street SE or a temporary elevated roadway alongside South Capitol Street. Another option was to divert the peak direction of South Capitol Street traffic onto one side of the viaduct while constructing the other side.

None of the initial scenarios were ideal. The diversion to 1st Street SE or onto a temporary elevated roadway would have impacted adjacent property, and diverting only the peak direction of traffic onto one side of South Capitol Street would have meant that the non-peak direction of traffic would be diverted to other roadways. The latter would have greatly extended the construction schedule and therefore the

community disruption, since only one side of the structure could be reconstructed at a time. In addition, the effort of managing a variable-direction traffic flow would have added construction cost. Preliminary traffic analysis for this construction sequencing revealed that drivers would experience approximately fifteen additional minutes of delay for over a one-year period.

In order to develop a shorter construction schedule and minimize community disruption, the design of the project was changed to include the lowering of the Frederick Douglass Memorial Bridge in place via hydraulic jacking. The lowered bridge would connect to a new intersection with Potomac Avenue. Because the lowering of the bridge had to be done to both sides at the same time, the entire bridge would have to be closed to traffic for two months. DDOT decided that disrupting traffic patterns for two months was preferable to disrupting patterns for more than one year. The scheduling of the project was adjusted to correspond with the summer months, when peak-hour traffic is 10 to 15 percent lower than normal. In addition, the preparatory repair work leading up to the complete closure was shifted to weekend shutdowns of one side of the bridge at a time.

Preliminary traffic analysis of the complete closure revealed that drivers would experience additional delays of up to 30 minutes during peak periods. To mitigate the impacts, several construction strategies were used as part of DDOT's integrated MOT approach. Shoulder lanes on northbound I-295 were put into operation for travel, and the on-ramp at Howard Road was expanded to two lanes. Traffic signal operations were adjusted to account for additional traffic on arterial diversion routes. DDOT continued to monitor traffic throughout the two-month closure and made adjustments as needed.

## **5 Project Descriptions**

The projects that make up the AWI are described in detail in the following section. Each project's existing conditions and proposed improvements are described, along with considerations for implementation. All information presented in these descriptions represents the current status of each project as of December 2007.

For information on the location of each project, refer to the master map in Section 3 (Figure 3-2). Map reference numbers have been included for each project in this section.

## Frederick Douglass Memorial Bridge Rehabilitation

Map Reference #:



Corridor: South Capitol Street

Project Cost:





Douglass Bridge conditions prior to construction



Douglass Bridge construction work, August 2007



Changes to Douglass Bridge

## **Current Project Schedule:**



## **Existing Conditions**

The Frederick Douglass Memorial Bridge previously touched down on the west side of the Anacostia River between O and P Streets. One-way atgrade service roads ran alongside this elevated section of South Capitol Street, joining the mainline just south of N Street. The bridge was in need of structural repairs and streetlight improvements.

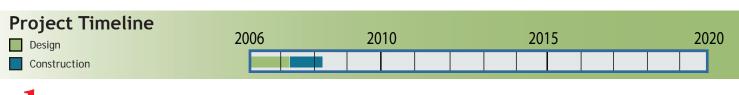
## **Proposed Improvements**

- Cleaning, painting, and repairing the bridge structure; replacing deteriorated structural steel members, deck joints, and bearings; milling and replacing the deck; repairing the deck drainage system; replacing streetlights; adding decorative floodlighting for piers; adding decorative streetlights; and replacing the pedestrian railing.
- The western approach from O Street to south of Potomac Avenue was demolished, and the remaining span of the bridge was lowered such that the new bridge approach meets the grade of Potomac Avenue. A new intersection at South Capitol Street and Potomac Avenue is being constructed, and between Potomac Avenue and N Street, South Capitol Street is being reconstructed with boulevard streetscape features.

## Implementation

The bridge was closed during July and August 2007 to perform the demoliton of the approach, lowering of the superstructure, construction of the abutment and approach structures, and construction of the at-grade roadway. Preparatory work, such as structural repair, was done prior to the bridge closure. Final paving and streetscape improvements will be completed by early 2008, prior to the opening of the new Washington Nationals Ballpark.

Source: DDOT



Map Reference #:



## South Capitol Street Near Term Improvements

## **Current Project Schedule:**



### **Existing Conditions**

The roadways surrounding the new Washington Nationals Ballpark and South Capitol Street had insufficient streetscape facilities and utility capacity to support planned and ongoing economic development. Additionally, other roadways and intersections in Wards 6 and 8 had insufficient pedestrian facilities and poor access for the disabled.

#### **Proposed Improvements**

Reconstruction of Potomac Avenue SE, 1st Street SE, N Street SE, and I Street SE to widen, enhance streetscaping, provide on-street parking, and install ADA-compliant wheelchair ramps. Proposed improvements also include bike lanes on 1st Street SE and Potomac Avenue SE, a new traffic signal at Half and M Streets SE, and a new traffic signal and median barrier removal at South Capitol and N Streets. Finally, roadways adjacent to South Capitol Street and Suitland Parkway in Wards 6 and 8 are being repaved and improved with geometric modifications, wheelchair ramps, and crosswalks.

#### Implementation

The near-term improvements are presently under construction and are scheduled to be completed by February 2008. DDOT has closely coordinated with utility providers so that needed upgrades, particularly for water and sewer, are being installed as the roadways are being reconstructed.

As with the Frederick Douglass Memorial Bridge Rehabiliatation project, this work will be completed prior to the opening of the new Washington Nationals Ballpark.

Source: DDOT

Corridor: South Capitol Street

Project Cost: \$35M



Unsafe crossing conditions on South Capitol Street prior to construction



Pedestrian improvements on M Street SE

2006	2010			2015					2020			Project Timeline
												Construction

#### 2007 Update

Anacostia Waterfront Transportation Master Plan

# South Capitol Street Long Term Improvements

Map Reference #:



Corridor: South Capitol Street

Project Cost:

\$970M



South Capitol Street Build Alternative 2

### **Current Project Schedule:**



#### **Existing Conditions**

Though Pierre L'Enfant envisioned South Capitol Street as a symbolic gateway in his 1791 plan, the street was eventually constructed as a utilitarian arterial and freeway. It has multiple grade separations with its cross streets, including the urban diamond interchange at M Street. East of the river, South Capitol Street splits into northbound and southbound roadways that run south until the Anacostia Naval Annex. Suitland Parkway merges with South Capitol Street in a complicated series of ramps. Suitland Parkway connects to I-295 at an interchange that only provides some traffic movements; the rest are provided via local street connections. There is no present connection between Suitland Parkway and Martin Luther King, Jr. Avenue.

#### Proposed Improvements

An EIS is currently underway for the South Capitol Street corridor, and the improvements associated with this area were originally investigated and defined in the South Capitol Gateway and Corridor Improvement Study and the Anacostia Access Studies.

The Build Alternatives for South Capitol Street include:

- Reconstructing portions of South Capitol Street as an at-grade urban boulevard with signalized intersections;
- Replacing the northbound South Capitol Street ramp to I-395 with a ramp just north of the SE-SW Freeway, modifying the signalized intersection underneath the freeway;
- Replacing the urban diamond interchange at South Capitol Street and M Street with an at-grade signalized intersection (Build Alternative 2);

Design Construction

### **Project Timeline**

2006	2	010		2015				2	2020	
	2006								2006 2010 2015	

- Replacing the existing Frederick Douglass Memorial Bridge with a new, lower bridge on a different alignment;
- Creating an at-grade intersection with South Capitol Street and Suitland Parkway;
- Reconstructing the interchange of I-295 and Suitland Parkway to include additional traffic movements and safer geometry;
- Creating a new interchange at Suitland Parkway and Martin Luther King, Jr. Avenue (Build Alternative 2); and
- Reconstructing part of New Jersey Avenue SE to include streetscape improvements.

#### Implementation

The South Capitol Street EIS is scheduled to obtain a Record of Decision in late 2008. After that, detailed design work can begin.

The following potential construction phases have been established for South Capitol Street improvements:

- 1. New Frederick Douglass Memorial Bridge
- 2. Reconstruction of interchanges at:
  - Suitland Parkway & South Capitol Street
  - Suitland Parkway & I-295
- 3. Suitland Parkway & Martin Luther King, Jr. Avenue interchange (Build Alternative 2)
- 4. South Capitol Street & M Street reconstruction as at-grade intersection (Build Alternative 2)
- 5. Replacement of the northbound South Capitol Steet to I-395 ramp

Source: DDOT



South Capitol Street Study Area



South Capitol Street Gateway Rendering

# Middle Anacostia Crossings Near Term Improvements

Map Reference #:



Corridor:

### Middle Anacostia Crossings

Project Cost:

### \$24M



Middle Anacostia Crossings existing conditions



Planned Middle Anacostia Crossings Improvements

# Current Project Schedule:



#### **Existing Conditions**

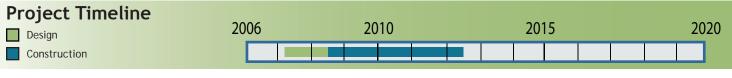
During the AM peak period, the following two signalized intersections currently experience failing levels of service: Pennsylvania Avenue/ramp to Northbound D.C. 295; and Pennsylvania Avenue/L'Enfant Square. The current conditions of the roadway surfaces of Good Hope Road and Minnesota Avenue are very poor and may be a contributing factor to the reduced flow of traffic in these sections of the study area.

In addition, the existing Pennsylvania Avenue / Minnesota Avenue intersection, consisting of two independent signalized intersections at L'Enfant Square, is susceptible to traffic problems due to the large number of left-hand turning motions. The existing configuration also creates safety problems for the large number of pedestrians which must cross in order to reach bus stops.

Likewise, the combination of heavy traffic volumes, transit and pedestrian activity associated with the Potomac Avenue Metro Station, numerous bus stops, and close interaction with 14th Street make the intersection of Pennsylvania Avenue and Potomac Avenue confusing and difficult to negotiate for both pedestrians and motorists.

#### Proposed Improvements

- Signing and pavement marking improvements along the Sousa Bridge and the ramp to the Southeast Freeway, including an adjustment to the sequence of overhead signing along the westbound approach of the Sousa Bridge to be in accordance with the Manual of Uniform Traffic Control Devices (MUTCD);
- Signal timing optimization along Pennsylvania Avenue, east of the Anacostia River;
- Roadway resurfacing and pavement marking replacement;
- Improvements to the pedestrian bridge between Anacostia High School and Anacostia Park, and connectivity improvements to nearby recreation center;



- Pedestrian, bicycle network, and bus stop amenity spot improvements throughout the study area.
- Reconfiguration of the intersection at Pennsylvania Avenue and Minnesota Avenue so that Pennsylvania Avenue would consist of three through lanes in each direction, and Minnesota Avenue would consist of a counter-clockwise circulating roadway around L'Enfant Square. All turns to and from the square would be right turns, eliminating the need for left turn lanes and exclusive left-turn signals.
- Reconfiguration of the intersection at Pennsylvania Avenue and Potomac Avenue into an oval-shaped roundabout that maintains four lanes along Pennsylvania Avenue. A larger, more consolidated pedestrian refuge area is achieved with this configuration and the combined aspects of the proposed crosswalk locations and new median area offer pedestrians a more direct path to get to and from the Potomac Avenue Metro Station.



Proposed Intersection Improvements at Pennsylvania and Minnesota Avenues

#### Implementation

Construction will begin on these near-term improvements in 2008.

**Sources:** 2005 Middle Anacostia River Crossings Transportation Study and Pennsylvania Avenue Concept Study (DDOT)



Proposed Intersection Improvements at Pennsylvania and Potomac Avenues

# 11th Street Bridges

Map Reference #:



**Corridor:** 

### Middle Anacostia Crossings

\$661M

### Project Cost:

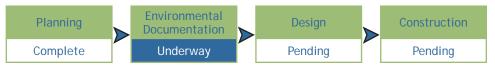


11th Street Bridge Existing Conditions



Movements missing from the existing 11th Street Bridges configuration

# Current Project Schedule:



#### **Existing Conditions**

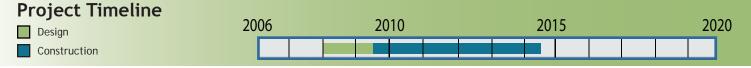
The traffic movements on the 11th Street Bridges are incomplete and mix local and regional traffic, which causes excessive weaving and merging maneuvers. While all traffic movements are presently provided on the west side of the river, many are not provided on the east side.

Southbound motorists on the Anacostia Freeway cannot access the bridges; nor can motorists on the bridges go north onto the Freeway. The ramps to make these connections do not exist. This results in commuter traffic to and from the north driving through neighborhood streets to get to their destinations.

#### **Proposed Improvements**

The District Department of Transportation (DDOT) in conjunction with the Federal Highway Administration (FHWA), propose to reconstruct and reconfigure the interchange of the Southeast/Southwest Freeway and the Anacostia Freeway over the Anacostia River, a distance of approximately 1 mile. The key design features of the preferred alternative are:

- The Preferred Alternative each would provide a reconstructed eightlane freeway bridge along the alignment of the existing 11th Street Bridge as well as a local four-lane bridge crossing on the current alignment of the Officer Welsh bridge. Both of these structures would accommodate two-way traffic on each structure. Pedestrian and bike facilities would be adjacent to the local travel lanes.
- New ramps east of the Anacostia River will connect both directions of the Anacostia Freeway with cross-river freeway bridges (Exhibit 2-1). Currently only the southern reach of the Anacostia Freeway is directly linked to the bridges.
- The Preferred Alternative provides a service interchange with the Anacostia Freeway.
- The Southeast/Southwest Freeway, the Southeast Boulevard (project #20 on Fig. 3-2) and 11th Street will connect through at-grade intersections on the local street grid. Traffic going from the Southeast/



Southwest Freeway to the Southeast Boulevard will have to go through a traffic signal.

• The Preferred Alternative maintains two-way traffic on both 11th and 12th Streets within the study area.

#### Implementation

A Preferred Alternative has been selected and the Final EIS is available for review. The public comment period was completed on November 20, 2007. A Record of Decision for the project is expected in 2008, after which detailed design work can begin.

**Sources:** 2005 Middle Anacostia River Crossings Transportation Study and 2007 11th Street Bridges FEIS (DDOT)



11th Street Bridges Preferred Alternative

# Barney Circle

Map Reference #:



Corridor:

### Middle Anacostia Crossings

### Project Cost:



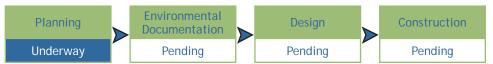


Barney Circle existing conditions



Barney Circle planned improvements

## **Current Project Schedule:**



#### **Existing Conditions**

On the west side of the Anacostia River, Barney Circle connects Pennsylvania Avenue with the Southeast Freeway. This junction does not operate as a true traffic circle because many of the movements are not provided. Some additional existing issues are listed below:

- Underutilized pavement along Southeast (SE) Freeway underneath Barney Circle;
- Commuter traffic on local roads; and
- Lack of connection to Anacostia Park and Waterfront areas.

#### **Proposed Improvements**

Related and adjacent projects include converting the Southeast Freeway to an urban boulevard between the 11th Street Bridge and Pennsylvania Avenue. The boulevard would feed directly into the new Barney Circle that would service all movements. The proposed circle configuration would provide better connectivity to Anacostia Park and the Waterfront;, as well as providing increased landscape opportunities.

**Source:** 2005 Middle Anacostia River Crossings Transportation Study (DDOT)

Project Timeline Design Construction	2006	2010	2015	2020
d.				

#### DISTRICT DEPARTMENT OF TRANSPORTATION



# Pennsylvania Avenue/ Anacostia Freeway Interchange

### **Current Project Schedule:**



#### **Existing Conditions**

The John Phillip Sousa Bridge carries Pennsylvania Avenue over the Anacostia River. Because it is not possible for vehicles crossing the 11th Street Bridge to go north on The Anacostia Freeway, the Sousa Bridge is used to make this heavily congested movement. In addition, the interchange east of the river does not allow for the southbound-Anacostia Freeway-to-westbound-Pennsylvania Avenue traffic movement. Pennsylvania Avenue, the Southeast Freeway and the Anacostia Freeway are all evacuation routes and truck routes for the District.

#### **Proposed Improvements**

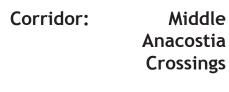
The improvements associated with the Pennsylvania Avenue Interchange project include:

- Reconstructing the Pennsylvania Avenue/Anacostia Freeway interchange to be a signalized traffic oval providing all movements.
- Lowering the Anacostia Freeway below Pennsylvania Avenue in a tunnel or depressed freeway.
- Reconstructing the Southeast Freeway/Pennsylvania Avenue/RFK Stadium Access Road junction as an at-grade signalized traffic circle.

#### Implementation

The reconfiguration of the I-295/11th Street/Anacostia Freeway interchange will provide a key northbound traffic movement that presently causes congestion on the Sousa Bridge. The improvements associated with this project provide key local connections that can be constructed once the regional (11th Street and 14th Street Bridges) and urban arterials (South Capitol Street Corridor) are completed.

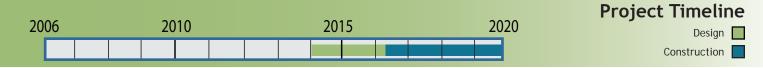
**Source:** 2005 Middle Anacostia River Crossings Transportation Study (DDOT)



### Project Cost: \$42M



Planned improvements at Pennsylvania Avenue and Anacostia Freeway



#### 2007 Update

# Southeast Boulevard

Map Reference #:



Corridor:

### Middle Anacostia Crossings

### Project Cost:





Southeast Boulevard existing conditions



Southeast Boulevard proposed configuration

# Current Project Schedule:



#### **Existing Conditions**

Currently, the Southeast Freeway comes to an abrupt end just to the west of Barney Circle, and its traffic spills out onto local roads. Because it maintains its high-speed freeway configuration up until the point where it ends, the segment between 11th Street and Barney Circle contains an abundance of underutilized pavement.

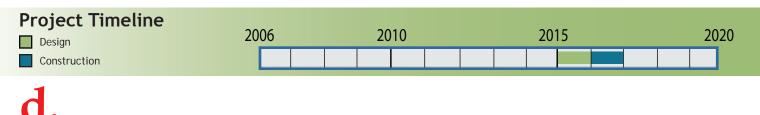
#### **Proposed Improvements**

A boulevard configuration in the Southeast Freeway right-of-way between 11th Street and Barney Circle would provide a more appropriate transportation use within this area. To maintain flexibility in land use, four plans to redevelop the Southeast Freeway right-of-way with a boulevard design have been prepared. Three typical sections envisioned for the boulevard have also been developed. These plans and crosssections can be implemented in several combinations to best meet the needs of the neighborhood.

#### Implementation

In general, the boulevard would be developed as a four-lane, divided minor arterial. Pedestrian and bicycle accessibility would be provided adjacent to the roadway by a shared use trail. Enhanced landscaping would also be applied to medians, buffer zones and all other areas where existing pavement is removed. This would assist in providing a better connection between the neighborhoods and the waterfront by creating a park-like environment, accessible to all modes of travel.

**Source:** 2005 Middle Anacostia River Crossings Transportation Study (DDOT)



# **Reservation 13 Roadway**



### **Current Project Schedule:**



#### **Existing Conditions**

The Reservation 13 site has historically been isolated from adjacent neighborhoods. The site includes major institutional uses such as a hospital and a correctional facility. Its limited connectivity continues today; in particular, there is no direct connection from Independence Avenue to points south.

The roadway from Barney Circle to the RFK Stadium is presently owned by the National Park Service. The main use of this roadway is to connect the Southeast Freeway with RFK Stadium parking facilities. The road runs along the Anacostia waterfront and is used by many groups of recreational users. This route is not an official District of Columbia roadway and is not maintained as such.

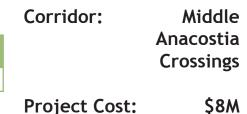
#### **Proposed Improvements**

The improvements associated with the Reservation 13 Road project include replacing a section of the RFK Stadium access road with a twolane low speed road with bicycle accommodations. The new roadway will follow the RFK Stadium access road alignment between Barney Circle and the southeastern corner of the Reservation 13 site, where it will connect with the future Massachusetts Avenue extension. The roadway will then curve to the north, running along Reservation 13's eastern border, and ultimately connect with Independence Avenue. The road will provide access to the adjacent Anacostia Riverwalk Trail.

#### Implementation

Design work is expected to begin intersection in 2008.

**Source:** 2005 Middle Anacostia River Crossings Transportation Study (DDOT)





Reservation 13 Roadway Improvements

20	06		20	)10		20	15		20	20	Project Timeline
											Construction

#### 2007 Update

# Kenilworth Avenue Corridor Near Term Improvements

Map Reference #:



Corridor: Kenilworth Avenue

Project Cost:



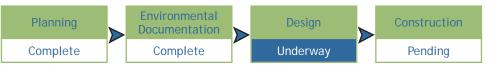


Existing Conditions-north of Benning Road



**Existing Pedestrian Conditions** 

### **Current Project Schedule:**



#### **Existing Conditions**

Access to and across Anacostia Freeway/Kenilworth Avenue is provided via interchanges with Pennsylvania Avenue SE, East Capitol Street, Benning Road NE, Nannie Helen Burroughs Avenue NE, and Eastern Avenue. In its current configuration, Kenilworth Avenue presents a major barrier to pedestrian and bicycle movement.

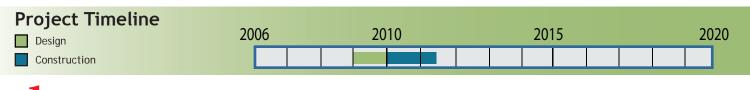
#### **Proposed Improvements**

- Creation of a new connection to allow traffic on westbound East Capitol Street to exit southbound and northbound onto Kenilworth Avenue.
- Consolidation and realignment of the slip ramps between Kenilworth Avenue and the parallel service road north of Nannie Helen Burroughs Avenue.
- Implementation of a corridor wide landscaping, signage, and street furniture program.
- General improvements to the pedestrian and bicycle throughway, curb ramps, pedestrian roadway, lighting and signal, and bicycle parking through specific projects and as part of area wide programs.
- Installation of additional lighting throughout the corridor in locations where lighting is lacking
- Upgrades to sugnage to meet FHWA Standards and to effectively communicate major exits.

#### Implementation

Near-term improvements can be implemented within three to five years. These projects may be implemented in conjuction with each other or independently.

Source: 2007 Kenilworth Avenue Corridor Study (DDOT)



# Nannie Helen Burroughs Interchange



### **Current Project Schedule:**



#### **Existing Conditions**

Nannie Helen Burroughs Avenue passes underneath Kenilworth Avenue and the adjacent CSX Railroad tracks. Access for pedestrians and bicyclists is constrained due to the narrowness of the underpasses. In addition, there is no night lighting or clear demarcation of pedestrian paths at street intersections to encourage walking.

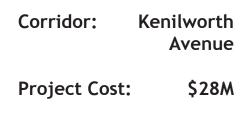
#### **Proposed Improvements**

- Reconstructing the bridge providing a wider section for Nannie Helen Burroughs Avenue beneath Kenilworth Avenue that allows for an additional lane and wider sidewalks for pedestrians and bicyclist.
- Making safety improvements for the exit ramp to Nannie Helen Burroughs Avenue and reconfiguring the exit ramp and service road on southbound Kenilworth Avenue, north of Nannie Helen Burroughs Avenue.
- Eliminating the exit ramp immediately before Benning Road and reconfiguring the remaining on- and off -ramps to improve safety on southbound Kenilworth Avenue, south of Nannie Helen Burroughs Avenue.
- Signalizing the new ramp connection and service road where they intersect with Nannie Helen Burroughs Avenue, and providing traffic signal systemization along Nannie Helen Burroughs Avenue to Minnesota Avenue.
- Improving lighting along Kenilworth Avenue between Foote Street and Lane Place.

#### Implementation

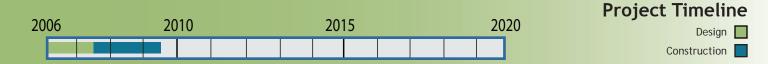
Construction is currently underway.

Source: 2007 Kenilworth Avenue Corridor Study (DDOT)





Urban Design Plan of Kenilworth Avenue Corridor



2007 Update

# **Project Descriptions**

# Kenilworth Avenue/ East Capitol Street Interchange

Map Reference #:

25

Corridor:

Kenilworth Avenue

**\$78M** 

Project Cost:



East Capitol Street Interchange Design

### **Current Project Schedule:**



#### **Existing Conditions**

The existing interchange does not provide for movements from northbound or southbound Kenilworth Avenue to eastbound East Capitol Street, from northbound Kenilworth Avenue to westbound East Capitol Street, or from westbound East Capitol Street to northbound or southbound Kenilworth Avenue.

#### **Proposed Improvements**

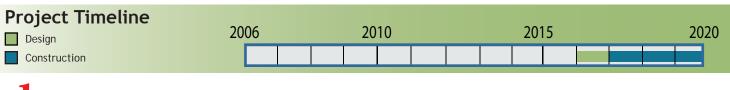
Improvements associated with the East Capitol Street Interchange include reconstruction of the Kenilworth Avenue/East Capitol Street interchange similar to the existing interchange or as an urban diamond, but with Kenilworth Avenue realigned to the east closer to the CSX railroad tracks, thus providing new open space between Kenilworth Avenue and the Anacostia River.

#### Implementation

The Benning Road and East Capitol Street interchanges should not proceed simultaneously, nor should either proceed at the same time as the improvements on New York Avenue, as each of these roadways provides an alternative to the other during construction. However, due to the proximity of the ramps for the Benning Road and East Capitol Street interchanges (1200 to 1500 feet between adjacent ramps), if the depressed option is selected for Kenilworth, it may be preferable to reconstruct these interchanges simultaneously to ease the transition between the two along Kenilworth Avenue.

Neither the Benning Road nor the East Capitol Street interchange should proceed simultaneously with the improvements proposed in the Middle Anacostia River Crossings Transportation Study at Anacostia Freeway / Pennsylvania Avenue SE or Barney Circle, as Pennsylvania Avenue is a viable alternative to either roadway during construction.

Source: 2007 Kenilworth Avenue Corridor Study (DDOT)





# Kenilworth Avenue/ Benning Road Interchange

## Current Project Schedule:



#### **Existing Conditions**

The existing interchange does not provide for movements from northbound or southbound Kenilworth Avenue to eastbound Benning Road, or from westbound Benning Road to northbound or southbound Kenilworth Avenue.

#### **Proposed Improvements**

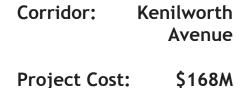
Improvements associated with the Benning Road Interchange include reconstruction of the Kenilworth Avenue/Benning Road interchange as a multi-level diamond interchange carrying Benning Road over Kenilworth Avenue and providing for all movements.

#### Implementation

Due to the increased turning capacity provided by the proposed Benning Road interchange, it would be preferable to construct this interchange prior to the East Capitol Street interchange to provide drivers with a more viable option to avoid East Capitol Street.

Neither the Benning Road nor the East Capitol Street interchange should proceed simultaneously with the improvements proposed in the Middle Anacostia River Crossings Transportation Study at Anacostia Freeway / Pennsylvania Avenue SE or Barney Circle, as Pennsylvania Avenue is a viable alternative to either roadway during construction.

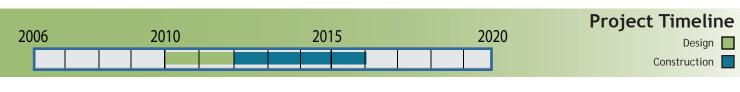
Source: 2007 Kenilworth Avenue Corridor Study (DDOT)



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 Image: Section of the section of t

Benning Road Interchange Scenario



#### 2007 Update

# **Project Descriptions**

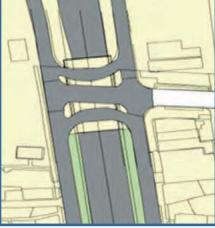
# Kenilworth Avenue/ Eastern Avenue Interchange

Corridor:

Kenilworth Avenue

Project Cost:

\$57M



Eastern Avenue Existing Conditions



Eastern Avenue Improvements

### **Current Project Schedule:**



#### **Existing Conditions**

The primary limitation of the existing interchange is the poor pedestrian environment and lack of landscaping and streetscape features. Pedestrians are forced to cross the corridor on a narrow concrete median that separates the turning traffic on Eastern Avenue from the Kenilworth Avenue traffic using the U-turns. The bridge itself is visually unappealing with a design that dates to the 1950s. Because of substandard clearances over Kenilworth Avenue, the Eastern Avenue bridge has been repeatedly hit by over-height vehicles.

#### **Proposed Improvements**

The proposed scenario maintains both U-turn ramps, but relocates them further from the intersection to provide space for pedestrian and landscape improvements, including pedestrian lighting. This scenario requires reconstruction of the bridge to create a wider bridge deck.

#### Implementation

A new pedestrian/bicycle connection between the end of Anacostia Avenue and Eastern Avenue provides additional access to the Anacostia waterfront and the surrounding neighborhoods and attractions.

Source: 2007 Kenilworth Avenue Corridor Study (DDOT)

Project Timeline Design	2006	20			201	15		2020
Construction								

Map Reference #:



# Kenilworth Avenue Mainline Improvements

#### Current Project Schedule: Planning Underway Linvironmental Documentation Pending Design Pending Construction Pending Construction Pending Construction Pending Construction Pending Construction Pending Construction Pending Construction Pending Construction Pending Construction Pending Construction Pending Construction Pending Construction Pending Pending Construction Pending Construction Construction Construction Pending Construction Pending Pending Construction Pending Pending Construction Pending Pending Pending Construction Pending

#### **Existing Conditions**

Kenilworth Avenue currently presents a major barrier to pedestrian and bicycle movement east of the Anacostia River. In addition, the roadway is hampered by several short merging zones and the resultant weaving traffic patterns.

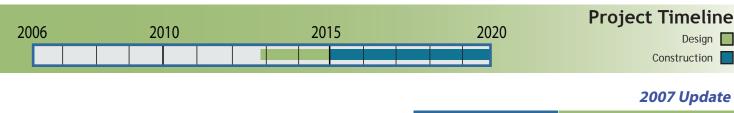
#### **Proposed Improvements**

Reconstruction of Anacostia Freeway/Kenilworth Avenue from north of the Anacostia Freeway/Pennsylvania Avenue interchange to the DC/Maryland border. The roadway would be reconstructed as either an eight-lane urban boulevard, a four-lane or six-lane limited-access roadway flanked by access roads, or a combination of an at-grade fourlane roadway between Pennsylvania Avenue and East Capitol Street and a depressed six-lane roadway flanked by at-grade access roads from East Capitol Street to the DC/Maryland border.

#### Implementation

If the depressed roadway option is chosen for Kenilworth Avenue, a new vehicular crossing of Kenilworth Avenue at Nash Street and a new pedestrian crossing at Douglas Street will be included. All options will provide landscaping and bicycle/pedestrian improvements throughout the corridor.

Source: 2007 Kenilworth Avenue Corridor Study (DDOT)



#### Anacostia Waterfront Transportation Master Plan

# 4th Street SW Reconstruction

Map Reference #:

10

Corridor:

### Southwest Waterfront

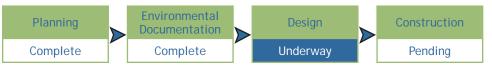
Project Cost:

(Done by others)



4th Street SW Existing Conditions

### **Current Project Schedule:**



#### **Existing Conditions**

Between Eye and M Streets SW, the right-of-way of 4th Street SW is interrupted by the Waterside Mall complex, a retail and office development built during the 1960s. A traffic study conducted by DDOT in 2002 and 2003 showed rather high average daily traffic numbers (4800 vehicles per day) for 3rd Street SW. Much of this high traffic load can be attributed to the lack of a through-connection on 4th Street. Additional traffic spillover effects are felt on Eye and M streets as part of the route around Waterside Mall.

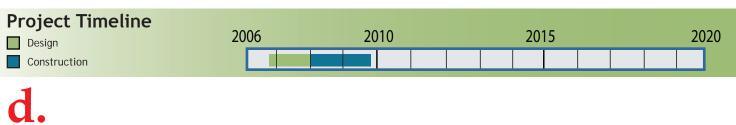
#### **Proposed Improvements**

4th Street will be re-created between Eye and M Streets.

#### Implementation

A large, multi-use development, to include over 1 million square feet each of office space and residential space and more than 100,000 square feet of retail space, is planned for the site of the existing Waterside Mall. Much of the proposed development is predicated on street frontoriented retail along the new segment of 4th Street. The site's developers will undertake the reconstruction of 4th Street.

Sources: 2003 Fourth Street SW Transportation Study (DDOT)



DISTRICT DEPARTMENT OF TRANSPORTATION

# Maine Avenue Improvements



### **Current Project Schedule:**



#### **Existing Conditions**

Maine Avenue SW connects directly to M Street SW, I-395, and 14th Street SW. The intersection of Maine Avenue and 9th Street SW currently operates at a poor level of service.

#### **Proposed Improvements**

The Maine Avenue SW improvements comprise a smaller area than other AWI improvements. These improvements include installing a signalized intersection on Maine Avenue between 9th and 12th Streets. The new intersection would include a median break on Maine Avenue so that vehicles can turn in and out of the Fish Market entrance and so that pedestrians can safely cross Maine Avenue. In addition, the developer of the Southwest Waterfront mixed-use development will remove a section of Water Street from near the new intersection to past M Street SW.

#### Implementation

This project will be mostly completed by the developers of the Southwest Waterfront mixed-use development. DDOT's only construction responsibility will be the the new intersection on Maine Avenue, which will total \$1.5 million.

#### Assumptions

These improvements are part of the larger AWI vision for the Southwest waterfront. This vision includes an accessible waterfront with commercial and housing development alongside. The transportation improvements associated with this development, however, are assumed to be relatively minor. Related and adjacent projects include the work on the 14th Street Bridges and South Capitol Street (at the M Street intersection).

Source: 2005 Maine Avenue Traffic Study (DDOT)

2006 2010 2015 2020 Project Timeline Design Construction

# Corridor:

## Southwest Waterfront

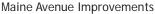
Project Cost:

(DDOT portion \$1.5M, remainder done by others)



Maine Avenue Study Area







# Anacostia Riverwalk

Map Reference #:



Corridor:

Riverwalk

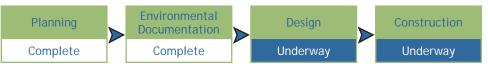
Project Cost:

\$105M



Anacostia Riverwalk design concept

### **Current Project Schedule:**



#### **Existing Conditions**

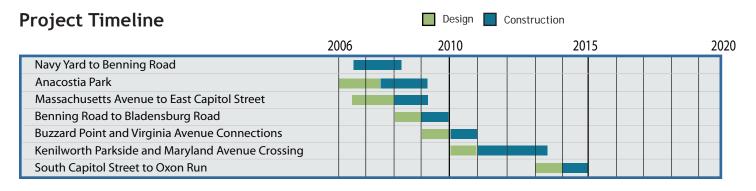
Currently the Anacostia River waterfront on both the west and east banks suffers from neglect and is not conducive to enjoyment of the river by the public.

#### **Proposed Improvements**

The Anacostia Riverwalk is a planned 16-mile multi-use trail along the east and west banks of the Anacostia River in Washington, DC. The vision for this continuous Riverwalk is a key component of the Anacostia Waterfront Initiative (AWI) Framework Plan. It realizes several AWI goals such as enhancing parkland and increasing access to waterfront destinations.

DDOT has taken the lead in planning and constructing the Riverwalk as a recreational amenity and transportation alternative for Washington residents. The trail will vary in width from 10 ft to 12 ft to ensure comfort for a wide range of users including bicyclists, inline skaters, pedestrians, disabled people, and others. Periodic waysides will provide seating, system maps, bike racks, and interpretive exhibits.

When completed, it will connect sixteen waterfront neighborhoods to the Anacostia National Park and the Anacostia River. Washington residents and visitors will be able to walk and bike on the Riverwalk to several popular destinations, including the Fish Wharf, the new baseball stadium, Poplar Point, the Navy Yard, historic Anacostia, RFK stadium, Kingman Island, and The National Arboretum. At either end,

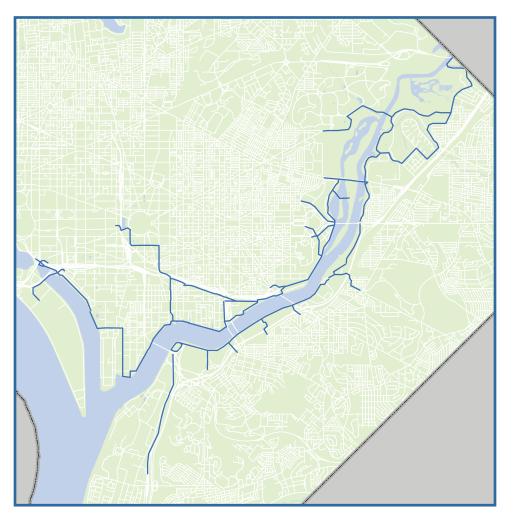


the trail will connect to the National Mall at the Tidal Basin and to the Bladensburg Marina Park in Prince George's County, MD.

#### Implementation

Riverwalk trail connections will be sequenced with the construction of 11th Street and South Capitol Street bridges. Existing trail sections will be maintained during construction of connecting elements.

Source: 2006 Anacostia Riverwalk Trail Factsheet (DDOT)



Full extent of the Anacostia Riverwalk upon completion

# **Project Descriptions**

# Martin Luther King, Jr. Two-Way Reconstruction

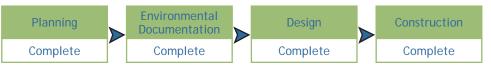
Map Reference #:



Corridor:

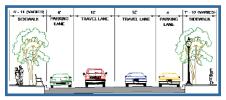
AWI-Wide

# **Current Project Schedule:**





Martin Luther King, Jr. Avenue prior to reconstruction.



New lane configuration of Martin Luther King, Jr. Avenue

#### Existing Conditions

Previously, Martin Luther King, Jr. Avenue SE operated as a one-way street between W Street SE and Good Hope Road. South of W Street, Martin Luther King, Jr. Avenue is a four-lane, undivided two-way road.

#### Proposed Improvements

In an effort to revitalize the urban fabric of Anacostia, Martin Luther King, Jr. Avenue between W Street and Good Hope Road was converted to an undivided two-way road. The changes are intended to improve the climate for commercial development in the Martin Luther King, Jr. Avenue corridor. Martin Luther King, Jr. Avenue now consists of two 12' travel lanes bounded by two 8' parking lanes (see below).

#### Implementation

The project was completed in October 2006. The eventual plan for Marlin Luther King, Jr. Avenue includes the conversion of some lanes to streetcar lanes.

Source: DDOT

# I-295/Malcolm X Bridge Rehabilitation

Corridor:

**AWI-Wide** 



### **Current Project Schedule:**



#### **Existing Conditions**

The bridge carrying I-295 over Malcolm X Avenue was an aged structure badly in need of rehabilitation.

#### **Proposed Improvements**

The bridge rehabilitation featured construction of new reinforced concrete deck slabs and other major structural and roadway work on the northbound and southbound I-295 bridges that run over Malcolm X Avenue. The first stage of the rehabilitation included reconstruction of abutments and decks on the interior (median) side of the bridges followed by reconstruction of the outer portions. Roadway work included reconstruction of the entrance ramp over South Capitol Street, pavement milling and overlay. The traffic signal system at Malcolm X Avenue at South Capitol Street was also modified.

#### Implementation

This project was planned to be coordinated with the Bolling Air Force Base main gate construction. Two lanes of traffic were maintained on I-295 in both directions—northbound and southbound—at all times.

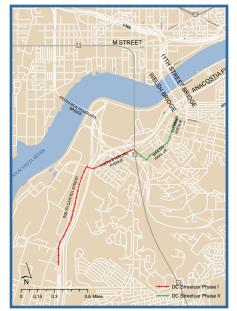
Source: DDOT

# DC Streetcar

Map Reference #:



Corridor:	AWI-Wide
Project Cost:	\$45M



DISTRICT DEPARTMENT OF TRANSPORTATION

DC Streetcar Proposed Lines

### **Current Project Schedule:**



#### **Existing Conditions**

The expected new development in the vicinity of Anacostia Metrorail station and along South Capitol Street, Firth Sterling Avenue, and Martin Luther King, Jr. Avenue is expected to create a transit-conducive corridor. The District has identified light-rail as an important supplement to Metrorail within its borders.

#### **Proposed Improvements**

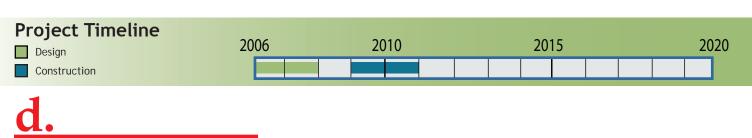
The first phase of improvements associated with the Anacostia Streetcar Line entails constructing a street-running rail line along the following routes:

- South Capitol Street between the Defense Intelligence Agency complex at Bolling Air Force Base and Firth Sterling Avenue;
- Firth Sterling Avenue east to Howard Road, ending at the Anacostia Metro Station

#### Implementation

The design vehicle is a narrow streetcar that can run within a normal travel lane. The streetcar line will not have dedicated lanes and instead will share travel lanes with vehicles.

Sources: DDOT, WMATA



# I-295/I-395 Tunnel



### **Current Project Schedule:**



# Corridor: AWI-Wide Project Cost: \$1B

#### **Existing Conditions**

Currently, I-395 crosses the Potomac River from Virginia on the 14th Street Bridges; crosses the Washington Channel of the Potomac River; bears east and forms a barrier between L'Enfant Plaza, Housing and Urban Development, and other federal buildings and residential Southwest neighborhoods; and finally turns north and enters the Third Street Tunnel south of the US Capitol. Interstate 295 runs north from an interchange with the Capital Beltway east of the Woodrow Wilson Bridge; parallels the Potomac and Anacostia Rivers until it passes South Capitol Street; bears north to cross the river on the 11th Street Bridges; then turns west to end at the junction with I-395 south of the US Capitol.

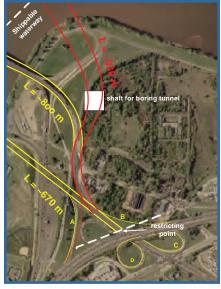
#### **Proposed Improvements**

Part of the vision for a revitalized Anacostia Waterfront and Near Southeast neighborhood includes the removal of the Southeast Freeway (I-295 east of South Capitol Street). To facilitate this, the high numbers of commuter traffic that currently use the 11th Street Bridges and the Southeast Freeway to travel between I-295 east of the Anacostia River and I-395 must be diverted to a different facility. The proposed tunnel would connect to I-295 in the Poplar Point area near the South Capitol Street/Suitland Parkway/I-295 interchange, cross under the Anacostia River somewhere within the South Capitol Street corridor, and connect to I-395 near the entrance to the Third Street Tunnel.

#### Implementation

Up to this point in time, the tunnel has only been investigated at a highly conceptual level. If this project is to move forward, a more detailed study and eventually an Environmental Impact Statement will need to be completed.

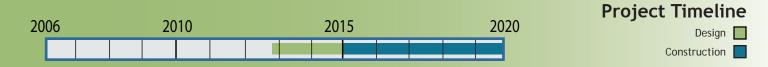
Source: 2005 South Capitol Street Tunnel Study (DDOT)



Proposed Tunnel- Southern Terminus



Proposed Tunnel- Northern Terminus



#### 2007 Update

# 14th Street Bridges Improvements

Map Reference #:

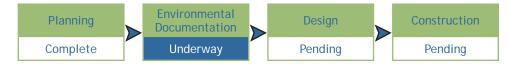


Corridor:	AWI-
Project Cost:	

-Wide

TBD

### **Current Project Schedule:**





14th Street Bridges Corridor

#### Existing Conditions

The 14th Street Bridges consist of three bridges that carry Interstate 395 over the Potomac River between Virginia and Washington, DC. The easternmost bridge (the Arland D. Williams Jr. Memorial Bridge) carries four lanes of northbound traffic, the westernmost bridge (the George Mason Memorial Bridge) carries four lanes of southbound traffic, and the center bridge (the Rochambeau Bridge) carries both northbound and southbound HOV traffic (two lanes in each direction). The interchange between the George Washington Memorial Parkway and I-395 does not operate well and is the source of traffic congestion during both peak periods. On the north side of the river, I-395 splits at the 14th Street significant weaving and merging that result in congestion on the north side of the river.

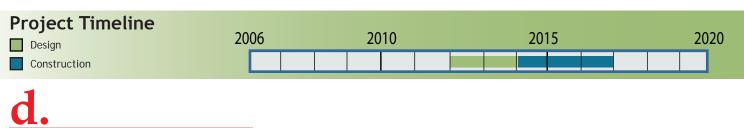
#### **Proposed Improvements**

The EIS will propose improvements to the 14th Street Bridges corridor focusing on reducing congestion and improving traffic operations and safety. This could include the reconfiguration of ramps and/or the replacement of bridges.

#### Implementation

Improvements to the 14th Street Bridges Corridor should follow the 11th Street Bridge improvements. Both bridges are major regional traffic routes and completing these improvements first would provide systemwide benefits. After the 14th Street Bridges improvements are made and traffic operations are improved, the regional network will be able to better handle traffic detours and shifts due to other AWI project construction (e.g. South Capitol Street Corridor and Kenilworth Avenue).

Source: DDOT



DISTRICT DEPARTMENT OF TRANSPORTATION

# New York Avenue Improvements



### **Current Project Schedule:**



Corridor:	AWI-Wide				
Project Cost:	\$1.1B				

#### **Existing Conditions**

New York Avenue corridor is located in the northeast and northwest quadrants of the District and links the downtown area with Prince George's County, Maryland. New York Avenue serves as a principal commuter, evacuation and truck route.

#### **Proposed Improvements**

For the purposes of the study, the corridor was divided into six improvement zones so as to distinguish between the functionality of each zone and to provide recommendations specific to the characteristics of the zone. The recommendations for the improvement zones include:

- Creating an urban boulevard entry way into the District, with New York Avenue as a six-lane divided highway with dedicated pedestrian and bicycle facilities and landscaped areas along both sides of the roadway.
- Urban design, landscape improvements, and mixed-use development becoming the focus at intersections.
- Creating a linear park and promenade along the north side of the roadway, with New York Avenue as a six-lane roadway with one and two left-turn lanes at key intersections, a wide median, a dedicated bike lane in the inbound direction, and a dedicated sidewalk on the south side.

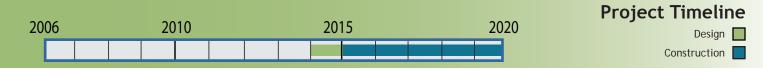
#### Implementation

The New York Avenue improvements should be done as one of the final pieces of the AWI studies, after the construction of the Kenilworth Avenue improvements.

Source: 2005 New York Avenue Corridor Study Draft Plan (DDOT)



New York Avenue Corridor



#### 2007 Update

# Water Coach

Map Reference #:



Corridor:

**Project Cost:** 

AWI-Wide

TBD

### **Current Project Schedule:**



#### **Existing Conditions**

Despite the fact that the Potomac and Anacostia Rivers are central to the region, no effective water-borne transit service is in operation.

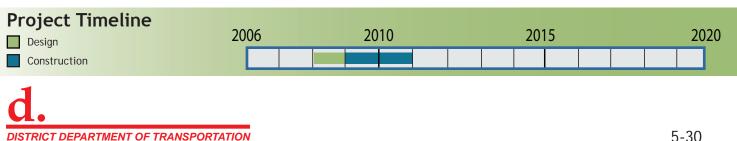
#### **Proposed Improvements**

DDOT will demonstrate the viability of water transportation by the implementation and operation of a water coach service in the District.

The demonstration system will provide scheduled service between locations on both the Anacostia and Potomac Rivers, within the District of Columbia. The service will be all-weather and provide connections to other transportation modes.

#### Implementation

The project area ranges from the Anacostia River from the Sousa Bridge to the confluence with the Potomac and the Potomac from Georgetown to the Wilson Bridge.



# 6 Key Developments

# Relationships between Infrastructure and Development Projects in the Anacostia Waterfront

A key component of the Master Plan is the implementation of projects in coordination with ongoing and future development in the area. For the benefit of the overall goals of the Anacostia Waterfront Initiative, infrastructure and development projects must be timed in a coordinated manner. DDOT is committed to making sure the construction timing of all projects will support the District's development goals as well as the construction timetables of development projects and vice versa.

DDOT has planned for infrastructure projects to facilitate economic development throughout the AWI area. At its heart, the AWI is a collaborative effort among several local agencies, including DDOT, to improve identified corridors through upgraded infrastructure, economic development, and context sensitive solutions. DDOT is renewing the transportation system in the AWI area so that it supports the level of activity that will come with intense development.

The Anacostia Riverwalk, in addition to providing greater pedestrian access to many areas of future development, serves an additional purpose in connecting several of the city's most treasured parks and open spaces. In particular, the Riverwalk will connect the heavily used tourist destinations around the National Mall and Capitol Hill with underappreciated park areas in the eastern part of the city, including the National Arboretum, Kenilworth Aquatic Gardens, and Kingman Island

The following pages provide details for the major developments to come in the AWI area and illustrate the spatial relationships between those developments, shown in gray, and key AWI infrastructure improvements. The map which shows the Riverwalk focuses on the numerous parks and green spaces which will be tied together by its 40+ miles of multi-use trails.

# South Capitol Street Corridor (Figure 6-1)

	Development Name	Total Square Feet	Office Square Feet	Retail Square Feet	Estimated Cost (millions)	Residential Units	Parking	Expected Completion
1	Department of Transportation Headquarters	2,000,000	1,350,000	22,300	\$400	-	957	2007
2	Ballpark	1,000,000	30,000	35,000	\$611	TBD	1,225	2008
3	U.S. Capitol Visitor Center	580,000	TBD	TBD	\$555	TBD	TBD	2008
4	Waterfront	2,475,000	1,200,000	75,000	\$650	800	1,900	2010
5	Anacostia Gateway Government Center	306,000	300,000	6,000	\$77	TBD	TBD	2011
6	"The Yards" (Southeast Federal Center)	5,500,000	1,800,000	250,000	\$1,700	2,800	TBD	2011
7	Buzzard Point	2,700,000	TBD	TBD	\$700	1,600	TBD	2011
8	Arthur Capper/Carrollsburg Senior Homes and Dwellings	1,206,338	TBD	51,000+	\$469	1288	968	2011
9	St. Elizabeths Redevelopment	5,000,000 +	TBD	TBD	TBD	TBD	TBD	2015
10	Barry Farm Redevelopment	TBD	TBD	70,000 +	\$565	1,391	TBD	2018
11	Florida Rock	1,100,000	600,000	36,000	\$300	180 (325 Hotel)	1,087	2018
12	Anacostia Metrorail Station	1,255,000	550,000	55,000	\$335	550	TBD	TBD
13	Poplar Point	1,750,000	TBD	TBD	\$300	1400-2300	TBD	TBD

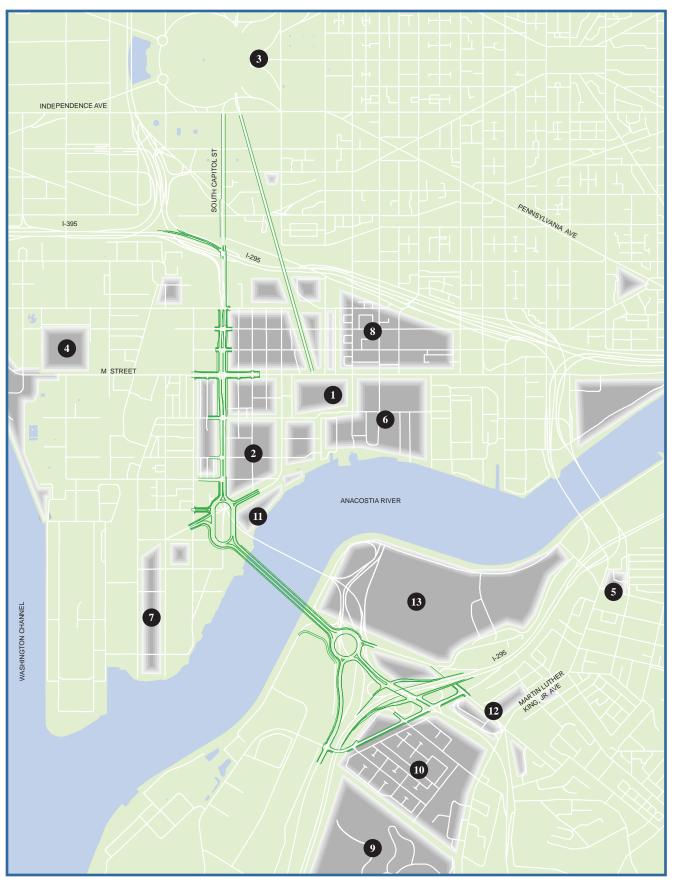


Figure 6-1: Developments in the South Capitol Street Corridor

# Middle Anacostia Crossings/11th Street Bridges Corridor (Figure 6-2)

	Development Name	Total Square Feet	Office Square Feet	Retail Square Feet	Estimated Cost (millions)	Residential Units	Parking	Expected Completion
1	Department of Transportation Headquarters	2,000,000	1,350,000	22,300	\$400	-	957	2007
2	Anacostia Gateway Government Center	306,000	300,000	6,000	\$77	-	TBD	2011
3	"The Yards" (Southeast Federal Center)	5,500,000	1,800,000	250,000	\$1,700	2,800	TBD	2011
4	Arthur Capper/Carrollsburg Senior Homes and Dwellings	1,206,338	TBD	51,000+	\$469	1288	968	2011
5	Hill East	4,235,200	2,000,000	35,000	TBD	700-800	TBD	2020
6	Anacostia Metrorail Station	1,255,000	550,000	55,000	\$335	550	TBD	TBD
7	Poplar Point	1,750,000	TBD	TBD	\$300	1400-2300	TBD	TBD



Figure 6-2: Developments in the Middle Anacostia Crossings / 11th Street Briodges Corridor

# Kenilworth Avenue Corridor (Figure 6-3)

	Development Name	Total Square Feet	Office Square Feet	Retail Square Feet	Estimated Cost (millions)	Residential Units	Parking	Expected Completion
1	Minnesota Benning Government Center	350,000	350,000	-	\$95	-	TBD	2009
2	Mayfair Mansions	500,000	-	-	\$110	569	282	2010
3	Parkside (incl. Thomas Elementary School)	3,170,000	500,000	30,000	\$416	1500	2,400	2011



Figure 6-3: Developments in the Kenilworth Avenue Corridor

# Southwest Waterfront Corridor (Figure 6-4)

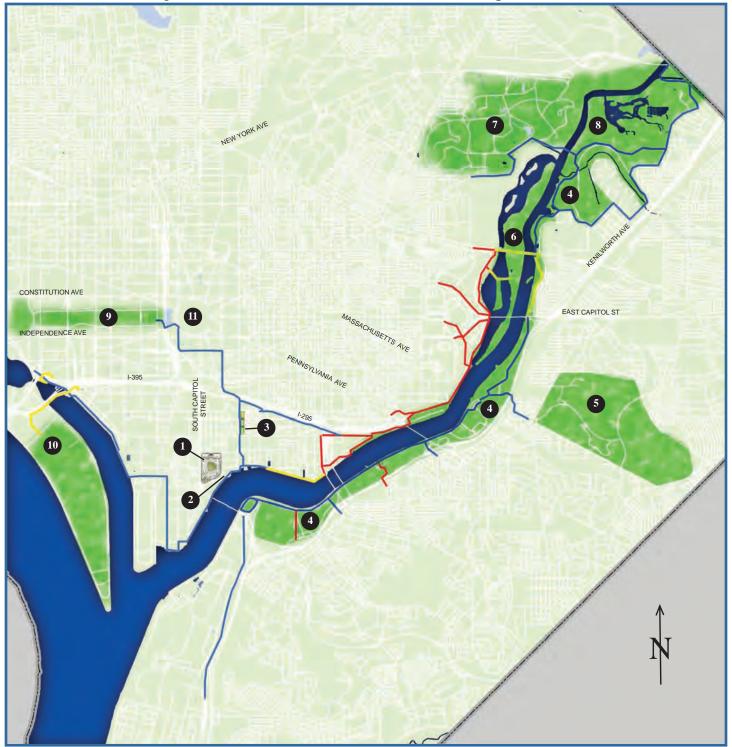
	Development Name	Total Square Feet	Office Square Feet	Retail Square Feet	Estimated Cost (millions)	Residential Units	Parking	Expected Completion
1	L'Enfant Plaza Redevelopment and National Children's Museum	1,213,319	701,319	109,000	\$300	260	-	2009
2	Waterfront	2,475,000	1,200,000	75,000	\$650	800	1,900	2010
3	Southwest Waterfront	2,300,000	150,000	230,000	\$800	950 (360 hotel)	2,000	2014



Figure 6-4: Developments in the Southwest Waterfront Corridor

# 6 Key Developments

# Parks linked by the Anacostia Riverwalk (Figure 6-5)



- 1. Ballpark
- 2. Diamond Teague Park
- 3. Canal Park
- 4. Anacostia Park

- 5. Fort Dupont Park
- 6. Kingman Island
- 7. National Arboretum
- 8. Kenilworth Aquatic Gardens
- 9. National Mall
- 10. East Potomac Park
- 11. U.S. Capitol Complex