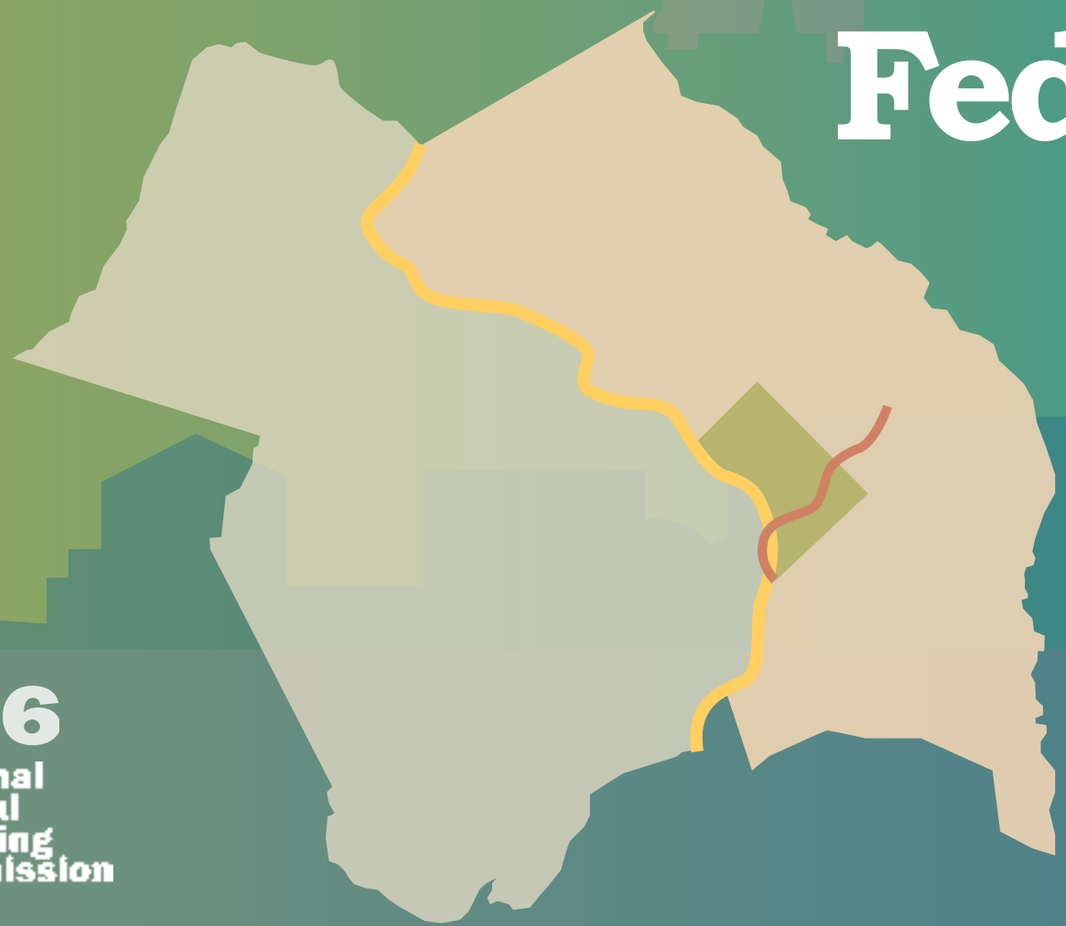


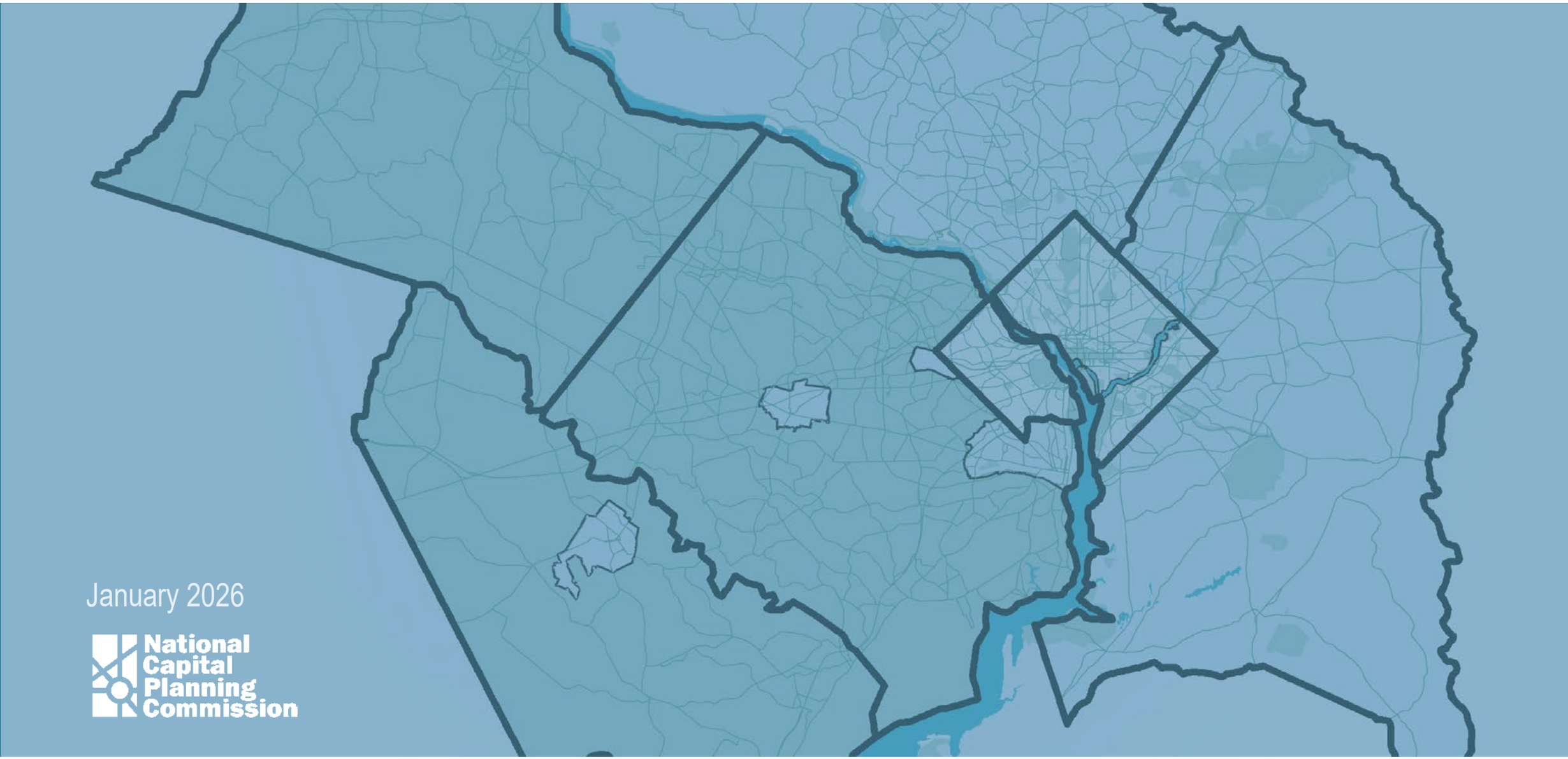
Comprehensive Plan for the National Capital: Federal Elements



- Urban Design
- Federal Workplace
- Foreign Missions & International Organizations
- Transportation
- Parks & Open Space
- Federal Environment
- Historic Preservation
- Visitors & Commemoration

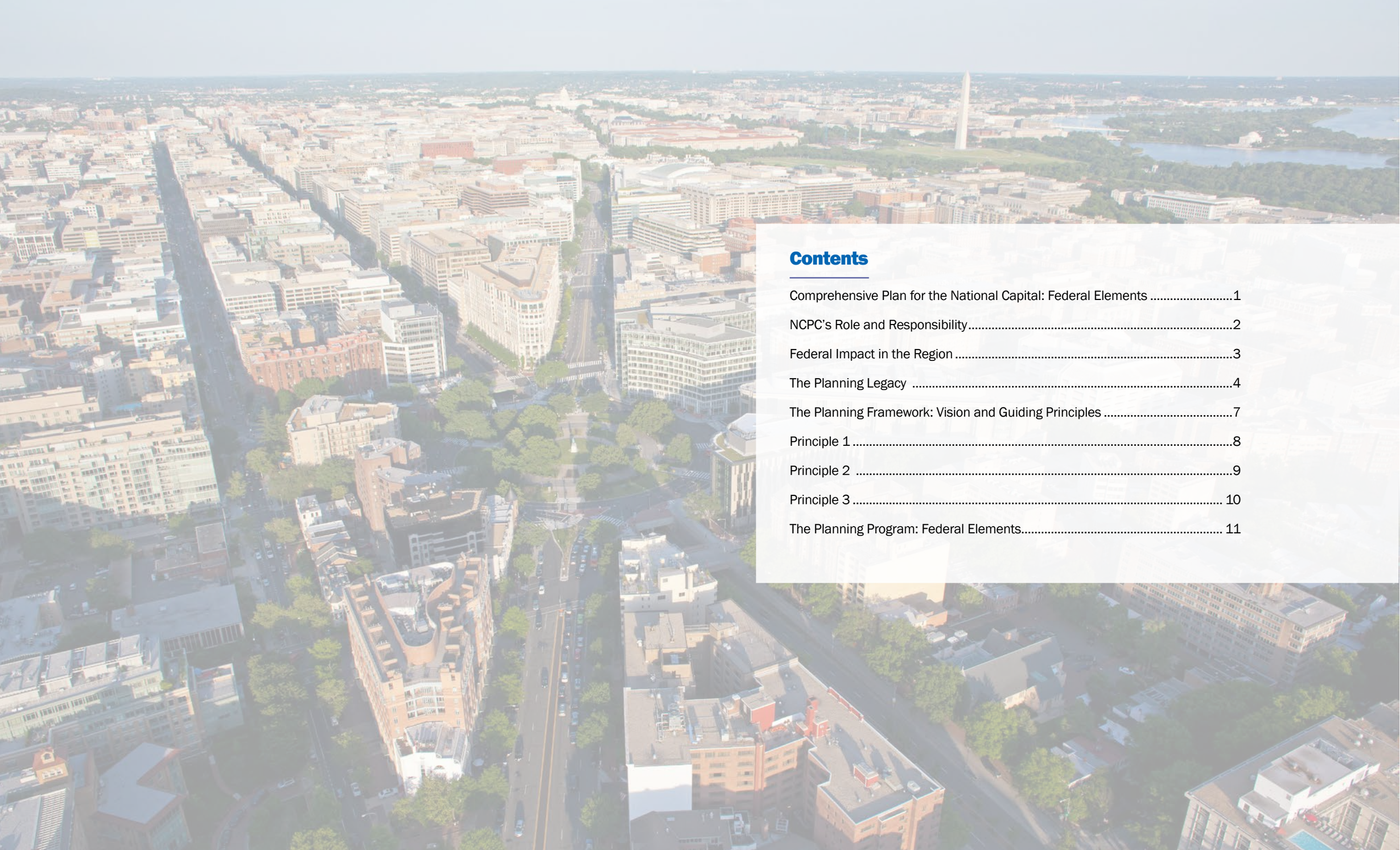
2026

National Capital Planning Commission



January 2026

National Capital Planning Commission



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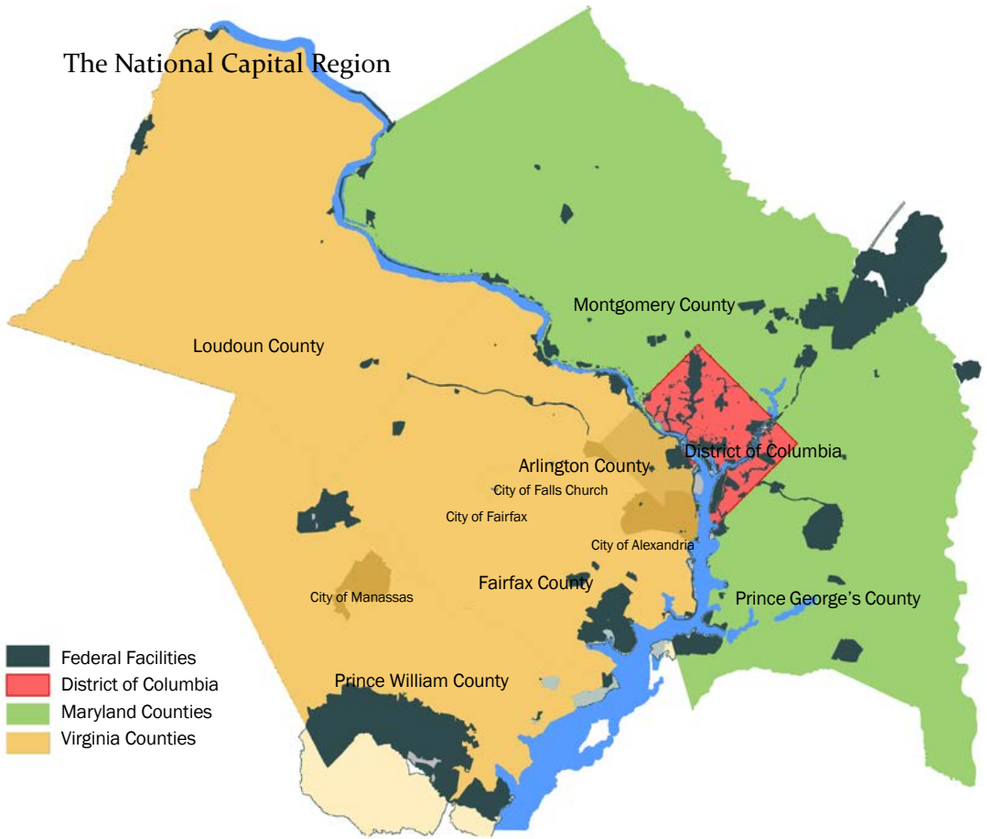
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The National Capital Region includes the District of Columbia; Montgomery and Prince George's Counties in Maryland; Arlington, Fairfax, Loudoun, and Prince William Counties in Virginia; and all cities within the boundaries of those counties.

Introduction

National capitals have distinct planning and development needs that distinguish them from other cities. While they share many traits with other metropolitan areas, by virtue of their national constituency they have unique qualities and requirements that must be addressed in their planning. The *Comprehensive Plan for the National Capital* (Comprehensive Plan) recognizes that the nation's capital is more than a concentration of federal employees and facilities. Washington, DC is the symbolic heart of the United States. It provides a sense of permanence and centrality that extends well beyond the National Capital Region (NCR) and the United States' national borders. It represents national power and promotes the country's history, traditions, and culture. Through its architecture and physical design, Washington symbolizes national ideals, values, and aspirations.

The Comprehensive Plan is comprised of two parts—the Federal Elements and the District Elements. The Federal Elements are prepared by the National Capital Planning Commission (NCPC), a federal agency. The Federal Elements of the Comprehensive Plan is a statement of principles, goals, and planning policies for the growth and development of the national capital during the next 20 years. They address matters related to federal properties and interests in the NCR. The Federal Elements are prepared pursuant to Section 4(a) of the National Capital Planning Act of 1952.

The eight Federal Elements in the Comprehensive Plan include Urban Design, Federal Workplace, Foreign Missions & International Organizations, Transportation, Parks & Open Space, Environment, Historic Preservation, and Visitors & Commemoration. Prior to this current update, the Federal Elements were last adopted in 2004.

The District Elements are prepared by the District of Columbia Office of Planning (DCOP) on behalf of the Mayor, and adopted by the Council of the District of Columbia. The District's Comprehensive Plan is organized around thirteen Citywide Elements and ten Area Elements. The Citywide Elements include Framework; Land Use; Transportation; Housing; Environmental Protection; Economic Development; Parks, Recreation and Open Space; Urban Design; Historic Preservation; Community Services and Facilities; Educational Facilities; Infrastructure; and Arts and Culture. The Area Elements include Capitol Hill; Central Washington; Far Northeast and Southeast; Far Southeast/Southwest; Lower Anacostia Waterfront/Near Southwest; Mid-City; Near Northwest; Rock Creek East; Rock Creek West; and Upper Northeast. The First Amendment Cycle for the 2006 *Comprehensive Plan for the National Capital: District Elements* was initiated in 2009. After concluding the approval process the amendments officially became effective in 2011 (text) and 2012 (maps). In early 2016, DCOP will launch the second amendment cycle for the 2006 District Elements of the Comprehensive Plan.

NCPC's Role and Responsibility

The region's significant federal presence requires extensive planning and coordination. As the central planning agency for the federal government in the NCR, NCPC is charged with planning for the appropriate and orderly development of the NCR and the conservation of its important natural and historical features. The Commission coordinates all federal planning activities in the region, and has several planning functions.

Commission responsibilities include:

- Preparing long-range plans and special studies to ensure the effective functioning of the federal government in the NCR.
- Preparing the *Comprehensive Plan for the National Capital* jointly with the District of Columbia government.
- Approving federal master plans and construction proposals in the District of Columbia, as well as some District government buildings.
- Reviewing proposed District of Columbia master plans, project plans, and capital improvement programs, as well as changes in zoning regulations.
- Reviewing plans for federal buildings and installations in the region.
- Reviewing comprehensive plans, area plans, and capital improvement programs proposed by state, regional, and local agencies for their potential impact on the federal establishment.
- Preparing the Federal Capital Improvements Program, and monitoring and evaluating federal capital investment projects proposed by federal agencies in the region.

Section 4(a) of the National Capital Planning Act of 1952[1] requires that NCPC prepare and adopt a "comprehensive, consistent, and coordinated plan for the National Capital." The Federal Elements of the Comprehensive Plan is the blueprint for the long-term development of the national capital and is the decision-making framework for Commission actions on plans, proposals, and policies submitted for its review. The Commission's comprehensive planning function involves preparing and adopting the Federal Elements, as well as reviewing the District Elements for their impact on the federal interest.

The Comprehensive Plan: Shared Stewardship

Collectively, federal, regional and local planning plays an important role in the character, development and growth, and livability of Washington. A vibrant District of Columbia should accommodate both the needs of our national government as well as enhance the lives of the city's residents, workers, and visitors. It should embody an urban form and character that builds upon a rich history, reflects the diversity of people and embodies the enduring values of the American republic. Furthermore, it creates a development trajectory in which residents participate in day-to-day life, in a manner that leverages the unique assets and identity of the National Capital Region.

The Comprehensive Plan for the National Capital is comprised of two parts: the Federal Elements and the District Elements. The Federal Elements of the Comprehensive Plan are developed by the National Capital Planning Commission and the District Elements by the District of Columbia's Office of Planning. Combined, these elements constitute the District's mandated planning documents, and guide development in the District of Columbia to balance federal and local interests with a collective responsibility for the natural, cultural, economic, and social environments. Many of the Elements have local, regional, and national significance; and together they advance Washington's great design and planning heritage.

Together, the National Capital Planning Commission and the District of Columbia Office of Planning work to enhance Washington, DC as a great national capital and plan for its equitable development through inspiring civic architecture, rich landscapes, distinct neighborhoods, vibrant public spaces, environmental stewardship, and thoughtful land-use management.

Federal Impact in the Region

The National Capital Region draws millions of visitors to its national memorials, museums, and other destinations.

The federal government exerts a powerful influence on the region's image, appearance, and livability. Americans have special aspirations for Washington, DC and the surrounding region because it is the nation's capital and symbolic heart of the country. They expect their seat of government to set the national standard for beautiful and inspiring civic architecture and landscapes, efficient transportation, environmental stewardship, and land-use management that respects Washington's great urban design heritage. Since the establishment of the city in the late 18th century, the federal government has played an active role in its planning and development to ensure that the nation's capital meets these expectations. In many cases federal laws, regulations, policies, and funding decisions direct activities in the region. Existing federal laws and policies recognize and give priority to Washington, DC as the established seat of the national government. This has been a major factor in assuring the continued growth of Washington's downtown commercial core even during periods of slow economic growth.

There are more than 230 memorials and museums in the city and surrounding environs. Washington attracts approximately 17.4 million domestic visitors and 1.6 million international visitors annually,[2] generating about $6.7 billion for the local economy.[3] The tourism sector is strengthened by the large number of federal visitor attractions in the area. Heritage tourists who constitute the leading growth sector in national tourism, are drawn by cultural resources such as memorials, museums, and historic sites. The region continues to be enriched through the creation of new national memorials and museums.

According to the 2004 Comprehensive Plan's Foreign Missions & International Organizations Element, there were 169 foreign diplomatic missions and 28 officially recognized international organizations in the NCR. In 2013, the figures reached 322 and 31, respectively.[4] The diplomatic and international community continues to be a source of economic growth in Washington as it provides employment and attracts international culture and commerce.

The federal government is the single largest employer in the National Capital Region.

The federal government continues to be the single largest employer in the region, although the federal share of total regional employment has declined since 1990. In 2000, approximately 15 percent of the total regional workforce was federal. In 2013, approximately 437,000 federal employees worked in the NCR, accounting for 12.3 percent of the total regional workforce. Of the total federal workforce, approximately 49 percent worked in Washington, DC; 30 percent in Virginia; and 21 percent in Maryland.[5]

The federal government spends billions on procurement and contracting activities in the National Capital Region.

While the size of the federal workforce has decreased since the 1990's, federal procurement and private-sector contracting has increased. Regional federal procurement spending grew from approximately $32.3 billion in 2001[6] to more than $80 billion in 2010.[7] Most of the growth was due to unusually large procurements for homeland security and defense. However, the recent fiscal outlook suggests increased budget constraints in the near future, pushing agencies to achieve their missions with greater efficiencies, limited budgets, and reduced spending on federal contracts.

The federal government leases or owns a significant amount of space in the region.

The federal government is the single largest owner and occupant of real property in the region. Although federal leases continue to decrease, it has not diminished the significance of federal ownership. In 2015, the U.S. General Services Administration portfolio consisted of 100.5 million rentable square feet of federal office space in the NCR, comprised of 44.2 million rentable square feet in 212 federal buildings and 56.3 million rentable square feet in 485 leased buildings.[8] In 2014, the U.S. Department of Defense controlled approximately 75 million square feet in more than 3,204 buildings in the NCR, comprised of approximately 73 million square feet in 2,993 owned buildings and two million square feet in 211 leased buildings.[9]

The federal government owns and maintains vast holdings of open space in the region.

Open space and parkland are important resources for residents, visitors, and workers as the region continues to experience growth. These federal open spaces are significant settings for important monuments, grand public promenades, major federal buildings, public open spaces, and quiet gatherings. Examples include the L'Enfant Plan's formal squares and circles, the National Mall, Manassas Battlefield, and the Cheasepeake & Ohio Canal (all managed by the National Park Service). Due to the environmental value and scenic beauty provided by natural and cultural landscape resources, the federal government acquires and protects hundreds of acres of natural areas.

The Planning Legacy





L'Enfant Plan Era

In 1787, the Constitution authorized the new federal government to establish a federal district as the seat of government. In the Residence Act of 1790,[10] the government called for the district to be sited within a 75-mile stretch of the Potomac River, and authorized President Washington to choose the precise location. He chose an area encompassing the upper reaches of the navigable waterway, embracing the mouth of the "Eastern Branch" (now the Anacostia River), as well as the port cities of Georgetown and Alexandria.

The next task was to site and construct government buildings within this district. President Washington accepted the proposal of Pierre L'Enfant, an engineer who previously worked with the Continental Army and federal government, to design the capital with a broad vision, providing the framework for a complete large-scale city that would meet the long-term needs of a growing nation.

L'Enfant's city plan, though occupying only a portion of the federal district, was extraordinarily ambitious. It included sites for major government buildings; memorials and other civic art; barracks and arsenals; cultural facilities; institutions such as hospitals and city markets; and the urban fabric to support a residential and commercial city. The streets and avenues were broad and park-like: half their right-of-way was intended for walkways with double rows of trees. The L'Enfant Plan[11] was overlaid with an abundant network of open space, ranging from monumental to local in scale, incorporating the area's rivers and topography, and resulting in the varied yet cohesive form that still characterizes the nation's capital.

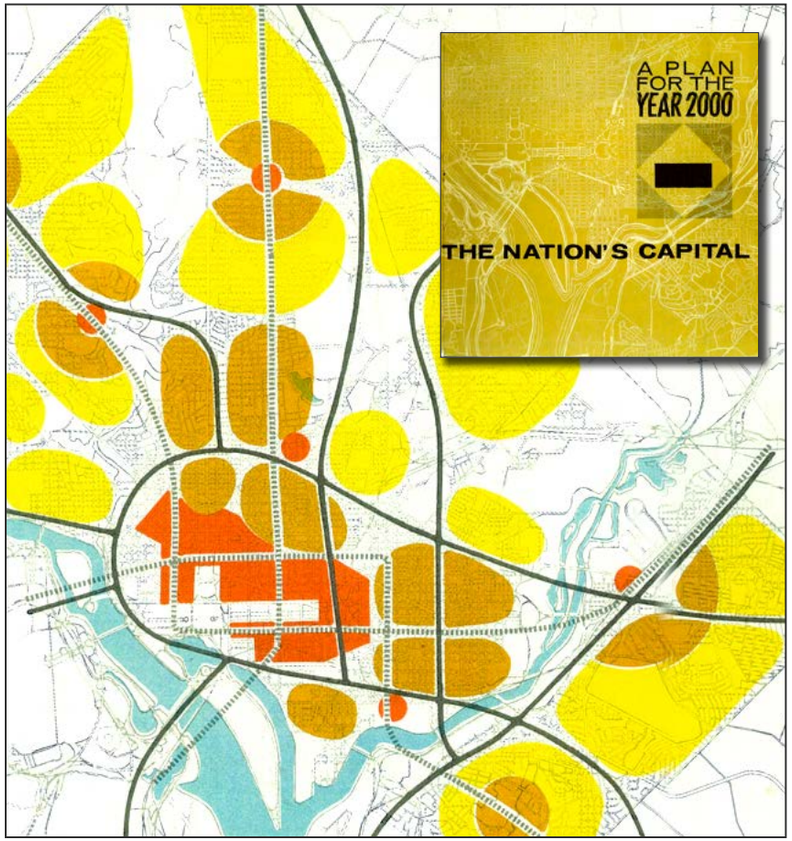
McMillan Commission Era

The McMillan Commission was concerned with reviving, refining, and extending the L'Enfant Plan to preserve and enhance the national capital's character. The McMillan Plan of 1901[12] addressed two main issues: building a public park system and designating sites for groupings of public buildings.

By connecting the existing parkland and extending the capital's park system into the outlying areas of Washington, Maryland, and Virginia, the McMillan Plan established a unified character for regional open space. Scenic drives and parkways would trace the shorelines of the area's rivers and streams. These parkways would rise through the valleys and along steep hillsides to connect the larger parks and unite the old Civil War forts into a great circle encompassing L'Enfant's axial organization. The Fort Circle Park System, as it was conceived, was to be second in importance only to the National Mall and the river designs.

The McMillan Plan grouped public buildings in formal landscaped settings, resulting in a highly concentrated monumental core. The plan reinforced a monumental National Mall composed of prominent features and public buildings. Many important elements of the plan were accomplished over the next quarter century: building the Lincoln Memorial; redesigning the landscape of the U.S. Capitol and White House; removing the railroad tracks from the Mall; constructing Union Station; building the Rock Creek and Potomac Parkway; and landscaping East and West Potomac Parks.





Comprehensive Planning in the National Capital Region During the 20th Century

The development of planning in the Washington region parallels the evolution of the profession throughout the nation, but with unique circumstances due to the presence of the national capital.

The McMillan Plan of 1901 provided a strong framework for many projects, both in the core and extending into the region. The plan formalized the National Mall's design, established key national parks, and created federal precincts such as the Federal Triangle. Within a few years, the need for a regulatory body became apparent. In 1910, the federal government created the U.S. Commission of Fine Arts, whose duties included "advis(ing) upon the location of statues, fountains, and monuments in the public squares, streets, and parks in the District of Columbia."[13] It took on the role of protecting and promoting the McMillan Plan, and two of its initial members had been part of the McMillan Commission. In 1910, Congress passed the Height of Buildings Act to limit building heights in Washington, DC. The U.S. Commission of Fine Arts' duties soon expanded to include design review of all public buildings and enforced the height limitations in Washington. The Height of Buildings Act has shaped Washington's horizontal skyline, views, and street-level character and is a valued urban design principle and important part of planning in the nation's capital.

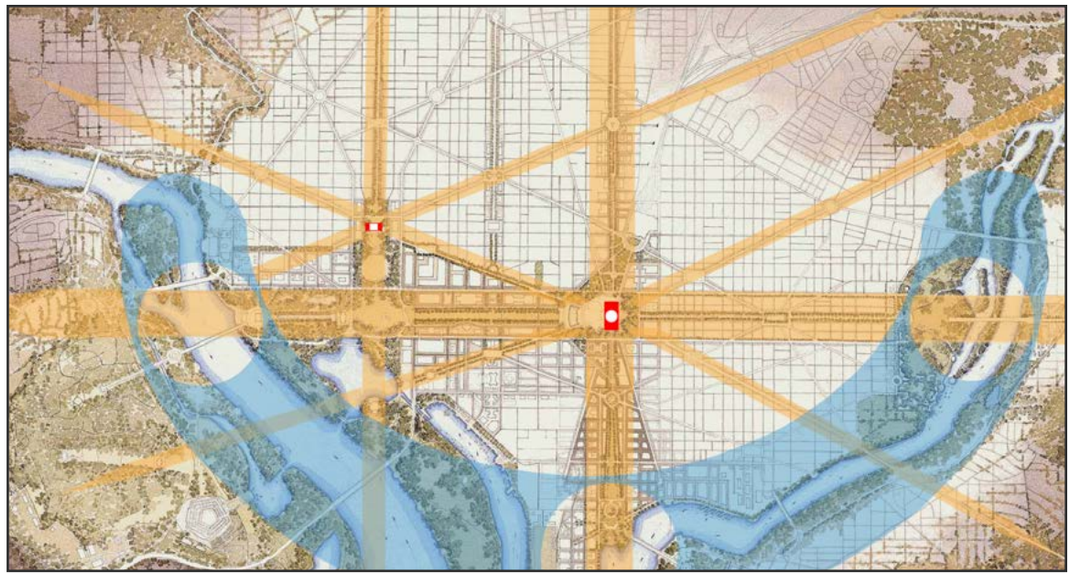
In the 1910s and 1920s, the planning field was becoming a more established component of modern urban management. Federal legislation in 1924 created the National Capital Park Commission to develop a comprehensive plan for the park, parkway, and playground systems of Washington. In 1926 its duties were extended to include consideration of all elements of city and regional planning, such as land use; major thoroughfares; systems of parks, parkways, and recreation; mass transportation; and community facilities. This federal agency was renamed the National Capital Park and Planning Commission (NCPPC) in 1926, and in 1952 it became the National Capital Planning Commission. It was responsible for all planning matters within the District of Columbia, and also had limited planning responsibilities extending into the region. Planning bodies at the county and state level were also created during this period, including the Maryland-National Capital Park and Planning Commission in 1927, established by the state with authority in both Montgomery and Prince George's Counties.

These federal and state agencies worked together on planning initiatives throughout the following decades. Beginning in 1930, the Capper-Cramton Act[14] authorized NCPPC to acquire land for a regional park and parkway system, including coordinated acquisition of stream valley parks in coordination with Maryland and Virginia planning authorities. NCPPC produced the 1950 Comprehensive Plan, primarily covering Washington, DC but also addressing regional issues. During the 1950s, NCPPC and NCPC studies demonstrated the need for a regional mass transit system, leading to the federal authorization of the Washington Metropolitan Area Transit Authority in 1965. In 1961, NCPC produced the influential *A Plan for the Year 2000*,[15] proposing a model for long-term regional growth. M-NCPPC then incorporated and expanded on this recommended model in its own comprehensive plan, titled "On Wedges and Corridors." The National Capital Regional Planning Council, a federal agency operating between 1952 and 1966, issued a Regional Development Guide[16] in 1966. And, NCPC issued drafts of new Comprehensive Plans in 1965 and 1967.

During this period, pressure was building for home rule in Washington, DC including reconsideration of the appropriateness of NCPC's role as Washington's local planning agency. The federal Home Rule Act of 1973[17] designated the District of Columbia's elected mayor as the planner for the District government, a power that is exercised through the DC Office of Planning. NCPC's role was re-defined to focus primarily on federal property in Washington, DC and the region. A new comprehensive planning effort was undertaken, leading to the publication of the *Comprehensive Plan for the National Capital* during the mid-1980s. This plan, a joint effort of NCPC and the District of Columbia government, contained Federal Elements, addressing federal concerns throughout the region, and District Elements, addressing matters of local concern. The Federal Elements also work in conjunction with comprehensive plans adopted by the various counties and cities in the region. This shared responsibility for the Comprehensive Plan remains the model for planning in the NCR.



Legacy Plan view of central Washington



Recentering the city to the U.S. Capitol is a principle theme in the Legacy Plan.

Planning America's Capital for the 21st Century

In 1997, the NCPC released its long-term vision for the development of the monumental core. *Extending the Legacy: Planning America's Capital for the 21st Century*[18] was developed in response to the projected long-term demands on the nation's capital and the threat of overbuilding in the monumental core. By recentering the monumental core on the U.S. Capitol, the Legacy Plan creates opportunities for new monuments, museums, and federal offices in all quadrants of the city. It calls for mixed-use development, expanding the reach of public transit, and eliminating obsolete freeways, bridges, and railroad tracks that fragment the city. It reclaims Washington's historic waterfront for public enjoyment and adds parks, plazas, and other urban amenities. While the Commission initially characterized the Legacy Plan as a long-range vision, support has been strong and many of the plan's most significant proposals are in development.

Principal themes of the Legacy Plan:

- Build on the historic L'Enfant and McMillan Plans, which are the foundation of modern Washington.
- Unify the city and the monumental core, with the U.S. Capitol at the center.
- Use new memorials and other public buildings to enhance economic development.
- Integrate the Potomac and Anacostia Rivers into the city's public life and protect the Mall, East and West Potomac Parks, and adjacent historic buildings from future development that would result in a loss of open space, natural areas, and historic resources.
- Develop a comprehensive, flexible, and convenient transportation system that eliminates barriers and improves movement within the city.



Catalina Calachan

The Planning Framework: Vision and Guiding Principles

The Commission envisions:

A vibrant world capital that accommodates the needs of our national government; enriches the lives of the region's residents, workers, and visitors; and embodies an urban form and character that reflects the enduring values of the American people.

The Comprehensive Plan's Federal Elements are linked by three guiding principles and themes that emerged within these principles.

1. Accommodate federal and national capital activities.

2. Reinforce smart growth and sustainable development planning principles.

3. Support local and regional planning and development objectives.

PRINCIPLE 1

Accommodate Federal and National Capital Activities

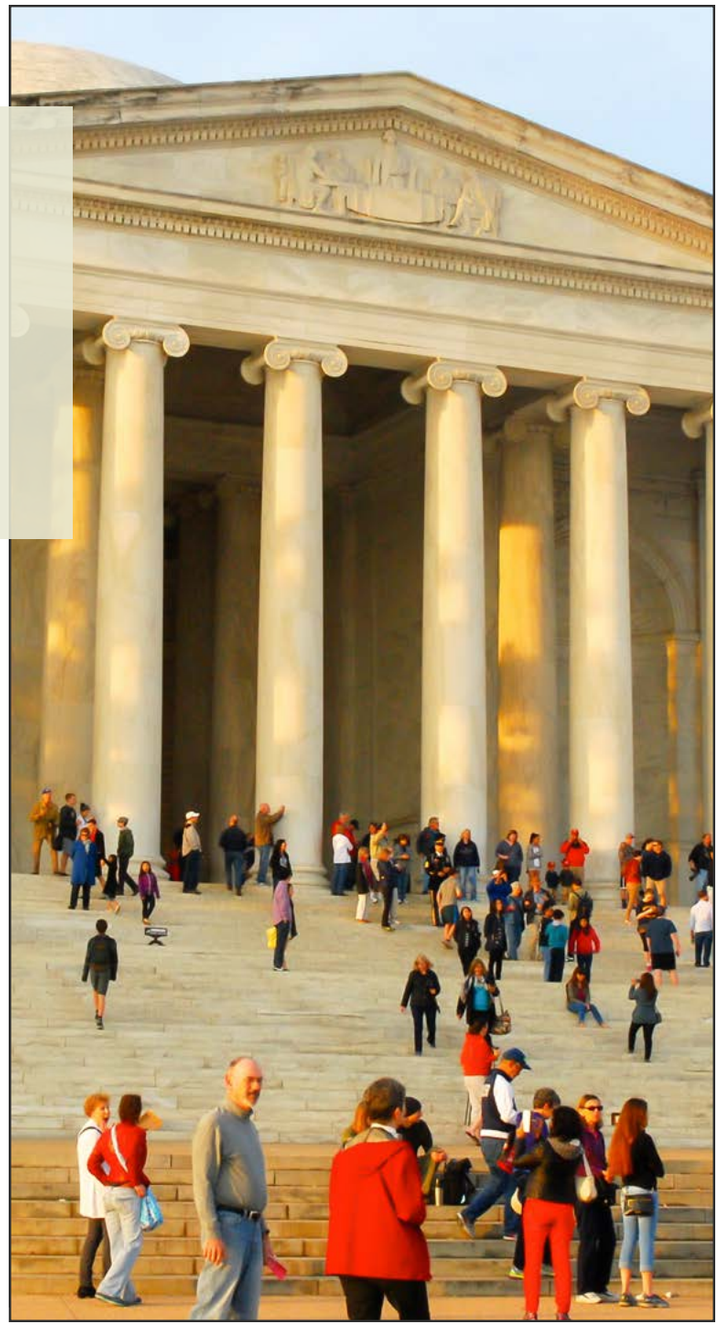
One of the key themes within this guiding principle is the importance of the appearance and image of the nation's capital. The city's physical design conveys the values and qualities to which we aspire as a nation. The Federal Elements emphasize fundamental concepts of beauty and order. Washington, DC, and the federal activities within it, must reflect the highest standards of architecture, urban design, and planning. As the central planning agency for the federal government, NCPC is committed to ensuring that adequate provisions are made for future generations who will come to the capital to petition the government, conduct business, or visit memorials and museums that honor the nation's heroes and capture it's history.

A second important theme is the operational efficiency of the federal government. The Federal Elements envision a capital city that is the economic, political, and cultural center of the Washington region. The Central Employment Area (CEA) (refer to the map in the Federal Workplace Element) is seen as the primary focus of new federal office development and the preferred location of new major national capital activities. Government headquarter facilities and functions that support national capital activities, such as entertainment and tourism, are encouraged to locate within or near the CEA. Washington, DC is considered the primary location for foreign missions and international organizations, consistent with international law and practice. An emphasis will be placed on retaining national and international activities in the city while preserving the autonomy of the District of Columbia government to regulate and plan local land use.

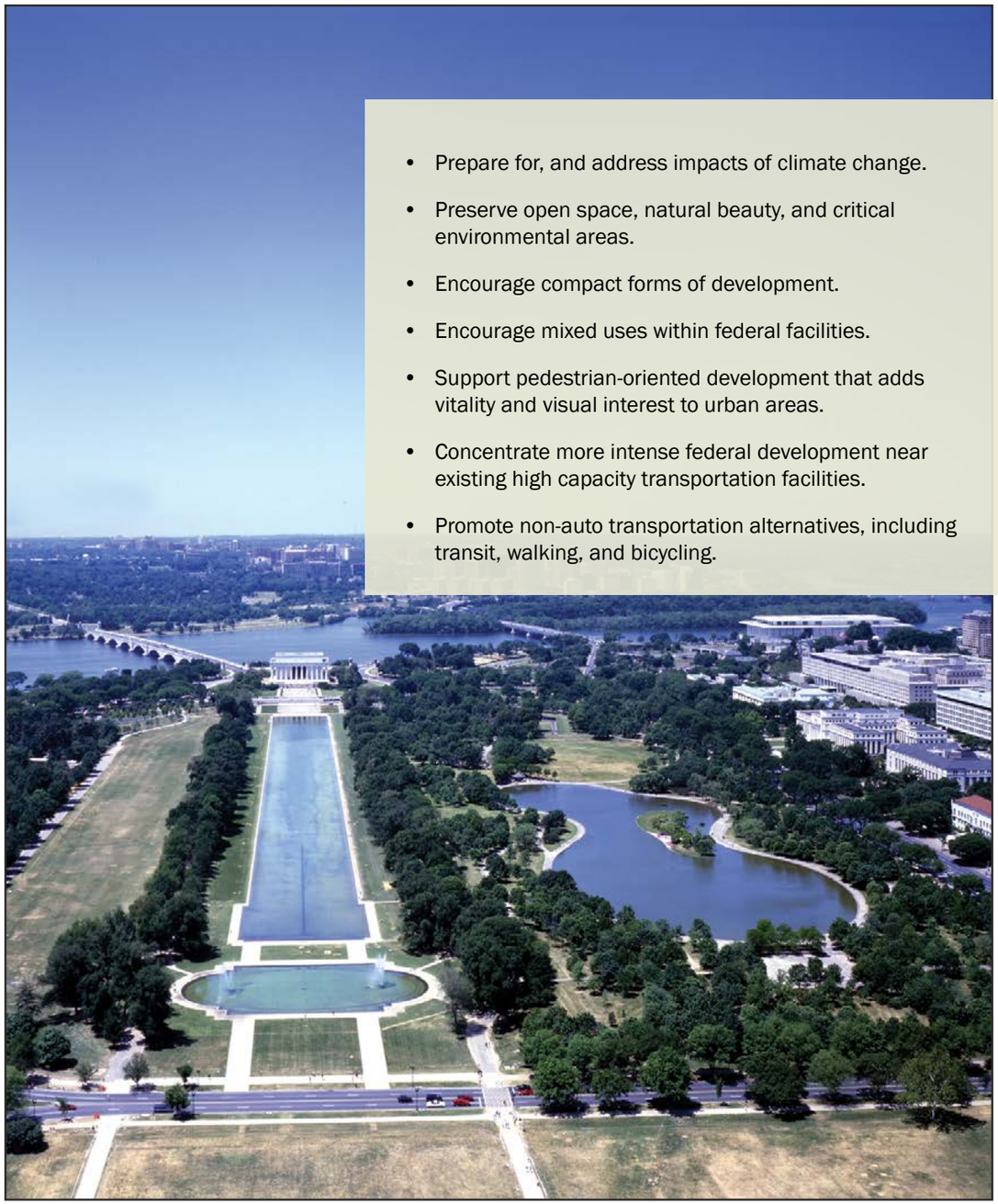
- Enhance the beauty and order of the nation's capital.
- Promote the highest quality design and development in the National Capital Region.
- Balance accessibility and security.
- Preserve historic properties and important L'Enfant and McMillan Plan design features.
- Disperse activities throughout the city and region.
- Promote the District of Columbia as the prime location for foreign diplomatic missions.

Those sectors of the regional economy that have traditionally been strong—information processing, support services, intelligence gathering, medical research, international activities, national defense, tourism, information technology, and support services related to the government—are expected to continue to be drivers of the region's economy because of their strong ties to the federal government. Activities requiring larger land areas or greater levels of security should locate in areas of the region that can accommodate those requirements. The federal government should make every attempt to use existing federal facilities and land for new federal space needs.

The Federal Elements recognize that many federal employees value living near their places of work, increasing the possibility that federal employees could commute primarily by transit, bicycle, and walking. Further, the siting and design of new federal facilities in the city and its urban core that are convenient to public transportation will encourage employees and visitors to make greater use of transit opportunities. Federal activities will also be encouraged to locate in ways that promote the development of new, related private-sector activities, while meeting the requirements of federal agencies. Regardless of their location, federal facilities are expected to safely and efficiently accommodate government functions while promoting the highest quality design.



Catalina Calachan



- Prepare for, and address impacts of climate change.
- Preserve open space, natural beauty, and critical environmental areas.
- Encourage compact forms of development.
- Encourage mixed uses within federal facilities.
- Support pedestrian-oriented development that adds vitality and visual interest to urban areas.
- Concentrate more intense federal development near existing high capacity transportation facilities.
- Promote non-auto transportation alternatives, including transit, walking, and bicycling.

PRINCIPLE 2

Reinforce Smart Growth and Sustainable Development Planning Principles

The Federal Elements encourage smart growth and sustainable development. The plan includes strategies that orient development to public transit; protect environmental and natural resources; organize new development in compact land use patterns; promote opportunities for infill development to take advantage of existing public infrastructure; and adapt and reuse existing historic and underutilized buildings to preserve the unique identities of local neighborhoods. Sustainable development recognizes the interrelationship between economic growth, environmental quality, and livability, and the responsibility that citizens have to preserve their communities and quality-of-life for future generations. These principles benefit the federal government and the region as a whole.

A critical theme within this guiding principle is transportation mobility and accessibility. To facilitate the movement of federal employees to and from their places of employment, federal agencies in the region are leading the way with a variety of creative commuting programs. The federal government provides a monthly transit benefit for employees. Many agencies have highly effective transportation management plans to help reduce the number of drive-alone commuters, encourage carpooling and vanpooling, and offer staggered work hours and telework options. Considering the NCR's status as one of the most congested regions in the country, federal agencies must continue to find new and effective transportation strategies at their work sites, including incentives for alternative travel modes such as walking and biking.

Another fundamental theme that emerges within the guiding principle is the stewardship of the region's natural and cultural resources. For more than two centuries, the federal government has actively acquired, developed, and maintained parks and open space, and protected and enhanced natural resources in the region. The importance of this mission continues. In addition, the federal government is also focusing on planning for, and addressing the impacts of climate change and flooding. Natural resources continue to be threatened by growth and development and with declining budgets, it is imperative to develop and seek unified approaches and implement innovative solutions to ensure that these resources will be preserved and enjoyed by all citizens now and in the future.

- Maximize the contribution of federal projects to local and regional jurisdictions through the location and design of federal facilities
- Promote intergovernmental coordination.

PRINCIPLE 3

Support Local and Regional Planning and Development Objectives

The federal government will continue to be a major generator of growth and development in the NCR. Federally owned and leased facilities are located throughout the region, and federal activities significantly impact the region's economic health, welfare, and stability.

The Commission and other federal agencies should work closely with local authorities and affected community groups in areas where federal activities are located, or are proposed to be located.

The Commission strongly promotes intergovernmental cooperation and public participation in the preparation and review of federal policies, plans, and programs in the region by:

- Coordinating federal plans, projects, and capital improvement programming with local, regional, and state plans and programs.
- Encouraging federal agencies planning development projects to participate in the Commission's "early consultation" program in order to inform nonfederal officials and community organizations about such projects prior to their submission to the Commission.
- Providing for public participation in the Commission's preparation and review of federal policies, plans, projects, and capital improvement programs.
- Assisting federal agencies in resolving issues with affected non-federal agencies and community groups in preparing proposed policies, plans, and programs.
- Coordinating the federal interest review of local, regional, and state plans and programs.
- Promoting information-sharing and data exchanges with state, regional, and local authorities.



The SW Ecodistrict Initiative proposes to redesign the 10th Street corridor.

The Planning Program: Federal Elements

The *Comprehensive Plan for the National Capital: Federal Elements* identifies and addresses the current and future needs of federal employees, visitors, and residents to the nation's capital and provides policies that:

- Guides urban design features that contribute to the image and function of the nation's capital.
- Guides the location of new federal facilities and the management of existing federal facilities.
- Guides the placement and accommodation of foreign missions and international agencies.
- Promotes the preservation and enhancement of the region's natural resources and environment.
- Protects historic and cultural resources.
- Encourages federal, local, state, and national authorities to work together.
- Supports access into, out of, and around the nation's capital that is as efficient as possible for federal and non-federal workers.

The eight Federal Elements are Urban Design (a new element); Federal Workplace; Foreign Missions & International Organizations; Transportation; Parks & Open Space; Federal Environment; Historic Preservation; and Visitors & Commemoration.

Urban Design Element: Promote quality design and development in the region that reinforces its unique role as the nation's capital and creates a welcoming and livable environment for people. Its Technical Addendum is a resource that supports policies and includes background, planning approaches, and explanatory graphics.

Federal Workplace Element: Locate the federal workforce in a way that enhances the efficiency, productivity, value, and public image of the federal government; strengthens the NCR's economic well-being; and emphasizes Washington, DC a as the seat of the federal government.

Foreign Missions & International Organizations Element: Plan a secure and welcoming environment for the location of diplomatic and international activities in Washington, DC. This should be done in a manner that is appropriate to the status and dignity of these activities; enhances Washington's role as one of the world's great capitals; and is sensitive to the character and use patterns of the city's neighborhoods.

Transportation Element: Develop and maintain a multi-modal regional transportation system that meets the travel needs of workers, residents, and visitors while improving regional mobility, accessibility, air quality, and environmental quality through expanded transportation alternatives and transit-oriented development.

Parks & Open Space Element: Conserve and enhance the NCR's parks and open space system, ensure that adequate resources are available for future generations, and promote an appropriate balance between open space resources and the built environment.

Federal Environment Element: Promote the NCR as a leader in environmental stewardship and sustainability. The federal government seeks to preserve and enhance the quality of the region's natural resources to ensure that their benefits are available for future generations to enjoy.

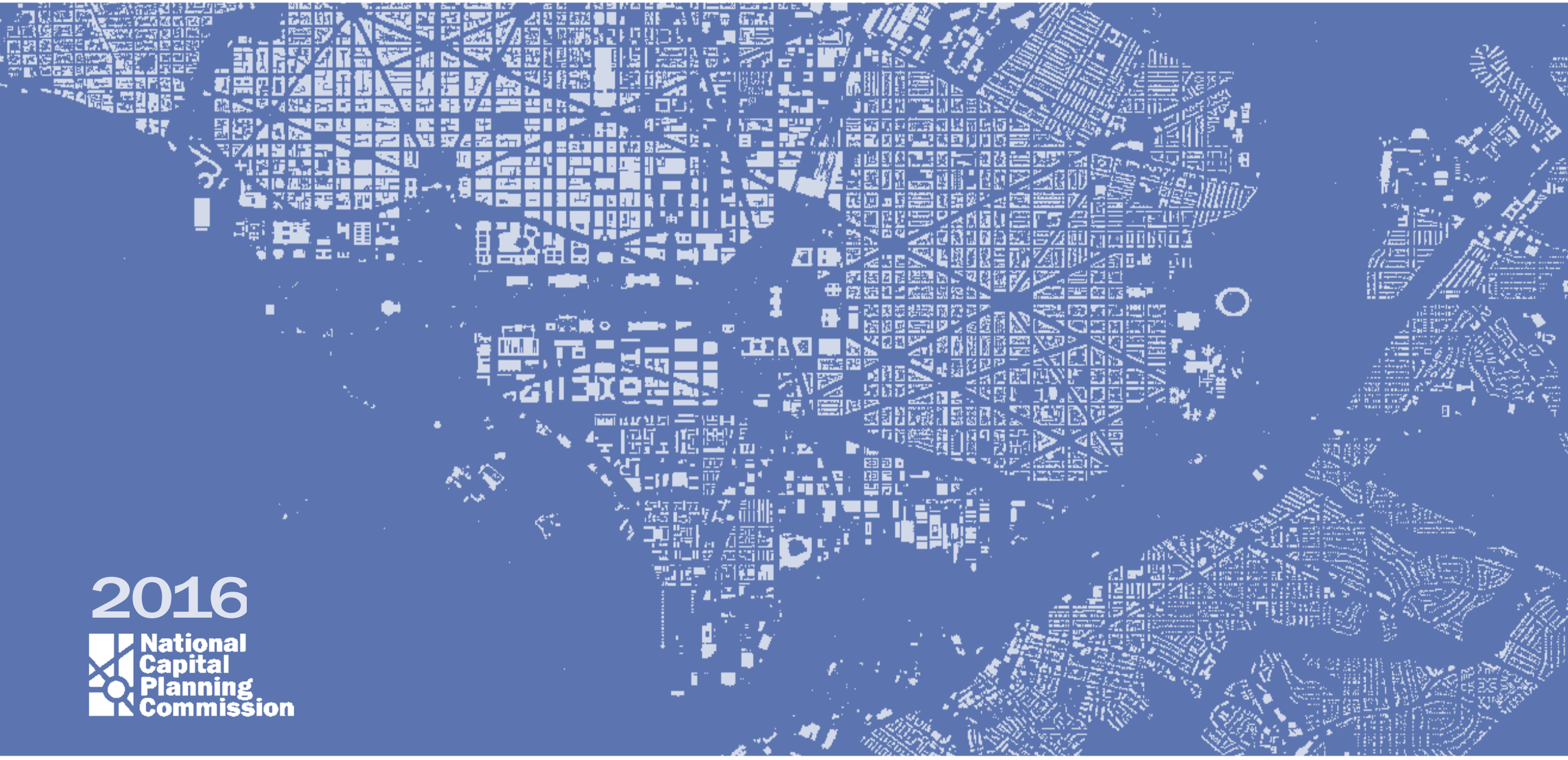
Historic Preservation Element: Preserve, protect, and rehabilitate historic properties in the NCR and promote design and development that is respectful of the guiding principles established by the Plan of the City of Washington and the symbolic character of the capital's setting.

Visitors & Commemoration Element: Provide a positive and memorable experience for all visitors to the NCR in a way that showcases the institutions of American culture and democracy, supports planning goals, and enhances activities that are unique to visiting the nation's capital.

The Federal Elements—along with the District Elements, federal and District agencies' systems plans, individual installation master plans and subarea plans, development controls, and design guidelines—constitute the road map for NCPC's land use planning and development decision-making processes in the NCR.

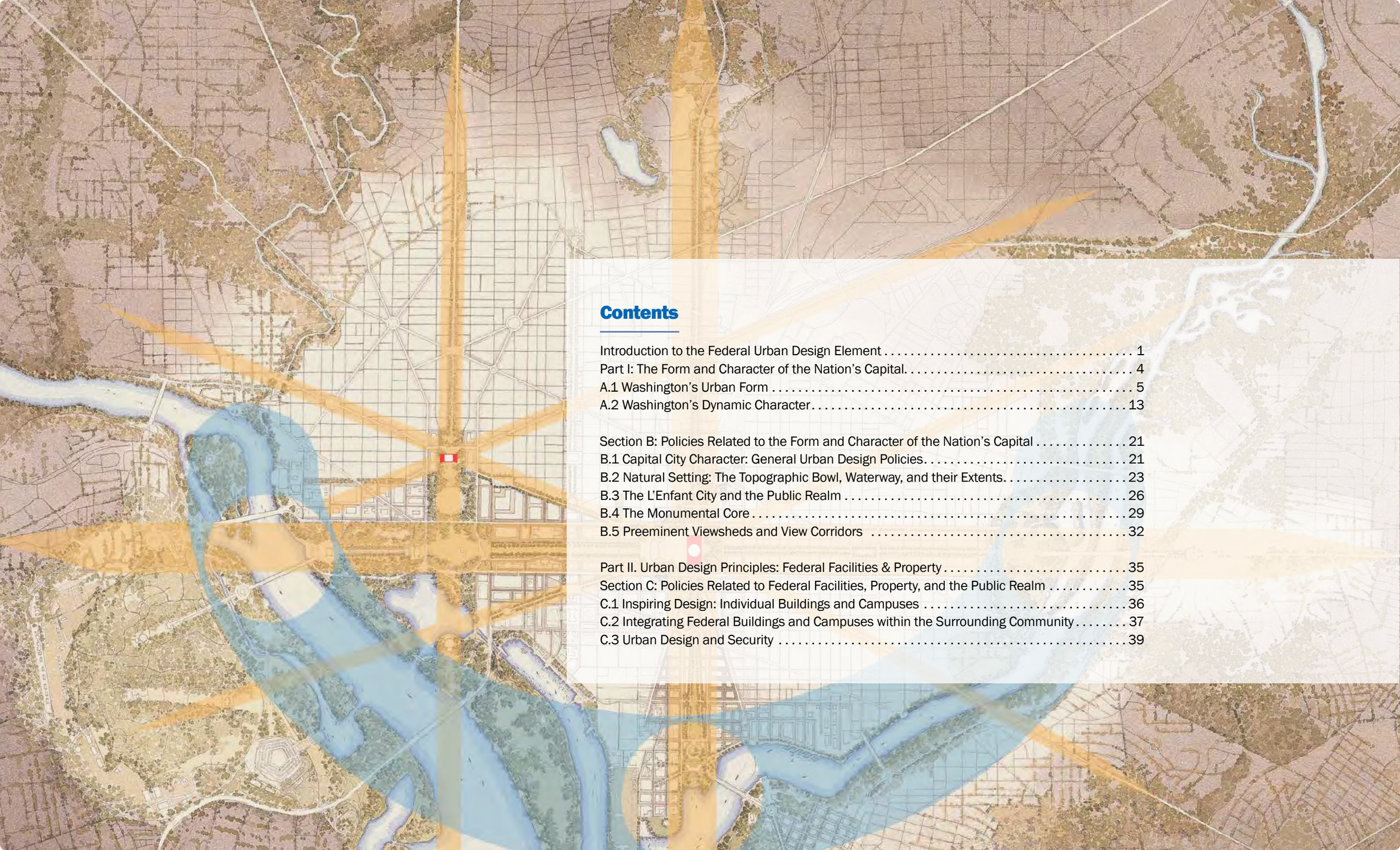
Endnotes

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2016

National Capital Planning Commission



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Catalina Calachan

Introduction to the Federal Urban Design Element

The federal government's goal is to promote quality design and development in the National Capital Region that reinforces its unique role as the nation's capital and creates a welcoming and livable environment for people.

Urban design is the practice of shaping the built environment of a city, town, or neighborhood. At its best, urban design results in cities that express the ideals of the people who build and occupy them, while adapting to their changing needs over time. Urban design operates on two scales: the larger scale, which addresses urban systems such as networks of streetscapes and public spaces; and the smaller scale, which addresses the pedestrian experience. Good urban design requires expertise in many disciplines including urban planning, architecture, landscape architecture, engineering, public policy, land use law, and social psychology. Through the use of these disciplines, it creates functional, sustainable, lively, and engaging places and improves the quality of life for the people who live and work there.

Urban design policy in Washington, DC must meet these objectives at an elevated standard due to the city's role as the nation's capital and one of the world's great planned cities. Washington is unique because the core planning documents that established the city's spatial framework continue to shape its development today.

The city and the surrounding National Capital Region (NCR) continue to evolve as both federal and local planning efforts guide growth and development throughout the region. It is critical for the federal government to engage with local jurisdictions throughout the region to address areas of mutual interest and prepare strategies for the region's overall urban design quality. This element provides guidance for the urban design of federal properties throughout the NCR.



DDIS Photography

Pennsylvania Avenue looking toward the U.S. Capitol.

Defining the Federal Interest for Purposes of the Urban Design Element

The *Comprehensive Plan for the National Capital* (Comprehensive Plan) sets forth a planning vision for Washington, DC and the NCR.[1] It is a unified document comprised of both District and Federal Elements. The District of Columbia undertook a major update of the Comprehensive Plan's District Elements that was completed in 2006, subsequently the First Amendment cycle was completed in 2011. The Federal Urban Design Element complements the District's element by focusing on areas under federal jurisdiction; planning matters related to Washington's form and character in areas with major, or contiguous to, national assets; and resources that contribute to the city's image or function as the nation's capital. For purposes of the Urban Design Element, the federal government's interests operate at two equally important levels: those related to Washington's role as the nation's capital (national interests), and Washington's role as the seat of the federal government (federal interests).

National and Federal Interests

The primary national interests as defined in this element are the preservation and enhancement of Washington's defining characteristics as a capital city that were established by the L'Enfant Plan,[2] McMillan Plan,[3] and the 1910 Height of Buildings Act[4] (Height Act). These qualities are important in areas such as the monumental core, where federal properties and national cultural institutions predominate, and along primary streets within the L'Enfant City that establish the city's basic spatial organization (see map, page 9). While the policies in this element apply primarily to federal property, they are also intended to inform the work of the Commission and staff when providing comments on non-federal property and proposals such as amendments to the Comprehensive Plan's District Elements, zoning map, other regulations, or regional development proposals and plans.

The national interest in Washington's design applies most particularly to the city's skyline and setting as typified by the topographic bowl (see map, page 6); the street grid; federal parks and reservations; federal buildings and infrastructure; Congressionally-authorized memorials and museums; and the contributing features of the L'Enfant Plan as defined in the National Register of Historic Places (NRHP). The national interest regarding federally-owned National Historic Landmarks extends beyond the building itself to its setting, especially when that setting is included in the Schedule of Heights.[5]

Like all cities Washington's urban design character is not a simple formula: it is complex and sometimes contradictory. Great urban design calls for a constant reconciliation of tensions among a variety of planning goals. Planning for a capital city and region requires balancing urban design principles that shape the everyday urban condition with additional design principles that focus on reinforcing the image of the nation's capital.

Finally, from a planning perspective, boundaries—political, geographic, or otherwise —are important. However, urban design policy and national interests related to the form and character of the nation's capital do not neatly fit into jurisdictional boundaries. Indeed, an urban design framework is a whole system of built and natural elements. These resources may be managed by different entities, but nonetheless contribute to a visual and functional composition that contributes to the national capital's image and function. Therefore, the related policies within this element are exclusively focused on national interests as described above, primarily within the topographic bowl (as described on page 23) and L'Enfant City. However, the introduction includes broader language to fully capture the scope and complexity of the major contributing urban and natural forms that make Washington distinctive as a national capital and a home for its residents.

Federal interests include matters related to federal buildings, campuses, parklands, operations, and security. Urban design policy is based on best planning practices and urban design principles for locating federal buildings and campuses for the benefit of agencies, employees, and the surrounding community. These policies are in Part II and apply in both a city and regional context.

Part I: The Form and Character of the Nation's Capital

Great cities evolve in a way that is authentic to their character and their future aspirations. Deep-rooted in Washington's DNA are signature qualities such as broad sun-lit and tree lined streets, and an unmistakable skyline. Equally authentic to Washington's character is a tradition of long-range planning that asserts that the capital's cityscape is more than a random result of economic activity over time; rather, it has aspired to a more explicit civic form. Built Washington—situated and scaled to the natural environment—emerged as a city of form and experience for residents, the nation's citizens, and millions of annual visitors. As Washington continues to evolve towards a vibrant future, its established urban design framework assures that it will do so in a way that retains many of those qualities that distinguish it from other cities.

Planning Together

The federal and District of Columbia governments share a vision to further Washington, DC as a great capital city that continues to evolve by building upon its extraordinary planning legacy with a renewed focus on elevating the way people experience the city. As joint stewards charged with protecting and advancing Washington as a vibrant capital, the federal and District governments believe it is essential to mutually promote these shared values. Through coordinated planning and project review both governments ensure the established urban design framework supports an evolving city that serves as a progressive 21st century metropolis and a nation's capital.

The foundation of Washington's design and character is based on continuous and deliberate planning to create a capital worthy of our nation. The streets, reservations, and vistas in Washington's urban core collectively establish the historic L'Enfant City as the singular American example of a purpose built national capital solely conceived to physically express the ideals of a new republic.[6] This historic plan serves as a significant urban design framework. Both the federal and District of Columbia governments have extended through subsequent generations of planning and the development of a signature system of public parks, lushly landscaped streets, and architecturally rich neighborhoods and buildings. Deeply rooted in the city's form are also natural qualities like the topography, streams and waterways, and sweeping promontory views that continue to shape the human experience of this city in both subtle and formative ways.



Lonnie Dawkings

Lincoln Park is a National Park Service site with two nationally significant memorials. The park serves as a local urban park that defines the neighborhood's identity and provides everyday recreational needs.

As a growing city, Washington, DC, must respond to the evolving needs of its residents, workers, and visitors and be cognizant of how technology and innovation are transforming the way people engage the public realm and built landscape to remain vital for future generations. The continued planning efforts by the federal and District of Columbia governments will build upon our planning legacy to meet the new century by shaping buildings, streets, and public spaces of our city as places for people; celebrating the increasing diversity of people and institutions within our city through the design of public spaces; and elevating our nation's capital as a sustainable and resilient place. By weaving the everyday experiences of people and contemporary design into the historic plan of our city we aim to elevate the national image of Washington as a truly great city.

Guiding Urban Design Principles

- Reinforce the character of the nation's capital as a city set in natural beauty.
- Ensure that federal development and lands in the city and region adhere to design quality standards.
- Foster a distinctive visitor experience that befits the nation's capital.
- Reinforce the qualities that define the form and character of the nation's capital and distinguish it from other American cities.
- Preserve the physical preeminence and visual hierarchy of the most significant civic structures within the city, including the White House, the U.S. Capitol, and the Washington Monument.
- Nurture a civic quality for streetscapes, parks, and open spaces within the monumental core that inspires people and cultivates a sense of permanence and dignity. Incorporate other attractive and adaptable built and programmatic elements in these civic spaces.
- Support a vital, comfortable, and accessible public realm, which is a hallmark of a good pedestrian experience and an important component of American civic life.
- Site major civic institutions, memorials, cultural landmarks, and other iconic city buildings at key locations with symbolic, spatial, or natural significance.

Washington's Urban Design Framework Components

The following map series illustrates and describes the five main components of Washington's Urban Design Framework.



Natural Settings:
Terrain (topography), ridges, stream valley corridors, waterways, "Green City" character (vegetation), and climate



Open Space Networks:
A system of circles and squares, large reservations, natural parks, formal or ornamental parks, urban squares and public grounds, park connections, and settings



Street + Public Spaces System:
Avenues, streets, civic places, park drives, scenic places, gateways, and street design



Urban Patterns:
Built-up forms, buildings, and density



Civic Art:
Monuments, memorials, sculptures, fountains, ornamental gardens, and edifices

Section A: Urban Design Framework

A.1 Washington's Urban Form

Good urban design enhances a city's vitality, livability, and beauty. Washington's design emphasizes its role as a national capital with natural, urban, and symbolic identities.

The composite urban design framework is particularly distinctive within the original L'Enfant City. Here, the combination of public spaces created by the L'Enfant and McMillan Plans (collectively known as *The Plan of the City of Washington*), together with the Height Act, resulted in an expansive, elegantly proportioned urban core. The Public Parking Act of 1870[7] shaped the public space and park-like character of Washington's system of streets and public spaces across the entire city. These defining documents broadly define Washington's innovative urban design framework and shape the qualities associated with its unique role as the nation's capital. These documents are placed within a planning context and described in more detail in pages 1-7 of the Urban Design Element's Technical Addendum.

As set forth through the *Plan of the City of Washington* and the Height Act, the natural and man-made components form a unique framework of basic physical forms, patterns, and features. These can be perceived as interrelated parts that form a single composition, making Washington a widely recognizable and memorable city.

None of these components can stand alone. From the many overlooks throughout the city, the visual field reveals how the framework components uniquely fit together and create a three dimensional spatial and visual order that reinforces national identity through prominently situated symbols and cultural institutions.

Because Washington is designed to be both seen and experienced, one policy objective is to identify the visual structures and enhance the city's visibility from publicly-owned overlooks at key vantage points. While many cities have overlooks at the top of buildings, nowhere else is such a premium placed on pedestrian vantage points located on public land. Where these overlooks are federal properties, the National Capital Planning Commission (NCPC) will continue to address the important planning issues associated with balancing agency security needs with public access.

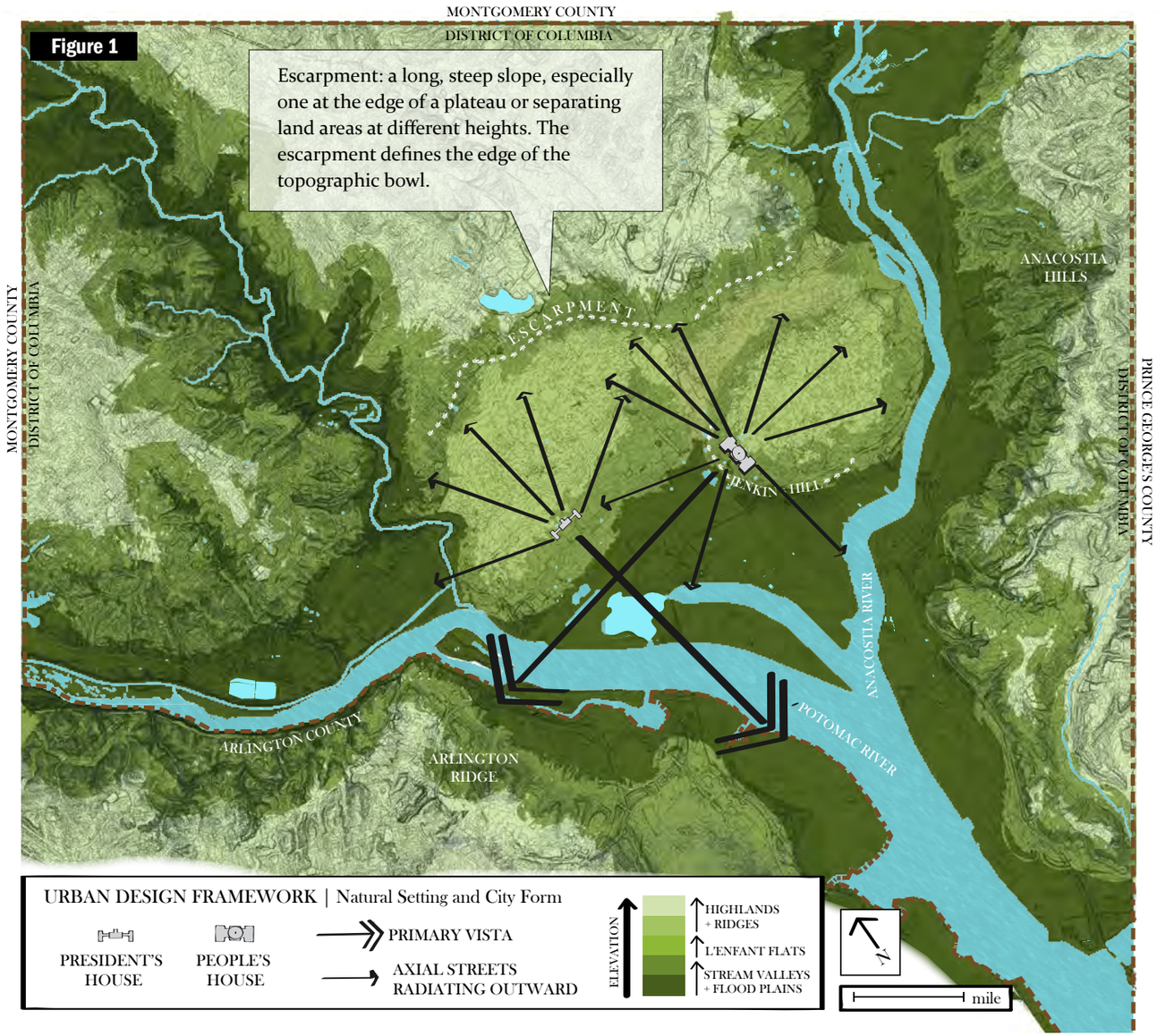
The Natural Setting and City Form

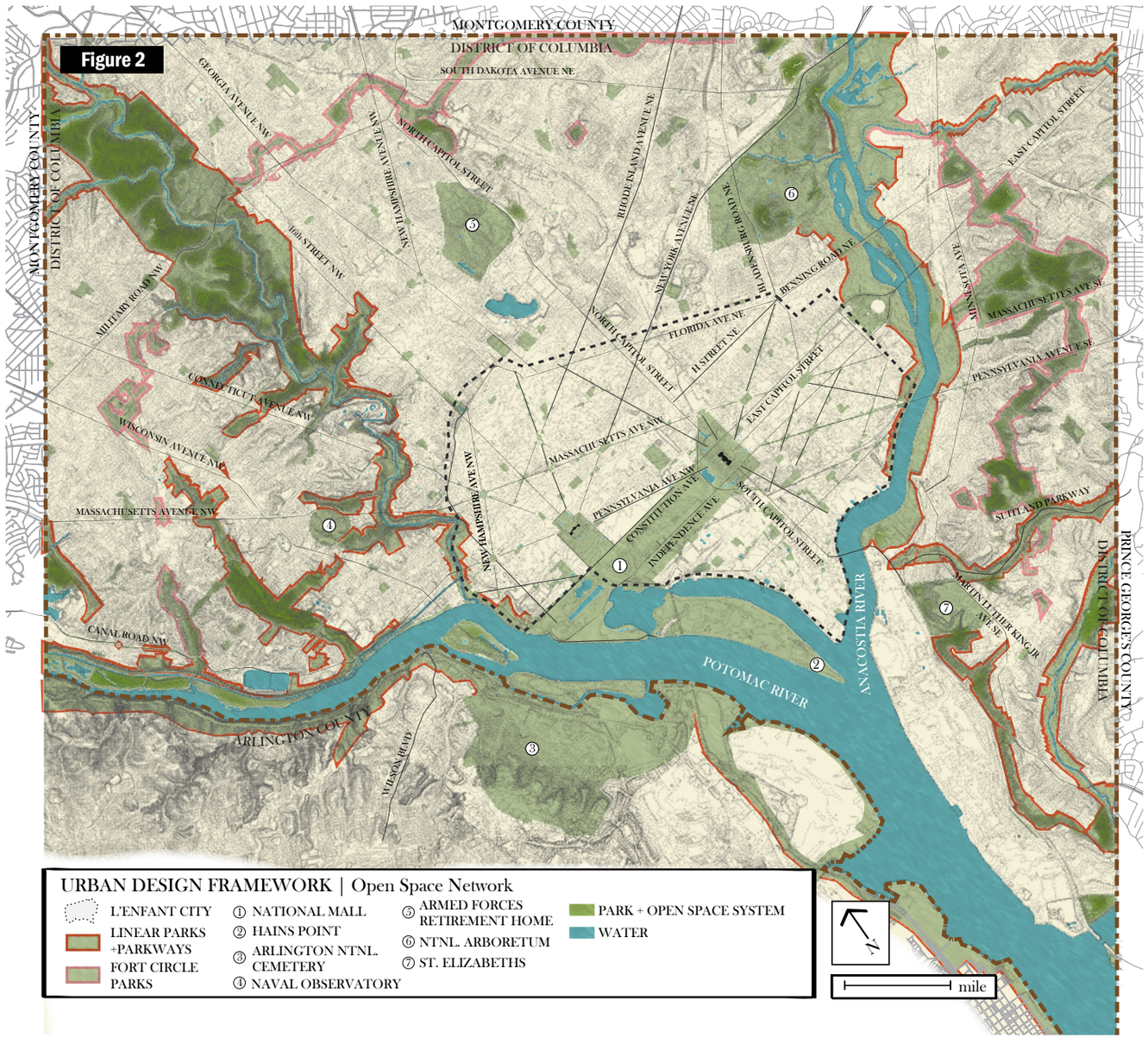
The L'Enfant Plan integrates a cityscape with natural geography to create an urban framework for the Washington region. In 1791, the city was established as the seat for the federal government. It places two seats of government, the People's House (U.S. Capitol) and the President's House (the White House), on prominent topographic flats (see page 23 for more information on the topographic bowl). A network of diagonal streets radiates outward from these two locations over the escarpment. The plan includes a system of open spaces, streets, and reservations explicitly designed to create a visual hierarchy of important places and to reinforce civic identity.

Policy Guide

For policies related to the city's natural form please see:

- B.2 Natural Setting: The Topographic Bowl, Waterways, and their Extents
- B.5 Preeminent Viewsheds and View Corridors





Open Space Network

The existing park and open space system in Washington is influenced by the 1902 *Report of the Senate Park Commission: The Improvement of the Park System of the District of Columbia* (The McMillan Plan), which recommended acquiring lands to better connect the park system within Washington, DC. It also established a more formal design framework that shapes the appearance of the National Mall, the park system, and parkway drives, illustrated in the map on the left.

These federal lands together provide a system of public parks and a natural environment at a variety of scales throughout the city. This includes smaller scale urban parks, circles, and squares that are woven throughout the city's core and located at its major extensions. Parkways line the city at its natural edges nearest the rivers. Washington also has an extensive linear parkway system, including Rock Creek Park (the largest park). The Civil War Defenses of Washington (commonly referred as the Fort Circle Parks), define the high ridgelines that encircle the historic city.

There are also several publicly accessible federal lands within the city that provide a natural setting. Some offer panoramic views of the nation's capital and surroundings. These include the Armed Forces Retirement Home, St. Elizabeths, the National Arboretum, and the U.S. Naval Observatory.

Policy Guide

For policies relating to the open-space system please see:

- B.2 Natural Setting: The Topographic Bowl, Waterways, and their Extents
- B.3 The L'Enfant City and the Public Realm
- B.5 Preeminent Viewsheds and View Corridors

Streets + Public Space System: District and Environs

Within the L'Enfant City, there is a visually coherent system of streets and public spaces. Broad avenues radiate outward from prominent, civic sites (such as the White House and U.S. Capitol) extending beyond the historic city. These streets retain the formal, baroque qualities of their original design. The diagonal avenues visually connect public spaces, parks, monuments, and important buildings.

Outside the L'Enfant City, these streets and diagonal avenues have varying characteristics. However, many are framed by concentrated activity and higher densities than the local street networks that occur in the interstitial spaces between the avenues.

Capital Gateway These designated gateways announce entry into the capital city. They are entry points where elements of the monumental core are visible. For example, the Arlington Memorial Bridge has symbolic significance and provides a formal processional entry into Washington, DC.

Gateways Define the city's edge or major entries into the city.

Major Axial Streets These streets extend along the primary north-south and east-west cross axes established within the L'Enfant Plan leading to the U.S. Capitol and White House.

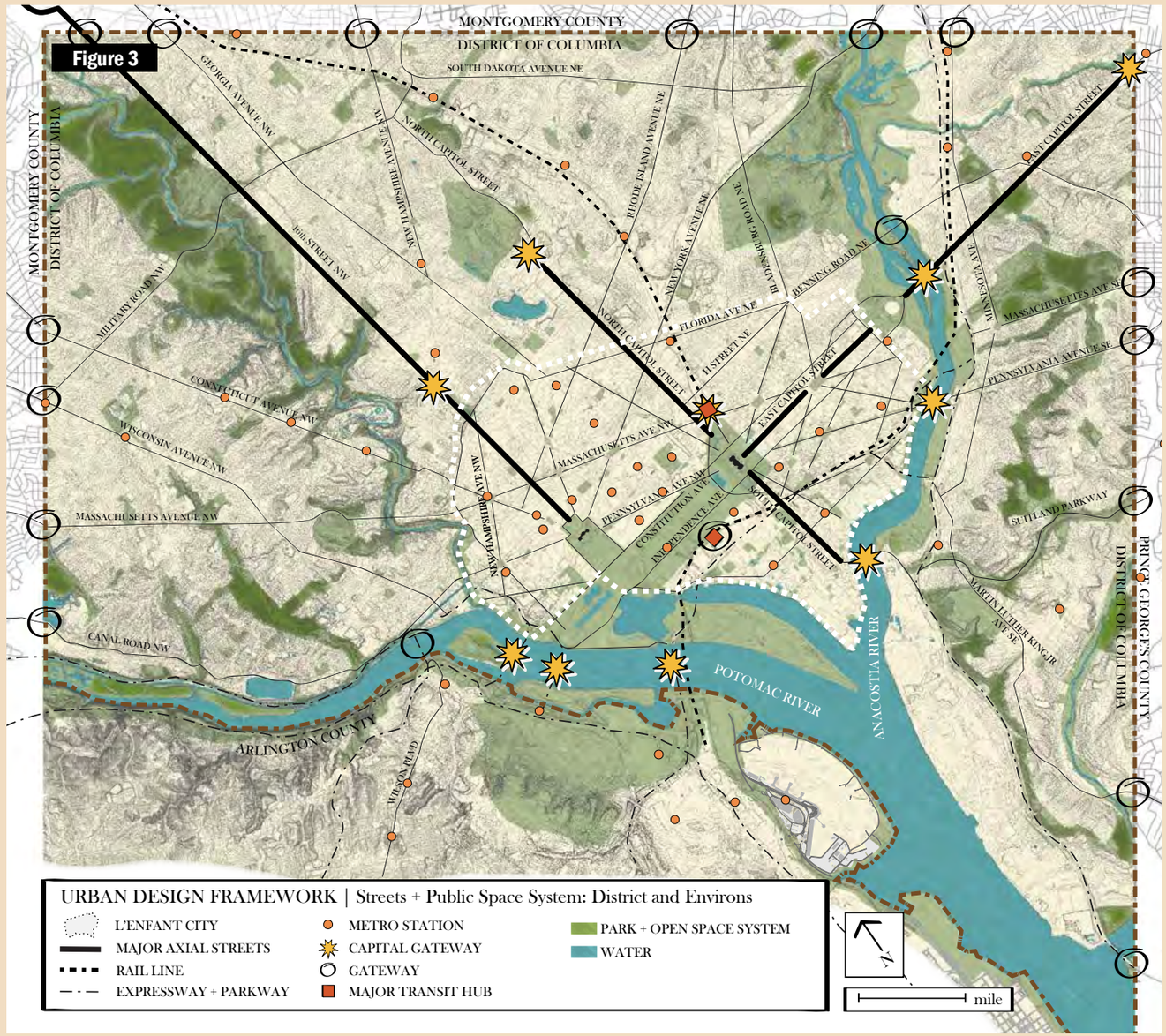
Expressways and Parkways The city's expressways serve a primary purpose of moving people through the city. The city's parkways are sited along elevated quays and afford commuters sweeping views of the city and surrounding area from a variety of vantage points.

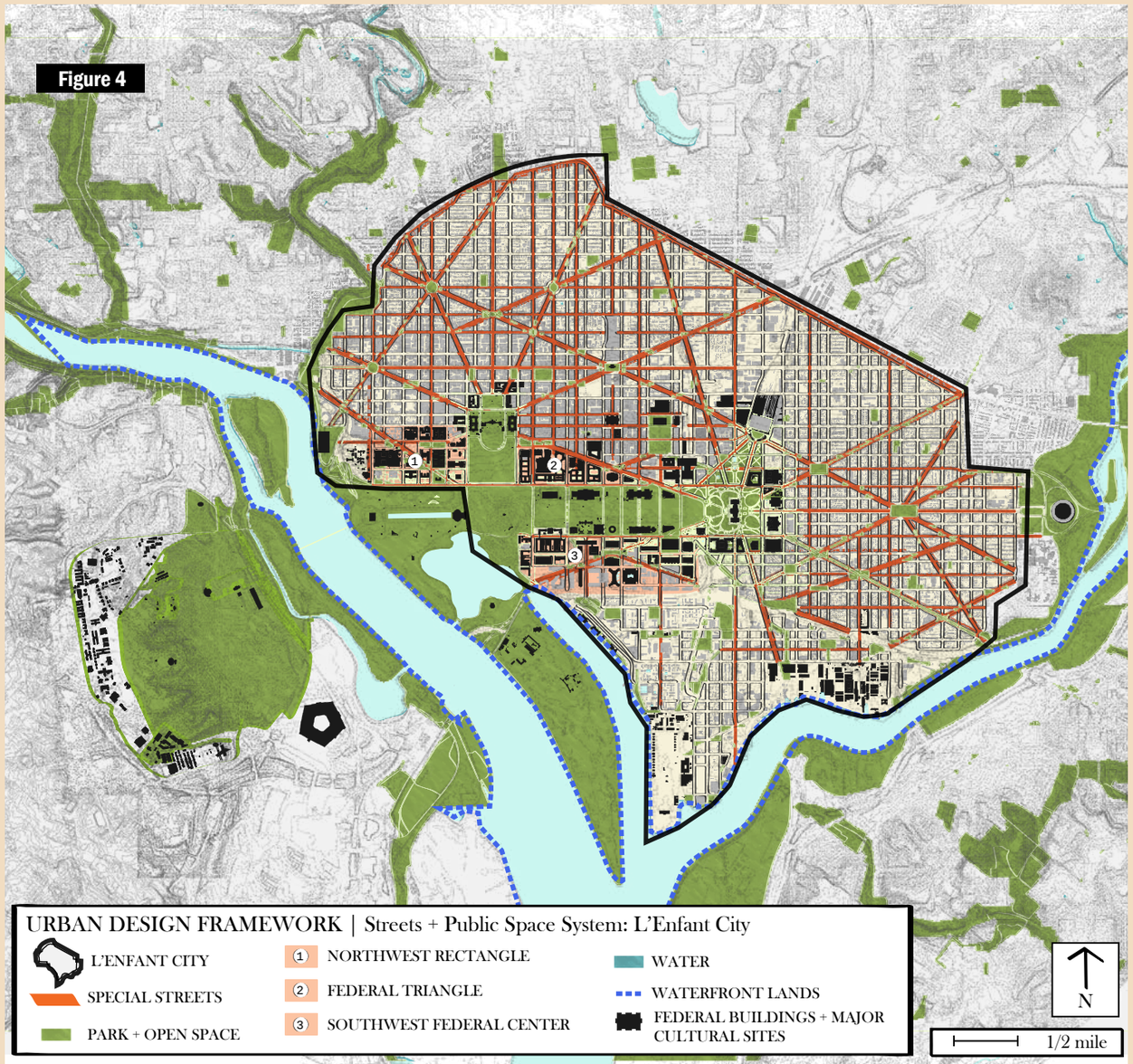
Major Transit Hubs and Metro Stations Washington's Metrorail system is an important piece of transportation infrastructure that shapes and connects the city and region. Many parts of the system exist underground and aren't visible with the exception of station entrances.

Policy Guide

For policies relating to the streets and public space system please see:

- B.1 Capital City Character: General Urban Design Policies
- B.3 The L'Enfant City and the Public Realm





Streets + Public Space System: L'Enfant City

The visually coherent system of streets and public spaces within the L'Enfant City retain the formal, baroque qualities with which they were originally designed. The diagonal avenues visually connect public spaces and buildings, parks, monuments, and important civic buildings. The significant vistas shown on the map include all of the views documented as part of the NRHP registration for the L'Enfant Plan.[8] There are several additional vistas added outside of those included in the NRHP nomination. For more detailed information on significant vistas please refer to page 32-33 of the Technical Addendum.

The area with the greatest concentration of federal properties and resources surrounds the National Mall and is known as the monumental core. Many of these facilities were built at a similar grand scale as those located on the Mall. These concentrated federal areas, as well as the edges that bound them, present opportunities to improve physical and visual connections and create more engaging and lively spaces.

NCPC undertakes long range planning efforts that focus on specific areas within the monumental core, including the Southwest Federal Center, the Federal Triangle, and the Northwest Rectangle. The *Monumental Core Framework Plan*[9] (2009) established planning goals to strengthen linkages between important places, reinforce national symbols, and realize place-making goals. The *SW Ecodistrict Plan*[10] (2013) proposed a transformation of the Southwest Federal Center between 3rd and 12th Streets, SW into a more dynamic center with a greater mix of uses, higher densities, and more engaging public spaces. These plans provide more detailed guidance on streets and public spaces.

Policy Guide

For policies relating to the streets and public space system please see:

- B.1 Capital City Character: General Urban Design Policies
- B.3 The L'Enfant City and the Public Realm
- B.4 The Monumental Core
- B.5 Preeminent Viewsheds and View Corridors

Urban Patterns

Generally, there is a higher density, or an urban core, within the L'Enfant City. Many federal headquarters and facilities, as well as the city's main business district, are located here. Beyond the L'Enfant City there are concentrated dense corridors with a mix of uses surrounded by lower density residential areas.

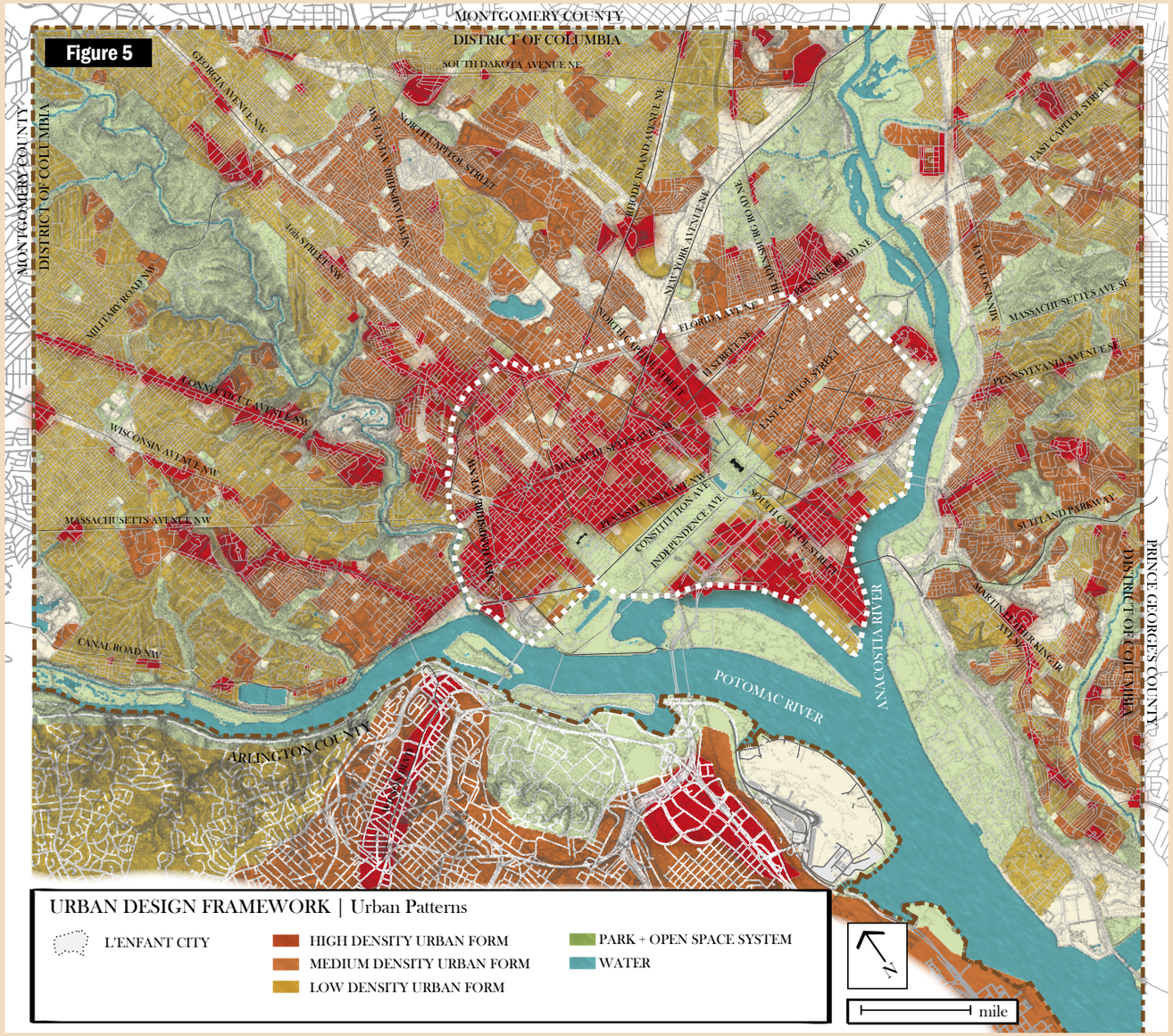
The relationship of building height to geography plays an important role in the sweeping panoramic views of Washington's skyline. The dense urban core is located within the topographic bowl at elevations close to sea level. The urban core is also where the greatest concentration of higher buildings (generally those exceeding 90 feet) are located. The surrounding highlands beyond the escarpment have buildings of lesser height.

There is also a network of dense urban neighborhood hubs throughout the NCR. Examples include Rosslyn in Arlington County and Bethesda in Montgomery County.

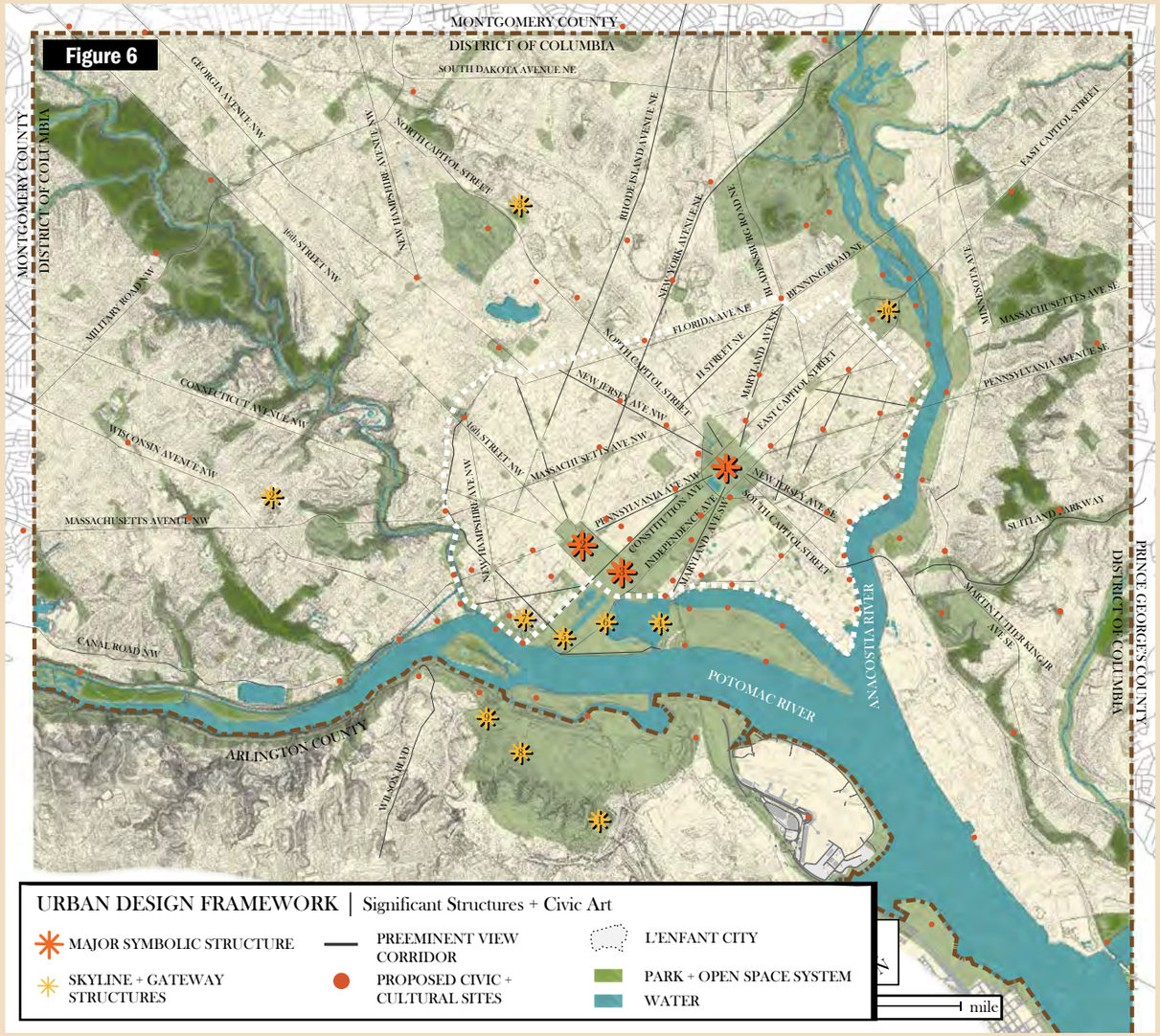
Policy Guide

For policies relating to urban patterns please see:

- B.3 The L'Enfant City and the Public Realm
- B.4 The Monumental Core
- B.5 Preeminent Viewsheds and View Corridors



Significant Structures + Civic Art



Major Symbolic Structures

These structures symbolize the nation's capital and define its image. The U.S. Capitol dome, the White House, and Washington Monument are the most prominent structures that delineate the skyline by creating a significant break in the consistent horizontal quality of the city's built form.

1. U.S. Capitol
2. White House
3. Washington Monument

Skyline + Gateway Structures

Structures that are visually prominent due to their spatial location. Some examples of` notable elements that define the skyline and others are adjacent to gateways into the city.

Skyline:

1. U.S. Air Force Memorial
2. Washington National Cathedral
3. Basilica of the National Shrine of the Immaculate Conception

Gateway:

4. Jefferson Memorial
5. Lincoln Memorial
6. Martin Luther King, Jr. Memorial
7. Kennedy Center
8. Arlington House
9. U.S. Marine Corps War Memorial
10. RFK Stadium site

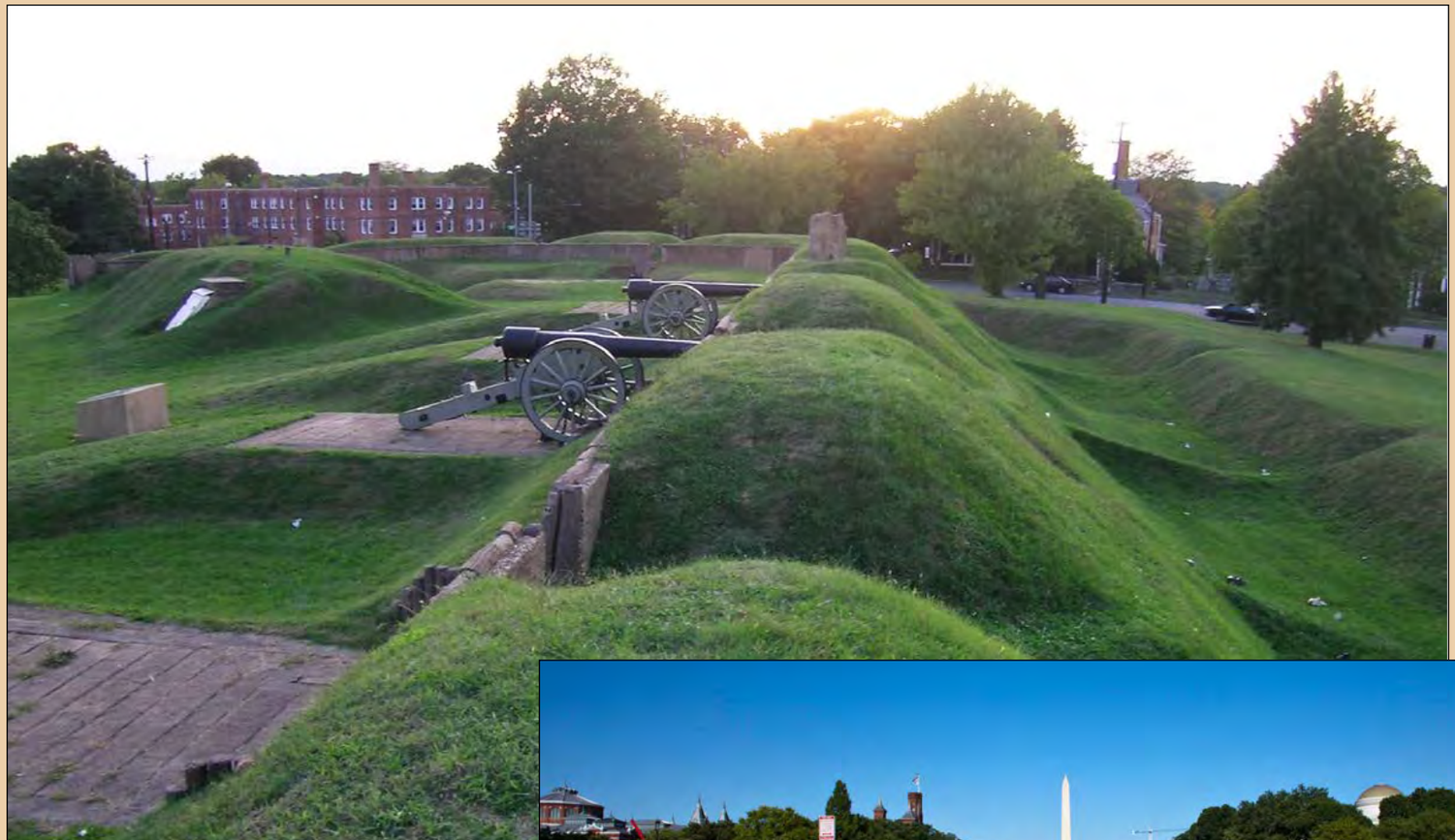
Proposed Civic + Cultural Sites

These sites reference those designated in NCPC's *Memorials and Museums Master Plan*[11] (2001). This plan, along with other NCPC long-range plans, envisions ways to extend and better integrate the language of the U.S. Capitol and monumental core into the contemporary city and surroundings. These plans established a principle of locating memorials and cultural sites with respect to topography and orientation to the original city plan.

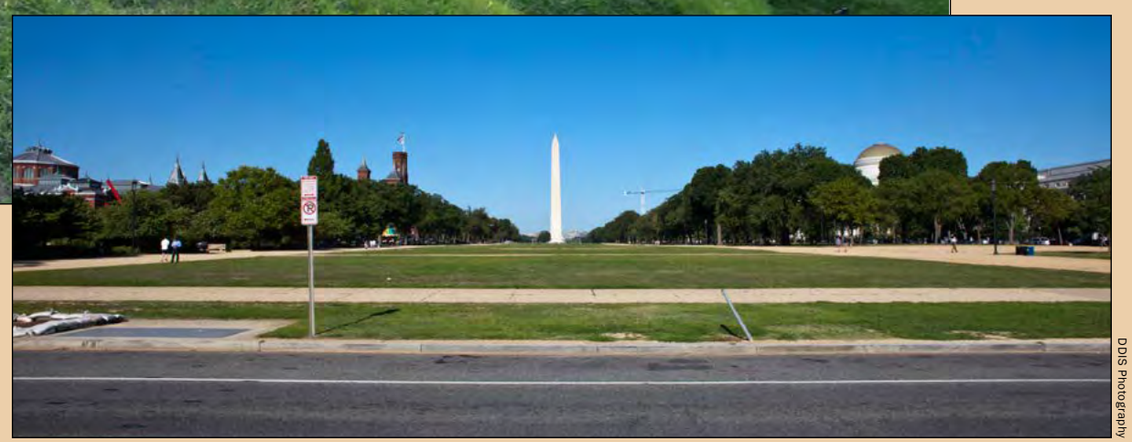
Policy Guide

For policies relating to significant structures, civic, art, and the symbolic skyline, please see:

- B.1 Capital City Character: General Urban Design Policies
- B.3 The L'Enfant City and the Public Realm
- B.4 The Monumental Core
- B.5 Preeminent Viewsheds and View Corridors



Fort Stevens Park



DDIS Photography

Westward views along the National Mall

A.2 Washington's Dynamic Character

A.2.1 Natural Identity

Washington has a strong, natural identity. Its given form is highly varied and has a rich diversity of ridges, stream valleys, waterways, and ecological systems. The natural blueprint was irretrievably lost in many cities, buried beneath buildings and infrastructure. However, the distinctive elements of natural identity persist today in Washington in various conditions. For example, many of the ridges remain fully perceptible and the major summits are emphasized by iconic structures, such as the Basilica of the Immaculate Conception and the Washington National Cathedral. Other natural elements, such as the city's once abundant, but often neglected, street trees are being replanted at greater rates after decades of decline.[12]

One of Washington's most distinctive characteristics is the link between its natural and man-made forms, and the manner by which together they uniquely express civic identity. The site chosen to establish the federal city was a relatively flat area at the confluence of the Potomac River and the Eastern Branch (now known as the Anacostia River). The site was surrounded by a series of low hills (the topographic bowl) which includes the Anacostia Hills, Arlington Ridge, and the Florida Avenue Escarpment (see Figure 1). The natural features of these rivers and the topographic bowl were all-important to L'Enfant's Plan because they gave a sense of place and a green backdrop to his vision for the new city. Today, some of these topographic sites remain under the control of the National Park Service and are protected from development.

The topographic bowl gives visual definition to the center of the L'Enfant City and two man-made focal points. The first of these is the U.S. Capitol. The central feature of L'Enfant's design was the elevated site selected for a People's House, on the brow of Jenkins Hill near the geographic center of the topographic bowl. The U.S. Capitol is symbolically connected to the Potomac River through sweeping views looking west down a "grand avenue bordered by gardens," today known as the National Mall. A less grand but still elevated site a little over a mile and a half northwest of the U.S. Capitol was set aside for the second focal point, the President's House, with its own sweeping views to the south, down the Potomac River towards Alexandria.

The view from the U.S. Capitol to the Lincoln Memorial and the western horizon form a major east-west axis. Views of the White House across the Ellipse to the Jefferson Memorial and the southern horizon form the major north-south axis. The National Register Nomination for the L'Enfant Plan identifies these two axes as primary vistas, and they cross at the Washington Monument. This characteristic integration of a monumental and urban framework with a natural topographic composition creates a unique urban design basis for the nation's capital.

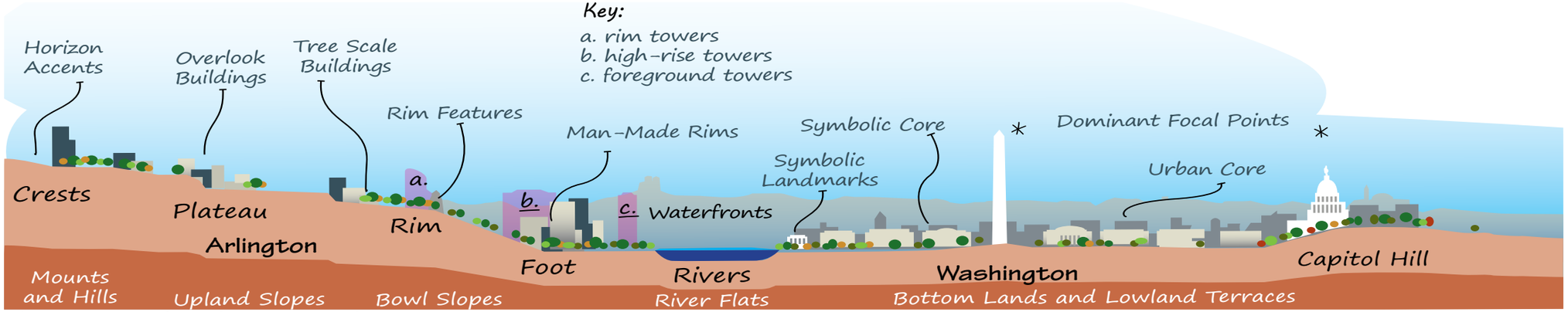
From a geographic perspective, the topographic bowl is the natural frame for the nation's capital. However, the political jurisdictions within the bowl are not the same and their community goals may differ. Therefore the topographic bowl and the primary vistas are no longer characterized as predominately green settings in some areas. This topographic bowl condition presents a singular challenge for envisioning the future design basis for the nation's capital, particularly as viewed from the primary vistas within the monumental core.

For example, Arlington Ridge is an important segment of the bowl, and parts of its natural character were preserved by the presence of Arlington Cemetery, Fort Meyer, and the U.S. Marine Corp Memorial. Parts of Rosslyn are characterized by a corporate office presence and high-rise residential development, creating an urban backdrop in place of a natural setting. Because the Height Act does not extend beyond the District, a conceptual understanding of building height in Arlington with respect to the primary vistas is defined through a resolution of the Arlington Board. This non-binding resolution acknowledges the importance of building height within Arlington with respect to the National Mall, particularly with the east-west axis.[13]

It is critical to engage local jurisdictions to address mutual interests in the overall urban design quality of the nation's capital and region, and to prepare strategies that holistically consider the quality of the primary vistas and their context as viewed from points in Washington, Virginia, and Maryland, as well as from the steps of the U.S. Capitol and the White House. As the surrounding natural and urban landscapes evolve it is important to maintain the monumental core's symbolic image.

Beyond the monumental core, the existing urban design framework integrates natural beauty and nature within the city fabric. The L'Enfant Plan created many circles, squares, and other places that can provide civic identity within neighborhoods. Each contributes to the city's natural identity and are important components of urban design. The natural setting was also a central concern of the McMillan Plan, as described in the Open Space Network map on page 7, which envisioned the parks and open space well beyond the L'Enfant Plan into the rest of the city.

Built Form and Natural Geography in the NCR



The east-west extent from Arlington, VA to Washington

A.2.2 Urban Identity

The NCR embodies a rich variety of built elements that shape its urban identity, from the low scale historic districts of Old Town Alexandria and Silver Spring, to the denser areas within downtown Washington and Montgomery and Arlington Counties. While the complete planning context for how the city and region developed is too broad and complex for the scope of this Urban Design Element, some of the most important aspects are found in the Formative Contributers section of the Technical Addendum on pages 1-7. For further reading, see *Worthy of the Nation*,[14] which includes a detailed history of more recent major planning influences, such as urban renewal (1960s), regionalism (1950s-present), and sustainability.

For purposes of the Federal Urban Design Element, there are four central and interrelated themes that shape policy issues and directions within the context of urban identity:

- City form and civic identity: the importance of the public realm in Washington
- The character of the monumental core
- City and symbol: downtown and the monumental core
- Beyond the monumental core: the federal role in city-building

City Form and Civic Identity: The Importance of the Public Realm in Washington

Plans for Washington sought to join nature into the urban fabric at every scale and link city form to civic identity. The national image is largely achieved through the design and function of the public realm and its relationship to important civic places. Washington's interconnected system of open spaces shapes the human experience of its built and natural features. These include both visual and physical connections that orient viewers to their surroundings, create visual cues to important places (immediately and at a distance), and move people throughout the entire city.

The *Plan of the City of Washington*, the Height Act, and the Public Parking Act of 1870 are major influences in the functional and visual quality of the public realm. Open space typologies include the spaces between buildings, the settings of federal buildings, and cultural institutions, plazas, and urban and natural park spaces. Decisions about how the public realm and streetscapes are programmed and designed influence how people experience the nation's capital and their perceptions about its character. Within this context, the foremost planning challenge is balancing security and accessibility. Security is a leading factor in decisions about how agencies locate, design, and program federal facilities and the setting around them. Integrating security elements with other urban design goals, such as design integrity, national image, and pedestrian experience, is also a priority.

One public realm feature that is unique to parts of Washington is the long-standing practice of hiding or diminishing utilitarian infrastructure. Examples include the ban on overhead streetcar and utility wires within the L'Enfant City and the 1:1 penthouse setback within the Height Act, which hides building mechanical equipment from street view. These public realm principles created an elegant and orderly quality to Washington's character that reinforces a sense of openness at the street-level and enhances the natural setting. Integrating these qualities into future decisions about modern transportation and utility infrastructure, which also occupy public space, remains an important challenge.



Stephen Voss

The special visual qualities and monumental forms of the capital city are translated even beneath the ground. The American Institute of Architects awarded its 2014 Twenty Five Year Award to the Washington Metrorail system. "Designed by Harry Weese, Fellow of the AIA with the matching ideals of 'Great Society' liberalism and Mid-Century Modernism, the Washington Metro gives monumental civic space to the humble task of public transit, gravitas fit for the nation's capital." Further, the American Institute of Architects describes the Washington Metropolitan Area Transit Authority's goal to provide a ridership experience "radically different from pre-WWII transit systems, an experience largely fulfilled by station design."

> "From the outset, Weese and the Washington Metropolitan Area Transit Authority knew exactly what they did not want: the New York City subway system. Metro was defined in total opposition to the most successful urban rail transit system in North America. Despite its status as an iconic set piece for the cultural capital of the nation, the New York subway is largely a haphazard assembly of rabbit warren tunnels dug out with an industrial utilitarianism that stops long before self-aware references to New York's heavy-industry past. Instead, Metro would be airy, spacious, and ennobling, and it would accomplish this through size and scale. As Weese explained in *The Great Society Subway*, 'Our whole thrust is to maximize the volume. It would use the formal language of monumental civic architecture, seen so often in Washington's federal buildings, and watch it seep into the earth, below ground, for the yeoman's task of public transit.'"[15]

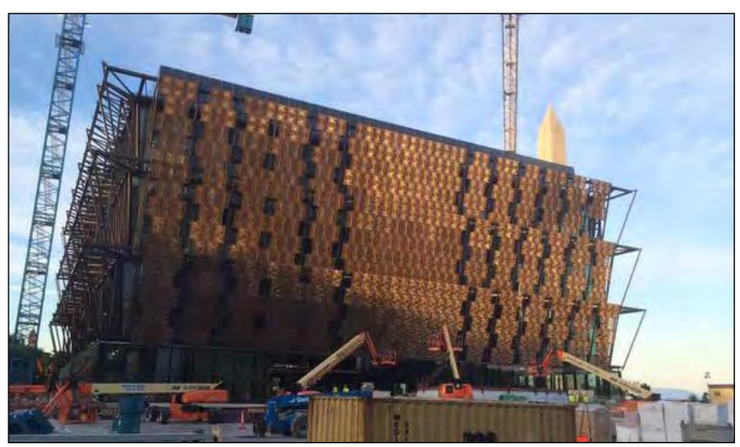
The Character of the Monumental Core

The spatial and symbolic center of the city is the monumental core, which includes the U.S. Capitol grounds, the White House, Arlington National Cemetery, the National Mall, Federal Triangle, and the surrounding government offices and civic, cultural, and symbolic structures. The monumental core is most closely linked to the distinctive image of the capital city and the functions of federal government. While the major landmarks and resources within the core are perceived, it does not have a rigid geographic or jurisdictional boundary and continues to evolve.

The success of the monumental core first rests on a strong vision for its future, and upon addressing and enhancing the complex relationships between the core and its surroundings. This includes both natural areas and some of the region's densest neighborhoods, including downtown Washington and parts of Arlington, Virginia. NCPC's *Monumental Core Framework Plan*, an extension of The Legacy Plan,[16] set forth a vision for the core.

This vision continues to be refined. A first impression of this area may be one of distinctive volume, including its gracious building forms and settings, its formal influences, and the predominance of some of the most significant national memorials, including the Washington Monument, Lincoln Memorial, and the Vietnam Veterans Memorial. Many of the city and nation's most architecturally significant federal and cultural buildings are also located within the monumental core. Although the core was historically characterized by neoclassical influences and architecture, new projects enrich the city's architectural quality. Examples include the National Museum of the American Indian, the U.S. Institute for Peace, and the National Museum of African American History and Culture.

Although the monumental core is envisioned as a composition of spaces, parts are disrupted by physical barriers. Residents and millions of annual visitors experience these barriers on several levels. First, on a site specific level, security elements such as bollards disrupt pedestrian circulation and access and reduce people's comfort. Given the importance of the public realm in the city's original plans and identity as a capital, planners must continue to identify solutions that protect federal buildings, employees, and the core's design integrity.



Smithsonian Institution

National Museum of African American History and Culture

Second, on a larger scale, major transportation infrastructure cuts across whole neighborhoods in and around the core. These large disruptions in the urban fabric are most prevalent in Southwest Washington which is shaped by urban renewal plans from the 1950s. Some large federal buildings occupy entire blocks and retail may be tucked within indoor malls, which fosters a bleak pedestrian experience. Addressing the unanticipated consequences of these past interventions is a core theme of the *Monumental Core Framework Plan* and continues to be an important priority. The planning community should continue to refine and implement a vision that realizes the monumental core's potential, including steps to address transportation barriers and create a more accessible and welcoming place.

City and Symbol: Downtown and the Monumental Core

The relationship between the monumental core and the surrounding urban environment is an important condition with implications for urban design policy. Creating a place for both government and commerce is integral to the *Plan of the City of Washington*. While the role of nature in national identity is explicitly documented, urban identity has evolved over time.

Today, the downtown areas of Washington and Arlington are growing stronger, more diverse, and more vibrant; and there are many economic and community benefits of this growth. Long-range plans and smaller focused studies have established a vision for improving accessibility and the public realm within these urban areas. For example, the District of Columbia Office of Planning's *Center City Action Agenda*[17] (2008) established a place-making initiative for the urban neighborhoods that surround the monumental core.The form that new density should take—whether at a human scale or more grand, whether concentrated or dispersed—is a key question for each community and has implications for national interests.

Several examples of contemporary urban design principles related to the physical relationship between the monumental core and the surrounding urban areas are discussed below. These principles guided policy development in subsequent sections of this element.

Create placemaking strategies to strengthen the public realm and user experience in the monumental core.

In addition to the corrective measures necessary to re-knit the monumental core's urban fabric, an important question is what roles are the area's major spaces expected to play? Many parts of the core are shuttered at night and would benefit from strategies to enhance their public spaces and create more active programming—a goal also shared for downtown Washington. The core's design structure and monumentality has the strength to support a wide variety of place-making activities without detracting from its role as a national showplace for visitors and the seat of government. Indeed, the success of the monumental core requires an intermixing of adaptable programming at a range of scales with those elements that are important for the capital city's image.

Integrate federal buildings into the surrounding urban fabric.

One important policy question for federal offices in the monumental core, downtown, and suburban locations is how buildings physically address the streets and public spaces in front of them, in terms of both design and programming. For example, a criticism of the FBI building on Pennsylvania Avenue is that it does not support important principles for a strong downtown. In particular, it is unwelcoming to pedestrians and breaks the "retail wall" along E Street. There are, however, other examples where federal buildings have successfully engaged their surroundings, including the headquarters buildings for the U.S. General Services Administration and the U.S. Department of Transportation.

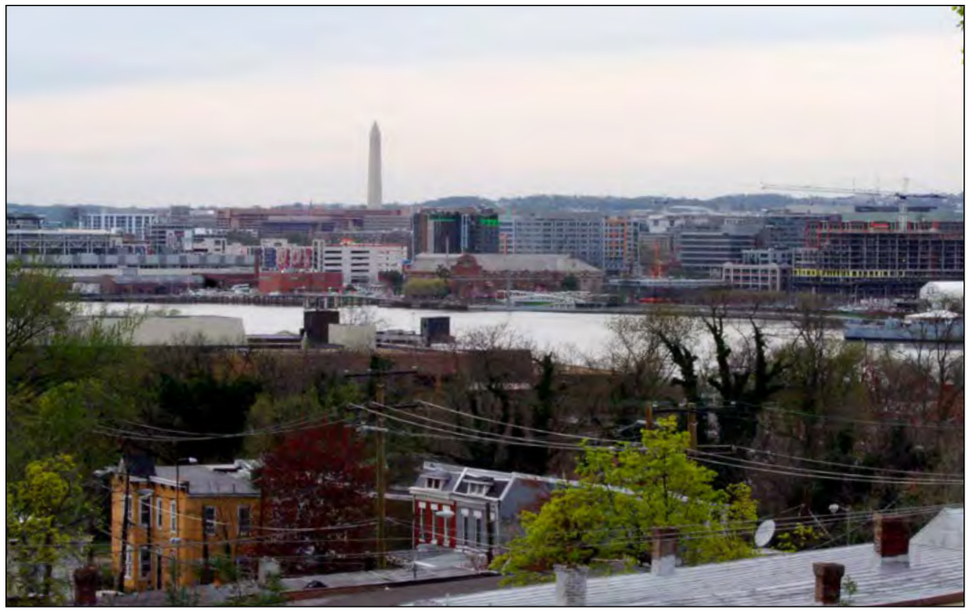
Protect the monumental core from impacts of commercial digital signage.

Digital signage, including lighting, is another example of a policy issue associated with balancing the commercial and civic presence in and around the monumental core. In general, some cities have used lighting to activate public areas and create a more dynamic visitor experience. However, depending on where these programs are situated and how they are implemented, digital lighting may negatively alter the monumental core's street atmosphere and skyline views of iconic national resources. This prompts an important discussion about balancing efforts to enhance the city's commercial and retail presence while also protecting the monumental core's night time image, which emphasizes memorials and major civic structures.

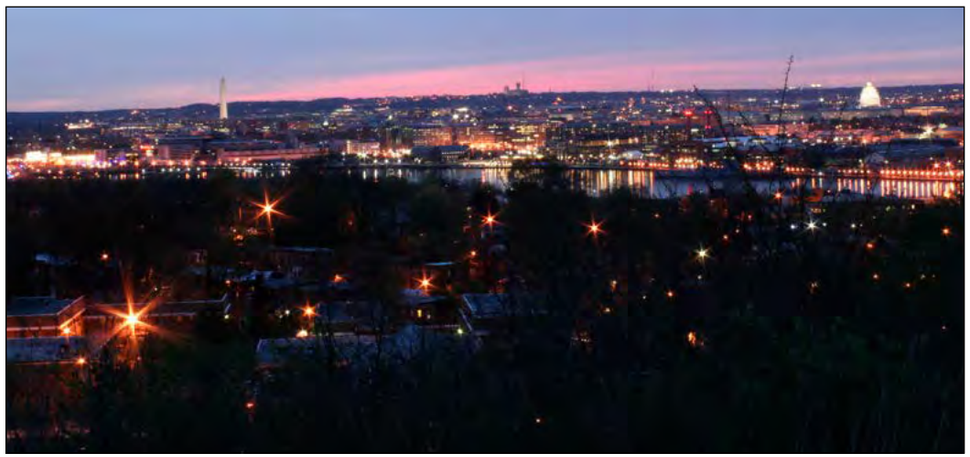
Develop transition strategies between densities and land uses to protect national resources.

A final policy issue relates to physical transitions between lower and higher density areas, particularly with respect to topography. A good example where transitions are important is North Capitol Street, where the street gains elevation as it moves north toward the escarpment. The street is framed by buildings of greater height and higher density on the east side in the NoMa commercial district. The west side remains largely residential.

Another important transition is the scenic and urban backdrop, as viewed from the primary east-west vista towards Arlington, Virginia. Washington's elegant urban pattern is situated with respect to topography. To reinforce this character, policies should identify transition and integration strategies at every scale between the traditional parts of the monumental core and the surrounding downtown and scenic areas. If Washington is historically a landscape image, what is the conceptual understanding of vertical elements, such as buildings or sculpture, within the city's design framework?



View from Cedar Hill at the Frederick Douglass National Historic Site, located beyond the monumental core.



Washington's skyline hierarchy is not only a daytime condition but also a nighttime condition. Lighting and signage also follow suit with this hierarchy. View from Our Lady of Perpetual Help Church, located in Southeast Washington.

Beyond the Monumental Core: The Federal Government and City-Building

A final theme is the role of the federal government in city-building. Establishing a seat for federal functions was clearly an important part of Washington's early urban identity. Yet, what role does the federal government play today in city-building? How does it shape the region's urban identity? While the *Plan of the City of Washington* created a holistic approach to establishing federal buildings and grounds that emphasized the public realm, large scale federal planning efforts, particularly in the 1950s and 1960s, were generally less successful.

The *Plan of the City of Washington* connected federal buildings to the city around them on a large scale, reinforcing a sense of place with interrelated implications for both federal offices and the city. Today, many new federal buildings are constructed within campus settings. Although the context for new projects within the region is site specific, the relationship between federal buildings and their immediate surroundings remains important.

The legacy of the federal government's contribution to urban design quality in the region is one of successes and failures. Planners today draw lessons from the past when engaged in urban design and city-building. Case studies, such as the relationship between the Bureau of Alcohol, Tobacco, Firearms and Explosives Headquarters and the surrounding NoMa neighborhood, illustrate the potential for federal agencies to positively participate in the city-building process.

A.2.3 Symbolic Identity

Washington's iconic cityscape is distinguished through the close relationship between its form and the functional and visual symbols of national civic life—whether a public building, ceremonial avenue, museum, memorial, or national park. Washington's symbolic identity expresses itself in a number of ways:

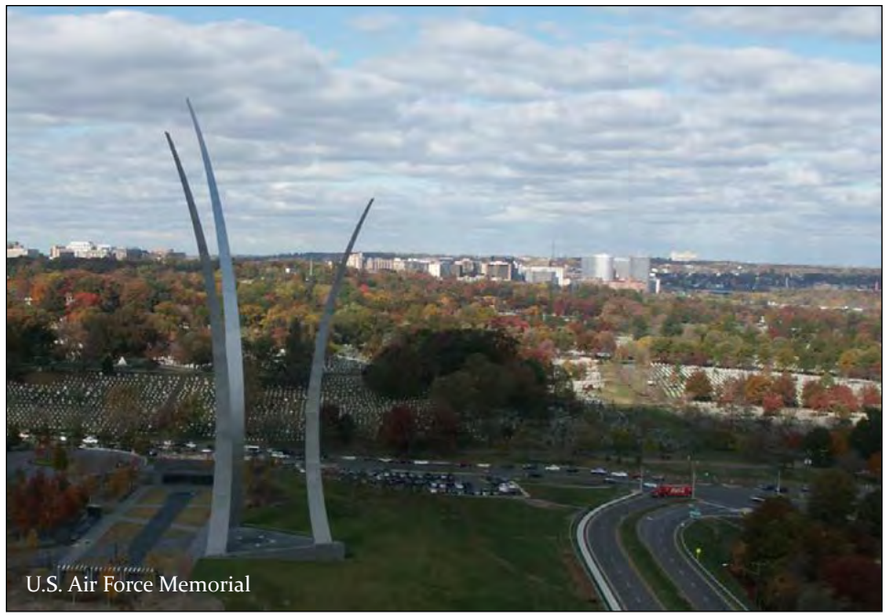
- A visual order of importance (hierarchy) that emphasizes symbols and structures, particularly the U.S. Capitol, White House, Washington Monument, and places along the National Mall from both composite skyline views and linear views along particular streets.
- The character of the monumental core, including the National Mall.
- Memorials, museums, and cultural resources that represent narratives of national significance.
- Special ceremonies that relate to symbolic and core governmental functions of the nation's capital.

For more detailed information see the Significant Structures + Civic Art map on page 11.



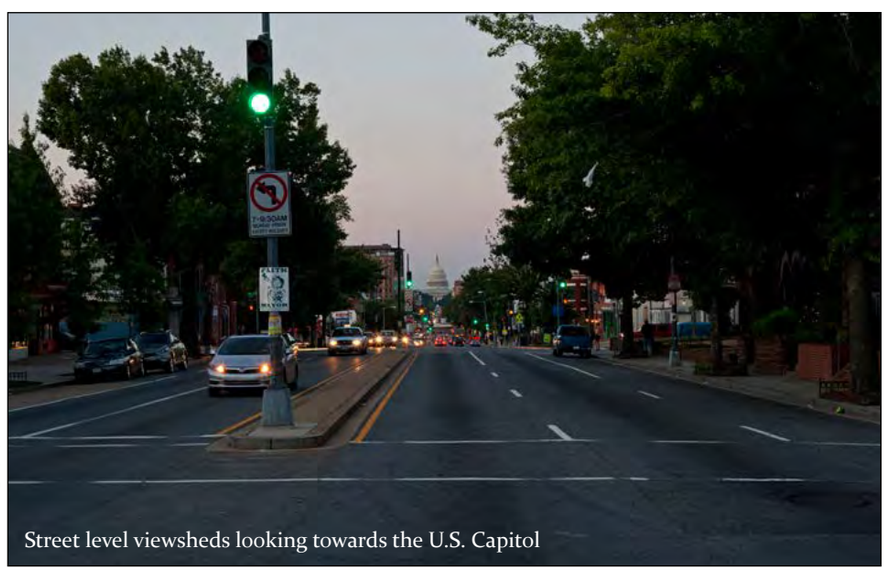
Eastern view along the National Mall from the Lincoln Memorial

DDIS Photography



Steven Kent Henry

U.S. Air Force Memorial



DDIS Photography

Street level viewsheds looking towards the U.S. Capitol

Major resources that contribute to Washington's symbolic and civic image include:

The Symbolic Skyline

As stated in *Worthy of the Nation*, L'Enfant urged "embracing in one view the whole extent from the Eastern Branch to Georgetown, and from the banks of the Potomac to the mountains [the hills surrounding the city]." One of the most important contributors to Washington's image is its unmistakable and symbolic skyline. For more than a century the federal Height Act has played a central role in shaping the form of the skyline, particularly within the boundaries of the L'Enfant City and the topographic bowl.

As viewed from the many overlooks within Washington, or from across the Potomac River in Virginia, the long views of Washington reveal a composite skyline punctuated not by commercial skyscrapers but by architectural embellishments and civic symbols. The Washington Monument, U.S. Capitol, Basilica of the Shrine of the Immaculate Conception, Old Post Office, U.S. Air Force Memorial, and Washington National Cathedral are some of the most distinctive skyline structures. From closer vantage points, the low scale of buildings and spacious settings around other landmarks, such as the White House, Lincoln Memorial, Jefferson Memorial, and Smithsonian museums, creates a fitting character for a capital city set in natural beauty. This park-like quality distinguishes Washington from other major metropolitan cities, though not to the extent it once did due to tree loss.

Washington's skyline and views have evolved over time. However, the urban design principles that give preeminence to its most important national symbols, and particular viewsheds to them, has generally been retained. These principles were reaffirmed through 2013's Height Master Plan.[18] This plan, requested by the U.S. House Committee on Oversight and Government Reform, included detailed technical analysis and extensive public input that considered the extent to which the Height Act continues to serve local and national interests.

Viewsheds

The city's street-level views and vistas are created by the location and extent of its streets where they intersect with important public spaces or natural areas. These elements help define the pedestrian experience in the nation's capital and generally prioritize natural and symbolic elements within a viewer's line of sight. These features are particularly distinctive within the original L'Enfant City, although some street-level linear viewsheds extend well beyond the topographic bowl and at elevated points which give the viewer a wider perspective to enjoy the city.

Commemorative Works

The memorial, another hallmark of Washington's symbolic character, is both a ceremonial and permanent fixture. Memorials are often located in national parks among Washington's high-profile structures, viewsheds, and promontories. They may inspire and broaden civic engagement; enhance their surroundings; and introduce cultural resources to parks. One of the hallmarks of a successful public realm is adaptability; thus, it is important to sensitively locate and design permanent memorials with respect to urban design goals and other open space uses. Since the 1980s, some of the city's memorial proposals are moving away from single, ornamental objects to large landscape solutions, with multiple commemorative elements. This trend prompts an important question—with implications for planning and design—how to balance a need for a variety of public space uses that typify an urban park system with the sacred, commemorative purposes of a memorial. Policies related to memorials are located in the Visitors & Commemoration Element.

It is important to create a sense of arrival to the nation's capital through prominent gateways, such as bridges, and the design and programming of federal reservations and special streets.



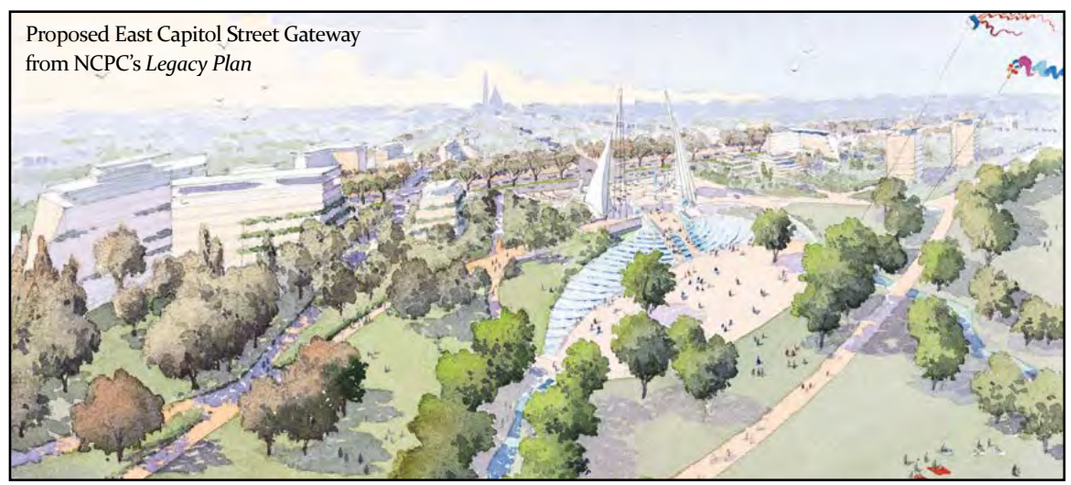
North Capitol Street

DDIS Photography



Chevy Chase Circle

DDIS Photography



Proposed East Capitol Street Gateway from NCPC's *Legacy Plan*

Michael McCann



Catalina Calachan



Ken Lund

Photo Comparison: View of the U.S. Capitol with unobstructed background compared to Philadelphia's Independence Hall

Section B: Policies Related to the Form and Character of the Nation's Capital

B.1 Capital City Character: General Urban Design Policies

As the capital city, Washington represents the country and embodies many of its civic identity aspirations. Washington's image is experienced by residents and visitors, and transmitted around the nation and world by media, arts and literature, photographs—even through currency. This resonating and powerful image is formed in part by individual buildings, park lands, and monuments, and in part by the city's overall urban design framework, which was explicitly designed to create a setting that reinforces the nation's democratic ideals.

NCPC is committed to enhancing the urban design quality of the nation's capital and protecting the integrity of the city's essential urban design framework. This especially includes the interconnected system of streets, reservations, and public spaces created by the *Plan of the City of Washington*. Two important, related principles must also be rooted in the vision for the nation's capital: first, the contributions of each new generation have an important place in the city's identity, and second, the federal government should support creativity and innovation in design and planning. While the Urban Design Element will not include guidance regarding architectural style or fine-grained design detail, a principle that Washington is a vital and evolving place, with an urban design framework that can accommodate both the old and the new, is fundamental to the image of America's capital.

The federal government should:

UD.B.1.1 Express the dignity befitting the national capital's image. Federal development in the city and region should adhere to high aesthetic standards already established by the planning and design legacy of the nation's capital. This legacy encompasses both the old and the new. The capital's rich architectural heritage is continually augmented by the design contributions of each new generation.

UD.B.1.2 Create a sense of arrival to the nation's capital through prominent gateways, such as bridges, and the design and programming of federal reservations and special streets as described within this element. See Figure 4.

1. Enhance gateway routes. Distinct and memorable landscaping, public art, building sculpting and/or architectural treatments can reinforce the experience of arrival.

2. Create gateways for important settings within the monumental core that provide a sense of entry with visual cues and transition points from one place to another.

UD.B.1.3 Preserve Washington's picturesque, horizontal character, and reinforce the Height Act.

UD.B.1.4 Maintain the skyline formed by the region's natural features, particularly the topographic bowl and its symbolic character.

1. Visually reinforce the preeminence of the U.S. Capitol, White House, Washington Monument, and other major nationally significant resources by protecting the visual frame around them. Carefully examine the use of vertical elements within the setting of major national resources.

2. Protect the settings of major skyline elements from visual intrusions such as antennas, water towers and rooftop equipment, or other constructed elements.

UD.B.1.5 Utilize building, street, and exterior lighting that respects the hierarchy of memorials, monuments, and important civic buildings and spaces in the nation's capital, with the U.S. Capitol and Washington Monument the most prominent features in the nighttime skyline.

1. Digital and motion signage, illuminated billboards, and/or other lighting should not detract from the setting of the National Mall, capital gateway views of the monumental core, or skyline views to important symbols and civic buildings, particularly in and around the monumental core. Any proposed illuminated signage that could impact the monumental core or other major park spaces and natural areas including waterfronts should be extensively modeled and analyzed for potential impacts prior to implementation.

UD.B.1.6 Enhance physical and symbolic connections that reinforce the city's spatial order.

UD.B.1.7 Use the city's physical framework of major axial views, vistas, streets, termini, and natural elements to establish new places and create symbolic points of reference and distinctive settings for new museums, commemorative works, and civic spaces.

UD.B.1.8 Create welcoming and vibrant spaces that enhance the user experience and foster civic and local uses. Design the visual and functional qualities of the public realm to reinforce Washington's national image, as well as its everyday experiences.



Washington's iconic nighttime sky

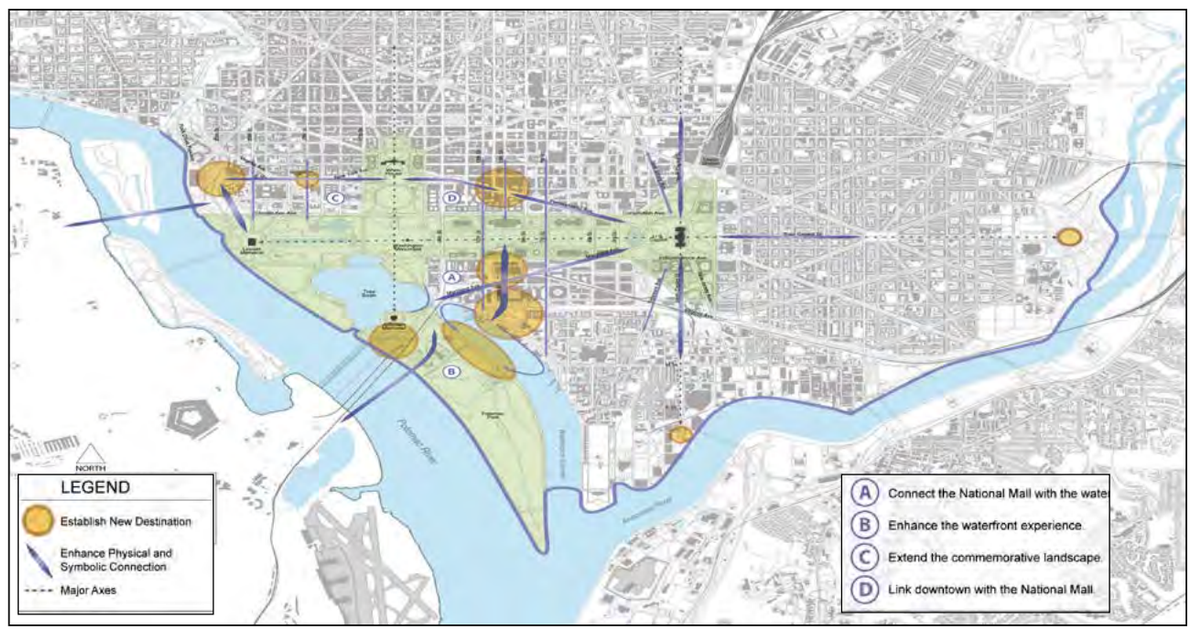
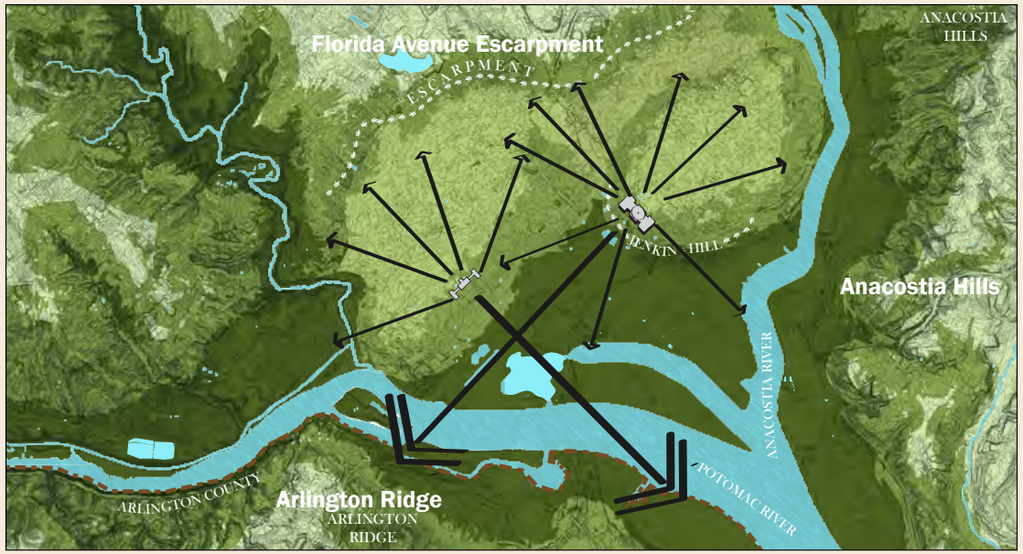


Diagram from the *Monumental Core Framework Plan*



The three key hillsides that comprise the topographic bowl include:

The Anacostia Hills (Washington, DC) form the eastern rim. Much of this area is characterized by a backdrop of green against the rivers. Development in this area is largely comprised of low-rise development and neighborhoods. There are significant open spaces established along the elevated ridges including several of the Civil War Defenses of Washington.

The Arlington Ridge (Virginia) form the western rim and comprise a direct spatial relationship with the National Mall. This area is characterized by clustered downtown development of varying heights (upwards of 300 feet) in Rosslyn which creates an urban backdrop to the Lincoln Memorial. This urban wall is in contrast with the rest of the views from the National Mall, particularly when compared to the green backdrops and consistent, low-lying urban forms found within the other hillsides. Other parts of Arlington have retained a green backdrop, particularly near Arlington National Cemetery.

The Florida Avenue Escarpment (Washington, DC) forms the northern ring of hills. Its central terrain slopes steeply and forms a broad overlooking terrace parallel to the L'Enfant Plan's boundary. Its western features, separated by the rift of Rock Creek Valley, are the Georgetown Heights, which rise up from the river and are some of the highest peaks in the metropolitan area. To the east, the escarpment turns northeasterly away from Florida Avenue and terminates near the National Arboretum. This terrain features the most uniformly urbanized portion of the topographic bowl. However, much of this area has the built-up character of a hill town, with low density neighborhoods and open spaces at strategic points, such as Meridian Hill Park (due north of the White House).

B.2 Natural Setting: The Topographic Bowl, Waterways, and their Extents

The importance of the natural setting as an abiding and foundational component of the capital city's form cannot be emphasized enough. *The Plan of the City of Washington* addresses the city's character through natural elements in a variety of ways, such as creating parks and green settings that surround important federal buildings and civic spaces. The plan utilizes topography in both dramatic and subtle ways to convey the importance of a select few civic structures. While these characteristics are most readily apparent within the L'Enfant City and the topographic bowl, national parkland extends into the city and region, including Rock Creek Park in Washington, Mount Vernon in Virginia, and Great Falls in Maryland. In addition to the region's waterways and hillsides, these parks create a rich and varied setting of natural beauty that contributes to the urban design character and sense of place for the nation's capital.

A key challenge for addressing the historic and future design framework for the nation's capital is the character of the topographic bowl and river settings. The lower elevations or basin areas of the topographic bowl are a central consideration. There are excellent wide and distant views up and across the Potomac River that reveal the natural extent of the local topography and reinforce the monumental core's horizontal character. Because of the broad and open design for the river and lowlands at these points, the encircling slopes of the topographic bowl are particularly conspicuous. From an urban design perspective, these hillsides perform two important functions: they are backgrounds for notable views and vistas in or around the L'Enfant City, and their slopes provide public outlooks for appreciating the capital.

The linear Anacostia Park hugs the south and eastern shoreline of the Anacostia River. The green setting of the prominent Anacostia Hills, which are part of the topographic ridge, are also visible in the background.



The federal government should:

UD.B.2.1 Preserve the natural setting of the L'Enfant City. In particular:

1. Protect the natural green aspect of federal lands that are part of the topographic bowl, including, but not limited to, National Park Service lands along Arlington Ridge and the Anacostia Hills, Arlington National Cemetery, and St. Elizabeths West Campus.

2. Support the following policies related to natural topography, consistent with the District Elements of the Comprehensive Plan:

   a. Maintain the prominence of the topographic bowl formed by the lowland and rim features of the L'Enfant City. This should include preserving the green setting of Anacostia Hills and maintaining the visual prominence of the Florida Avenue Escarpment.

   b. Respect and perpetuate the natural features of the city's landscape. In low-density, wooded, or hilly areas, new construction should preserve natural features, rather than alter them to accommodate development. Density in such areas should be provided as needed to protect natural features such as streams and wetlands. Where appropriate, clustering of development should be considered as a way to protect natural resources.

   c. Protect prominent ridgelines so as to maintain and enhance the District's physical image and horizontal character.

UD.B.2.2 Encourage local jurisdictions and federal agencies to reinforce the capital's natural frame.

1. Retain and add trees on hillsides.

2. Scale and strategically locate buildings in relationship to the topography to reinforce important views to and from sloping sites. Protect views outward from the L'Enfant City and views inward from vantage points along the rim of the topographic bowl from inappropriate intrusions. Preserve open space and allow for public use of

Washington's Waterfront

The city's waterfront is an important piece of the public realm providing a place for public enjoyment, recreation, commemoration, and environmental stewardship. The Anacostia and Potomac Rivers define natural and urban edges of the city and offer panoramic views and settings of extraordinary beauty unique. The waterfront should be accessible to the public, with a mix of quiet and reflective spaces and others actively developed to support programming and urban activities. Much of the shoreline is publicly owned, with significant portions of the waterfront framed by open space parklands under the jurisdiction of the National Park Service, including heavily used parks and trails such as Potomac Heritage Trail, Mount Vernon Trail, and the Chesapeake and Ohio Canal towpath.

On-going planning work developed by both federal and local agencies continues to enhance this extraordinary natural feature. NCPC's *Legacy Plan* envisioned Washington's waterfront along the Potomac and Anacostia Rivers as a national showcase of urban vitality and sensitive design. The plan proposed restoring the city's historic connections to the river and developing a continuous band of open space from Georgetown to the National Arboretum. The Anacostia Waterfront Initiative,[19] a public-private partnership under the leadership of the District Department of Transportation, further developed this vision with planned projects such as the Anacostia Riverwalk and the 11th Street Bridge Park.



DDIS Photography

Protecting Washington's Natural Framework

The District Elements of the Comprehensive Plan guide the vision for the densities within the topographic bowl along the Florida Avenue escarpment and Anacostia Hills. They include important guidance about protecting the natural frame of the L'Enfant City. With the exception of the NoMa neighborhood north of Union Station, these areas tend to be characterized by lower density development than found downtown. The federal government should continue to engage the District of Columbia and Arlington County governments to prepare a plan for enhancing the design framework of the nation's capital, including urban design strategies that take into account the natural setting and the visual quality of the primary views.

One of the most important contributors to the urban design quality of the city and region are their trees. Washington was planned to support a lush tree canopy, with green open spaces and tree-lined boulevards. According to Casey Trees, a non-profit devoted to restoring Washington's tree canopy, "some consider Washington the birthplace of arboriculture due to the tens of thousands of trees planted in the city in the 1800s, which earned the nickname the City of Tree's."[20] Sadly, the loss of the city's once abundant street trees is well documented. Washington lost an estimated 64 percent of its urban forest cover between 1973 and 1997 due to disease, development, and natural attrition.[21] The District is implementing plans to replenish the city's tree cover, and an important goal of the Urban Design Element is to reinforce these local, community, and nonprofit efforts.[22]

these views.

UD.B.2.3 Recognize the contribution of Rock Creek Park, the Anacostia Parks, and the Civil War Defenses of Washington in reinforcing the natural setting and character of the nation's capital. In particular:

1. Complete multi-purpose trails connecting the Civil War Defenses of Washington, and those within the parks along the Anacostia and Potomac Rivers.
2. Improve the transition between the edges of these large, natural parks and the neighborhoods that abut them to be sensitive to the natural setting.
3. Encourage tree planting and natural habitat restoration to meet goals described in the Federal Environment Element.

UD.B.2.4 Maintain and enhance the characteristics and natural settings of the National Park Service parks and parkways. In particular:

1. Maintain parkways as scenic landscape corridors and protect their historic character.
2. Encourage local jurisdictions to minimize—through planning, regulation, and thoughtful design—the impact of development visible from parkways.
3. Require actions to minimize and mitigate negative impacts to maintain parkway characteristics where transportation system impacts are unavoidable.

UD.B.2.5 Support public access to, and along, regional waterfronts along the Potomac River, Anacostia River, and other tributaries. In particular, work with federal and local governments as necessary to:

1. Avoid creating physical barriers to the waterfront.
2. Design and locate bridges to minimally affect local riverine habitat, waterways, shorelines, and valleys, as described within the Federal Environment Element.
3. Improve way-finding, signage, and pedestrian amenities on streets that lead to parks.
4. Preserve views from public lands to regional waterfronts, wherever possible.

UD.B.2.6 Encourage the further development of the urban tree canopy to frame street views, reinforce the human scale on broad streets, and provide critical shade and beauty.

B.3 The L'Enfant City and the Public Realm

The urban design of Washington's public realm is inextricably linked to its emblematic image and character, and perhaps most importantly, how it is experienced. The public realm includes exterior places, linkages, and built form elements that are physically and/or visually accessible. These elements include streets, sidewalks, bicycle trails, bridges, plazas, squares, transportation hubs, gateways, parks, waterfronts, natural features, view corridors, landmarks, and building yards. The scale, form, and character of public realm elements signify the relative significance of a space within the city and define the human experience. For federal facilities, it is important to consider the accessibility of transit, bicycle, and pedestrian modes with urban design including American with Disabilities Act (ADA) and Architectural Barriers Act (ABA) requirements.

The composition of buildings, reservations, streets, and vistas that collectively establish the historic L'Enfant City is the most important American example of a planned urban core that physically expresses its political role as a purpose-built national capital which also provides a framework for many of the city's oldest commercial and residential neighborhoods. That these values were interwoven within the *Plan of the City of Washington* and continue to be reflected speaks to the ability of architecture and urban design to embody and project a deeper collective consciousness. And while the L'Enfant City's development is based on the city's original plan, it is not fixed architecturally to a particular time period. Indeed, the process of rebuilding and reimagining many parts of the L'Enfant City should be organic and ongoing.

Of particular importance to the Urban Design Element is the pedestrian experience along Washington's avenues and public spaces. This is distinguished by a sense of openness, both within the immediate setting, and in terms of visibility to more distant structures and natural elements. This emphasis on the visual qualities and preeminence of the public realm is a fitting and fundamentally unique contribution to Washington's image as the country's capital city and is a legacy of its original plans.

For policies that further address the public realm for federal properties throughout Washington and the region, refer to Section C: Policies Related to Federal Facilities, Property, and the Public Realm starting on page 35. Additionally, the District of Columbia's *Public Realm Design Manual*[23] is a useful resource that provides further guidance for the maintenance of the public realm.

This policy section provides guidance on the distinct system of streets and public spaces within the L'Enfant City as documented on the map on the following page, highlighting special streets as defined within this element, the settings of federal buildings and grounds, parks, plazas and other open spaces that meet the following qualities:

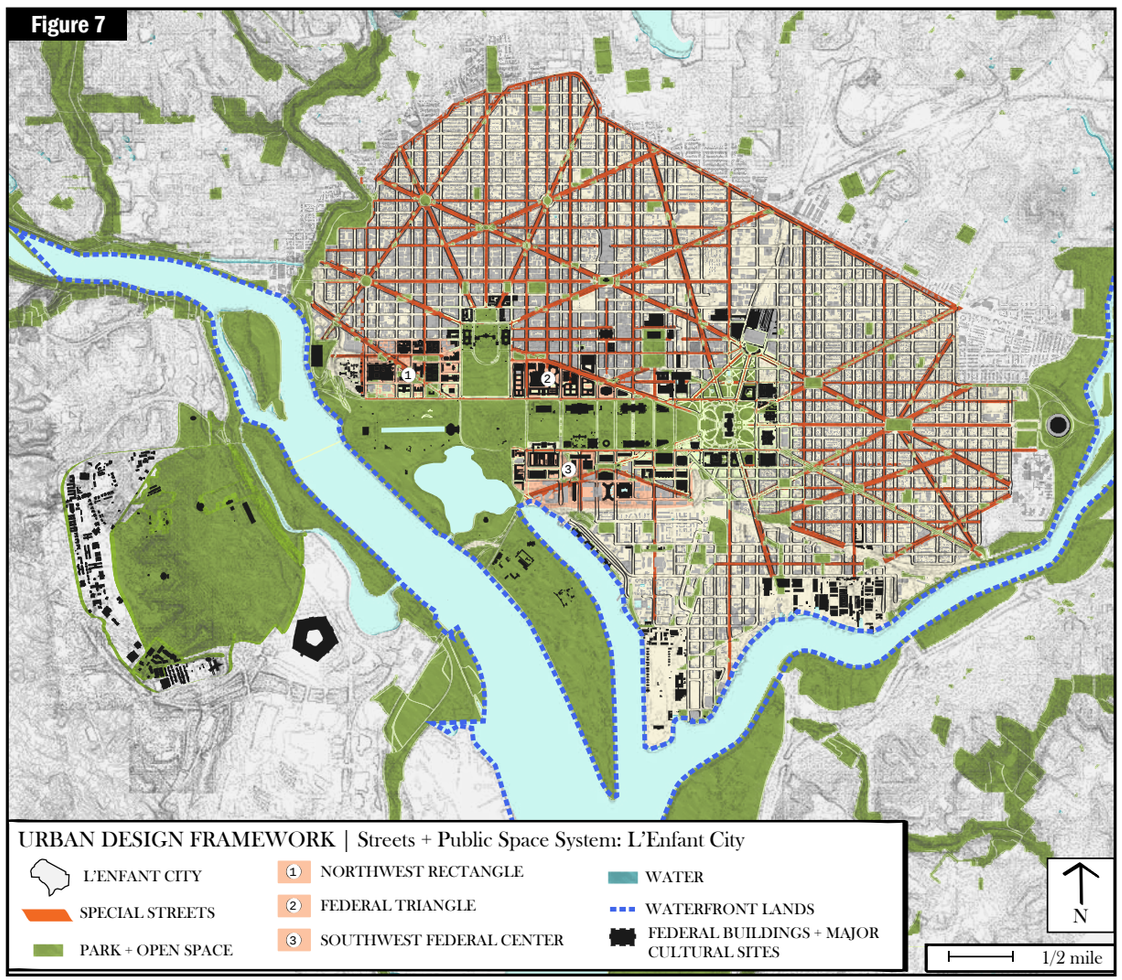
Special Streets

- Streets that radiate from the U.S. Capitol and White House.
- Streets that radiate from the Washington Monument and Lincoln Memorial, or within the setting of the Jefferson Memorial.
- Streets that frame or contribute to defining major scenic or symbolic areas or that serve as important connections, edges, or boundaries to special settings of national importance.
- Preeminent view corridors as defined within this element. For more detailed information on each specific view corridor listed on this map please refer to pages 17-31 in the Technical Addendum.
- Significant vistas as defined in this element and documented in the NHRP registration for the *Plan of the City of Washington*. For more detailed information on each specific view corridor listed on this map please refer to pages 32-33 in the Technical Addendum.

Parks, Plazas, Open Spaces, and Natural Features

- Reservations within the L'Enfant City, particularly squares and circles located at the intersection of major radial/axial streets.
- Public spaces that frame or contribute to defining major scenic or symbolic areas or that serve as important connections, edges, or boundaries to special settings of national importance.
- Open spaces that promote a sense of entrance to the capital.
- Places that embody or display a distinctive functional importance by providing settings for ceremonies or activities related to the functions of the nation's capital.
- Open spaces that serve as significant routes for ceremonial, cultural, or governmental activities related to the functions of the nation's capital.
- Open spaces that contribute to interconnected landscapes, architectural settings or activity centers that display distinctive coherence of national importance.

Figure 7



The federal government should work with federal and District of Columbia agencies to:

UD.B.3.1 Maintain or restore the integrity of the original L'Enfant Plan elements, including original rights-of-way, squares, streets, vistas, symbolic connections, and termini.

1. Discourage the closure of L'Enfant streets for private development. When L'Enfant streets must be closed for public purposes, ensure that deed restrictions are adopted so streets will be re-opened when the rights-of-way are no longer required for non-street purposes.

2. Protect the visual openness and functional qualities of L'Enfant public spaces by preventing visual incursions into the rights-of-way wherever possible. This protection extends to the public space up to the full height allowed under the Height Act and is particularly important at intersections and termini of radial and axial avenues, on streets adjacent to reservations, and along special streets as described in this element.

UD.B.3.2 Enhance L'Enfant Plan reservations, particularly those at the intersection or termini of radial and axial streets and avenues, as public open spaces that serve residents and visitors as attractive neighborhood parks and sites for commemorative works. In particular:

1. Provide attractive, well-designed and well maintained amenities such as landscaping, lighting, way-finding, signage, seating, and where appropriate, play spaces for children.

2. Embellish reservations with commemorative works, fountains, and public art in ways that establish focal points for axial views.

3. Work with federal and local stakeholders to program reservations for placemaking, cultural activities, and passive recreation while, in accordance with federal regulations, respecting their historic character.

4. Work with federal and local stakeholders to ensure that pedestrian walkways and other public realm elements are designed to provide safe and appealing public access.

UD.B.3.3 Protect the open space of the L'Enfant streets. The exceptional width and openness of the street rights-of-way constitutes public space that contributes to the city's character.

UD.B.3.4 Consider building setbacks, massing, and scale when constructing building facades to reinforce and frame the spatial definition of public spaces and right-of-ways.

UD.B.3.5 Ensure that streetscape elements including trees, enhance significant vistas, including the major axial and radiating streets that provide views of major buildings, parks, or commemorative works. Provide public realm and streetscape elements, such as street trees, transit amenities, curb cuts, garage access, transit infrastructure, security elements, and signage that:

1. Maintain views and don't obstruct or detract from important views/ viewsheds as described within this element.
2. Reinforce the processional experience (spatial order) along important view corridors.
3. Reinforce the visual frame for, and not detract from, the views of major national memorials, civic institutions, landmarks, and park reservations.
4. Enhance the pedestrian experience and reinforce the human scale along Special Streets.

UD.B.3.6 Sensitively locate and design public realm and streetscape elements along Special Streets and near important places. Public realm and streetscape programs should complement the surrounding area and create a visual cohesiveness to the setting. In particular, these programs should:

1. Maintain Special Streets with a cohesive tree canopy, and public realm and streetscape programs.
2. Provide landscape treatments that reflect the significance of Special Streets as important settings for the nation's capital.

UD.B.3.7 Reinforce the distinctive character and gracious monumentality of the public realm and enhance the pedestrian experience in those areas that provide a setting for ceremonies or activities related to the functions of the capital, particularly within the monumental core.

1. Create cohesive treatment for roadway and sidewalk widths, building setbacks, and public realm and streetscape elements throughout the length of the street within the monumental core, except where a customized design defines a special precinct, such as the White House.
2. Establish and maintain a vision for a streetscape and public realm design program for all precincts within the monumental core, including, but not limited to the White House, U.S. Capitol, Federal Triangle, and Pennsylvania Avenue between the White House and the U.S. Capitol.
3. Implement a cohesive public realm program that enhances the formal design, setting, open space character, and visitors' experience to the National Mall, consistent with the National Park Service's *National Mall Plan*.[24]
4. Establish and maintain a vision for the character of the major entrances to the monumental core, including public realm programs.

UD.B.3.8 Protect the beauty and visual qualities of the public realm and the pedestrian experience along Special Streets by orienting service functions to the backs of buildings where possible. To the extent feasible, orient all building garage entrances, mechanical equipment rooms, and loading facilities along service streets and designated alleys.

UD.B.3.9 Landscape treatments should enhance the settings around civic and cultural buildings and grounds.

UD.B.3.10 Streetscape furniture and other structural elements should be of high quality and design, and enhance the settings around civic and cultural buildings and grounds.

UD.B.3.11 Work with federal and local stakeholders, as appropriate, to sensitively locate and design interpretive, directional, advertising, and other functional signs in a way that complements the civic qualities of the monumental core and contributes to the public realm's overall visual character. In particular:

1. Establish signs and other graphics in public spaces that respond to the context and aesthetic of the surrounding environment. Signage programs near the White House, the U.S. Capitol, the National Mall, and other nationally significant sites should not detract from the site's visual preeminence nor the civic character of the settings around them.
2. Complement the street-defining elements of the precinct by keeping signs to a minimum.
3. Consolidate street signs and directional signs in one location to the extent possible.
4. Consider the concepts of placement, scale, size, composition, color, texture, lettering style, and readability of interpretive signs and graphics.

UD.B.3.12 Design and maintain streetscapes and open spaces to be adaptable to changing needs, while continuing to embody the design intent of Washington's urban design framework.



Legacy Plan aerial view of Washington's monumental core



10th Street, SW connection to the southwest waterfront

B.4 The Monumental Core

The heart of Washington's symbolic fabric is its monumental core. Much of the monumental core is a cherished part of the country's architectural and cultural heritage, though parts of this extraordinary civic composition are disrupted by physical barriers. Examples of preeminent civic and cultural assets within the monumental core include the White House, U.S. Capitol, Supreme Court, Smithsonian Campus, major federal headquarters buildings, Kennedy Center, and Arlington National Cemetery.

Where noted, the policies within this section are derived by reference from the Framework Plan that guides the development of the monumental core, including opportunities for placemaking, locations for new cultural attractions, and strategies to increase the economic vitality of the area. The Framework Plan sets forth opportunities and strategies that address key challenges, including identifying new sites for memorials and museums; eliminating physical barriers that impede movement and limit access; creating a stronger diversity of land uses to promote day/night activities; and fostering a more welcoming street-level experience.

The federal government should:

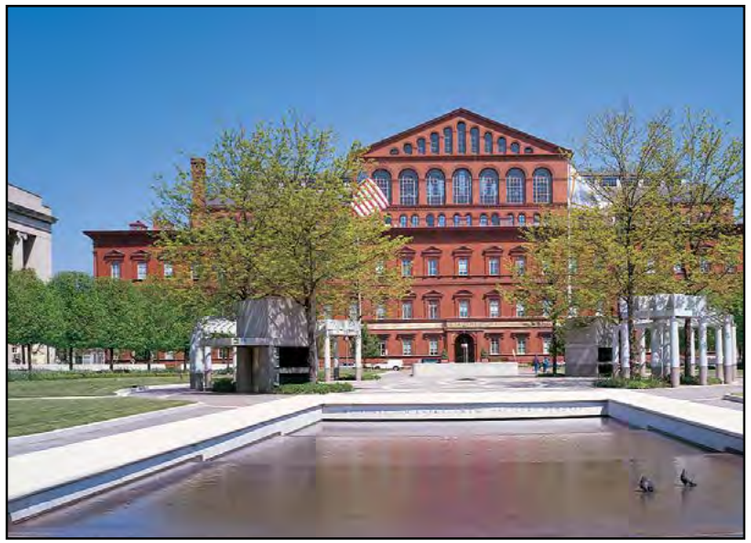
UD.B.4.1 Plan carefully for the design and land uses in and around the monumental core to reinforce and enhance its special role in the image of the nation's capital. In general, encourage federal agencies and local jurisdictions to incorporate urban design strategies that consider the relationship between the design of new development and significant adjacencies, such as major public spaces, urban and historic fabric, and along the preeminent viewsheds described within this element. In particular:

1. Respect the character of the Federal Triangle buildings and grounds as established in the McMillan Plan. Explore new programming for the public realm and ground floors, including public art and pedestrian amenities, to create visual variety and activate the spaces for the enjoyment of the public and federal employees.

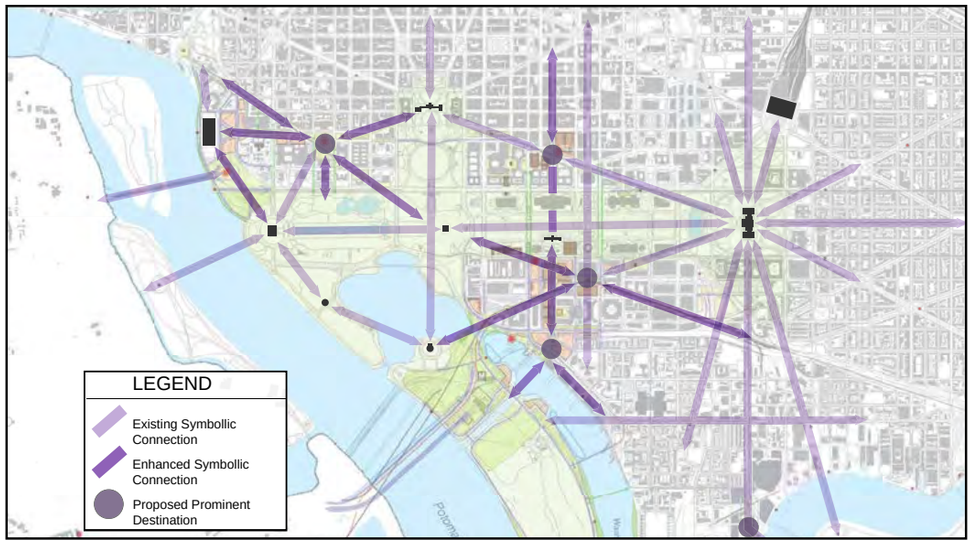
2. Respect the National Mall's historic open space and monumental character for the benefit of future generations. Ensure that new development does not infringe on the civic qualities and integrity of the National Mall and the surrounding monumental core. In particular:

    a. Protect the experience of the National Mall as a public space within a park-like setting framed by civic and cultural buildings. Sensitively scale development of buildings on Independence and Constitution Avenues.

    b. Respect existing lines of sight from the National Mall and existing relationships, including height and mass within that line of sight.



The National Building Museum is the focal point of the terminating vista along 4th Street, NW.



Urban design symbolic relationships shown in the *Monumental Core Framework Plan.*

U.D.B.4.2 Sensitively sculpt new development and create or maintain public space programs for streets adjacent to major national civic and cultural institutions, such as the National Archives, National Building Museum, Kennedy Center, and Smithsonian museums.

1. Carefully plan development along axial streets that connect major historic cultural buildings, particularly along 8th Street, NW (National Archives and the Donald W. Reynolds Center for American Art and Portraiture).

2. Carefully plan development along streets with major adjacencies, particularly those next to the White House (including 15th and 17th Streets, NW), and at intersections with historic buildings, such as on F Street, NW at the Eisenhower Executive Office Building and the U.S. Treasury Department.

UD.B.4.3 Create or strengthen multiple visual and functional linkages that connect reservations and civic spaces within the monumental core to the rest of the city utilizing the principles set forth in the *Monumental Core Framework Plan*. In particular, reinforce linkages with placemaking strategies, including public realm and streetscape programs as described in the Special Streets section of this element, and transportation programs to improve access for visitors.

1. Improve visual and functional connections between the National Mall, waterfront, and the rest of the city, where possible.

2. Improve transitions between places and remove visual and psychological barriers at major pedestrian thoroughfares and open spaces. Eliminate or redesign barriers in locations where historic axes and public spaces were disrupted in a way that supports the urban fabric's continuity.

3. Locate civic attractions such as parks, overlooks, and memorials across the Anacostia River.

4. Achieve a cohesive public realm that welcomes pedestrians and allows civic engagement and social interactions through attractive urban landscapes and functional buildings.

5. Maximize opportunities to create high-quality, pedestrian-friendly public spaces and increase access to major destinations.

6. Wherever possible, deck over high speed roadways and rail lines, and relocate rail and roadway infrastructure where it impedes pedestrian access.

Edges and Transitions: Independence and Constitution Avenues

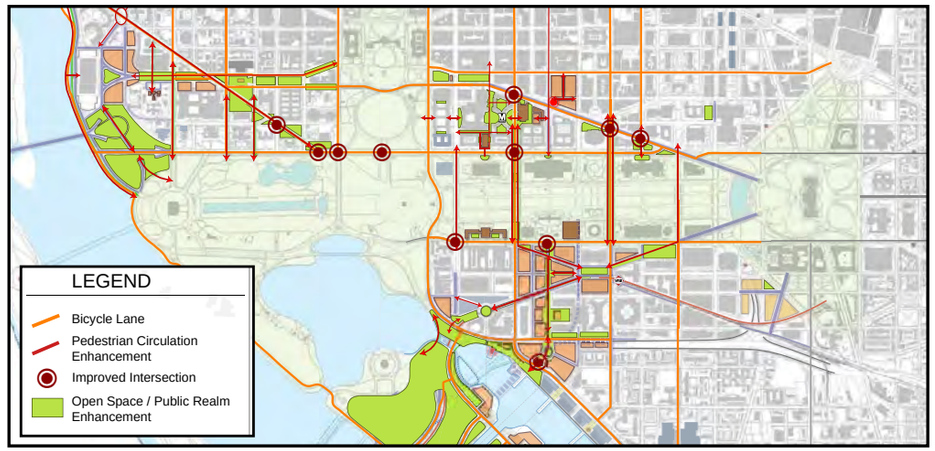
Constitution and Independence Avenues, two of the most prominent streets in the nation's capital, serve unique transitional roles in the monumental core. Framing the National Mall's northern and southern edges, respectively, they shift the user experience between the pastoral setting of the National Mall and the built environment in the surrounding urban core. The scale of the federal buildings on these avenues helps to minimize intrusions and provides a frame sympathetic to the culturally significant viewshed.

While the federal presence on Constitution Avenue is unlikely to change in the foreseeable future, the federal government is currently analyzing the best use of its land and buildings on and around Independence Avenue. In the future, Independence Avenue could be home to the Smithsonian Campus to its north and a new mix of uses to its south, which underscores its role as a threshold between the monumental core and downtown Washington.

The *SW Ecodistrict Plan* envisioned this area, anchored by Independence Avenue, as a vibrant and sustainable district with residential, commercial, cultural, and office uses joining some of the federal agencies that call this area home. The plan recognizes the need to protect the open sky views and public character of the National Mall in addition to the sense of symmetry of new development on Independence Avenue with the Smithsonian Campus. The plan also recognizes that if some of the federally-owned land on Independence Avenue were to become private, there is a significant opportunity to increase density and the mix of uses that would make this area a more enjoyable place to work, live, and visit.

Therefore the plan proposes development controls such as building setbacks and upper-story setbacks that respect the lower-scale Smithsonian buildings on the north while anticipating greater density to the south. As with Constitution Avenue between the Mall and Federal Triangle, future Independence Avenue development should use design elements such as building massing, roofline sculpting, and material choice to successfully make this transition.

Beyond their transitional roles as a threshold between the Mall and surrounding areas, Constitution and Independence Avenues are part of a larger, interconnected open space network and reinforce linear views of the primary east-west vista (see Section B.5), most notably from Independence Avenue west to the Washington Monument. Both orthogonal avenues are part of the National Register of Historic Places Inventory of Significant Vistas, are home to prominent federal public buildings and cultural destinations, and serve as event spaces for a variety of local, regional and national activities.



Public Realm System Diagram from the Framework Plan.

Constitution and Independence Avenues serve as a transition from the National Mall out to the monumental core. They are also part of a larger, interconnected public realm network of parks, memorials, and streets that reinforce the city's key viewsheds.

UD.B.4.4 Use the principles and strategies of the *Monumental Core Framework Plan* to identify opportunities to strengthen linkages between nationally significant places, improve the public realm, and enhance the monumental core's character. Examples include, but are not limited to:

1. Promote and maintain Pennsylvania Avenue, NW between the U.S. Capitol and the White House as a distinguished, high quality, mixed-use, multi-modal boulevard for residents, workers, tourists, and other visitors. It should contain an actively programmed, pedestrian-oriented, and inviting public realm that enhances the avenue's symbolic character and function and connects downtown Washington and the National Mall. Enhance the avenue's iconic reciprocal views to the U.S. Capitol and White House grounds through a cohesive streetscape design.

2. Redefine 10th Street, SW as a pedestrian friendly, mixed-use corridor that connects the southwest waterfront to the National Mall and establishes a terminus at the overlook as a premier cultural and mixed-use site.

3. Envision E Street, NW as a primary open space connector and urban parkway between the White House grounds and the Kennedy Center, including several potential sites for major new commemorative works.

4. Establish a strong physical and visual connection between the Lincoln Memorial and the Kennedy Center.

5. Improve walkability and access to key destinations within the monumental core and downtown by enhancing the pedestrian quality of secondary and tertiary connections within and around the monumental core, such as 23rd Street, NW; 20th Street, NW; 12th Street, NW; 10th Street, NW; and 7th Street, NW.

6. Consider opportunities to re-establish the Washington Monument view corridor along Virginia Avenue southeast of Independence Avenue.

B.5 Preeminent Viewsheds and View Corridors

L'Enfant urged the importance of "embracing in one view the whole extent from the Eastern Branch to Georgetown, and from the banks of the Potomac to the mountains."

One of the most important hallmarks of the capital city's symbolic image and urban design framework is a three dimensional spatial and visual order that reinforces the preeminence of national symbols and democratic institutions. The city's street-level views and vistas are created by the location and extent of its streets, the height of buildings, and where streets intersect with important public spaces or natural areas. Public realm and streetscape programming are important contributors to the quality of the city's viewsheds and the character of its streets.

Many of the city's vistas and street-level views are particularly distinctive within the original L'Enfant City. Sweeping panoramic views also exist from observation points at the edge of the topographic bowl which give the viewer a wider perspective to enjoy the city. These panoramic viewsheds are principally shaped by natural features and are included in Section B.2. The L'Enfant Plan National Register Nomination form documents viewsheds within the plan area. Major panoramic views have not been similarly documented and evaluated in a singular, comprehensive document.

Preeminent viewsheds and view corridors within this section include views to and from the monumental core, specifically to and from the U.S. Capitol and White House. These views are critical to maintain as they contribute to the visual importance and hierarchy of nationally symbolic public buildings. Simple massing studies should be prepared prior to major decisions about zoning, master plans, and development review along any of the preeminent viewsheds listed in this section. Additional documentation and guidance for each viewshed and view corridor listed in the inventory below can be found in the Technical Addendum.

1. Primary east-west vista from the National Mall to the western horizon
2. Primary north-south vista from the White House to the southern horizon
3. North Capitol Street linear view from the U.S. Capitol to Michigan Avenue, NW
4. South Capitol Street linear view from the U.S. Capitol to Potomac Avenue, SW
5. 16th Street, NW linear view from the White House to Euclid Street, NW
6. Maryland Avenue, SW linear view from the U.S. Capitol to the Tidal Basin
7. Maryland Avenue, NE linear view from the U.S. Capitol to the National Arboretum
8. Pennsylvania Avenue, NW linear view between the U.S. Capitol and the White House Grounds
9. Pennsylvania Avenue, SE linear view from the U.S. Capitol to Southern Avenue, SE
10. East Capitol Street from the U.S. Capitol to Southern Avenue, SE
11. New Jersey Avenue, NW linear view from the U.S. Capitol to Florida Avenue, NW
12. New Jersey Avenue, SE linear view from U.S. Capitol to Tingey Street, SE

For more detailed information on each specific view corridor listed on this map please refer to page 19 in the Technical Addendum.

Figure 8

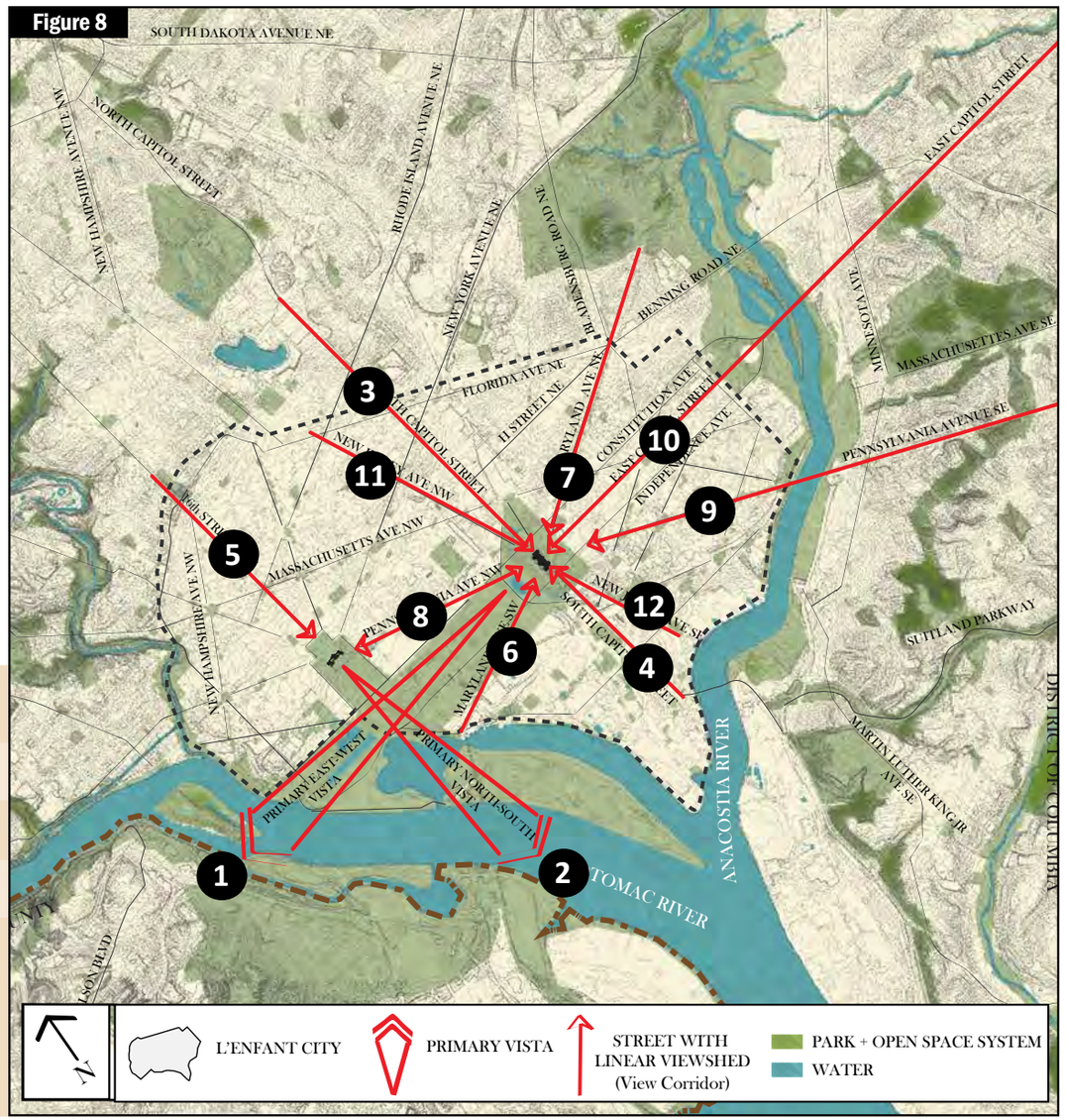
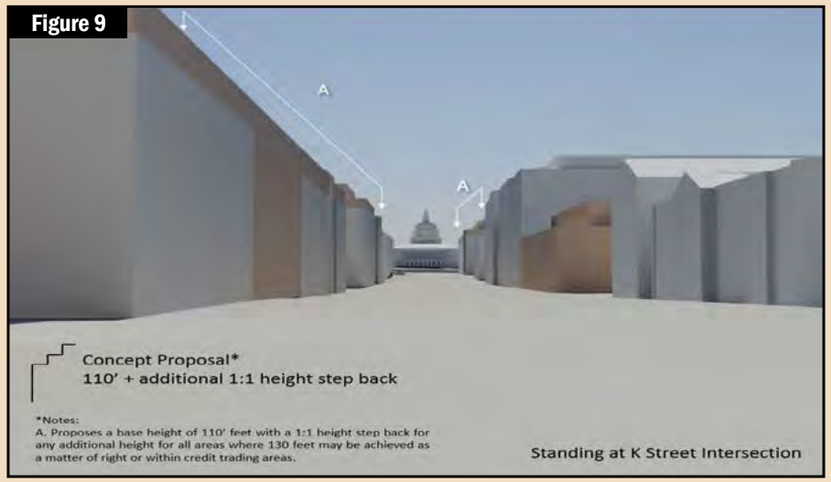


Figure 9



In September 2014, NCPC staff offered comments on the District of Columbia Zoning Regulations Review (ZRR) including recommendations on the proposed zoning along North and South Capitol Streets. The image above illustrates the NCPC proposed building massing along North Capitol Street.

The vista of the U.S. Capitol along North Capitol Street is one of two primary north/south axes that establish the urban design framework and fundamental symbolic design basis for the city, and it is one of the important gateways to the monumental core.

North Capitol Street's topography is similar to 16th Street north of the White House. From Florida Avenue, the street generally slopes down towards the U.S. Capitol, therefore, the mass and location of buildings along these blocks strongly influence perceptions about the scale of the U.S. Capitol dome and its preeminence within the pedestrian's line of site. At the same time, North Capitol is at the confluence of the new, high densities of the NoMa commercial neighborhood on the east side of the street, and lower density residential development on the west side of the street. NCPC staff recommended that buildings south of K Street, NW along North Capitol, on lands subject to zoning and not subject to other height restrictions, have a 1:1 step back at 110 feet.

NCPC staff also recommended a 1:1 stepback at 110 feet on South Capitol Street between the SE/SW freeway and M Street, SW. The stepback will ensure that the U.S. Capitol dome is not diminished by the proposed matter of right building heights and will also encourage a consistent cornice line in the blocks immediately adjacent to the Capitol.

The federal government should work with federal and local agencies to:

UD.B.5.1 Protect and enhance panoramic and street-level linear views of the U.S. Capitol, White House, Washington Monument, and other major skyline elements. Remove visual intrusions to increase visibility.

UD.B.5.2 Plant and maintain street trees to help frame preeminent and axial views and renew the park-like character of the nation's capital.

UD.B.5.3 Locate tour bus and commercial truck parking in a way that does not disrupt the preeminent view corridors.

UD.B.5.4 Reinforce street-level linear views with consistent building setbacks and cornice lines, wherever possible.

UD.B.5.5 Enhance and protect the primary north-south/east-west vistas within the L'Enfant Plan through appropriately scaled building development, wherever possible.

UD.B.5.6 Reinforce the U.S. Capitol as the spatial center of the city and restore the prominent role of the radiating streets and important intersections through decisions about public realm and streetscape programming, street-level uses, building mass, and viewshed protections as described within this element. These include: North Capitol Street, South Capitol Street, East Capitol Street, New Jersey Avenue, Maryland Avenue, and Delaware Avenue. Destinations along these streets should reflect their role as prominent gateways into the monumental core.

1. Visually reinforce the preeminence of the U.S. Capitol within street-level linear views along intersecting streets. Utilize building setbacks and sculpting to protect the visual frame around the U.S. Capitol dome and reinforce sweeping and open views to it. Continue to scale and orient building heights along streets that intersect with the U.S. Capitol with a general landscape vista, where the width of the street is greater than the height of buildings that flank the street.

2. Protect views to and from the U.S. Capitol from visual competition from new development, wherever possible.

3. Promote balanced massing and scale along linear views of streets that intersect with the U.S. Capitol to form a coherent composition on a block-by-block level.

U.D.B.5.7 Reclaim Maryland Avenue, SW as a grand boulevard that links the U.S. Capitol to the Jefferson Memorial by enhancing existing public spaces and reconnecting the street grid.

U.D.B.5.8 Reclaim South Capitol Street as a grand boulevard that links the U.S. Capitol to the waterfront by addressing transportation infrastructure and enhancing public spaces. Repair the urban fabric.

UD.B.5.9 Ensure that any new uses or improvements on Pennsylvania Avenue between 3rd and 15th Streets, NW are cohesively planned, improved, and maintained in a manner befitting the avenue's national and local role in a 21st century capital city, reflecting the ceremonial heart of the nation and the daily vibrancy of the city.

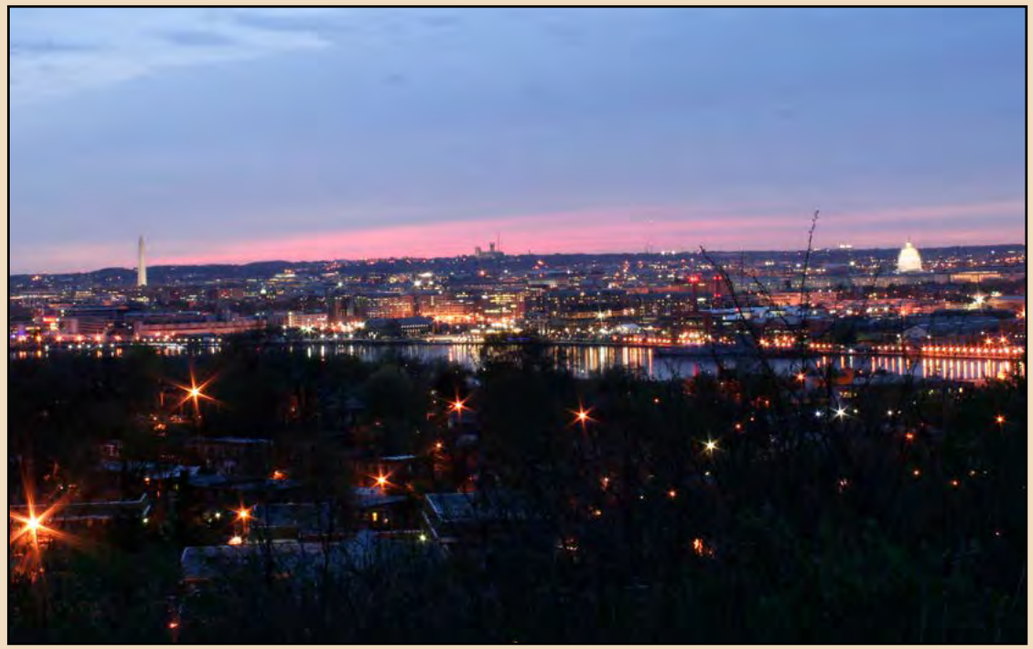
1. The *Pennsylvania Avenue Development Corporation Plan's* (1974), General Guidelines, and Square Guidelines, as amended, ensure that the siting and massing of any structure or landscape elements strengthen the sweeping open frame around the U.S. Capitol and are compatible with building massing and the public realm within its surroundings.

UD.B.5.10 Visually reinforce the special importance of the White House and its grounds.

1. Maintain a consistent tree canopy along 16th Street, NW from the escarpment north of Meridian Hill Park, a key observation point that offers singular views to the White House.

2. To meet urban design quality and security goals, the scale of buildings located on the blocks within the immediate vicinity of the White House should not visually overwhelm the building and grounds, particularly as viewed from 16th Street, NW and Pennsylvania Avenue. In general, protect the existing spatial relationship of the White House and the mass and scale of adjacent buildings along 16th Street, NW up to Scott Circle.

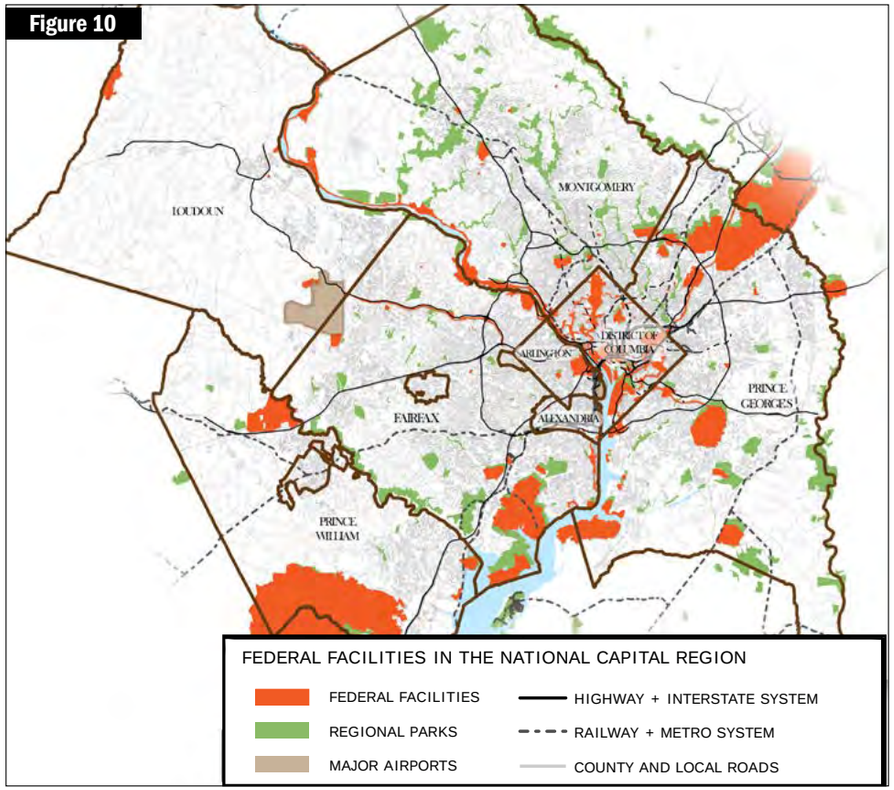
3. Ensure that massing and scale of buildings along 16th Street, NW is balanced and forms a coherent composition on a block by block basis.

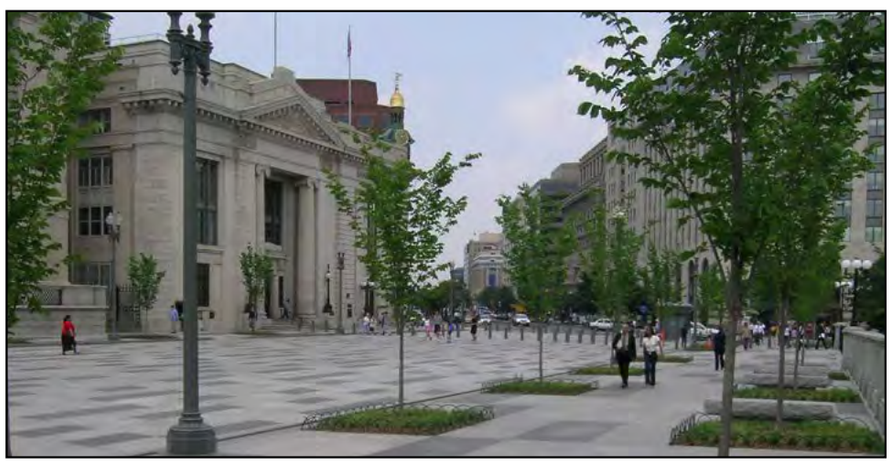


Panoramic Viewsheds: St. Elizabeths West Campus

The unique integration of Washington's city plan with its natural geography produces sweeping views of the urban and natural landscape from the surrounding topographic ridgelines. Notable portions of these prominent ridgelines in southeast Washington are the site of federal parklands such as the Civil War Defenses of Washington and federal facilities. For example, the St. Elizabeths West Campus is part of the southern portion of the Anacostia Hills and the open plateau within the campus offers unique vantage points for panoramic views towards the Washington Monument, the dome of the U.S. Capitol Building, and the Washington National Cathedral in the distance. Panoramic views from public lands such as St. Elizabeths should receive further study to ensure these important viewsheds are maintained and enhanced wherever possible.

Figure 10





Pennsylvania Avenue in front of the White House

Part II. Urban Design Principles: Federal Facilities & Property

There are many important factors that shape the location and design of federal buildings and property within the city and region, including agency mission, budget, operational needs, and proximity to transit. Urban design is one component that should be incorporated into this decision-making process. This section establishes policies related to the urban design of federal property. How federal facilities are situated and designed plays an important role in the overall character of the environs and of their immediate setting. The quality of a federal property's urban design is an important contributor to the workplace experience for federal employees and can impact the way that the agency conducts its day-to-day operations. Finally and more broadly, the design of federal buildings is an important contributor to the capital's image, and has the potential to shape impressions of the federal establishment more generally.

Many federal properties are concentrated in the monumental core and are important contributors to the visual and functional qualities of the public realm in this important symbolic setting. Similarly, campuses and bases such as the National Institutes of Health in Montgomery County, Maryland and Fort Belvoir in Fairfax County, Virginia are important parts of the urban design and character of the communities in which they are situated. As such, it is critical that federal properties, whether located in an urban, suburban, or even rural context, address the public space around them. This includes pedestrian street-level experience and access. Although each building and campus is unique, each should be developed with an urban design strategy that considers whether and how the buildings should fit and engage the surrounding context, circulation in and around the site, and other related planning goals.

Section C: Policies Related to Federal Facilities, Property, and the Public Realm

The policies established in the following sections focus on design issues related to federal facilities and property. The policies are organized into three focus areas which reflect the core issues associated with federal building design. These include encouraging quality design; integrating buildings and campuses into their communities; and urban design and security. Interior space, another important contributor to a federal facility's design quality, is not considered. The policies work in concert with those established in the Federal Environment, Federal Workplace, and Historic Preservation Elements, which each provide direction during a facility's design phase.

C.1 Inspiring Design: Individual Buildings and Campuses

The Urban Design Element establishes policies that guide the design of federal buildings, including modernizations, rehabilitations, expansions, and new construction. The policies do not endorse any particular architectural style. Rather, this section considers how a federal building's outward appearance and orientation can enhance the surrounding context. The policies encourage facility designers to incorporate best planning practices, including those related to sustainability and building design.

While a federal building's design and construction should be of a high quality, not all federal buildings must be iconic in design. The design approach should contribute to an area's sense of place. Further, designers should explore opportunities to relate a building's efficiency and sustainability to the buildings around it. Combining stormwater management systems or sharing energy can minimize design and construction costs and maximize efficiencies. This "district-level" approach to sustainability is a core value in designing high quality federal buildings and is a central theme of the *SW Ecodistrict Plan*. For further guidance concerning stormwater mitigation and other ecological and sustainable practices please refer to the Federal Environmental Element.

The federal government should:

UD.C.1.1 For the construction or modernization of principal federal buildings, such as headquarters and major offices, should reflect their importance in the National Capital Region. Buildings should be designed and constructed with quality, durable materials to protect the public investment and reflect the National Capital Region's image.

1. Use building orientation, mass, and façade articulation, as well as landscaping and lighting to emphasize the importance of special settings of national importance.

2. Location of vegetation, color, scale, and texture of landscape elements in the settings of federal buildings and national institutions should complement the building's programmatic elements and design.

UD.C.1.2 For federal campuses and installations, agencies should address specific urban design issues through the preparation and updating of master plans. In conformance with NCPC guidelines, master plans should be updated on a regular basis, in consultation with local governments and the Commission, to respond to changing conditions and agency needs. The urban design component of master plans should:

1. Analyze existing installation characteristics and surroundings, including the qualities and resources to be protected, and problems to be resolved.

2. Propose urban design policies, including topics such as building groupings, massing, and architectural character; streetscape, landscape elements, and character; signage and parking.

3. Include a strategy for the site and design of principal agency functions.

4. Include a strategy for utilitarian or routine support functions, which should generally be sited and designed to avoid or minimize intrusion on principal urban design features.

UD.C.1.3 Implement sustainable site and building design at a district-level scale, where possible.

UD.C.1.4 Federal buildings should achieve a balance between iconic design and infill design as appropriate to the building site's location and setting.

UD.C.1.5 For federal facilities, integrate the accessibility to transit, bicycle, and pedestrian modes into the urban design and comply with ADA and ABA requirements.



Edward Hueber/Arch Photo

U.S. Census Bureau Headquarters, Suitland, MD



The Intelligence Community Campus-Bethesda project in Maryland transformed an inefficient and outdated federal campus into a sustainable, interconnected workplace. Extensive coordination with the community, adjacent federal agencies, and local jurisdictions resulted in refinements addressing parking, building design, and stormwater management. Construction began in 2012.

C.2 Integrating Federal Buildings and Campuses within the Surrounding Community

Within Washington, DC and the NCR, the federal government maintains modest and large buildings and multi-structure campuses. Facilities such as Fort Belvoir in Virginia, the National Institutes of Health in Maryland, and the Department of Homeland Security Headquarters at St. Elizabeths in Washington maintain a large presence within their communities. Building and site design, particularly as it relates to security and public space, tremendously impacts the character of adjacent neighborhoods. The quality of building or campus design is important in supporting a desirable community character. This section will recommend strategies to integrate federal buildings and campuses into their surrounding context using urban design and planning principles. Security plays an important role and is addressed in the following section.

These policies broadly consider circulation and pedestrian connections through federal properties to maintain continuous local and regional networks. These networks can also assist federal employees in walking or biking between campus locations. The policies also acknowledge the importance of locating amenities such as retail or parking facilities in a manner so that they can be used by local residents and not strictly by federal employees. Federal campuses should consult local plans and design guidelines not only to understand the context in which they are located, but also to balance local goals for neighborhood character with agency goals. For additional policies related to access and circulation in and around federal campuses, refer to the Federal Workplace and Transportation and Elements.

Finally, one critical component of how a building meets its surroundings is its street level presence. The quality of a building's street level design and use reflects its orientation to people. Buildings with active street level uses create a sense of accessibility and comfort for pedestrians. Campuses with inviting edges at the street can support pedestrian movement and connectivity within a given community. This is particularly important for federal buildings situated in downtown areas. This section encourages facility designers to rethink the notion of traditional federal building design and look for creative ways to better fit federal buildings within their surroundings. This policy section is also relevant for the disposition of excess federal property. The future use of disposed sites can contribute to the existing surrounding community and reinforce planning goals and objectives through coordinated place-making strategies. For more policies concerning the integration of federal properties with the surrounding community please see the Federal Workplace and Transportation Elements.

UD.C.2.1 The site planning of federal buildings and campuses throughout the region should relate appropriately to their surrounding context, including:

1. The surrounding uses and scale of existing street and block patterns.
2. Compatibility with nearby buildings, including height, massing setback, materials, fenestration, and scale.
3. Local community goals.

UD.C.2.2 Agencies should enhance the pedestrian experience in and around federal buildings and campuses, wherever possible, and in consideration of this element's security section. In particular:

1. Consider flexible and impervious areas, such as plazas, to accommodate congregating and place-making activities within the design program of federal building yards.

2. Avoid blank walls where a building meets adjacent public space and activate street level facades by utilizing art displays, transparent materials, or other appropriate methods.

3. Principal facades and primary public building entrances should face major streets or open spaces.

4. Break up superblocks and introduce mid-block alleys that can either be used for community open space or shared access to service areas of multiple buildings.

5. Incorporate shared open space into new federal office developments, where possible.

6. Habitable building space should be provided along the street frontage to accommodate public space or activated ground floor uses, such as retail or other commercial enterprises, as appropriate. In particular:

a. Concentrate retail activity near transit hubs and key intersections adjacent and accessible to public sidewalks and plazas.

b. Consider establishing street markets and farmers markets on federally-owned plazas, courtyards and underused open spaces.

UD.C.2.3 Provide access to, and/or connections through, campuses, building yards, plazas, or courtyards for local and regional trails, bikeways, pedestrian ways, or open space networks where possible. Agencies should explore programming these areas with publicly accessible amenities such as art installations and/or farmers markets.

UD.C.2.4 Provide strategic multi-modal street connections or extensions to adjacent streets or the local street grid to and through installations to provide a continuous transportation network.

UD.C.2.5 Design pedestrian and vehicular entrances, or any physical gateways to federal campuses and buildings, to be as inviting and as accessible
as possible.

UD.C.2.6 Locate and design appropriate amenities, including retail, to be accessible to the local community, where possible.



Farmers market at the U.S. Department of Agriculture's Whitten Building

Interagency Security Task Force



In March 2000 Congress authorized the Commission to establish the Interagency Security Task Force. This Task Force evaluated the impact of security measures on the historic character of Washington's monumental core. In November 2001, the Commission adopted the Task Force's recommendations contained in a report entitled *Designing for Security in the Nation's Capital*. Among its recommendations, the report called for the preparation of an urban design and security plan to identify permanent security and streetscape improvements for federal facilities in the nation's capital.

The Task Force's recommendations became the basis for the *National Capital Urban Design and Security Plan* (2002). The plan was the result of a collaborative effort by the National Capital Planning Commission, federal and District of Columbia governments, security agencies, and civic and business organizations.

Specifically, the *National Capital Urban Design and Security Plan*:

- Provides strategies for perimeter security against the threat of bomb-laden vehicles.
- Includes a citywide program that provides both security and urban beautification.
- Expands the palette of attractive street furnishings and landscape treatments that can provide curbside security.

NCPC reconvened the Interagency Task Force and produced an addendum in 2004 with updated information.

In 2005, NCPC adopted an updated set of objectives and policies[25] for reviewing perimeter security projects. The updated polices reinforce the importance of design quality in the nation's capital, and strive to balance building security with the functional and visual qualities of public space.

C.3 Urban Design and Security

Both federal and local governments are responsible for the safety of those who live, work, and visit the nation's capital while preserving the openness and historic design that have made Washington one of the world's most unique capital cities. Many of these policies are also applicable to federal building and campuses in the greater region.

Washington, DC is admired for the sweep and grace of its historic streetscapes and open public spaces. However, guard huts, street closures, rows of concrete planters, and other permanent and temporary barriers can adversely affect the capital's appearance and people's impression of it. Such security features can also adversely impact the character of local neighborhoods in which federal facilities are located.

There are many aspects to security planning and design that must be considered when designing effective security measures. Risk management strategies for external threats range from infrastructure protection, building construction, and perimeter security to surveillance and operations. The criteria are derived from various Presidential directives and other federal security criteria contained in documents such as the Department of Homeland Security's Interagency *Security Committee's Manual for New Federal Office Buildings and Major Modernization Projects* and the Department of Defense's *Unified Facilities Criteria*.[26]

NCPC supports the development of effective security systems that preserve the characteristic openness of Washington's public spaces and enhance the city's public realm, as well as the character of adjacent communities in the region. When physical perimeter security is necessary, it should be located within, and integrated into, the design of the building yard. If there is no building yard, as is typically found in urban areas, it may be necessary to place physical perimeter security measures in public space. This should be done in an unobtrusive manner that integrates security barriers and furthers or creates an attractive urban landscape or pastoral green suburban edge.

The policies within this section are derived by reference from NCPC's *National Capital Urban Design and Security Plan*,[27] which includes context and objectives.

These policies address important city planning and design issues when it is necessary to construct physical perimeter security. This section balances building security with the functional and visual quality of public space, in consideration of: (1) the monumental core's historic resources and the democratically-inspired design principles inherent in Washington's historic city plan; (2) the region's need for mobility, mixed-use development, and activated street level activity to protect and enhance its economic vitality; and (3) the importance of protecting the public realm from the adverse impacts of perimeter security to ensure that residents, workers, and visitors maintain their rights to access, use, and the ability to enjoy the grace and beauty of public space in the capital and the region.

UD.C.3.1 Permanent closure of streets or sidewalks within right-of-ways established by the L'Enfant Plan should be strongly discouraged.

1. Streets necessary for emergency evacuation should not be closed, blocked, or access restricted except for brief periods when required for extraordinary events or activities.

UD.C.3.2 Temporary closure or access restrictions to streets, parking lanes, or sidewalks should be limited to only the protection of those uses deemed absolutely essential for immediate continuity of critical government operations. These closures or restrictions should only be allowed during times of extraordinary security threats, or brief periods of time when required for extraordinary events or activities, such as large public demonstrations, the State of the Union Address, or ceremonial parades.

1. Temporary closure or access restrictions should be in accordance with previously established plans and procedures. Coordination should occur among governmental entities directly affected by the closure, or those that can provide meaningful input on a range of potential impacts caused by the closure, such as the Department of Homeland Security-National Capital Region Coordination; the local emergency management service; the local law enforcement agency; the U.S. Capitol Police; the U.S. Park Police; the U.S. Secret Service; the Federal Protective Service; local planning and transportation offices; and the National Capital Planning Commission, as appropriate.

UD.C.3.3 The placement of security barriers in public space is discouraged and should be minimized.

1. Interior building space programming for new buildings, or for major renovation projects, in urban settings should consider locating critical uses and operations in areas of the building that will minimize the need to place perimeter security in public space.

2. Protection of exterior air-intake systems should be visually and physically integrated into the architecture of the building design. Air-intake protective measures should not prevent access to the building yard or public space, nor impede pedestrian circulation.

3. For existing buildings in urban areas, perimeter security barriers should be located within the building yard when the face of the sensitive building to the outside edge of the building yard is a minimum of 20 feet. If the distance from the face of the building to the outside edge of the building yard is less than 20 feet, then perimeter security barriers may be permitted in public space adjacent to that building.



The National Museum of the American Indian security barriers

4. Existing streetscape, landscape, or building site features should be hardened, or perimeter security should be integrated into the topography of the site to provide physical perimeter security where feasible. If this not achievable, then security barriers should be integrated into the urban landscape in a manner that minimizes their visual impact and physical infringement into public space.

5. When physical perimeter security elements are located at the edge of the building yard, designs should accommodate visual and physical public access to the building lawn and designated entries.

6. The location of perimeter security barriers should minimize interruption of pedestrian circulation. Barriers should not unduly cross sidewalks perpendicularly, causing pedestrians to maneuver between them.

UD.C.3.4 The location and arrangement of security barriers should be compatible with the placement of security barriers for other buildings on the street.

UD.C.3.5 Perimeter security barriers at intersections, corners, and near cross walks or other highly used pedestrian areas should be minimized; barriers that are needed should be located to allow safe pedestrian waiting areas and pedestrian movement.

UD.C.3.6 Placement of security barriers should incorporate best design practices and industry standards and be arranged to:

1. Comply with the Americans with Disabilities Act and Architectural Barriers Act.
2. Provide visual clues to signify important circulation routes and site or building features.
3. Ensure that the public space is visually and physically accessible.
4. Provide sufficient clearances to allow access to and from transit stops.
5. Provide safe pedestrian access to and along sidewalks, public spaces, and building entrances.
6. Provide emergency access to buildings and emergency evacuation from buildings.
7. Ensure that maintenance equipment such as snow plows, utility trucks, and motorized cleaners can access and maneuver within building yards, sidewalks, and plazas.
8. Provide at least two feet from the face of the curb to the face of the barrier to allow for opening car doors, unloading and loading of passengers, and ease of access to public space.

UD.C.3.7 Security elements located at the curb, or edge of the sidewalk, should not unduly impede pedestrian access to various permitted sidewalk and street activities, such as cafés, kiosks, demonstration areas, or parade viewing areas along ceremonial streets. The designs must accommodate viewing stands, tents, and review stands that are used during significant public events.

UD.C.3.8 The design of security barriers, including their mass, form, and materials should respond to the architectural and landscape context in which they are located and complement and aesthetically enhance the special character of the associated building and precinct.

UD.C.3.9 Physical perimeter security barriers within the building yard should be incorporated into the landscape design and include low walls, fences, seating, landscaping, and other public amenities typically found within the landscape. The design of these barriers should be architecturally compatible with adjacent buildings and respect the overall character of the streetscape.

UD.C.3.10 Perimeter security barriers in public space should incorporate decorative tree wells, planters, light poles, signage, benches, parking meters, trash receptacles, and other elements and public amenities typically found in a streetscape.

UD.C.3.11 Protection of existing trees, including their canopies and root systems, and new street tree planting is encouraged when the plantings will be in context with the existing or the planned corridor streetscape. This will minimize the visual impact and the physical intrusion of the security barriers in the urban landscape.

UD.C.3.12 The design of perimeter security should respect the building's use, significance and location in the community, as well as established view corridors.

UD.C.3.13 Perimeter security design should strive for continuity, consistency, and enhancement of the overall streetscape.

UD.C.3.14 Perimeter security design should avoid relying on repetitive use of single elements, such as continuous rows of bollards or planters.

UD.C.3.15 Physical perimeter security should follow design principles to achieve a sense of openness, balance, rhythm, and hierarchy that will improve way-finding and visual linkages along a street and enhance the pedestrian experience. For example, elements can be designed and placed to signify primary or secondary pedestrian entrances.

UD.C.3.16 Perimeter security barriers should be designed as a family of beautiful, functional streetscape elements that also function as a public amenity.

UD.C.3.17 Physical perimeter security projects that are located in areas with a previously approved streetscape program should be designed to be consistent with the design intent of the streetscape standards of that associated area.

UD.C.3.18 Security barrier design (placement, height, spacing, dimensional volume, structural integrity, and other physical characteristics) should respond to the identified threats as well as specific building and site conditions, relational vehicle design speeds, angles-of-approach, and pavement types.

UD.C.3.19 Curbs, copings, and retaining walls should be incorporated into the design of security barriers to reduce the perceived barrier height.

UD.C.3.20 Pedestrian screening security operations should not be conducted in public space. If building additions or renovations are required to accommodate this function, the new construction should be compatible with the existing architecture and should not project into L'Enfant Plan rights-of-way, other public space, or viewsheds.

UD.C.3.21 Guard booths should be integrated into, and designed in context with, the site and building design. When feasible, guard booths should be located in the building yard. Where the depth of the building yard is insufficient, the guard booth should be located to minimize interruption of pedestrian movement along the pathway.

UD.C.3.22 Vehicular controls at building entries, such as vehicle barriers and guard booths should be located so that pedestrian movement along sidewalks is not blocked. Check points should be designed to allow off-street queuing space that does not block pedestrian movement or traffic flow.

UD.C.3.23 Vehicular control measures that are visible from public space should be attractively designed and mechanical equipment should be hidden. Solid hydraulic plate barriers should only be used in locations that are not highly visible from public space.

UD.C.3.24 Signage, electronic signals, or other control measures should be integrated into vehicular barriers and guard booths to minimize visual clutter.

UD.C.3.25 The *National Capital Urban Design and Security Plan* is predicated on a design framework that defines contextual areas and Special Streets. Special Streets, recognized as the monumental avenues and diagonal streets in the L'Enfant Plan, are the great linear connectors of the city and provide an important symbolic and ceremonial function in the nation's capital. Ideally, the physical perimeter security for buildings on these monumental and diagonal streets should be designed collectively as a contextually appropriate, cohesive streetscape. In the absence of funding to design the entire streetscape, it is incumbent upon federal agencies to coordinate their design solutions with their neighbors along the street and consider the larger context.

UD.C.3.26 The capital's preeminent viewsheds and monumental avenues, such as Pennsylvania, Constitution, Independence, Maryland, Virginia, and New Jersey should receive special treatment to ensure that security projects are addressed comprehensively, emphasizing the streetscape as a whole with attention to their axiality and formality.

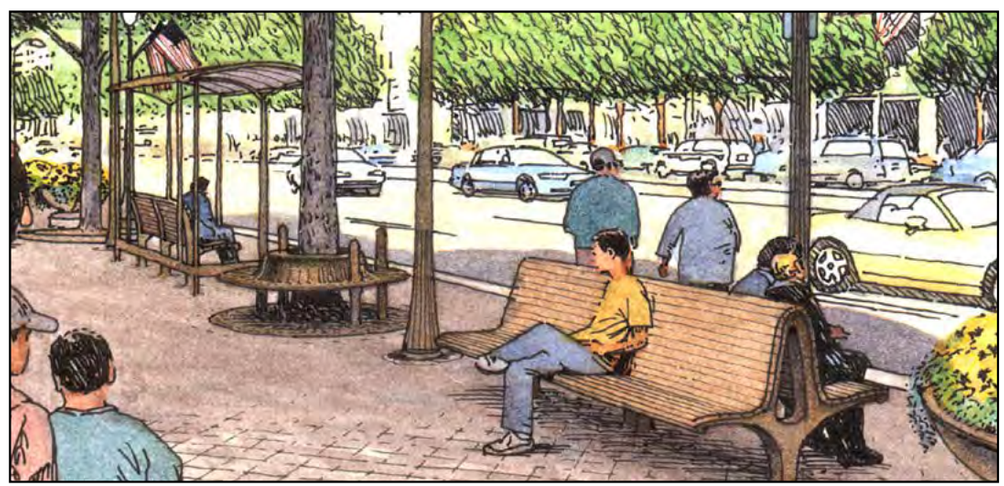
UD.C.3.27 Diagonal avenues should be treated in a manner that emphasizes their landscape features, including significant tree and ground plantings.

UD.C.3.28 Special Streets (such as Pennsylvania, Constitution, Independence, and Maryland Avenues), or those that are included in special planning areas (such as 10th Street, SW; 7th Street, NW; and F Street, NW) should be treated in a manner that reinforces their linkages, unique conditions, and individual character.

UD.C.3.29 Grid streets should be treated in a manner that builds upon existing streetscape standards and minimizes the contrast between security and streetscape elements.



Proposed contextual guardbooth design.



NCPC's *National Capital Urban Design and Security Plan* proposed streetscape security furniture.

Endnotes

1. The Federal Elements are prepared pursuant to Section 4(a) of the National Capital Planning Act of 1952 (now codified at 40 U.S.C. § 8722).
2. **L'Enfant Plan:** http://www.ncpc.gov/ncpc/Main(T2)/About_Us(tr2)/About_Us(tr3)/History.html
3. **McMillan Plan** http://www.ncpc.gov/ncpc/Main(T2)/About_Us(tr2)/About_Us(tr3)/History.html
4. **1910 Height of Buildings Act**: https://www.ncpc.gov/ncpc/Main(T2)/About_Us(tr2)/About_Us(tr3)/HeightofBldgs1910.pdf
5. The Schedule of Heights are height limitations in 15 different areas of Washington that are adjacent to public buildings, including the blocks around the White House, the Supreme Court, and the congressional office buildings. It functions in addition to the Height of Buildings Act.
6. **National Register of Historic Places Registration Form for the L'Enfant Plan**: http://focus.nps.gov/pdfhost/docs/NRHP/Text/97000332.pdf
7. **Public Parking Act of 1870**: https://comp.ddot.dc.gov/Documents/1870%20Parking%20Act.pdf#pagemode=none
8. For more information, see the National Register Nomination Form: http://focus.nps.gov/pdfhost/docs/NRHP/Text/97000332.pdf
9. **Monumental Core Framework Plan**: http://www.ncpc.gov/ncpc/Main(T2)/Planning(Tr2)/FrameworkPlan.html
10. **SW Ecodistrict Plan**: http://www.ncpc.gov/swecodistrict/
11. **Memorials and Museums Master Plan**: http://www.ncpc.gov/ncpc/Main(T2)/Planning(Tr2)/2MPlan.html
12. According to Casey Trees, in 1950 Washington, DC supported an estimated 50 percent tree canopy. By 2011, it had declined to just over 35 percent. http://www.caseytrees.org/about/mission
13. The Arlington County Board adopted "The Resolution of Concern Regarding Building Heights Related to the National Capitol Mall Axis" in 1982. It is non-binding and addresses NCPC's concerns regarding the east-west axis.
14. National Capital Planning Commission and Johns Hopkins University Press, 2006.
15. Zach Mortice, Managing Editor, AIArchitect, 2014 Twenty-five Year Award, "Washington Metropolitan Area Transit- Notes of Interest," www.aia.org/practicing/awards/2014/twenty-five-year-award/
16. **Extending the Legacy: Planning America's Capital for the 21st Century**: http://www.ncpc.gov/ncpc/Main(T2)/Planning(Tr2)/ExtendingtheLegacy.html
17. **Center City Action Agenda**: http://planning.dc.gov/page/center-city-action-agenda-2008
18. **Height Master Plan**: http://www.ncpc.gov/heightstudy/overview.html
19. **Anacostia Waterfront Intiative:** http://www.anacostiawaterfront.org/awi-transportation-projects/anacostia-riverwalk-trail/
20. Casey Trees – www.caseytrees.org/about/mission
21. Benefits of Trees: A Research List. www.actrees.org
22. DDOT's Urban Forestry Administration accounts for about half of all trees planted each year throughout the District. Casey Trees has a goal of creating 40 percent canopy by 2035.
23. **Public Realm Design Manual**: http://ddot.dc.gov/PublicRealmDesignManual
24. **National Mall Plan**: http://www.nps.gov/nationalmallplan/National%20Mall%20Plan.html
25. **In 2005, NCPC adopted an updated set of objectives and policies for reviewing perimeter security projects**: http://www.ncpc.gov/DocumentDepot/Publications/SecurityPlans/NCUDSP/NCUDSPAddendum2005.pdf
26. **Department of Defense's Unified Facilities Criteria**: http://www.wbdg.org/ccb/DOD/UFC/ufc_1_200_01.pdf
27. **National Capital Urban Design and Security Plan**: https://www.ncpc.gov/DocumentDepot/Publications/SecurityPlans/NCUDSP/NCUDSP_Section1.pdf

Urban Design Element: Technical Addendum



2016

National Capital Planning Commission

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Creating an Urban Design Element

The 2004 *Comprehensive Plan for the National Capital: Federal Elements* (Comprehensive Plan) contained policies that pertain to urban design, but not a stand alone element. Given the importance of urgan design across NCPC activities, staff began crafting a new Federal Urban Design Element to include in the Comprehensive Plan.

In July 2011, an Urban Design Task Force was created to work with NCPC staff to guide policy development for a new element. NCPC held two workshops to obtain stakeholder and public input. A resulting draft Urban Design Element was released in November 1, 2012 for a 90-day public comment period.

Following this release, the U.S. House Committee on Oversight and Government Reform directed NCPC to jointly prepare a study of the 1910 Height of Buildings Act with the District of Columbia. As a result, NCPC staff placed development of the Urban Design Element on hold until completion of the Height Master Plan. This plan received extensive public input and produced relevant technical information and visual modeling studies. NCPC submitted its portion of the final study, which included five recommendations that address national interests regarding the city's form and character, to Congress in November 2013. One recommendation was to study viewshed protections within the Comprehensive Plan.

Following completion of the Height Master Plan, NCPC updated and expanded the Urban Design Element, to include policy section and a technical addendum. The element reflects the guidance and contributions of the Task Force and public comments received on the original draft, as well as new material derived from technical work conducted for the Height Master Plan, public input, and the Commission's final recommendations, including a new viewshed section.

A Supplementary Technical Addendum

This technical addendum is a resource that supports policies within the new Urban Design Element of the Comprehensive Plan, including background, planning approaches, and explanatory graphics. The technical addendum provides more detailed context to support decision-making, including key concepts and definitions.

The addendum is comprised of two sections:

- An introductory overview of the formative contributors to Washington's urban design framework, particularly the L'Enfant and McMillan Plans (collectively the *Plan of the City of Washington*) and the Height of Buildings Act. This section also includes a summary of other notable plans, policies, and regulations that shape the urban design condition of the city and region.
- A viewshed policy framework to identify and evaluate critical viewsheds and vistas within Washington and its environs.

The Technical Addendum is part of the Comprehensive Plan and may be referenced in Commission activities, as appropriate.

I. Formative Contributors to Washington's Urban Design Framework

Two of the most formative contributors to Washington's form and character are the Plan of the City of Washington and the Height of Buildings Act. The Plan of the City of Washington refers to the L'Enfant Plan and McMillan Plan collectively.



A. Plan of the City of Washington

THE L'ENFANT PLAN.

The L'Enfant Plan of 1791 established the basic form of the original city including the National Mall, the city street grid, public spaces, and the location of the White House and U.S. Capitol. The L'Enfant Plan is a baroque city plan of four quadrants with a pattern of radiating avenues, parks, and vistas laid over an orthogonal system. The avenues were to be "wide, grand boulevards, lined with trees, and designed in such a manner that would visually connect topographical sites throughout the city."[1] At these sites important structures, monuments, and fountains were to be constructed.

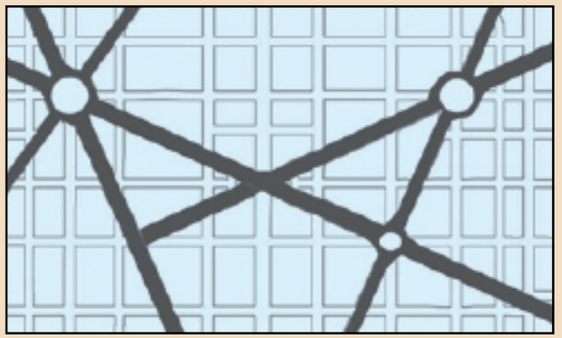
The result of Pierre L'Enfant's design was a plan with ceremonial spaces and grand boulevards that respected the land's natural contours in a picturesque manner. The open spaces established by the L'Enfant Plan are as integral to the city's design as the street network and configuration. In particular, the vistas, which are related to the location and extents of avenues and streets, "propel the [L'Enfant City] into the third dimension…for this reason, in keeping with the height-limit regulations governing construction in the District of Columbia and its importance to understanding the baroque nature of the plan. The open space above the streets and avenues is included in the National Register nomination."[2]



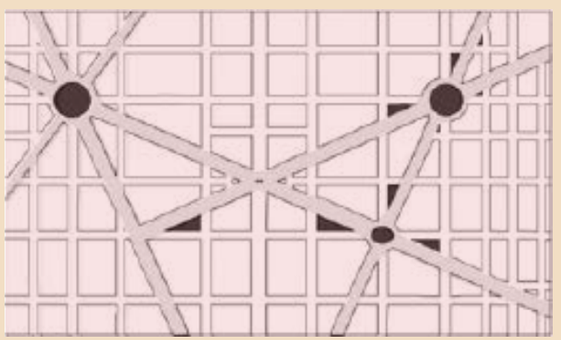
Edward Sachse, 1852 Historic Panoramic City Map

Key L'Enfant Plan features include:

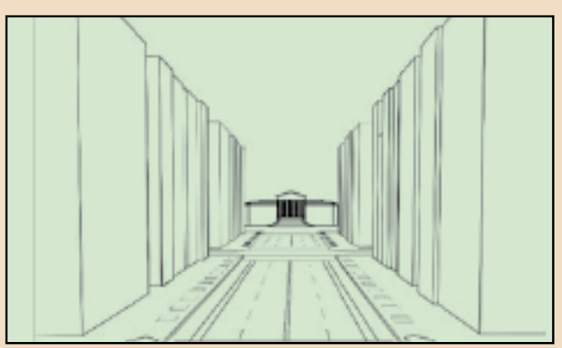
- The location of the U.S. Capitol at the center of, and on the most prominent site, within the city. This established the importance of Congress as the people's house.
- The location of the President's House at another elevated site, with a visual link to the U.S. Capitol by way of what is now known as Pennsylvania Avenue.
- Dramatic unimpeded views of the Potomac River and flanking hills from the U.S. Capitol and the White House, providing a constant reminder of the city's natural setting and the nation's first president.
- A connected and important system of streets, reservations, and open spaces that are listed on the National Register of Historic Places (NRHP). Within that system there are several major streets and avenues that have a particular role in establishing the images and symbols of the national capital. Many of these are the widest avenues. According to the 1792 version of L'Enfant's plan drawn by Andrew Ellicott, "the grand avenues and such streets as lead immediately to public places are from 130 to 160 feet wide, and may be conveniently divided into foot ways, walks of trees, and a carriage way. The other streets are from 90 to 110 feet wide." Some of the most important streets in the city's urban design framework include:
- The avenues set aside for major ceremonial functions and the pageant of government.
- The great axial streets that form the basic organization of the capital city, and avenues, including circles and squares.
- Boundary streets that mark the city's limits, define major topographic contours, or abut major rivers and streams.
- Street network that provide pedestrian connections between important civic buildings, national resources, and activities.



Grand Avenues



Public Spaces



Terminating Vistas

THE McMILLAN PLAN.

Developed by the Senate Park Commission in 1901, the plan now known as the McMillan Plan formalized the National Mall's design; created federal precincts around the National Mall (such as the Federal Triangle); and established key national parks such as the Civil War Defenses of Washington, also known as the Fort Circle Parks. It also refocused on removing development that interfered with the L'Enfant Plan's original framework, with uninterrupted greenspaces restored. The McMillan Plan was built upon the baroque ideals of the L'Enfant Plan and reinforced the idea of grand public spaces and civic buildings based on the City Beautiful Movement.

The McMillan Plan was concerned with "...two main problems: the building of a park system and the grouping of public buildings. By connecting existing parkland and carrying the park system to the outlying areas of the District and across the river as far as Mount Vernon and Great Falls, it addressed the city's regional character."

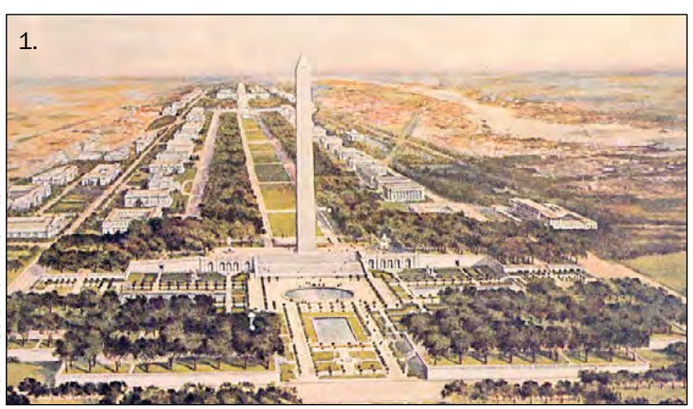
Key McMillan Plan features include:

1. Plans for the monumental core, including improvements to the National Mall and creation of the Federal Triangle.
2. Development of new infrastructure, including Memorial Bridge and Union Station.
3. An expanded park system, including Rock Creek Park, the Civil War Defenses of Washington, and parkways.

Victorian Era Contributions to the Plan for the City of Washington

Washington's form has adapted over time to accommodate growth and change. In addition to the bold plans articulated in both the L'Enfant and the McMillan Plans, a significant modification to Washington's street pattern occurred in the last several decades of the nineteenth century. "Maps show a proliferation of narrow mid-block streets, mainly in residential areas that developed during this period. The historic city plan of Washington DC, designed by L'Enfant and further enhanced by the innovations of the Senate Park Commission, focused on radial avenues, vistas, and park systems and laid the framework for the Nation's capital. Within this grand organization of arterial thoroughfares, the platting of streets to be lived upon rather than journeyed bears significance to the overall plan of a city. Just as the McMillan Plan adapted to a new century and a larger city and nation, the functional and aesthetic accommodations made by the Victorians cannot be ignored or slighted. Their landscaped reservations and their creation of intermediate grid streets were just as formative of the present character of 'Washington City' as were the McMillian Plan's grander designs. The formal nature of L'Enfant's design led to modifications of his large squares that were otherwise difficult to subdivide, develop and use efficiently without the introduction of new, minor streets. L'Enfant's concentration on first laying out the radial avenues led him to create blocks of differing dimensions when he overlaid the orthogonal streets. That longer blocks were later bisected by tertiary streets appears as unplanned by L'Enfant, as was the development of alleys, front-yard public-space 'parking,' and the reservations at the intersections of radial and grid streets. The creation of minor streets, though unplanned, was historically important and represents a natural outgrowth of the plan as it developed. Minor streets proved crucial to the filling-out of L'Enfant's plan and to the development and service of the dense, row residential pattern characteristic of the nineteenth-century city."[3]

1.



Commission of Fine Arts

National Mall

2.



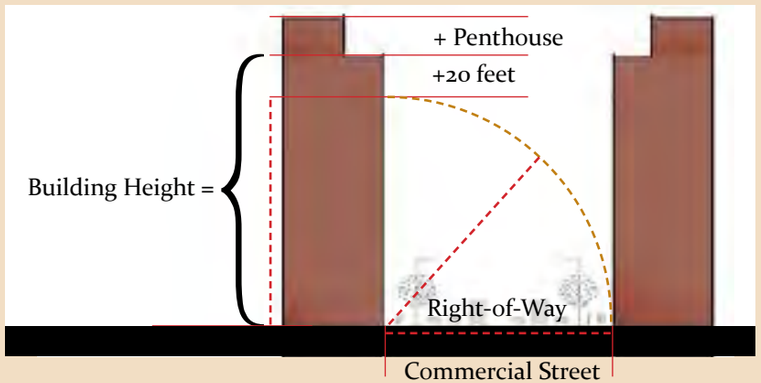
Library of Congress

1927-1932, Lincoln Memorial Bridge under construction

3.



Adam Fagen



Building height is measured based on the width of the street on which the building is located plus twenty feet.



Mathew Thomas Carroll

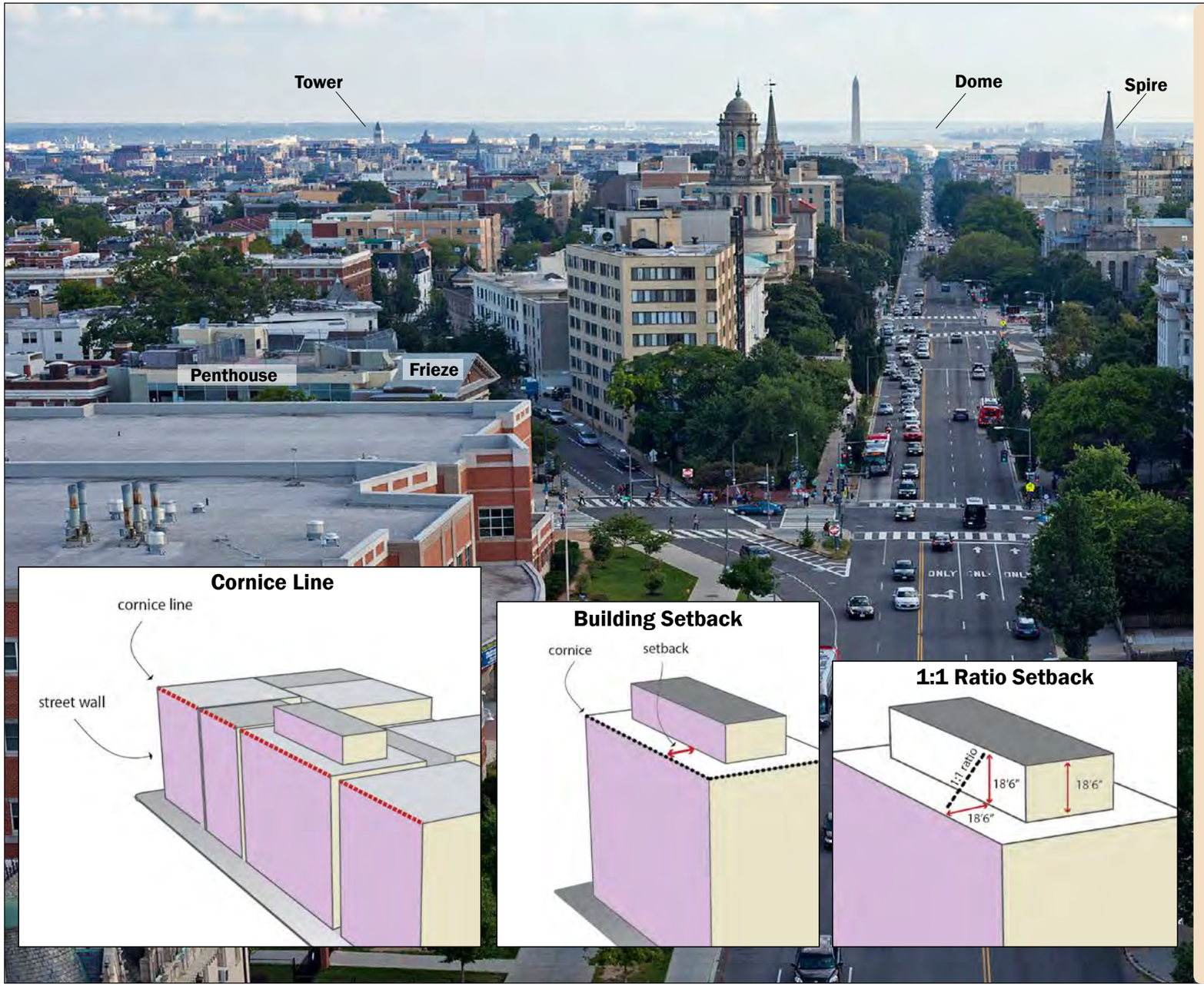
B. The Height of Buildings Act

One of the most important contributors to Washington's image is its unmistakable and symbolic skyline. For more than a century, the federally regulated 1910 Height of Buildings Act[4] (Height Act) has played a central role in shaping the form of the skyline, particularly within the boundaries of the L'Enfant Plan area and topographic bowl. From within Washington, DC or from across the Potomac River in Virginia, the long views of Washington reveal a skyline punctuated not by commercial skyscrapers, but by architectural embellishments and civic symbols. The Height Act also contributes to the pedestrian street-level experience, which is often described as having a sense of openness. It is of note that in many parts of the city, local zoning has historically been more restrictive than the Height Act.

In 2013, NCPC prepared the Height Master Plan[5] in partnership with the District of Columbia. The study's purpose was to examine whether the Height Act continues to meet national and local planning goals. The plan included a visual modeling study, technical planning analysis, and extensive public input. NCPC submitted its portion of the final study to Congress in November 2013, including recommendations to retain the Height Act throughout Washington and allow for occupancy of penthouses. In 2014, Congress passed a minor amendment to the Height Act, which generally reflects NCPC's recommendations.

Key Height Act features include:

- Building height is measured based on the width of the street on which the building is located, plus twenty feet in commercial areas. The Height Act includes a maximum height of 130 feet on commercial streets and 90 feet on residential streets. Certain segments of Pennsylvania Avenue may go up to 160 feet, with a building step back.
- The Height Act includes guidance on architectural and functional building elements that may exceed the maximum limits of the Height Act.
- The 130 foot building cap results in a horizontal street section along some of L'Enfant's grandest avenues, which means they are wider than the buildings on them are tall. This horizontal street section widens the frame around views, such as those to the U.S. Capitol. There are other streets within the L'Enfant Plan where the urban fabric is built out to the full height allowed under the Height Act. Many of these have street sections that are taller than the buildings on them are wide, and are more commercial in character. This creates a subtle but important distinction between the character of the city's monumental and symbolic streets and avenues from local commercial and residential streets.
- The creation of a horizontal skyline allows civic structures, such as the U.S. Capitol and the Washington Monument, to be the most visible objects within the skyline. This sets the national capital apart from other U.S. cities, where commercial buildings tend to dominate the skyline.
- The Height Act permits human occupancy of penthouses within a height of 20 feet or less, with a penthouse setback.



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Terminology and Definitions

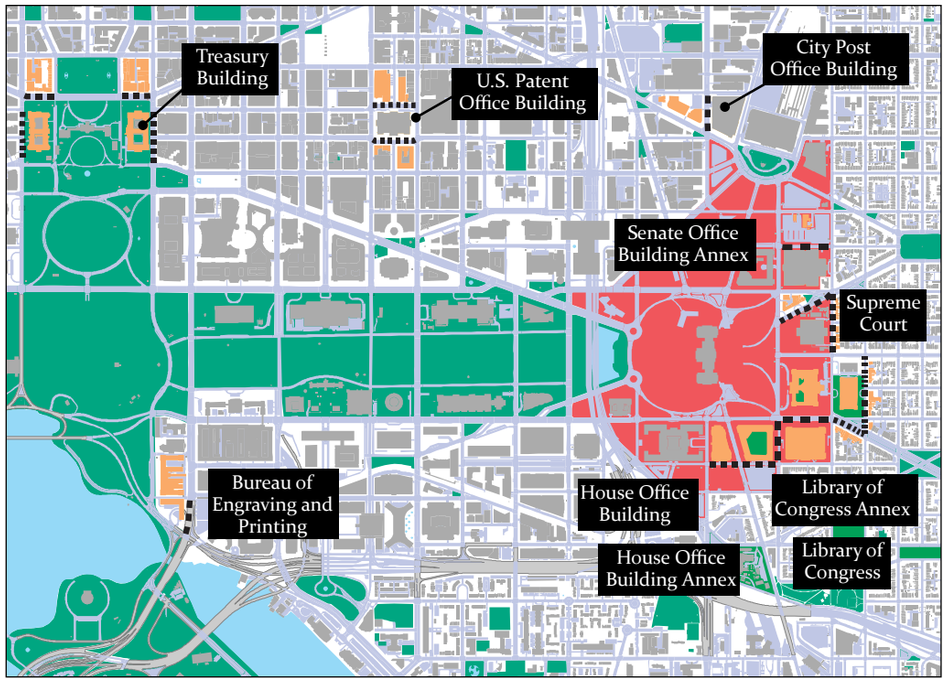
Penthouse: A structure on the top of a building's roof that is setback from the exterior walls and does not occupy the entire roof of the building. Penthouses may serve as occupiable spaces, or they may be constructed to house mechanical equipment.

Architectural Embellishments: Architectural details that add character and interest to a building. Embellishments primarily serve an aesthetic purpose. Examples of traditional embellishments on civic and institutional buildings in Washington, DC are spires, towers, friezes, and domes. (Architectural embellishments are sometimes used to conceal mechanical equipment, but generally are not occupied.)

Cornice Line: The horizontal top edge of a building. Cornice lines define the street-wall along a street and serve an important role in framing views along streets.

Building Setback: Distance which a structure is setback from a particular point. A penthouse setback refers to the distance a penthouse must be setback from the main building's outer-wall. The setback both distinguishes and preserves the main building's cornice line.

1:1 Ratio: As applied to penthouse setbacks, this requires a structure to be setback a distance equal to its height above the roof upon which it is located. The 1:1 ratio tucks additional building height away from the building's cornice line, opening more sky from a street level view. This proportion historically kept mechanical equipment on a roof out of sight from the street level.



Schedule of Heights adjacent to public buildings

THE SCHEDULE OF HEIGHTS.

Section 5 of the Height of Buildings Act provides for a Schedule of Heights.[6] This Schedule addresses site specific maximum building heights in sensitive areas adjacent to public buildings. These sites may require more specific or restrictive height limits given their location. While the Schedule can further restrict building height, it cannot violate the underlying formula determined in the federal law. The District of Columbia Government manages the Schedule. Note: policy guidance within the Urban Design Element should be viewed in concert with the existing Schedule of Heights. It assumes buildings covered under the Schedule will remain regulated within current limits.



The Cairo Building was constructed in 1894 (before the Height Act) and is 164 feet tall.

A summary of selected laws that influence urban design or the process by which key planning and design decisions are made include:

National Capital Planning Act. This Act, set forth at 40 U.S.C. §§8701 et seq., establishes the National Capital Planning Commission as the central planning agency for the federal government in the National Capital Region. The Act provides for the agency's essential functions, including development of a Comprehensive Plan for the region; review of federal and some District of Columbia (DC) proposed developments and projects; review of DC zoning amendments; annual production of the *Federal Capital Improvements Program* and review of the *DC Capital Improvements Program*; and the development of special planning projects.

Commemorative Works Act. This Act, set forth at 40 U.S.C. §§8901 et seq., specifies the requirements for development, approval, and location of new memorials and monuments in the District of Columbia and its environs. The Act preserves the urban design legacy of the historic L'Enfant and McMillan Plans by protecting public open space and ensuring that future memorials and monuments in areas administered by the National Park Service and the General Services Administration are appropriately located and designed. When amended in 2003, the Act established a Reserve, or no-build zone on the National Mall, a proposal called for by NCPC in its *Memorials and Museums Master Plan*.

District of Columbia Zoning Act. This Act, set forth at D.C. Code §§6-641.01 et seq., authorizes the DC Zoning Commission to regulate the location, height, bulk, number of stories, and size of buildings and other structures; lot occupancy; the sizes of open spaces; the density of population; and building and land uses. Federal buildings are exempt from zoning controls, but the Act mandates that NCPC serve on the DC Board of Zoning Adjustment, which hears many cases involving land near, or affected by, federal landholdings.

The Shipstead Luce Act. A federal law that regulates the height, exterior design, and construction of private and semi-public buildings in certain areas of the national capital. (P.L. 231-71).

A series of federal statutes from the 1880s through the turn of the century governs the laws prohibiting overhead wires, including those that support utilities and transportation. The law specific to the prohibition of overhead contact rail wires dates from a March 2, 1889 statute, which applies to Washington City and Georgetown (March 2, 1889, ch. 370, §2). Subsequent federal legislation authorizing the charters of new railroad companies operating in the District of Columbia contained mandates to lay underground wires specific to the boundaries of individual charters. The statutes specific to rail wires may be seen within the context of a larger body of legislation prohibiting use of overhead utility wires (July 18, 1888, ch. 676, §1; DC ST 1981 § 34-1402).

C. The Public Parking Act of 1870

In 1870, Congress passed the Public Parking Act of 1870[7] "Parking Act" which designated part of the right-of-way immediately adjacent to private property as park areas for shade trees and walkways to be maintained by the adjacent property owner. The Act led to the enhancement of the L'Enfant City's broad avenues creating tree-lined vistas to the city's prominent landmarks. It also largely shaped the public space and park-like character of Washington's system of streets across the entire city. The District of Columbia government regulates "parking" areas on non-federal lands in Washington to ensure that the areas remain landscaped and is visually accessible to the general public. Although these regulations have evolved over time, they continue to respected the original intent of the Parking Act to maintain public space as part of the District's park and open space system.

D. 20th Century Planning and Beyond

Additional selected contemporary plans and policies that continue to influence urban design in Washington today, include:

The Comprehensive Plan for the National Capital is comprised of District and Federal Elements. These Elements include broad urban design goals and key resources, including related to viewsheds.

Extending the Legacy: Planning America's Capital for the 21st Century [8](1997) re-orients the perceived center of the city to the U.S. Capitol and reinforces the importance of the major north-south axial relationships, including North and South Capitol Streets. It also proposed to eliminate obsolete freeways, bridges, and railroad tracks that fragment the city and break up major viewsheds, such as on South Capitol Street. The plan adds visual and functional focal points, such as new plazas.

Memorials and Museums Master Plan[9] (2001) identifies potential sites for future memorials based on the city's symbolic and physical urban design framework.

Monumental Core Framework Plan[10] (2009) proposes strategies to restore the viewsheds of important corridors, strengthen the seamless connection between federal and local areas, and create new connections to symbolic locations.

Sector Plans prepared by each of the jurisdictions within the National Capital Region that include broad and detailed urban design guidance. Of particular note are the District of Columbia Office of Planning Small Area Plans and Studies completed for neighborhoods throughout the city, as well as Arlington County's Rosslyn and Courthouse Area Sector Plans.

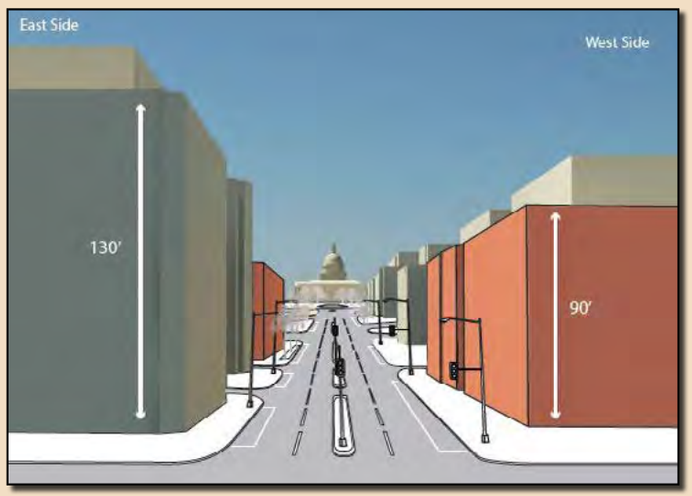
Area Plans prepared by NCPC, such as the *SW Ecodistrict Plan*,[11] and *The South Capitol Urban Design Street Study*[12] *(2003)*.

Federal Management Plans may identify urban design elements, such as viewsheds. Examples include plans for Arlington National Cemetery, the Armed Forces Retirement Home, and select National Park Service parks.

Public Space Plans and Policies including those related to street infrastructure, transportation infrastructure, and lighting. The District Department of Transportation Public Realm Design Manual[13] provides a summary of District of Columbia regulations and specifications for the design of public space elements throughout the city.

Planning Tools: Visual Analysis and 3D Modeling

Visual analysis and 3D modeling are useful planning tools for evaluating impacts of new built development. The following images are a sampling of visual analysis NCPC completed while working with local jurisdictions to understand impacts to important national resources.



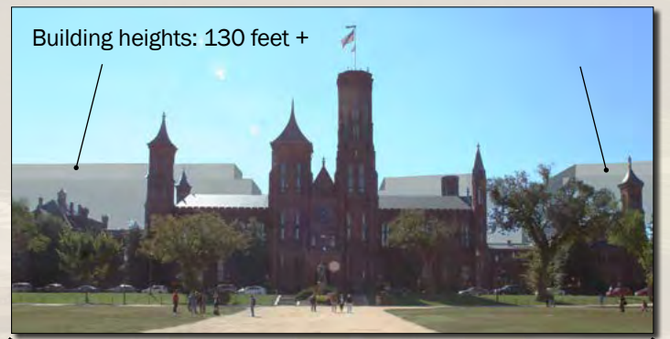
The image of North Capitol Street is part of a massing study completed by NCPC while working with the District of Columbia Office of Planning to understand proposed building massing south of K Street, NW. North Capitol Street is an important gateway into the monumental core with a preeminent view of the U.S. Capitol.

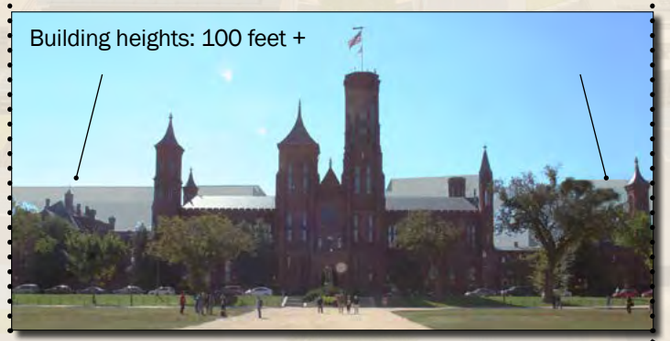


This image is part of a series of 3D simulations completed by NCPC while working with Arlington County Planning Department. Evaluated proposed building heights within Arlington's Courthouse neighborhood in the *Envision Courthouse Square Plan*, evaluated views from the National Mall.

These rendered images are part of a series of 3D simulations looking at various building heights and setbacks along the south side of Independence Avenue within the SW Ecodistrict. These images look at the Smithsonian Castle, a building with a unique roofline.

Design conditions such as building massing, roofline sculpting, and material choice all contribute to the making of a successful transition.







II. Viewshed Policy Framework

NCPC prepared this technical analysis and background information about viewsheds for the Urban Design Element. In the final Height Master Plan report, the Commission recommended adding a study of viewshed protections within the Comprehensive Plan. The viewshed section within the Urban Design Element is new and includes a distinct set of questions and issues. NCPC prepared this section of the Technical Addendum to explain the planning approach to viewshed protections and to support policy development, particularly within sections B.2 and B.5 of the element.

The primary purpose of this viewshed section is to create a framework for identifying and evaluating critical viewsheds and vistas within Washington and its environs. This section also:

- Provides technical information and guidance.
- Creates a succinct and replicable analysis of viewsheds that describes important characteristics and qualities.
- Establishes a baseline condition for particular views.
- Provides consistent criteria, vocabulary, and direction on planning matters.
- Proposes an agenda for future study.



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General Principles for Viewshed Maintenance

One of the most important hallmarks of the capital city's symbolic image and urban design framework is a three dimensional spatial and visual order that reinforces the preeminence of national symbols and democratic institutions. The city's street-level views and vistas are created by the location and extent of its streets, the height of buildings, and where streets intersect with important public spaces or natural areas. These elements help define the pedestrian experience in the nation's capital and generally prioritize natural and symbolic elements within a viewer's line of sight. Many of the city's vistas and views are particularly distinctive within the original L'Enfant City, although some street-level linear viewsheds extend well beyond the topographic bowl and at elevated points which give the viewer a wider perspective to enjoy the city. These panoramic viewsheds are principally shaped by natural features and the building mass in the surroundings. Building mass, public realm, streetscape programming, and natural features are all important contributors to the quality of the city's viewsheds and the character of its streets.

NCPC supports the following general principles related to viewshed maintenance:

- To the greatest extent possible, create a wide visual frame and natural backdrop ("breathing room") around the U.S. Capitol, White House, Washington Monument, and other major symbolic elements within the monumental core.
- Preserve the visual openness and functional qualities of public spaces by preventing visual incursions into the rights-of-way wherever possible, particularly throughout the L'Enfant City and at key topographical points and gateways. Within the L'Enfant City, this protection extends to the public space up to the full height allowed under the Height Act and is particularly important at intersections and termini of radial and axial avenues, on streets that cross or are adjacent to reservations, and near major historic landmarks and settings.
- Support the District Department of Transportation's current practice of linking lighting design to special streets and places. Many of Washington's lights are vertical and have limited horizontal armatures, which limits infrastructure in the right of way, and reinforces the city's viewsheds. Encourage existing and new practices, as necessary, to ensure that preeminent viewsheds and significant vistas which provide views of major buildings, parks, or commemorative works are enhanced by trees and other streetscape elements.
- Support policies to sensitively locate and design interpretive, directional, advertising, and other functional signs in a way that reinforces preeminent viewsheds described in this section.



Architect of the Capitol

The visual frame around the U.S. Capitol is a natural one.



Scott@GP

Elsewhere, commercial buildings and other signage may be located within the backdrop of major civic structures. This is in Nashville, TN.



Roadway infrastructure impacts the South Capitol Street view corridor. Further study is needed to address major infrastructure and develop a distinct, cohesive corridor to reinforce the quality of views to the U.S. Capitol.



NCPC studied alternatives to reconfigure the U.S. Department of Energy building and reopen 10th Street, SW. This will strengthen the quality of the street and link the waterfront and the National Mall.



National Capital Trolley Museum



National Capital Trolley Museum

Washington operated a streetcar system that utilized an underground conduit system from the 1890s-1960s.

Visual Incursions

In the context of viewsheds, visual incursions are built or natural elements that extend within a view corridor. They could technically include a wide range of built and natural elements, permanent and semi-permanent. Examples of visual incursions may include some types of transportation infrastructure, security infrastructure, and permanent buildings with overhangs. It is important to note that well-designed streetscape elements and a healthy tree canopy are not considered visual incursions. These can contribute to viewshed quality and reinforce the processional experience (spatial order) along an important corridor.

One public realm feature that is unique to parts of Washington and that has enhanced its viewsheds is the long-standing practice of hiding or diminishing views of utilitarian infrastructure. Examples include the ban on overhead streetcar and utility wires within the L'Enfant City, the design of lighting and other utility infrastructure, and the 1:1 penthouse setback within the Height Act, which hides mechanical equipment for buildings.[14] As a result, it is one of the largest wire-free cities in the world.

Together with the Height Act, these public realm principles created an elegant and orderly quality to city character that reinforces a sense of openness at the street-level and enhances the natural setting—integrating these qualities into future decisions about modern transportation and utility infrastructure—which also occupy public space—remains an important urban design policy question.

Generally, NCPC is concerned with visual incursions that:

- Extend within the street right of way.
- Detract from the preeminence of a major national resource along a view corridor.
- Visually sever major landscape elements.
- Detract from the character of historic, cultural, or other open space areas.

Core Issues for Discussion: Viewsheds

There are several related urban design issues that should be addressed at the project level and though public dialogue, rather than through Comprehensive Plan policy.

The L'Enfant Plan—by design—creates opportunities for reciprocal relationships between natural and built elements. And, the city's baroque planning tradition often situates elements at the center of parks and open spaces. Parks that contain memorials may define the extent of, or be located within, the preeminent viewsheds or vistas identified within this addendum. Enhancing viewsheds and creating civic spaces within them do not have to be mutually exclusive. However, priorities should be weighed early in the site planning process.

On a project level, key questions to consider include:

- The proposed element's scale.
- The significance of the viewshed.
- Whether a vertical or horizontal orientation is appropriate, given the design and the needs of the setting.
- Planning and urban design goals for site integration and creating successful public spaces.

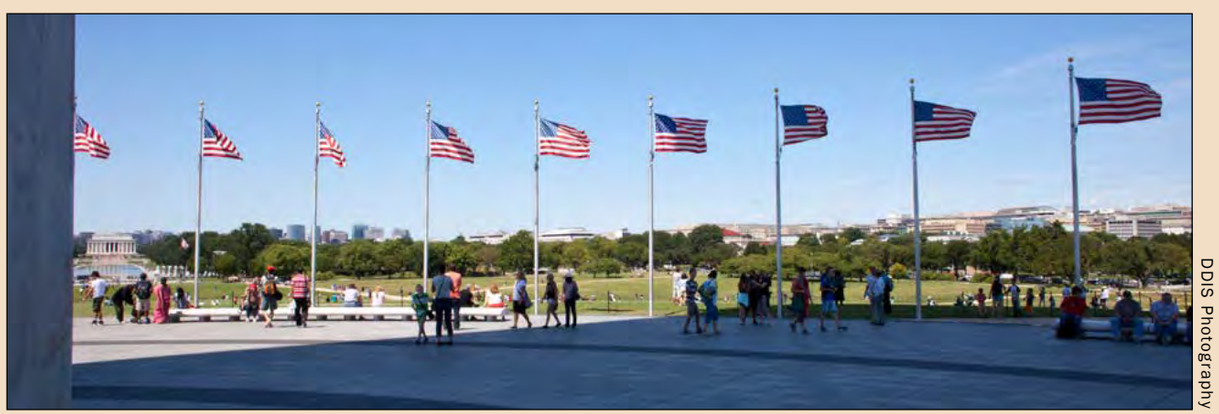


M.V. Jantzen

Freedom Plaza, along Pennsylvania Avenue, is an example. Depending on its scale and location, a new memorial or structure, could disrupt this long view corridor. On the other hand, terminating vistas are part of the city's design and a principal of the L'Enfant Plan.

Maintaining Washington's visual hierarchy

Washington's skyline, and a few major vistas within the monumental core, follow a visual hierarchy that emphasize symbolic and monumental buildings. (refer to section A.2.3 of the Urban Design element on the visual order) How do we encourage quality design of built elements, such as federal buildings, within the preeminent viewsheds, while also maintaining that hierarchy? What is the role of new memorials and museums proposed within major viewsheds? How do we understand the visual hierarchy of new memorial elements within the context of the city's preeminent viewsheds?



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Viewshed Policies: Methodology and Approach

The primary purpose of the addendum is to create a framework to identify and evaluate critical viewsheds and vistas within Washington and its environs. The Technical Addendum provides the tools to evaluate impacts and urban design challenges within the nation's capital. Viewsheds are one of many critical elements that together create Washington's urban design, and viewshed maintenance should not be prioritized to the exclusion of other planning goals, such as creating public spaces. As a general matter, viewshed maintenance is a design challenge that must be weighed and evaluated against other program goals and design for future development within the region.

(1) Conduct background research from the following source materials:

a. Existing planning guidance from the *Plan of the City of Washington*

b. The *Plan of the City of Washington* National Register nomination

c. Existing planning guidance from more recent plans, including the Comprehensive Plan, *Memorials and Museums Master Plan*, Legacy Plan, Framework Plan, and the Height Master Plan.

d. Case study research. Staff evaluated existing viewshed policies from other cities.

(2) Identify general viewshed and vista typologies and contributing elements:

a. List and diagram viewshed and vista typologies.

b. Identify major elements that contribute to any viewshed or vista.

   i. Natural elements: street trees, topography, waterways

   ii. Built elements: building mass (height and setback), infrastructure, street furniture

c. Identify factors that influence viewshed quality.

   i. Visibility

   ii. Pedestrian orientation

   iii. Visual cohesiveness

   iv. Visual preeminence of major symbols

(3) Identify viewsheds and vistas that warrant inclusion in the Federal Elements of the Comprehensive Plan and classify them based on the type. Map and propose policy guidance for each classification.

(4) Prepare an action agenda for future study.

Viewshed Types + Definitions

This section will identify the different types of views and create a common vocabulary. There are three types of viewsheds within the National Capital Region: panoramic viewsheds, viewshed cones, and linear viewshed corridors. The character of each viewshed type is described below, as are other key terms.

Panoramic Viewshed: Washington, DC's sweeping vistas are a result of geography and height restrictions that maintain the hierarchy of buildings across the skyline (not allowing visual competition with the defined prominent structures). Additionally, height controls allow for sweeping vistas that can be appreciated from numerous vantage points from all directions. Without height restrictions within the topographic bowl, the sweeping panoramic views of the U.S. Capitol dome would likely be lost and its visual prominence restricted to viewshed corridors. Therefore, the skyline is as integral an element of urban design as individual view corridors.

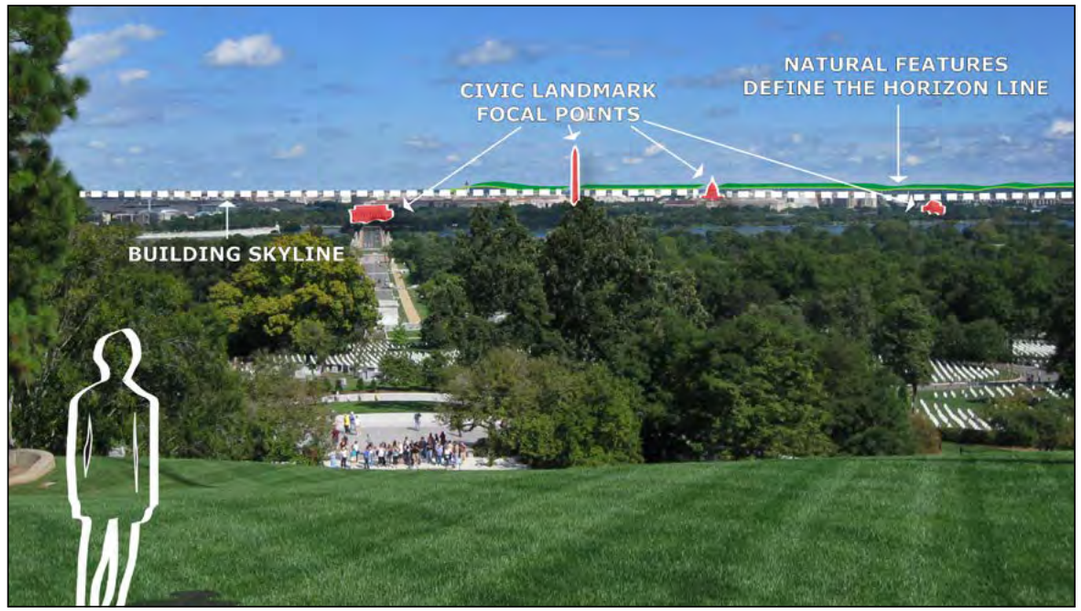
Viewshed Cone: (views to the horizon) The primary vistas, as defined in the NRHP nomination,[15] are examples of viewshed cones in the nation's capital. The extent of these viewsheds is conical in form.

Linear Viewshed Corridors: Or a terminating vista within the L'Enfant Plan, are linear views with an axial line of site that are defined by public realm elements streetwalls in the middle ground, and the focal point object(s) at the viewshed terminus. Terminating vistas within the L'Enfant City commonly feature significant civic buildings or spaces.

Observation Point: A position where a person stands to view.

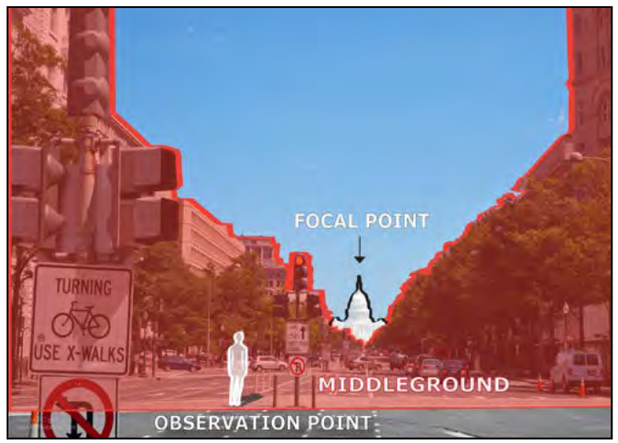
Middle ground: The part of the view that is the space between the foreground and background.

The streetscape or landscape program: An important public realm feature that contributes to a view's composition. Looking down Pennsylvania Avenue, the tree canopy (for a majority of the year) serves as the primary visual element framing the U.S. Capitol.



Panoramic viewshed: Observation point from the front lawn of Arlington House, Arlington National Cemetery





Middle ground



Background



Tree Canopy



Visual Incursions

Background: The part of the view that is furthest from the viewer and beyond both the foreground and middle ground. The background can be thought of as the backdrop or canvas for which the foreground and middle ground are set against.

Visual Incursions: In the context of viewsheds, visual incursions are built or natural elements that extend within a view corridor. They can technically include a wide range of built and natural elements, both permanent and semi-permanent.

For example, District Department of Transportation uses vertical lighting elements that have limited horizontal armatures. These particular elements are also removable. This current practice of locating functional elements in this way maintains the openness of pedestrian level views to important landmarks.

Viewshed Classification System

For purposes of the Urban Design Element, policy development, and future work, views are organized into three classes. Policy guidence for each class varies.

1. Pre-Eminent Viewsheds: Includes views to and from the monumental core,in particular to and from the U.S. Capitol and White House. These views are critical because they contribute to the visual importance/hierarchy of nationally symbolic public buildings and civic spaces.

2. Significant Vistas: All other important views that are generally a product of Washington's historic composition (Plan of the City of Washington). Many of these views are street-level traditional terminating vistas. These vistas offer public realm elements and streetscape programming that maintain the visual order and reinforce the city's network of streets and public spaces.

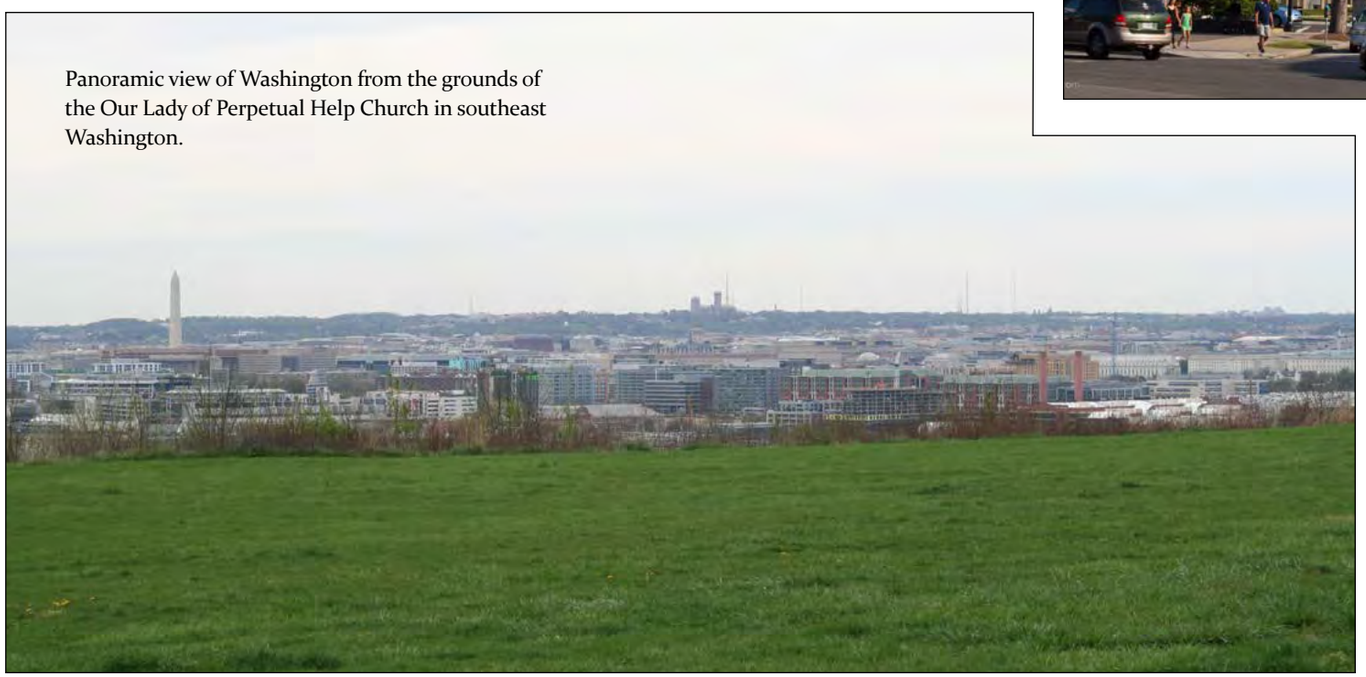
3. Scenic Panoramic Viewsheds: Includes significant panoramic views within the National Capital Region. Sweeping views capture Washington's skyline including many prominent structures within the monumental core (Washington and Arlington). These views often offer the greatest opportunity to understand the relationship between the scenic and built elements of the capital'ss urban design framework.



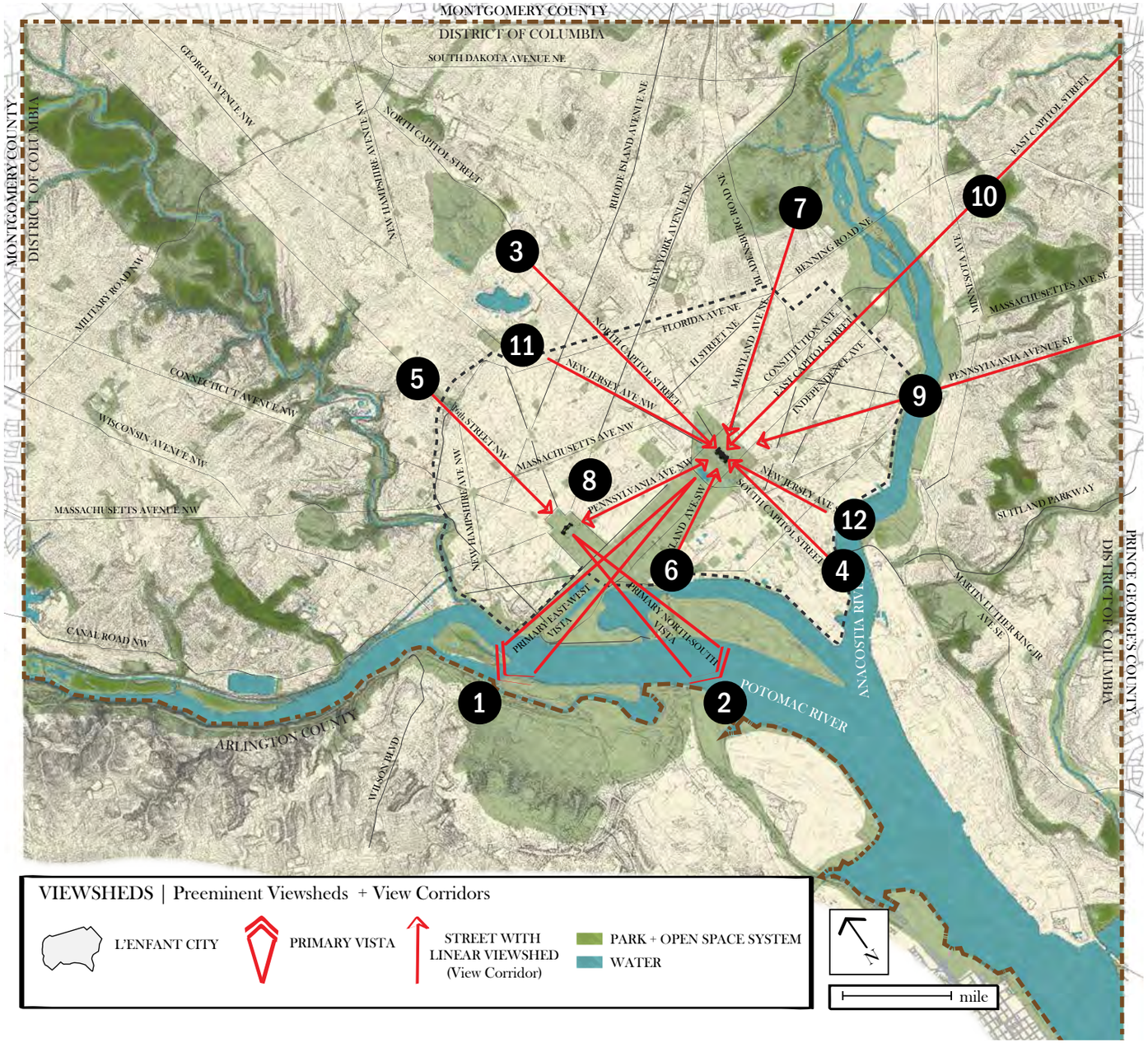
Terminating vista along 10th Street, NW looking toward the Smithsonian National Museum of Natural History.



Terminating vista along New Jersey Avenue, NW looking toward the U.S. Capitol.



Panoramic view of Washington from the grounds of the Our Lady of Perpetual Help Church in southeast Washington.



Inventory | Preeminent Viewsheds

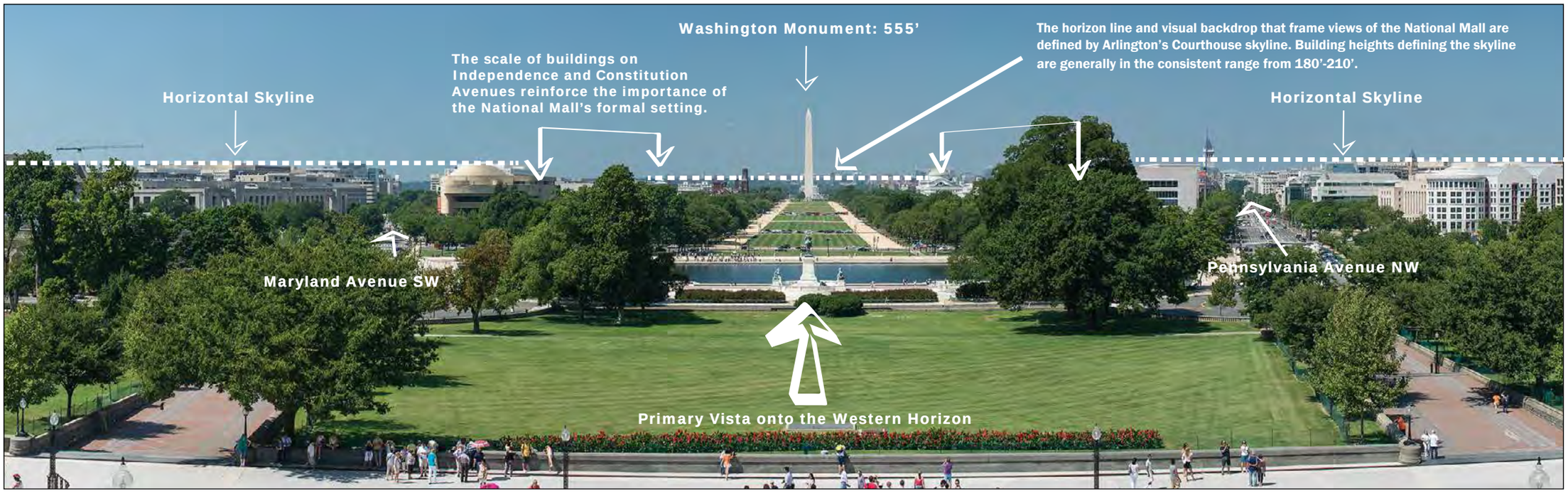
This inventory includes streets and geographic regions within Washington that warrant the most detailed planning and urban design guidance. These include views to and from the monumental core, specifically to and from the U.S. Capitol and White House. The character and quality of these iconic views are the most critical because they contribute to the visual hierarchy of buildings and spaces that symbolize the capital city.

This category of viewsheds will receive the most detailed level of guidance related to viewshed maintenance.

Preeminent Viewsheds

1. Primary East-West Vista from the National Mall to the Western Horizon
2. Primary North-South Vista from the White House to the Southern Horizon
3. North Capitol Street Linear View from the U.S. Capitol to Michigan Avenue, NW
4. South Capitol Street Linear View from the U.S. Capitol to Potomac Avenue, SW
5. 16th Street, NW Linear View from the White House to Euclid Street, NW
6. Maryland Avenue, SW Linear View from the U.S. Capitol to the Tidal Basin
7. Maryland Avenue, NE Linear View from the U.S. Capitol to the National Arboretum
8. Pennsylvania Avenue, NW Linear View from the U.S. Capitol to the White House Grounds
9. Pennsylvania Avenue, SE Linear View from the U.S. Capitol to Southern Avenue, SE
10. East Capitol Street from the U.S. Capitol to Southern Avenue, SE
11. New Jersey Avenue, NW Linear View from the U.S. Capitol to Florida Avenue, NW
12. New Jersey Avenue, SE Linear View from the U.S. Capitol to Tingey Street, SE

Preeminent Viewshed: Primary East-West Vista



Existing Conditions

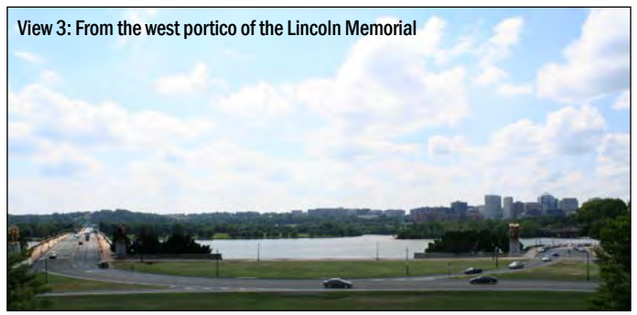
This primary vista is listed in the NRHP, and it provides a strong visual connection from the U.S. Capitol along the National Mall to the Lincoln Memorial and westward to the horizon. This axis is an essential orientation point that establishes the spatial order of the city and contributes to the visual quality within the monumental core. Arlington County, Virginia plays an integral role in the urban design framework of the National Capital Region, including this particular vista. The Courthouse neighborhood is sited along the Arlington Ridge, a natural feature that functions as the visual backdrop to the East-West vista. Viewed from the National Mall, an interspersed tree-line complements Courthouse's consistent, low-lying urban wall and frames westward views from the Mall. While the east-west axis is no longer a strictly scenic vista, the Courthouse is perceived today as fairly uniform, without individual vertical elements interrupting the skyline and competing with the visual frame around the Lincoln Memorial and Washington Monument. A wider perspective of the east-west axis includes a sharper transition to the building masses of the Rosslyn skyline to the north. This shift from scenic to urban backdrop presents a challenge for assessing the character and future maintenance of this major vista.

Focal Point: The National Mall onto the Horizon

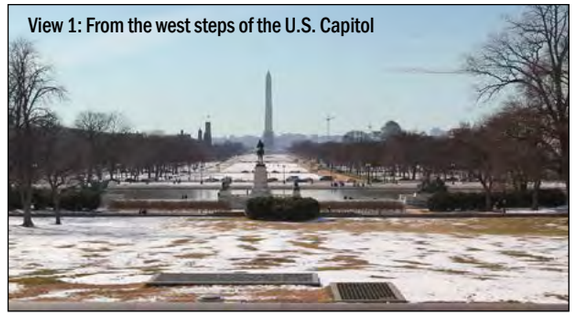
This vista includes the National Mall, one of the most important civic and cultural spaces in the nation. The U.S. Capitol, Washington Monument, and Lincoln Memorial are the most visually prominent structures within a panoramic, scenic setting of the National Mall and surrounding landscapes. The form and character of the built and natural elements within and around this vista are important parts of how the public experiences some of the nation's most beloved memorials and public buildings. Additional important resources located within this vista include Arlington National Cemetery and the George Washington Memorial Parkway.

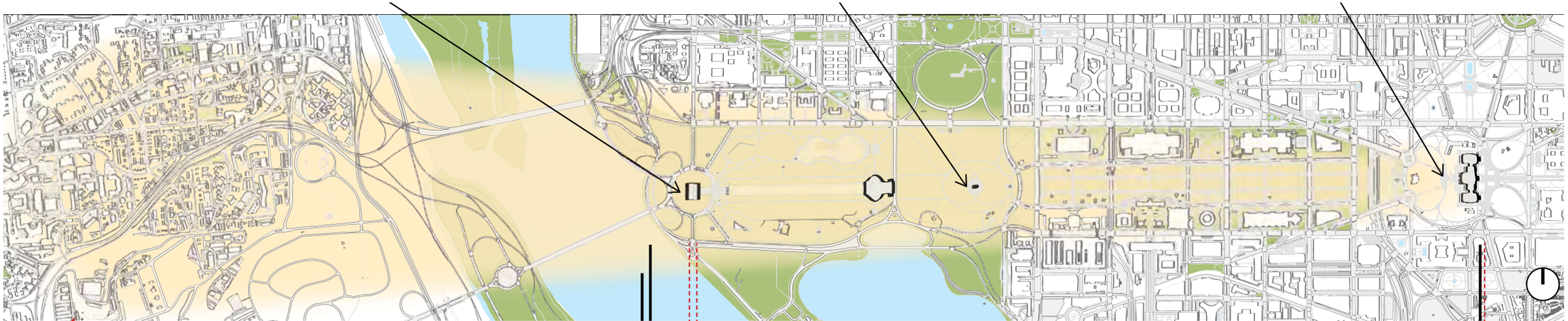
Policy Direction

Prepare urban design studies to assess the visual quality of the viewshed cones that extend outward from the primary vistas along the western and southern axes of the National Mall. Encourage and work with local jurisdictions to prepare and implement urban design strategies to address major land use transitions and protect the visual quality of viewsheds from the National Mall, in consideration of both the built and natural elements.



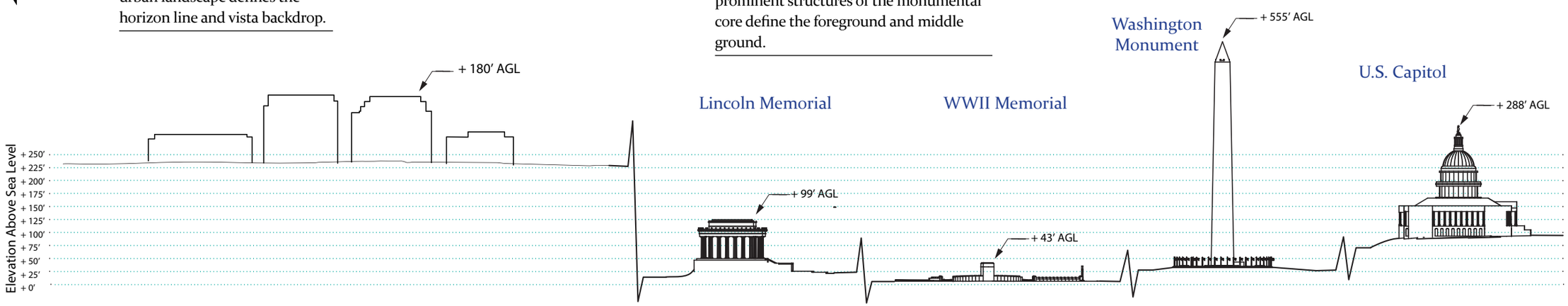






The Arlington Ridge and its urban landscape defines the horizon line and vista backdrop.

The National Mall and the visually prominent structures of the monumental core define the foreground and middle ground.



Preeminent Viewshed: North Capitol Street

Existing Conditions

North Capitol Street is a primary axis and a major civic gateway into the monumental core. Its topography descends steadily in grade starting roughly at Florida Avenue heading south towards the U.S. Capitol. Today, building height generally tapers off moving outward from the bowl toward the topographic ridge. This relationship between natural topography and building scale strongly influences perceptions about the scale of the U.S. Capitol dome and its preeminence within the pedestrian's line of site. This affords the U.S. Capitol dome a generous sky backdrop and visual preeminence when viewed well north of the L'Enfant City. Street lighting and other infrastructure along North Capitol within the L'Enfant City is designed with limited intrusion into the right of way. A significant view of the U.S. Capitol Dome terminates directly north of the North Capitol Street intersection with Michigan Avenue, NW.

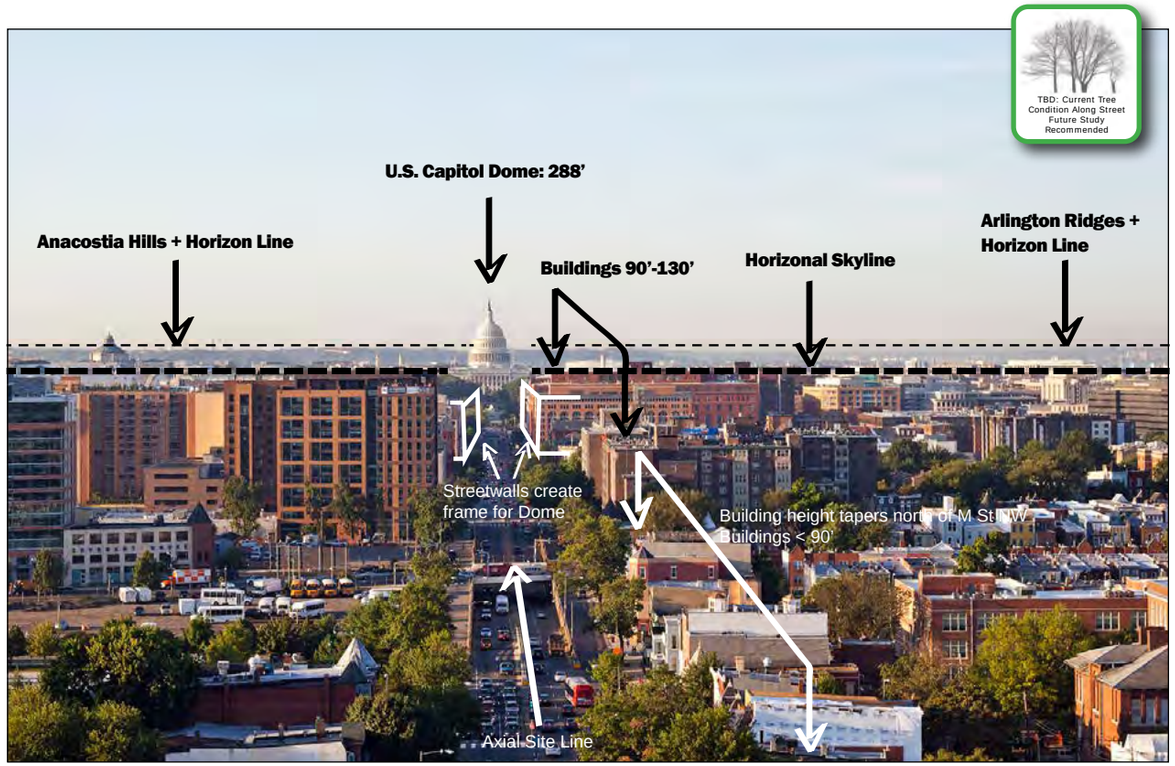
From a planning perspective, North Capitol Street is at a pivotal point in its development that prompts several complex urban design questions. Today, North Capitol is at the confluence of the new, higher densities of the NoMa commercial neighborhood to the east, and lower densities that have historically characterized this area on the west. Visual models illustrate the undefined edges along each of the blocks within the corridor under zoning, weakening the composition among buildings on either side of the street. This results in the impression that North Capitol is defined by the edges of the areas around it, rather than as a distinctive street unto itself.

Focal Point: U.S. Capitol Dome

The U.S. Capitol was intentionally situated on an elevated location within the topographic bowl to reflect its preeminence and lasting significance to the country as the People's House. Its preeminence is reinforced by the U.S. Capitol's location along a primary symbolic axis with respect to the city's system of streets and public spaces. Today, the U.S. Capitol dome itself is a defining symbol within the cityscape and contributes to the city's distinctive skyline. Skyline and street-level linear views to and from the U.S. Capitol are an essential and distinguishing element of Washington's form and character.

Policy Direction:

- Specific recommendations for building mass south of K Street with respect to block-level symmetry and the visual frame around the U.S. Capitol.
- Additional urban design study to develop a distinct, cohesive corridor with urban design strategies that address these important transitions in building scale with respect to topography, reinforce the quality of views to the U.S. Capitol, and promote the potential of this street as one of the city's most important gateways.
- Additional urban study to address tree canopy conditions and the ground floor retail program to improve the pedestrian experience.



Considerations for Viewshed Maintenance

- Consider preserving existing building height along the blocks immediately adjacent to the U.S. Capitol Building. This allows for "breathing room" that reinforces the visual frame around these structures. In particular, building heights south of K Street should be maintained through massing and setbacks to preserve the established landscape-oriented frame.
- Consider height, mass, and bulk of new development in the foreground, middle ground, and background to maintain the relationship between the U.S. Capitol dome and the sky backdrop.
- Consider whether the roofline/cornice line treatment of new buildings appropriately frames the viewshed corridor along North Capitol Street.
- Consider the visual impact of public infrastructure and landscaping on the view corridor.

Viewshed Extent Plan View



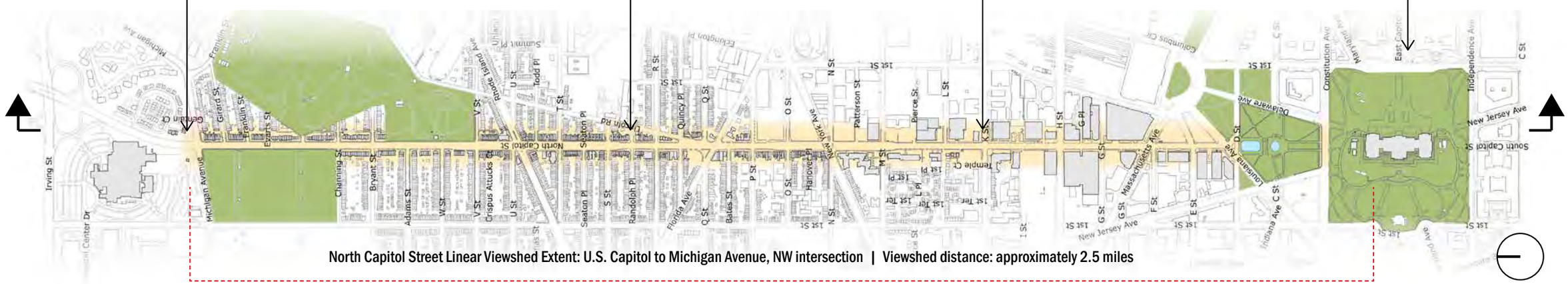
View 2: North Capitol Street at Randolph Place, NW



View 1 : North Capitol Street, NW at K Street, NW

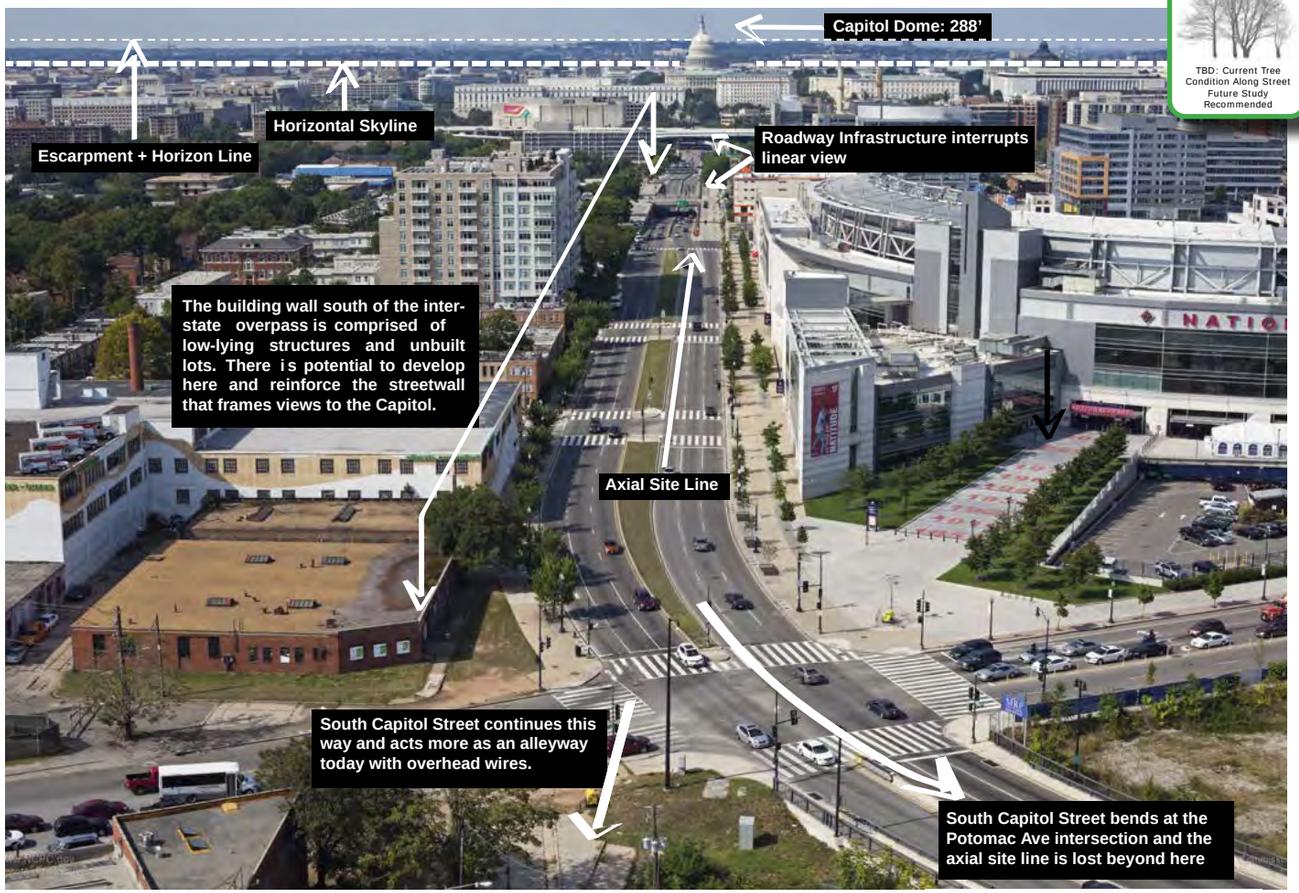
A significant view of the U.S. Capitol terminates at the Michigan Avenue, NW intersection

Focal Point: U.S. Capitol Dome





Preeminent Viewshed: South Capitol Street



Existing Conditions

South Capitol Street is a primary axis and gateway into Washington. Historically, there was a tremendous gap between the potential of this corridor and its condition. Most particularly, the Southwest/Southeast Freeway severs the urban fabric along South Capitol Street and the view to the U.S. Capitol. Spotty development and empty lots along some blocks have also historically characterized the area. However, new development, such as the baseball stadium, a handful of buildings, and the proposed new Frederick Douglass Bridge are linking downtown to the waterfront and reclaiming South Capitol as an important place for both the future growth of the District and as a monumental civic boulevard. Building height and density varies greatly leaving opportunity to develop and reinforce the viewshed corridor along this street. However, South Capitol's potential to achieve more than the appearance of a vehicular thoroughfare depends on future streetscape and infrastructure improvements.

Focal Point: U.S. Capitol Dome

The U.S. Capitol was intentionally situated on an elevated location within the topographic bowl to reflect its preeminence and lasting significance to the country as the people's house. Its preeminence is reinforced by the U.S. Capitol's location along a primary symbolic axis with respect to the city's system of streets and public spaces. Today, the U.S. Capitol Dome is a defining symbol within the cityscape and contributes to the city's distinctive skyline. Skyline and street-level linear views to and from the U.S. Capitol are an essential and distinguishing element of Washington's form and character.

Policy Direction:

- Specific recommendations for building mass between M Street and the freeway, and north to the U.S. Capitol.
- Recommend revisiting the *South Capitol Street Urban Design Study* (2003) and developing strategies to address major infrastructure, land use, and public realm issues. Goals include developing the street as a distinct, cohesive corridor with urban design strategies that reinforce the quality of views to the U.S. Capitol, promote the potential of this street as one of the city's most important gateways, and address tree canopy conditions and ground floor retail programs, which would greatly impact the pedestrian experience.
- Recommend further urban design and programming study of the planned South Capitol Street terminus (the oval) at the Anacostia River.

Considerations for Viewshed Maintenance

- Address the nature of transportation improvements that should be undertaken in the South Capitol Street corridor to improve visibility of the U.S. Capitol currently hindered by highway infrastructure.
- Address the visual impact of public infrastructure and landscaping on the view corridor.
- Consider maintaining the existing building height along the blocks immediately adjacent to the U.S. Capitol. This allows for "breathing room" that reinforces the significance of the dome.
- Consider height, mass, bulk of new development in the foreground, middle ground, and background to maintain the relationship between the Capitol dome and the sky backdrop.
- Consider whether the roofline/cornice line treatment of new buildings appropriately frames the viewshed corridor along South Capitol Street.

Viewshed Extent Plan View





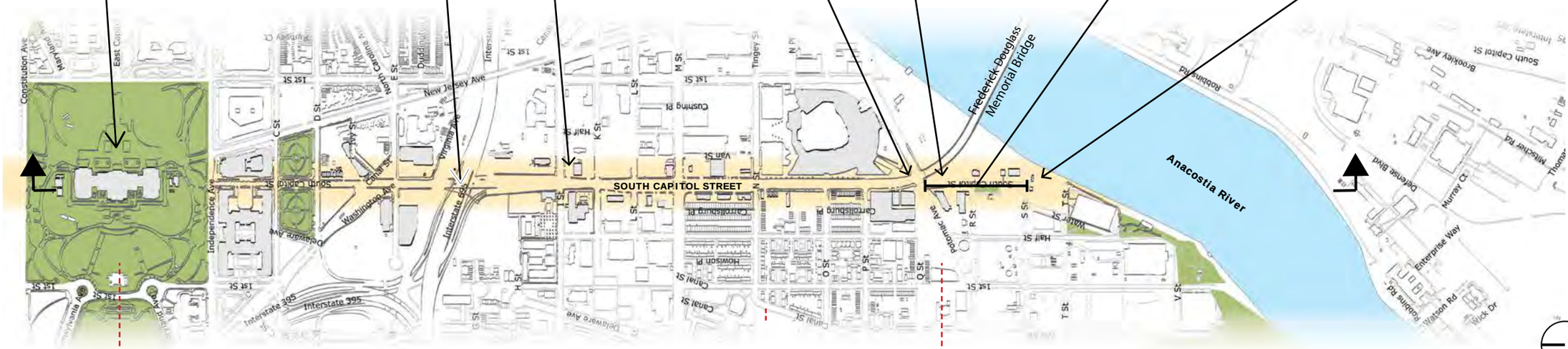


Focal Point: U.S. Capitol Dome

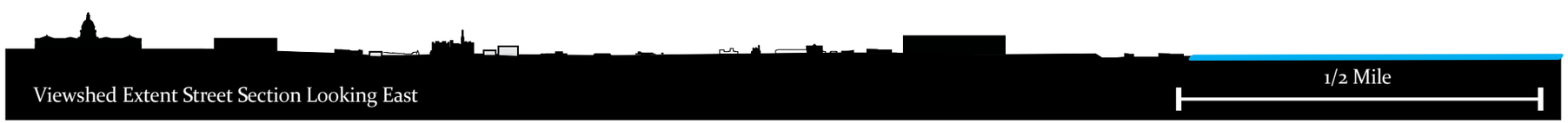
Highway infrastructure interrupts the linear view to the U.S. Capitol

A significant view of the U.S. Capitol terminates at the Potomac Avenue intersection

The portion of South Capitol Street that extends south beyond the Potomac Avenue intersection is treated as an alley way.



South Capitol Street Linear Viewshed Extent: U.S. Capitol to Potomac Avenue intersection | Viewshed distance: approximately 1 mile



Viewshed Extent Street Section Looking East

Preeminent Viewshed: 16th Street

Existing Conditions

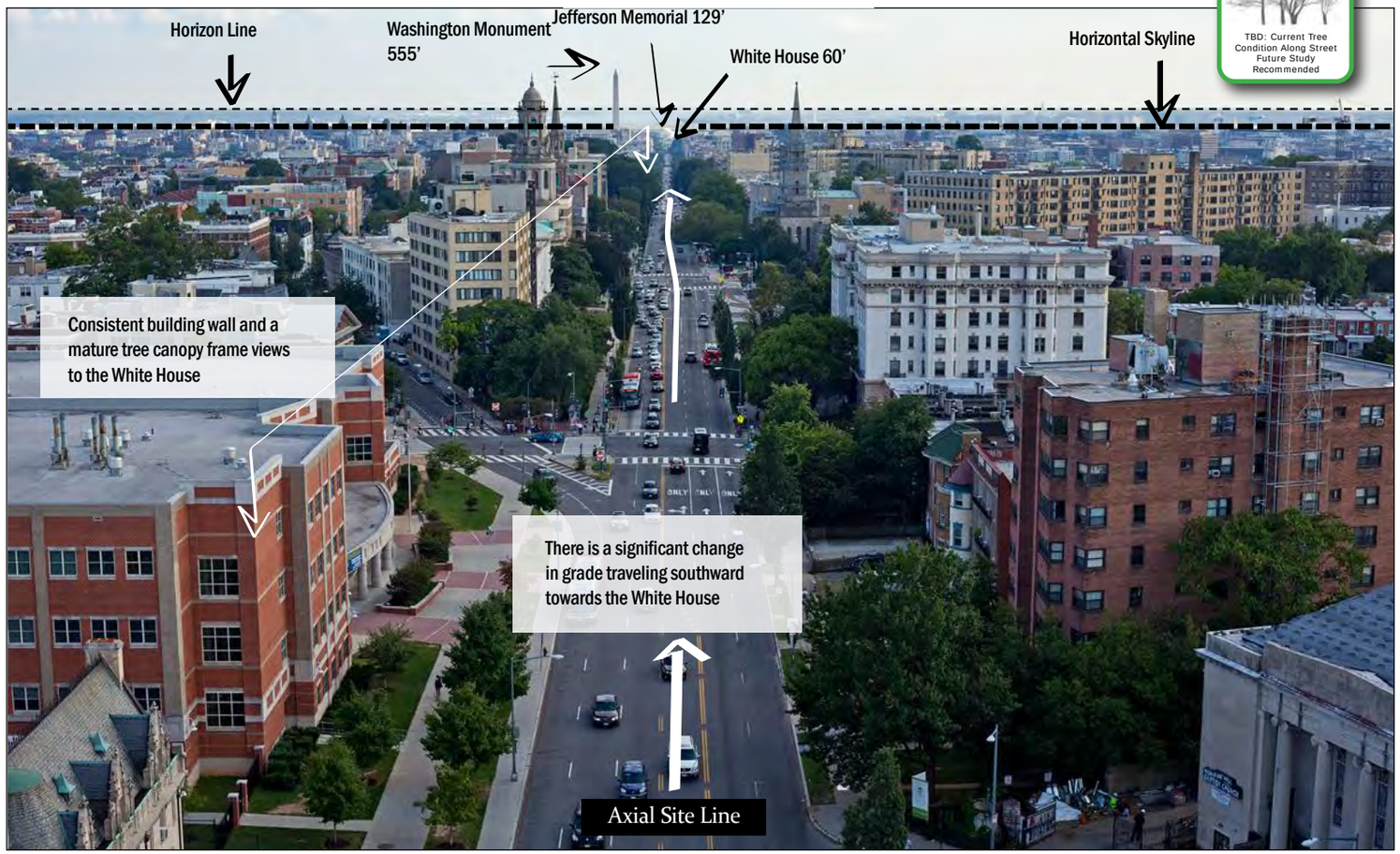
16th Street, NW is a civic gateway on axis with the White House. It is also the spine of an important historic residential neighborhood. Of all of the preeminent viewsheds within this section, it is the most cohesive and well-maintained. A mixture of wooded buffers, open lawns, and residential uses border the street north of Meridian Hill Park along 16th Street. South of Meridian Hill Park the scale of buildings transitions into higher density residential, commercial, and office uses and is generally symmetrical on a block-level. There are significant views of the White House where 16th Street crosses the escarpment (approximately at Euclid Street, NW) leading into the L'Enfant City and continuing southward. Minor improvements, such as tree pruning, may enhance the quality of this viewshed. One important land use issue with potential urban design impacts on the quality of this viewshed is the existing zoning and building height of a single parcel just north of the White House. If built to full potential at 130 feet, this building may disrupt the streetwall and diminish the appearance of the White House. Additional visual analysis is required to assess impacts and propose urban design strategies.

Focal Point: White House

The White House and grounds are symbol's of the executive branch of the U.S. government and are located at an important orientation point within the city plan, where they are connected to the U.S. Capitol from Pennsylvania Avenue.

Policy Direction

- Recommendations for viewshed maintenance.
- Additional urban design study on the blocks immediately adjacent to the White House.



Considerations for Viewshed Maintenance:

- Consider height, mass, bulk of new development in the foreground, middle ground, and background to maintain the visual prominence of the White House. These elements are particularly critical along this view corridor as the White House is smaller in scale than many of the buildings in the immediate context.
- Consider whether the roofline/cornice line treatment of new buildings appropriately frames the viewshed corridor along 16th Street, NW.
- Consider the visual impact of public infrastructure and landscaping on the view corridor.
- Consider a streetscape plan, including tree canopy.

Viewshed Extent Plan View



View 2 : 16th Street, NW at Euclid Street, NW



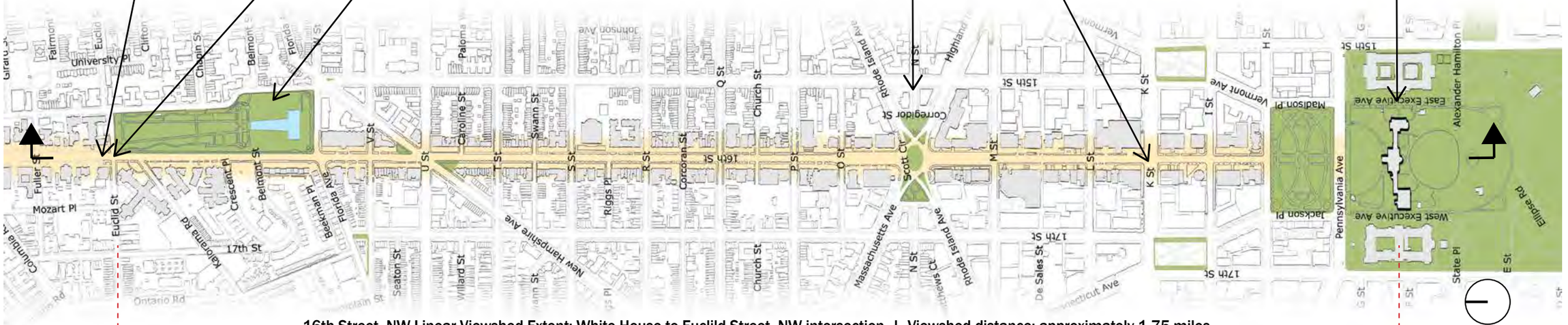
View 1 : 16th Street, NW at K Street, NW

A significant view of the White House terminates at the Euclid Street, NW intersection.

Meridian Hill Park

Scott Circle

Focal Point: White House



16th Street, NW Linear Viewshed Extent: White House to Euclid Street, NW intersection | Viewshed distance: approximately 1.75 miles



Preeminent Viewshed: Pennsylvania Avenue, NW



Existing Conditions

Pennsylvania Avenue, NW between the White House and U.S. Capitol is one of the most significant and historic thoroughfares of the nation, physically and symbolically connecting the legislative and executive branches of government. The avenue's south side is dominated by the Federal Triangle's neoclassical buildings, home to federal agency headquarters and the District's city hall. It has a consistent building wall with setbacks approximately 25 feet from the curb. The north side of the corridor is flanked by large scale commercial/office buildings of varying architectural styles and time periods with setbacks ranging from 25–75 feet from the curb. Both sides reinforce the viewshed through consistent building heights and the use of a compatible street tree canopy. Most of the year, this critical streetscape feature forms the viewshed, serving as the primary vertical element.

The avenue serves local, regional, and national needs as a ceremonial promenade, a place for First Amendment activities, and a downtown event space. Pennsylvania Avenue is also an important link between the U.S. Capitol and the White House; between the formal settings of the National Mall and Federal Triangle to the south; and the central business district and Penn Quarter to the north.

A major redevelopment effort led by the Pennsylvania Avenue Development Corporation (PADC) from the 1970's to the 1990's reshaped the design and character of the street and surrounding neighborhood. This effort set the stage for the rebirth of downtown Washington. The PADC Plan and Square Guidelines currently guide the character and development of the avenue. The National Park Service's *Pennsylvania Avenue National Historic Site Management Plan*[16] also provides policy guidance on character, symbolism, and maintenance of the viewshed.

Today, Pennsylvania Avenue is confronting challenges related to aging infrastructure and maintenance, and the lack of vibrant streetscape and programming properly integrated into the greater neighborhood. These impact site conditions that shape the quality of this viewshed and the everyday experiences of people along the Avenue.

Focal Point: U.S. Capitol Dome

Skyline and street-level linear views to and from the U.S. Capitol are an essential and distinguishing element of Washington's form and character. The U.S. Capitol was intentionally situated on an elevated location to reflect its preeminence and lasting significance to the country as the People's House. Its preeminence is reinforced as the center of the cross axis in the city plan. Today, the U.S. Capitol dome is a defining symbol within the cityscape and contributes to the city's distinctive skyline.

Focal Point: White House Grounds and President's Park

The White House Grounds serve as the western terminus of the central section of Pennsylvania Avenue. The avenue once continued west as E Street, past the Ellipse and through the Foggy Bottom neighborhood. After 9/11, E Street was closed to vehicular traffic through the grounds. This significantly impacts vehicular traffic along the Avenue's central section, and creates an imposing (but pedestrian-accessible) visual barrier of perimeter security elements.

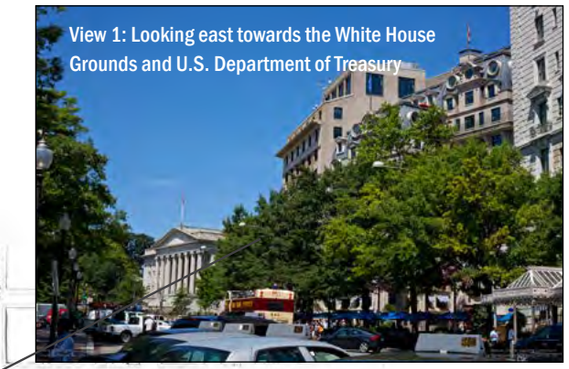
Policy Direction

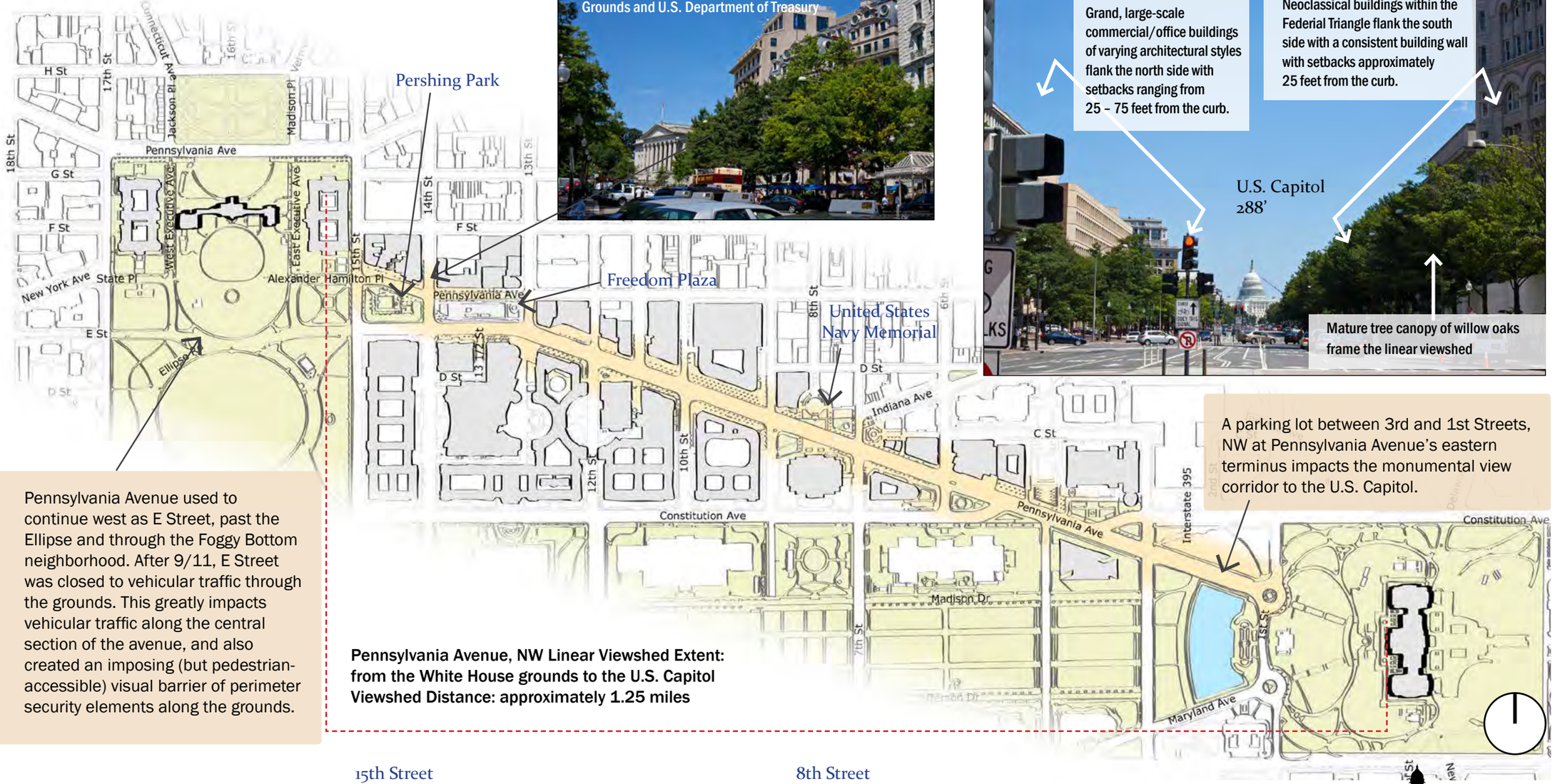
- Address any new vision to reinforce Pennsylvania Avenue's national and local roles in a future update.
- Consider strategies and best practices for long-term maintenance in programming and urban design to reinforce viewsheds.
- Distinguish the programmatic role of the avenue from the National Mall in ways that celebrate/maximize the view.
- Consider ways to maximize pedestrian accessibility to experience the viewshed.

Considerations for Viewshed Maintenance

- Consider maintaining the balance and symmetry of building mass along the entire avenue. This allows for "breathing room" that reinforces the dome's significance.
- Consider height, mass, bulk, and building setbacks of new development in the foreground, middle ground, and background to maintain the relationship between the Capitol dome and the sky backdrop.
- Consider opportunities to reinforce the primary tree canopy and building walls that frame views toward the U.S. Capitol.
- Consider how the roofline/cornice line treatment of new buildings respect the established line of Federal Triangle buildings and appropriately frame the viewshed corridor toward the U.S. Capitol.
- Consider the visual impact of public infrastructure and landscaping on the view corridor.
- Consider how the viewshed is reinforced through a consistent design and visual relationship between the U.S. Capitol and White House grounds if a new public realm design (including streetscape and parks) is developed.

Viewshed Extent Plan View





Pennsylvania Avenue used to continue west as E Street, past the Ellipse and through the Foggy Bottom neighborhood. After 9/11, E Street was closed to vehicular traffic through the grounds. This greatly impacts vehicular traffic along the central section of the avenue, and also created an imposing (but pedestrian-accessible) visual barrier of perimeter security elements along the grounds.

A parking lot between 3rd and 1st Streets, NW at Pennsylvania Avenue's eastern terminus impacts the monumental view corridor to the U.S. Capitol.

Pennsylvania Avenue, NW Linear Viewshed Extent: from the White House grounds to the U.S. Capitol
Viewshed Distance: approximately 1.25 miles



Viewshed Extent Street Section Looking Northeast

Preeminent Viewshed Inventory: Maryland Avenue, SW

Existing Conditions

Maryland Avenue, SW is a symbolically important avenue radiating from the U.S. Capitol. Although Maryland Avenue, SW is different in character, it is related in geometry and location to Pennsylvania Avenue, NW. This important street visually links the U.S. Capitol, federal reservations, and open spaces, the Jefferson Memorial, and the waterfront. However, the sunken CSX rail line currently dominates a significant portion of the street. This railroad infrastructure disrupts the urban fabric and diminishes Maryland Avenue's streetscape quality.

Focal Point: U.S. Capitol Dome

The U.S. Capitol was intentionally situated on an elevated location to reflect its preeminence and lasting significance to the country as the People's House. Its preeminence is reinforced by the U.S. Capitol's location along a primary symbolic axis with respect to the city plan. Today, the U.S. Capitol dome is a defining symbol within the cityscape and contributes to the city's distinctive skyline. Skyline and street-level linear views to and from the Capitol are an essential and distinguishing element of Washington's form and character.

Policy Direction:

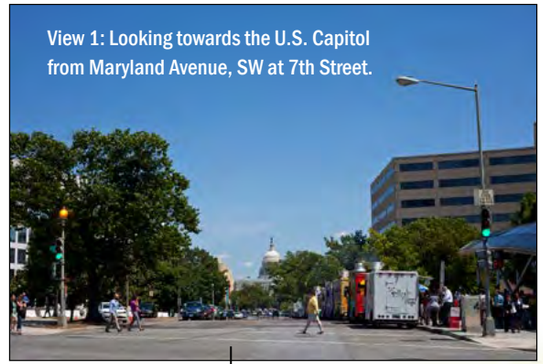
- Address transportation infrastructure.
- Implement strategies to improve the avenue's public realm as found in the *SW Ecodistrict Plan* and the DC Office of Planning's *Maryland Avenue, SW Small Area Plan.*

Considerations for Viewshed Maintenance

- Address the nature of development and transportation improvements that could restore the street surface at-grade to improve visibility of the U.S. Capitol that is partially hindered by railway infrastructure.
- Consider opportunities to reinforce the streetwall that frames views toward the U.S. Capitol.
- Consider whether the roofline/cornice line treatment of new buildings appropriately frames the viewshed corridor along Maryland Avenue.
- Consider the visual impact of public infrastructure and landscaping on the view corridor.

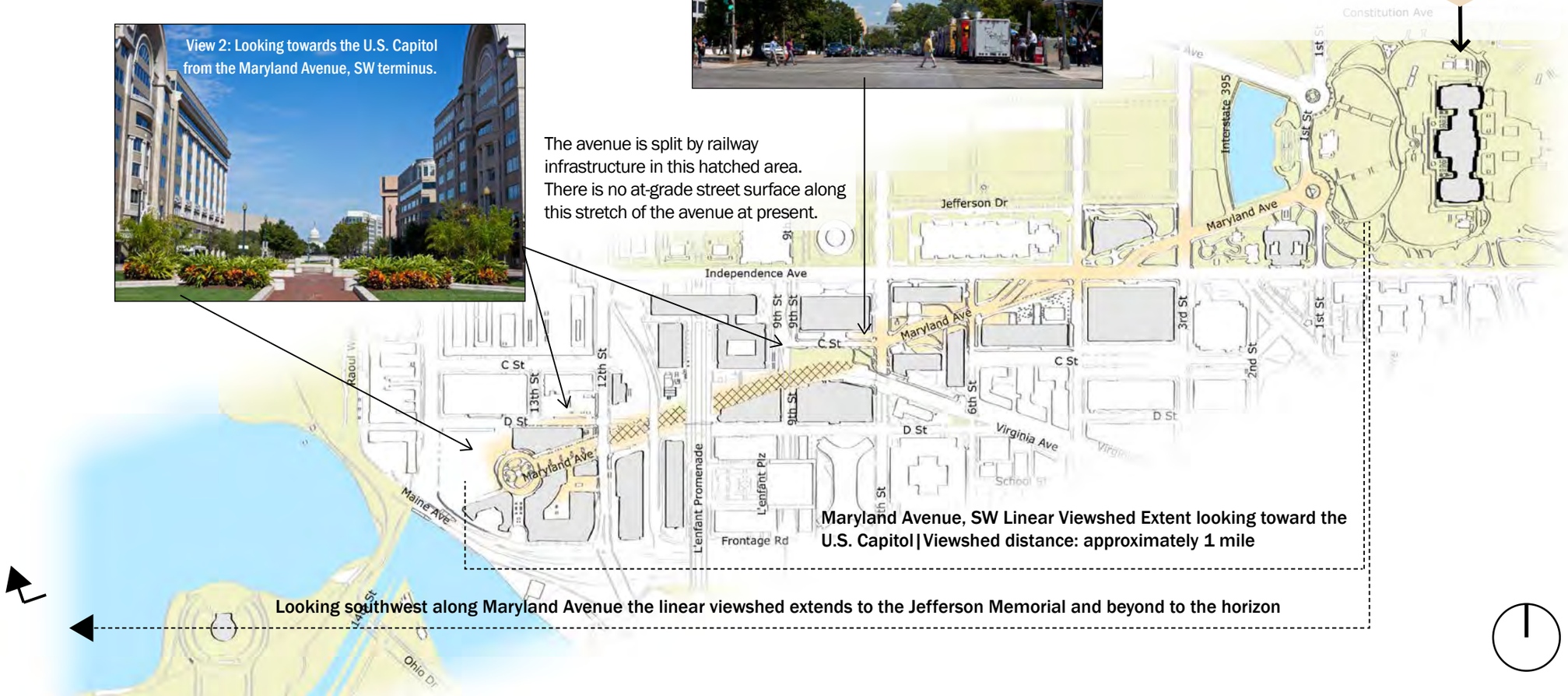


Viewshed Extent Plan View



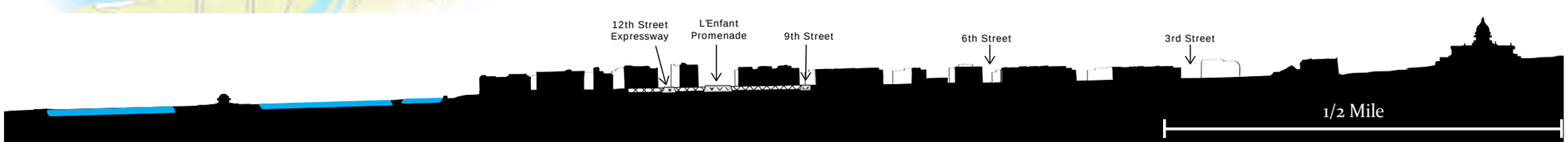
Focal Point:
U.S. Capitol

The avenue is split by railway infrastructure in this hatched area. There is no at-grade street surface along this stretch of the avenue at present.



Maryland Avenue, SW Linear Viewshed Extent looking toward the U.S. Capitol|Viewshed distance: approximately 1 mile

Looking southwest along Maryland Avenue the linear viewshed extends to the Jefferson Memorial and beyond to the horizon



Preeminent Viewsheds: Future Work and Action Items

The following viewsheds require further study to assess their existing conditions and opportunities to reinforce their visual quality. While these viewsheds are all similar in significance, each viewshed presents a unique condition that requires individual assessment.

Policy Direction

The Urban Design Element includes an action item to address further study and encourage local jurisdictions to study and prepare urban design strategies to address and protect the visual quality of these viewsheds.

Viewshed: North-South Primary Vista

Existing Conditions

This Primary Vista, as listed in the NRHP, provides the strong visual connection from the White House along the Mall to the Jefferson Memorial and southward to the horizon. This axis is an essential orientation point that establishes the spatial order of the city and visual quality within the monumental core. This vista includes the National Mall, one of the most important civic and cultural spaces in the nation. The White House, Washington Monument, and the Jefferson Memorial, the Tidal Basin, Potomac River, and the Wilson Bridge are the most visually prominent structures within this panoramic, scenic setting.

The form and character of the built and natural elements within and around this vista are important parts of how the public experiences some of our nation's most beloved memorials and public buildings, today and in the future. Arlington County, Virginia plays an integral role in the urban design framework of the National Capital Region, including this particular vista. The Crystal City neighborhood serves as part of the visual backdrop of this primary vista. Additional important resources located within this vista, include the George Washington Memorial Parkway, Ronald Reagan Washington National Airport, Pentagon, and Air Force Memorial.

Viewshed: Pennsylvania Avenue, SE

Existing Conditions

Pennsylvania Avenue, SE radiates southeast from the U.S. Capitol across the Anacostia River providing the public with long views of the U.S. Capitol Building. West of the Anacostia River, a mix of commercial and residential uses flanks the Avenue. East of the Anacostia River, low-density development with generous setbacks, and the Fort Circle Parks, flank the Avenue.

Pennsylvania Avenue links together the monumental core, historic neighborhoods, and natural features. The variety of land uses as well as transitions between built and natural features along the avenue presents opportunities and challenges for future development. Further study is needed to assess strategies to reinforce views to nationally and locally significant focal points along the avenue. The District of Columbia Office of Planning has completed a visionary planning study for Pennsylvania Avenue, SE (east of the Anacostia) as part of the "Great Streets" Initiative, which is a multiple agency effort to improve and transform a selection of prominent corridors in Washington.

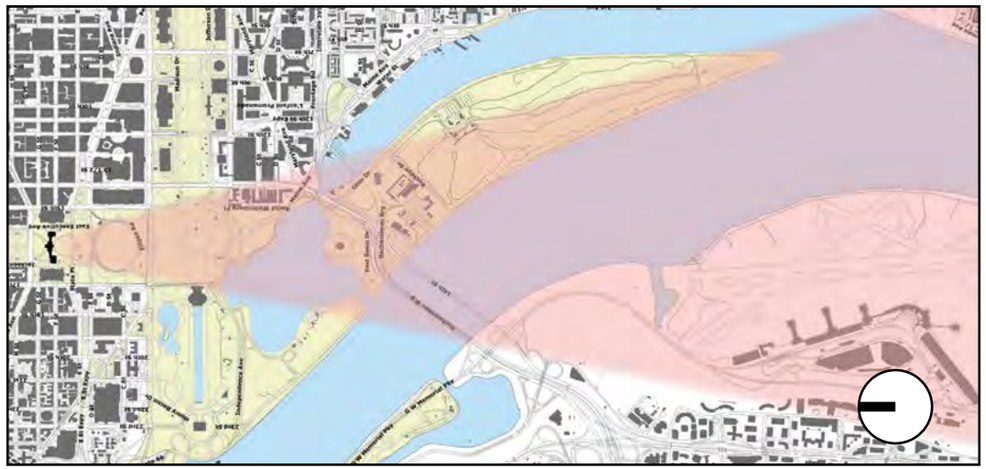
Viewshed: Maryland Avenue, NE

Existing Conditions

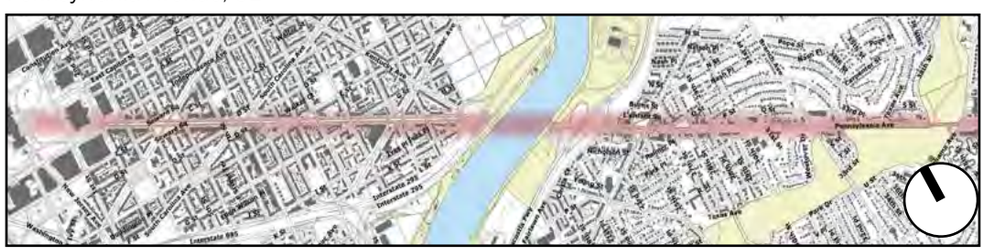
Maryland Avenue, NE radiates from the U.S. Capitol extending northeast to the United States National Arboretum. Maryland Avenue crosses through predominantly residential neighborhoods of small-scale medium density buildings. In addition to the U.S. Capitol, there are several other focal points along the avenue, such as Stanton Park, which is a significant public space.

Further study is necessary to assess the visual quality of the linear view and identify opportunities to maintain the monumental view along this predominantly residential corridor.

North-South Primary Vista



Pennsylvania Avenue, SE



Maryland Avenue, NE



East Capitol Street





Viewshed: East Capitol Street

Existing Conditions

East Capitol Street radiates eastward from the U.S. Capitol, extending through historic neighborhoods, and crossing the Anacostia River; linking together both nationally and locally significant features. East Capitol Street serves as a gateway into the city that leads to the monumental core. The street provides long views of the U.S. Capitol dome and the Washington Monument creating a visual link between the monumental core and the surrounding established neighborhoods.

Further study is needed to assess strategies to reinforce views to national symbols as well as significant features, such as the Anacostia River and the RFK Stadium site, which both serve as focal points along this prominent street.

New Jersey Avenue, NW+SE



Viewshed: New Jersey Avenue, NW+SE

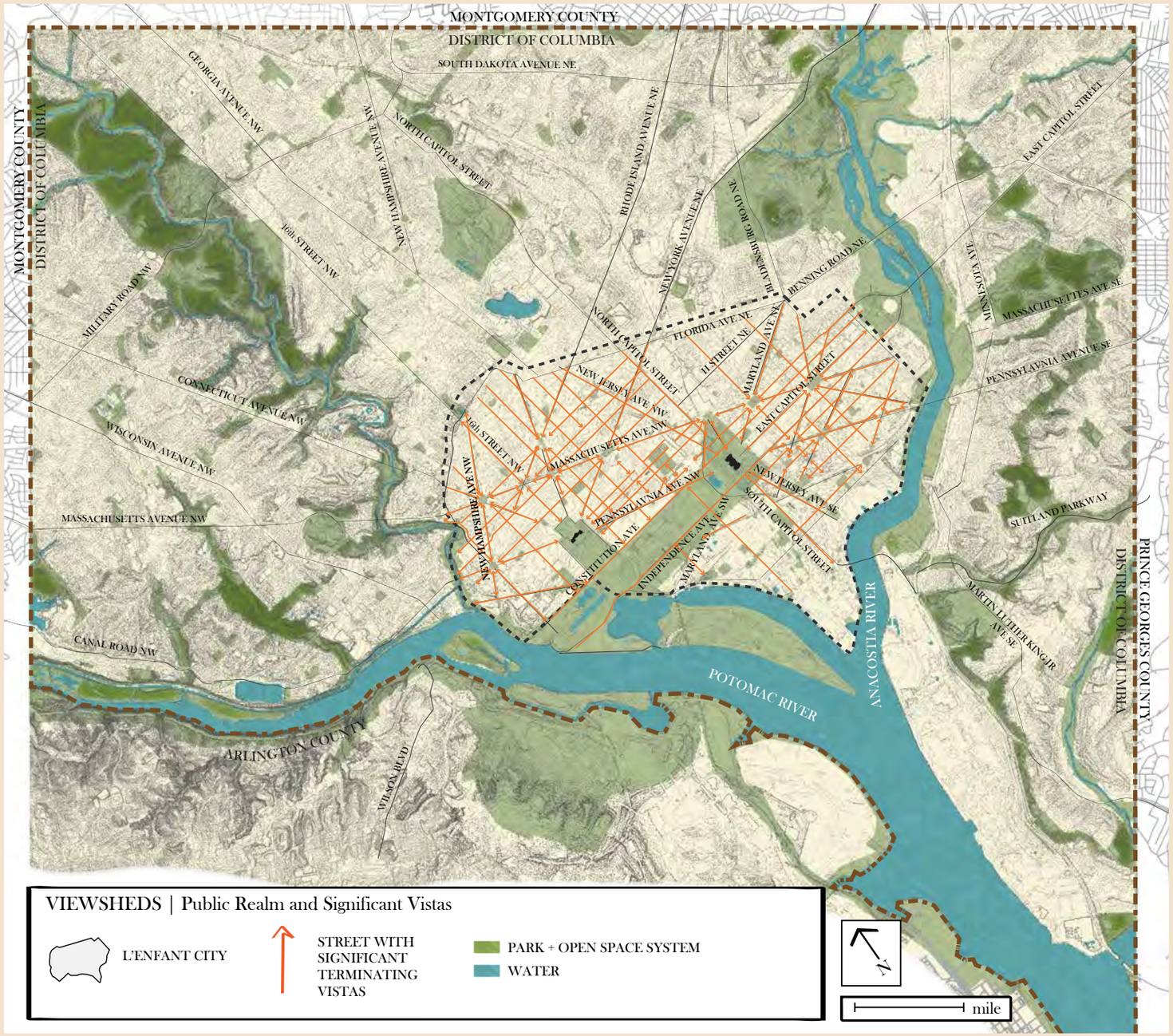
Existing Conditions

New Jersey Avenue radiates from the U.S. Capitol extending to the northwest and to the southeast.

New Jersey Avenue, NW extends north through the historic L'Enfant City and is flanked by relatively dense development and a mature tree canopy, which frames views of the U.S. Capitol. The land use patterns and building scale that frame the avenue's linear view of the U.S. Capitol transition at the intersection of New Jersey and New York Avenues. Large scale commercial office buildings generally flank the avenue to the south of this intersection. Smaller scale residential buildings flank the avenue to the north. Further study is needed to assess the extent and visual quality of views to the U.S. Capitol along the avenue's axis.

New Jersey Avenue, SW provides views to both the U.S. Capitol, the Anacostia River, and waterfront parkland.

The Anacostia Waterfront Initiative completed visionary planning work addressing the Anacostia Park system (part of the Anacostia Park System) that is on axis with New Jersey Avenue across the Anacostia River. There is a significant visual connection between the Avenue and this particular parkland. Anacostia Waterfront Initiative's work suggests creating a visual extension of the New Jersey Avenue across the Anacostia River. This site can also be incorporated into a memorial entranceway to the historic L'Enfant City from the southern bank of the Anacostia River. This site location offers the opportunity for a major destination memorial, museum, and/or several smaller memorials.


MONTGOMERY COUNTY
DISTRICT OF COLUMBIA
SOUTH DAKOTA AVENUE NE
GEORGIA AVENUE NW
NORTH CAPITOL STREET
NEW HAMPSHIRE AVENUE NW
RHODE ISLAND AVENUE NE
NEW YORK AVENUE NE
HADDONFIELD ROAD NE
BENNING ROAD NE
EAST CAPITOL STREET
MINNESOTA AVE
MASSACHUSETTES AVE SE
PENNSYLAVNIA AVENUE SE
SUITLAND PARKWAY
MARTIN LUTHER KING JR AVE SE
PRINCE GEORGES COUNTY
DISTRICT OF COLUMBIA
ANACOSTIA RIVER
SOUTH CAPITOL STREET
NEW JERSEY AVE SE
MARYLAND AVE SW
INDEPENDENCE AVE SW
CONSTITUTION AVE
PENNSYLVANIA AVE NW
MASSACHUSETTS AVE NW
NEW JERSEY AVE NW
NORTH CAPITOL STREET
FLORIDA AVE NE
H STREET NE
MARYLAND AVE NE
EAST CAPITOL STREET
16th STREET NW
NEW HAMPSHIRE AVE NW
MILITARY ROAD NW
CONNECTICUT AVENUE NW
WISCONSIN AVENUE NW
MASSACHUSETTS AVENUE NW
CANAL ROAD NW
POTOMAC RIVER
ARLINGTON COUNTY
WILSON BLVD
VIEWSHEDS | Public Realm and Significant Vistas
L'ENFANT CITY
STREET WITH SIGNIFICANT TERMINATING VISTAS
PARK + OPEN SPACE SYSTEM
WATER
mile

Inventory of Significant Vistas

Connect public spaces, civic buildings, and other civic works within the historic city. The vistas documented on the map include all of the National Register of Historic Places (NRHP) registration for the L'Enfant Plan.



Significant Vistas along Avenues and Streets

The following inventory list is sourced from the NRHP registration for the L'Enfant Plan of the City of Washington.

1. Vistas Along Radiating Avenues (providing oblique views of major buildings indicating their orientation in the plan, and views between various monuments and parks, as noted):
    - Pennsylvania, Delaware, New Jersey, Maryland Avenues (view toward U.S. Capitol)
    - Pennsylvania, New York, Connecticut, Vermont Avenues (view toward White House Precinct)
    - Indiana Avenue (view toward Old City Hall)
    - Virginia Avenue (view toward Washington Monument)
    - Massachusetts, New York Avenues (view toward Central Public Library)
    - Louisiana Avenue (view toward Union Station)
    - New Hampshire, Rhode Island, North Carolina, South Carolina, Kentucky, Tennessee, Potomac Avenues

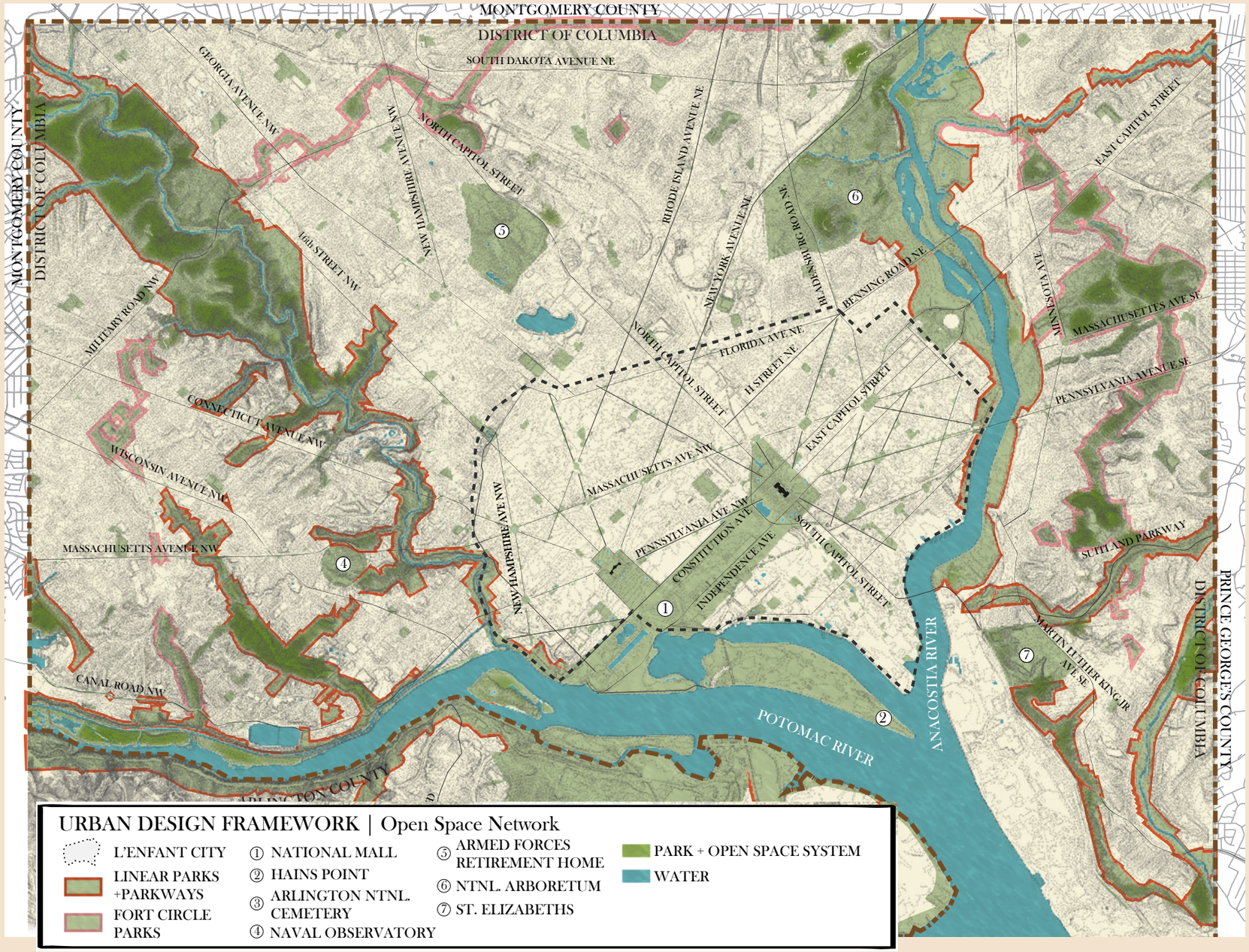
2. Vistas Along Orthogonal Avenues (providing frontal views of major buildings, and flanking or connecting major parks on axis):
    - East, North, South Capitol Streets (view toward the U.S. Capitol)
    - 16th Street, NW (view toward White House)
    - K Street, NW/NE (various parks)
    - Constitution and Independence Avenues (view toward U.S. Capitol Grounds, National Mall, Potomac Parks)

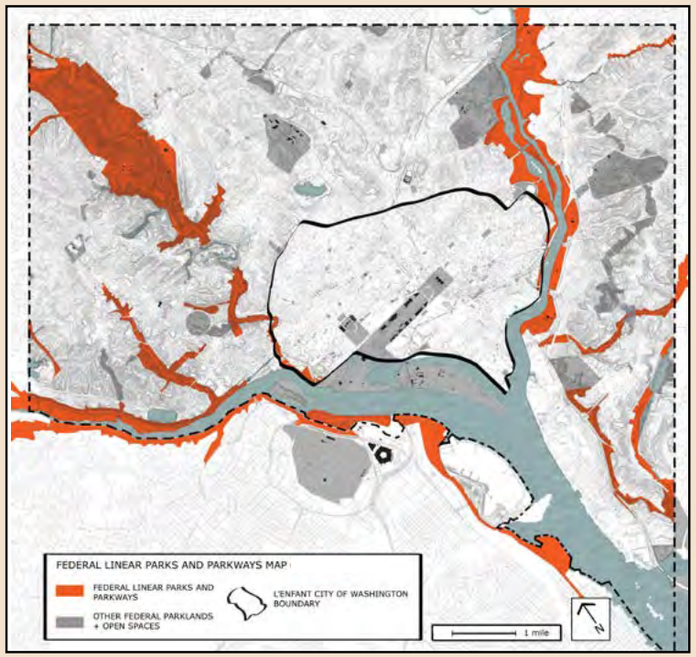
3. Vistas Along Major Cross-Axes (providing frontal views of focal buildings)
    - 8th Street, NW (view toward Old Patent Office/Archives/ Central Public Library)
    - 4th Street, SW/ 4th-1/2 Street NW (view toward judiciary square)

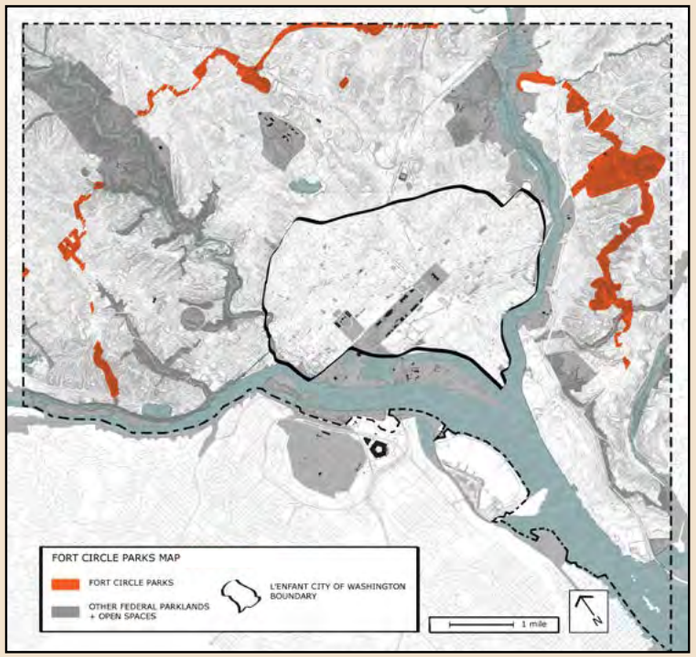
4. Tangential Vistas (providing views of major buildings marking the location of cross-axes):
    - F Street, NW (view toward Old Patent Office)
    - G Street, NW (view toward Old Patent Office/ White House Precinct)
    - E Street, NW (view toward Judiciary Square)

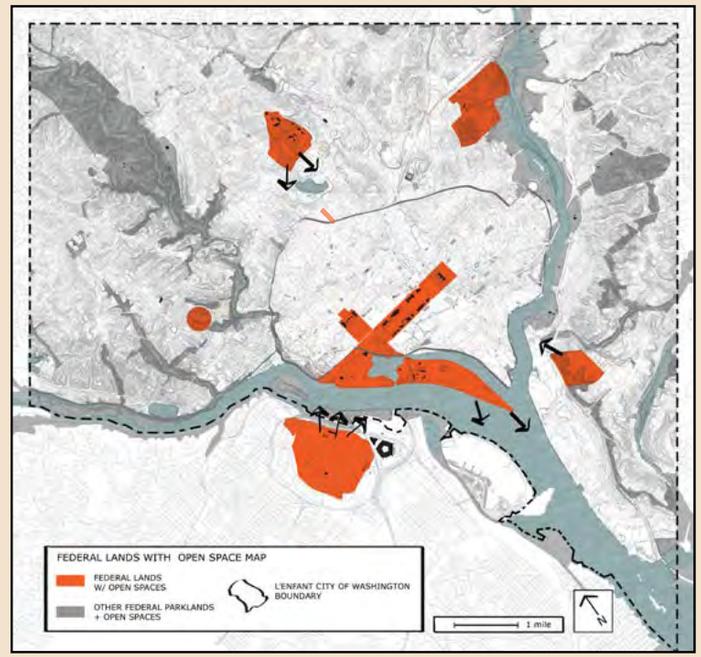
5. Other Frontal Vistas
    - 10th Street, SW (view toward Smithsonian Castle)
    - 10th Street, NW (view toward Museum of Natural History)
    - 6th Street, NW (view toward National Gallery of Art)
    - F Street, NW (view toward Treasury Department/ Old Executive Office Building)

6. Axial Street Vistas (connecting the center points of parks and circles on the orthogonal grid):
    - 23rd Street, NW (view toward Washington Circle/ Lincoln Memorial)
    - 19th Street, NW (Dupont Circle)
    - P Street, NW (Dupont/Logan Circles)
    - 13th Street, NW (Logan Circle)
    - 14th Street, NW (Thomas Circle)
    - M Street, NW (Thomas Circle)
    - N Street, NW (Scott Circle)
    - 8th Street, NW (Mt Vernon Square)
    - C Street, NW (Market Square)
    - 5th Street, NE/SE (Stanton Park/Seward Square/Marion Park)
    - C Street, NE (Stanton Park)
    - C Street, SE (Seward Square)
    - 8th Street, SE (Eastern Market Metro Square/Navy Yard)
    - D Street, SE (Eastern Market Metro Square)
    - 12th Street, NE/SE (Lincoln Park)
    - G Street, SE (Garfield Park)
    - L Street, SE (Reservation 126)


MONTGOMERY COUNTY
DISTRICT OF COLUMBIA
SOUTH DAKOTA AVENUE NE
GEORGIA AVENUE NW
NEW HAMPSHIRE AVE NW
NORTH CAPITOL STREET
RHODE ISLAND AVENUE NE
NEW YORK AVENUE NE
BLADENSBURG ROAD NE
BENNING ROAD NE
EAST CAPITOL STREET
MINNESOTA AVE
MASSACHUSETTS AVE SE
PENNSYLVANIA AVENUE SE
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MILITARY ROAD NW
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CONNECTICUT AVENUE NW
WISCONSIN AVENUE NW
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PENNSYLVANIA AVE NW
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SUITLAND PARKWAY
MARTIN LUTHER KING JR AVE SE
CANAL ROAD NW
POTOMAC RIVER
ANACOSTIA RIVER
ARLINGTON COUNTY
PRINCE GEORGE'S COUNTY
DISTRICT OF COLUMBIA
1
2
3
4
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6
7
URBAN DESIGN FRAMEWORK | Open Space Network
L'ENFANT CITY
LINEAR PARKS +PARKWAYS
FORT CIRCLE PARKS
① NATIONAL MALL
② HAINS POINT
③ ARLINGTON NTNL. CEMETERY
④ NAVAL OBSERVATORY
⑤ ARMED FORCES RETIREMENT HOME
⑥ NTNL. ARBORETUM
⑦ ST. ELIZABETHS
PARK + OPEN SPACE SYSTEM
WATER







Scenic Panoramic Viewsheds

While panoramic views may be experienced from many parts of the National Capital Region, a priority are views from publicly accessible federal lands. Some of these lands are strategically located with respect to topography or geography and offer sweeping views of Washington's skyline, including prominent structures within the Monumental core and its environs.

Public Accessible Federal Lands

This list includes lands with documented views:

1. Arlington National Cemetery: View to the monumental core; general panoramic view of the skyline.
2. St. Elizabeths: View to U.S. Capitol.
3. Armed Forces Retirement Home: View to the U.S. Capitol and Washington Monument.
4. Hains Point: Views of the waterfront, Anacostia Hills, and Arlington Ridge.
5. Frederick Douglass House.

In addition to the federal lands listed above, there are other publicly accessible lands within the city, such as the Fort Circle Parks, Naval Observatory, and National Arboretum that potentially offer panoramic views as well. Additional urban design studies are necessary to assess the visual quality, character, and contributing elements of panoramic viewsheds within the National Capital Region.

Key Questions for Additional Study

- What are the defining characteristics of these vistas?
- How would we define the contextual elements of each viewshed?
- How do these characteristics contribute and frame the city's urban design framework?
- How can we reinforce these qualities through urban design viewshed policies?
- What other value do these natural places within the city offer from an urban design perspective?
- Are there any publicly accessible federal open spaces that are absent from this list?

Endnotes

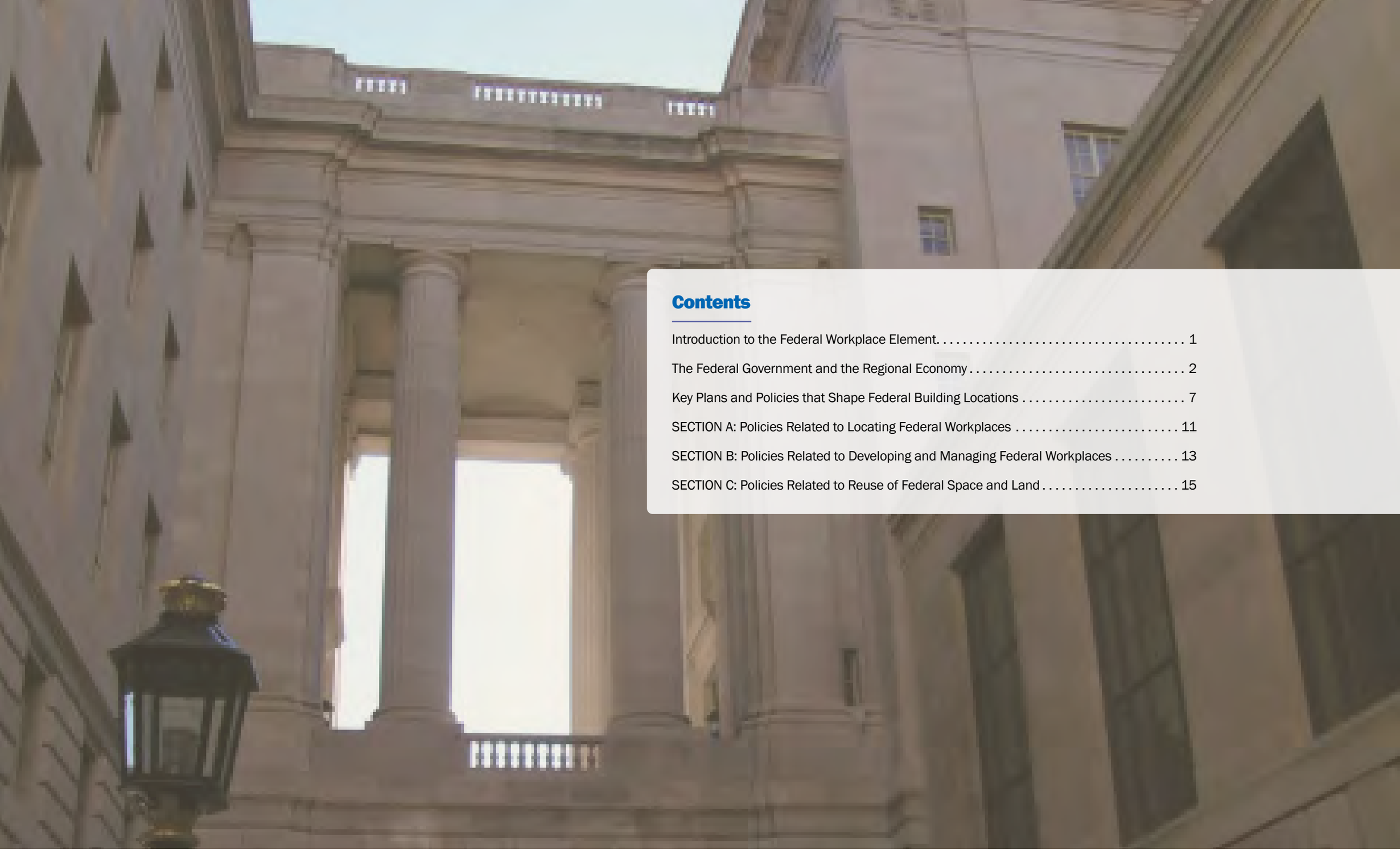
1. National Register of Historic Place Nomination Form: L'Enfant Plan of the City of Washington, District of Columbia. October, 1990.
2. Ibid.
3. Draft National Historic Landmark Nomination for The Plan of the City of Washington, pg. 71-72, 1791.
4. **Height of Buildings Act**: http://www.ncpc.gov/buildingheights
5. **Height Master Plan**: http://www.ncpc.gov/heightstudy/
6. **Schedule of Heights**: https://www.ncpc.gov/heightstudy/docs/Historical_Background_on_the_Height_of_Buildings_Act_(draft).pdf
7. **Public Parking Act of 1870**: https://comp.ddot.dc.gov/Documents/1870%20Parking%20Act.pdf#pagemode=none
8. **Extending the Legacy: Planning America's Capital for the 21st Century**: http://www.ncpc.gov/ncpc/Main(T2)/Planning(Tr2)/ExtendingtheLegacy.html
9. **Memorials and Museums Master Plan**: http://www.ncpc.gov/ncpc/Main(T2)/Planning(Tr2)/2MPlan.html
10. **Monumental Core Framework Plan**: http://www.ncpc.gov/ncpc/Main(T2)/Planning(Tr2)/FrameworkPlan.html
11. **SW Ecodistrict Plan:** www.ncpc.gov/swecodistrict
12. **South Capitol Urban Design Street Study**: https://www.ncpc.gov/DocumentDepot/Publications/SouthCap/SouthCap_Part1.pdf
13. **District Department of Transportation Public Realm Design Manual**: http://ddot.dc.gov/PublicRealmDesignManual
14. 1888 Congressional Legislation Banning Overhead Wires § 34-1901.01 http://dccode.org/simple/Title-34/Chapter-19/
15. National Register of Historic Place Nomination Form, L'Enfant Plan of the City of Washington, District of Columbia. October, 1990.
16. **Pennsylvania Avenue National Historic Site Management Plan**: http://www.nps.gov/nationalmallplan/Documents/Penn/PAAV_Management_Plan_5-14-2014.pdf

Federal Workplace Element



2016

National Capital Planning Commission



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Introduction to the Federal Workplace Element

The federal government's goal is to locate the federal workforce in a way that enhances the efficiency, productivity, value, and public image of the federal government; strengthens the National Capital Region's economic well-being; and emphasizes the District of Columbia as the seat of the federal government.

The nation's founders planned Washington to serve a special purpose as the seat of the federal government. Throughout the city's history, the federal government constructed buildings to house important governmental functions. Over time, decisions about the location, design, and function of federal buildings have greatly influenced the National Capital Region's (NCR) physical development and economy. Today, the federal presence remains concentrated in the region, distinguishing it from other metropolitan areas in the nation.

Some of the best-known federal workplaces in the region are also some of the nation's most iconic structures. Examples include the U.S. Capitol, White House, Supreme Court, Pentagon, and numerous government headquarters. In addition to administrative space, there is a broad diversity of governmental functions and workplaces throughout the region including laboratories and research facilities; military bases and airfields; agricultural land and stables; industrial and manufacturing sites; and warehouses. Many federal buildings and resources are a source of national pride, providing testimony to the dignity, enterprise, vigor, and stability of the American system of government.

This element addresses the core policy issues and goals that shape decisions related to federal workplaces. One policy dimension is broad and external-facing: understanding the complex relationship between federal workplaces and the surrounding community and region. Today, the federal government is a primary contributor to the region's economic health and a significant player in trends related to transportation, environmental stewardship, real estate, workforce development, and employment. For example, through the purchases of goods and services, the federal government is the region's chief customer for private-sector contracts. In 2010, federal procurement made up of 19 percent of the region's economy. With vast owned and leased real estate, and federal employment and contractor wages, the federal workplace significantly affects all sectors of the region's economy. The federal workplace continues to evolve. Current trends show the federal government moving from leased spaced to federally owned space. The federal government equally depends on a strong and economically vibrant region to maintain and enhance its operational efficiency and productivity. This symbiotic relationship results in many common economic interests between the federal government and regional jurisdictions in the District of Columbia, Virginia, and Maryland.



Catalina Calachen





U.S. Navy

Clockwise from top left: U.S Capitol, U.S. Supreme Court, and the Pentagon

A second policy dimension is internal-facing and principally concerned with planning issues related to facilities, operations, and the everyday workplace experiences of federal employees. Today, the federal workplace is evolving in response to interrelated goals for operational efficiency, fiscal responsibility, and environmental stewardship. Simultaneously, new technologies are driving a more flexible, mobile work environment. Each of these external drivers affects the federal government's overall demand for office space and the design and function of offices and individual workstations.

The Federal Workplace Element encourages federal agencies and communities to work together to improve the operational efficiency and productivity of federally owned and leased workplaces, as well as the economic health and livability of communities within the region. The element works in tandem with the other Federal Elements, particularly the Urban Design and Transportation Elements, to guide federal workplaces in a manner which benefits local communities' urban design, development, and transportation goals.

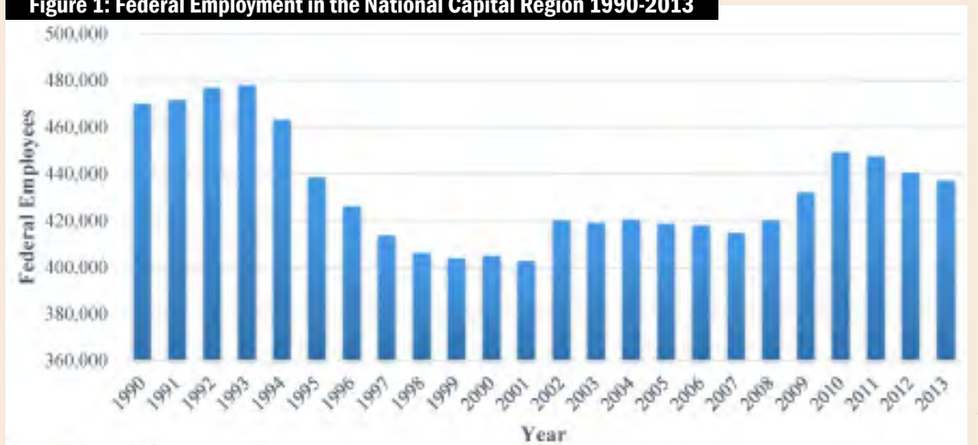
The Federal Government and the Regional Economy

Historically, economists measured the federal government's role in the region's economy by the size of its workforce. Today, workforce size is only one aspect of the scope and complexity of the federal government's influence on the region. The following data includes key trends and figures with implications for both federal workplace policy and its influence on the region's economy.

Federal Employment

Understanding the federal government's size and its impact on the regional economy is an important component of planning for the federal workplace. The U.S. Bureau of Economic Analysis is the primary source for federal employment figures contained in the Federal Workplace Element. It collects data based on the zip code from which employees' paychecks originate. This is a new source of data not used in previous *Comprehensive Plan for the National Capital: Federal Elements* (Comprehensive Plan). Data from security-sensitive agencies is estimated and it does not include Postal Service employees. While accurately estimating federal employment on a regional basis remains a challenge, this new data source provides a more consistent picture of the volume and distribution of federal employment over time.

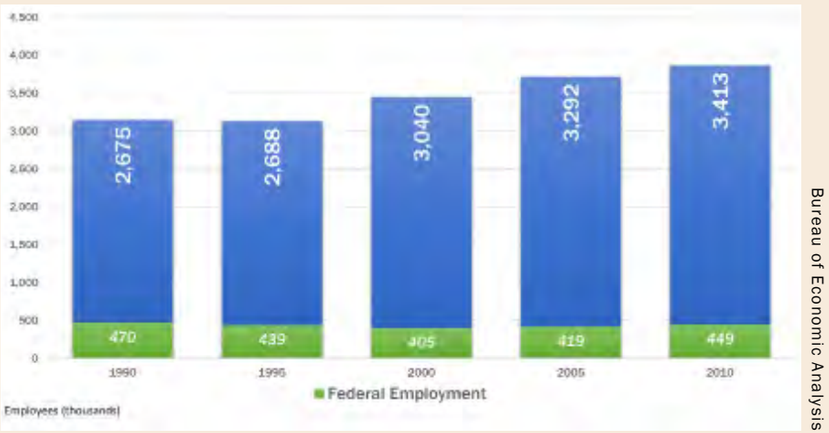
Figure 1: Federal Employment in the National Capital Region 1990-2013



Bureau of Economic Analysis

The National Capital Region's (NCR) federal employment declined and then slightly rebounded between 1990 and 2013. In 1990, there were approximately 470,000 federal employees with a peak in 1993 of approximately 478,000. By 2001, the number of federal employees declined to approximately 403,000. The region's federal employment rebounded with an estimated 437,000 employees in 2013.

Figure 2: Federal Employment vs. Regional Employment



Bureau of Economic Analysis

Direct federal employment is relatively steady and remains an economic driver in the regional economy. However, the federal workforce as a percentage of the overall regional workforce has decreased from 17.6 percent in 1990 to 12.3 percent in 2013. This trend reflects strong growth in the regional economy, which has added more than 850,000 jobs since 1990. The federal presence anchored some of this growth.

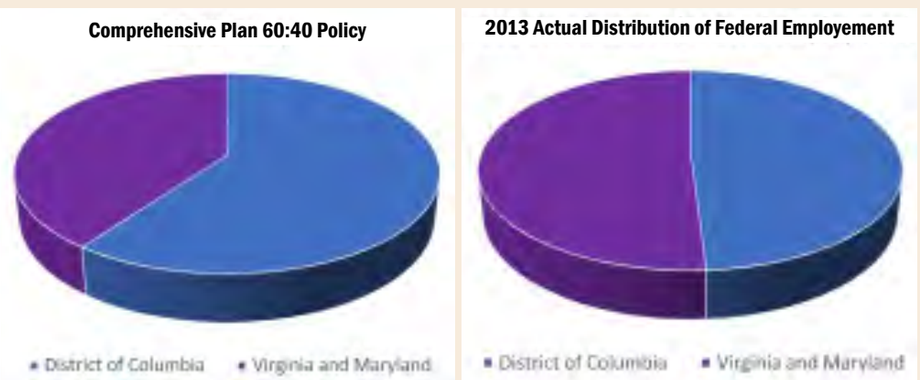
Federal Employment: City and Regional Distribution

By law, the District of Columbia is the seat of the federal government[1] and all "offices attached to the seat of government shall be exercised in the District of Columbia, and not elsewhere, except as otherwise expressly provided by law."[2] The law does not define "offices," but the rule general applies to the main offices for executive agencies or departments, unless granted a statutory waiver.[3]

Because federal employment is such an important part of the regional economy, a vital goal is to strike a balance between centralized and regional locations. A 1968 Comprehensive Plan policy stated that 60 percent of the region's federal employees should work in the District of Columbia with 40 percent located elsewhere in the region. This "60:40" policy remains in effect today.

Federal employment has always been concentrated in the District of Columbia. In 1960, 63 percent of federal employment (civilian and military) in the NCR was located in the District of Columbia, 14 percent in Maryland, and 23 percent in Virginia. Since then, the District of Columbia's total percentage has declined. By 1990, the District of Columbia's share of the region's federal employment was reduced to approximately 52 percent. It has remained at this general level through 2013.[4] This shift in the distribution could have occurred due to the increase in federal employment at military installations and biotechnology research facilities, both predominately located outside of Washington.

Figure 3: Distribution of Federal Employment in the National Capital Region

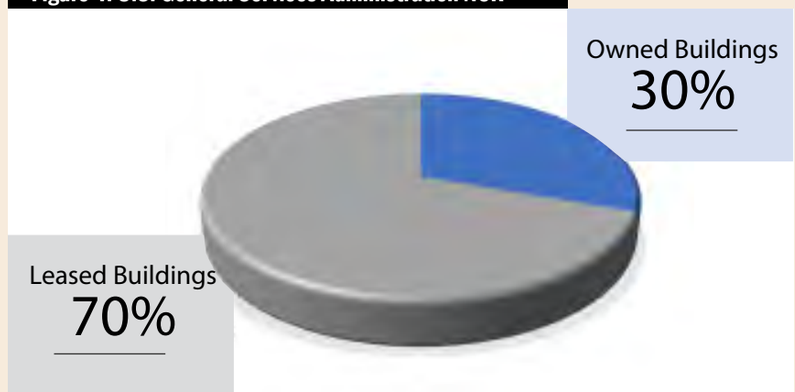


Department of Commerce, Bureau of Economic Analysis, Regional Income Division, November 2014.

Federal Real Estate Inventory

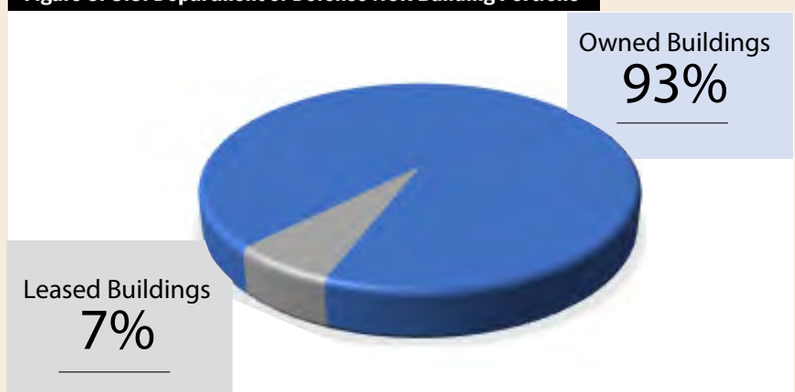
The federal government is the single largest owner and occupant of real property in the region. The U.S. General Services Administration (GSA) manages, builds, constructs, and leases 100.5 million rentable square feet of federal office space in the NCR, comprised of 44.2 million rentable square feet in 212 federal buildings and 56.3 million rentable square feet in 485 leased buildings.[5] The U.S. Department of Defense (DoD) controls approximately 75 million square feet in more than 3,204 buildings in the NCR, comprised of approximately 73 million square feet in 2,993 owned buildings and two million square feet in 211 leased buildings.[6]

Figure 4: U.S. General Services Administration NCR



GSA, NCR's Public Buildings Service, Data Received February 24, 2015.

Figure 5: U.S. Department of Defense NCR Building Portfolio



DoD, Base Structure Report - Fiscal Year 2014 Baseline,
A Summary of the Real Property Inventory

Federal Procurement

According to the U.S. Census Bureau's Consolidated Federal Funds Reports for Fiscal Years 2001 and 2010,[7] NCR federal procurement spending grew from approximately $32.3 billion in 2001 to more than $80 billion in 2010. Most of the growth was due to unusually large procurements for homeland security and defense. A portion of the growth is also attributed to the American Recovery and Reinvestment Act of 2009.[8] Federal procurement can create spin-off industries and employment in other sectors of the economy. Local and federal agencies continue to explore how to encourage private sector opportunities and workforce development in industry sectors anchored by federal activities. Federal Procurement declined $11 billion (14 percent) between Fiscal Year 2010 and Fiscal Year 2013.[9] The current fiscal outlook suggests increased budget constraints in the near future, pushing agencies to achieve their missions with greater efficiencies and limited budgets, and reduced spending on federal contracts.

Contracting and the Federal Work Program

The nature of federal government work has changed over time, and the role of the federal employee has evolved from office clerks and support services to technical and professional staff, managers, and administrators overseeing specialized programs. Many services previously done by federal employees are contracted to the private sector, ranging from project management support services to technology, professional services, and the research and development needed to run these programs. These private contractors contribute to regional property tax, sales tax, and other revenues. The federal government indirectly supports a significant number of regional private sector workers.

Major Drivers Shaping Workplace Policy

The manner by which the federal government manages its assets and operations is fundamentally changing in response to new laws, policies, and technologies. Therefore, the federal workplace is evolving with implications at a variety of scales, from the consolidated real estate portfolio level to the individual building and workstation level.

Executive Orders promote interrelated goals for fiscal and environmental stewardship, and the Office of Management and Budget's aggressive goals to use federal real estate assets more efficiently are reshaping the federal government's physical footprint.

These federal Executive Orders and policies will continue to impact the region's development, resulting in agencies considering plans to consolidate, co-locate, dispose of real property, and move out of leased space and into greener, smaller, workspaces in federal ownership.

The changing federal workplace poses important implications for the future of local communities and the region. The potential impacts of federal consolidation and mobile workplaces on development patterns and the regional economy are not fully understood and should be carefully examined using scenario-based planning analysis or other methods.

GSA require at a minimum, new construction and substantial renovations of federally owned facilities to be LEED Gold.



"Reduce the Footprint"

To stay operationally efficient, the federal government continually evaluates its facility requirements and adjusts its portfolio. One challenge is how to meet tightening budgets and use real estate more efficiently. Executive Order 13589: Promoting Efficient Spending[10] (2011) requires that agencies not increase the size of their civilian real estate inventory, subject to certain exceptions and requires agencies to offset increases in square footage through consolidations, co-locations, or disposal of space from its inventory.

In 2013, the Office of Management and Budget's "Freeze the Footprint" policy expanded these goals for federal real estate.[11] This guidance prohibits agencies from increasing their total domestic office and warehouse inventory square footage compared to the FY 2012 baseline. Agencies are required to develop plans, internal controls, performance criteria, and strategies to reduce the federal footprint. Strategies may include developing off-sets to address growth, co-locating with other agencies, and consolidating offices. These requirements are leading many agencies to use assets more efficiently and eliminate underutilized space.

Environmental Stewardship

In addition to operational efficiencies, another factor that strongly influences workplace policies, including federal building location decisions, is environmental stewardship. In 2011, the Council of Environmental Quality issued *Sustainable Locations for Federal Facilities*,[12] which guides federal agencies to locate near transit and in areas that are pedestrian and bicycle friendly. In 2015, the U.S. Health and Human Services Surgeon General released a call to action on walking and walkable communities. There are many opportunities to increase walking and improve pedestrian experiences through the planning and design of federal properties and support of worksite programs and benefits that improve the health of employees. Executive Order 11988: Floodplain Management[13](1977) and Executive Order 13690: Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input[14] (2015) direct federal agencies to consider practicable alternatives before locating in a floodplain to avoid impacts and floodplain development.

Executive Order 13693: Planning for Federal Sustainability in the Next Decade[15] (2015) maintains federal leadership in sustainability and reduction of greenhouse gas emissions. Federal agencies are required to increase energy efficiency, reduce greenhouse gas emissions, conserve and protect water resources, reduce waste, incorporate sustainable high performance green buildings, promote environmentally responsible products and technology, and strengthen sustainable communities. The federal governments role in environmental stewardship is further discussed in the Federal Environment Element.

The Federal Workplace Element provides policies for siting and managing federal facilities in a manner that supports a more sustainable federal workplace. For example, federal agencies are required to create an updated sustainability plan that reflects how their operations will lower greenhouse gas emissions and meet energy efficiency targets, as required in Executive Orders. The plan requires that federal facilities meet the energy goals established in the Energy Independence and Security Act, (2007) which established the goal of net zero energy usage for federal facilities by 2030.

The Federal Workplace Element policies reflect guidance enacted at national and local levels since the 2004 Comprehensive Plan update, including:

- Executive Order 13690: Establishing Federal Flood Risk Management Standards
- Executive Order 13693: Planning for Federal Sustainability in the Next Decade
- Energy Independence and Security Act of 2007
- Telework Enhancement Act of 2010 (H.R. 1722)
- Executive Order 13589: Promoting Efficient Spending
- Presidential Memorandum Disposing of Unneeded Federal Real Estate
- Council of Environmental Quality Recommendations for Sustainable Locations for Federal Facilities
- Plans and goals for Washington, DC and the region, including the Metropolitan Washington Council of Government's Region Forward Initiative.

The Mobile Workplace

The federal workplace is also moving towards a mobile work environment to create a more effective and efficient government, meet sustainability and performance measures, and address tightened budgets. New technologies and work practices are advancing goals for environmental stewardship and redefining the workplace, allowing employees to work anywhere and any time. The Telework Enhancement Act of 2010[16] allows flexibility in work arrangements whereby employees can perform their duties and responsibilities from an approved worksite other than their designated workplace. The choice to telework can help agencies improve productivity, assure continuity of operations, and respond to the workforce's changing needs. These trends, broadly captured by the term "mobility," help agencies achieve their missions and also support transportation goals, such as traffic reduction.

Workplace mobility trends are redefining employee space requirements, leasing policies, and building design. At the building level, these trends impact interior space configurations including smaller workstations and more advanced mobile devices; reduced individual space per employee; increased density within office environments; adaptable community environments such as eating areas and collaborative work zones; and more flexible workstations to accommodate multiple users.

GSA helps agencies develop customized strategies to forecast how mobility can help them achieve cost savings and meet space reduction goals. Each scenario characterizes how an agency might structure a mobility program based on varying levels of desk sharing, mobility, and telework, with the consideration of desksharing, mobility, and telework. Scenarios are also weighed against transportation cost savings and broader environmental benefits, such as reductions in greenhouse gas emissions.

Another approach is the concept of "right sizing" office environments. "Right sizing" identifies the actual amount of workspace needed to perform the agency's mission. As an example, GSA advises its client agencies on information technology innovations and investments as the key component to enabling workplace mobility and reducing required space. When coupled with a flexible and open office design and mobility, "right-sizing," desk sharing or hoteling, and alternate work schedules[19] can significantly reduce space requirements and increase utilization rates.

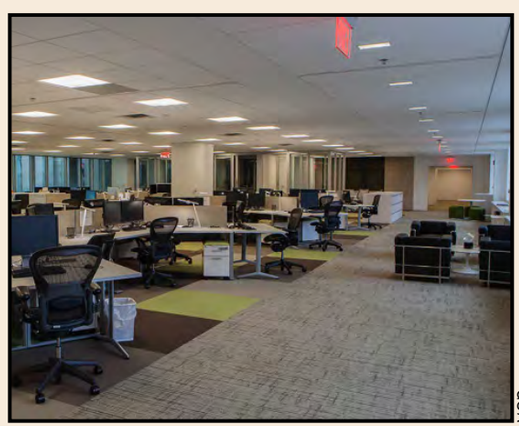
The Evolving Workplace Approach

In 2013, the U.S. General Services Administration (GSA) launched the Total Workplace Initiative[17] to create a 21st century workplace throughout the federal government. This initiative would provide services to help agencies create strategies to reduce their office space, drive down costs, foster collaboration, better manage IT spending, and increase energy efficiency.

GSA modernized their own Washington, DC (Central Office) building, adding approximately 119,517 usable square feet to the existing historic building. Mobility strategies such as hoteling (an arrangement where employees reserve non-dedicated, non-permanent workspaces assigned on an as-needed basis) and desk-sharing, are included in the modernization, allowing an additional 2,300 occupants to be assigned to the building. The original building program was approximately 460,000 usable square feet, housing 2,200 occupants with a utilization rate of 208 square feet per person.

The modernized building contains approximately 579,000 usable square feet, houses approximately 4,500 occupants at 2,300 seats for a utilization rate of 129 usable square feet per person. These strategies are based on GSA's research on regional real estate use, employee leave use, alternate work schedules, and telework schedules.

The U.S. Department of Agriculture Forest Service is another example of how federal agencies are consolidating real estate. The agency houses 762 workers in 206,000 square feet across three buildings, including the federally-owned Sidney Yates Building and two leased locations in Rosslyn. The agency plans to consolidate the three buildings and relocate all employees to the Yates Building, using a total of 108,000 square feet. The 762 employees would utilize 550 seats, effectively improving utilization rates from 270 usable square feet/employee to 195 usable square feet/employee.


GSA


GSA

Office space at GSA's Central Office Building.

Security

Security is an important consideration when deciding on the siting of a federal facility. Federal agencies that require greater setback requirements and security needs may decide to locate on federal campuses or areas located outside of Washington, DC. Federal campuses like St. Elizabeths, FDA White Oak, and the Suitland Federal Center are desirable locations for agencies that want to provide a security buffer for one larger area vs. providing perimeter security for individual buildings. The U.S. Department of Defense's Unified Facilities Criteria established minimum anti-terrorism and force protection standards for all U.S. Department of Defense buildings, which play's an important role in siting decisions.



Elvert Barnes

The Suitland Federal Center is a secure campus located just outside of Washington, DC in Suitland, MD.

Key Plans and Policies that Shape Federal Building Locations

The location of federal facilities plays a critical role in how federal employment is distributed in the region. One key challenge is retaining and attracting federal employment and activities in the nation's capital. Appropriately locating federal workplaces can encourage efficiencies in federal operations and promote development that can advance regional and local goals such as economic development, compact, mixed-use development, increased transit ridership, reduced road congestion, improved air and water quality, efficient use of existing infrastructure, and preservation of open spaces.

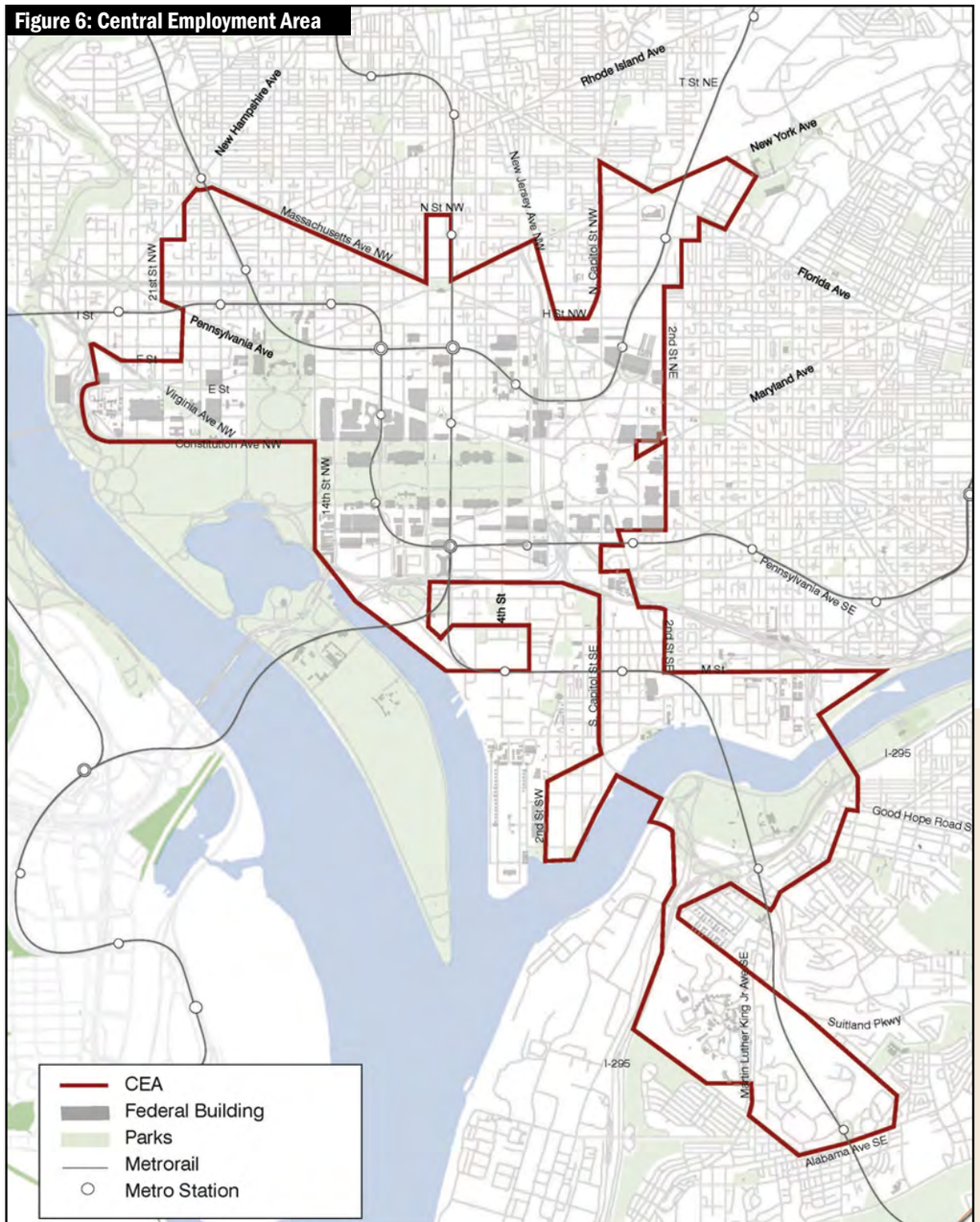
As the seat of the federal government, federal headquarters, major federal facilities, and buildings with symbolic functions should remain centralized in the Central Employment Area (CEA) of Washington. This area is highly accessible to the public, employees, and groups requiring consistent contact with these agencies, fostering efficient interactions among federal policy-making branches. When locating outside of the CEA, federal agencies should consider other federal employment areas identified by local jurisdictions as priority places for federal facilities; and areas where the region's jurisdictions have collectively identified for job and housing growth, such as the Regional Activity Centers.[18] Locating federal facilities in these planning areas can help support local economic development and planning goals and objectives.[19]

A wide range of plans and policies guide location decisions. The Federal Workplace Element focuses on planning priorities for agencies located within the NCR.

The Central Employment Area in the Comprehensive Plan for the National Capital

Since the 1969 Comprehensive Plan, NCPC has prioritized workplace locations within Washington's official CEA. The CEA reflects the region's primary commercial center and concentration of federal employment. The area incorporates the federal establishment's symbolic and physical heart and is the hub of various transit system. Most of the CEA's federal facilities are within a quarter mile of a Metrorail station and connected to the station by a network of walkable streets. GSA uses the CEA boundary as the primary area for federal leasing in Washington, DC.

Figure 6: Central Employment Area



NCPC

While the Comprehensive Plan defines the CEA, it does not include a specific process to review or update its boundaries. NCPC and the District of Columbia should periodically assess the CEA as a tool to support infrastructure needs and other reinvestment efforts. And as the District and Federal Elements are updated, the CEA should be reevaluated to ensure that it reflects the District of Columbia's priority areas for commercial, mixed-use development, and transportation investments.

As part of this update, NCPC and the District of Columbia worked together to include one joint update to the CEA boundary in both the Federal and District Elements.

Many federal facilities continue to be located within the CEA, while other federal activities that must be located outside it are situated in federal employment areas, where local land use conditions support the efficiency and productivity of those activities. With the changing needs of the federal workplace, many federal agencies may relocate to accommodate space needs and consolidation efforts.

When locating outside of the CEA, it is important to consider areas that help improve social, economic, environmental, and cultural conditions. And in urban areas, federal facilities should locate to the extent practicable in qualified opportunity zones, other distressed areas, and central business districts or employment areas that are recommended by local officials.[20] The federal government should continue to collaborate with federal, regional, and local jurisdictions to identify appropriate federal employment locations in the region beyond the CEA.

Central Employment Area

Both the District and Federal Elements include a joint federal/District designation of a Central Employment Area within Washington, DC. The CEA includes the existing "core" of federal facilities such as the U.S. Capitol Building, the White House, the Supreme Court, and most of the legislative, judicial, and executive administrative headquarters of the United States government. The Central Employment Area is the District of Columbia's commercial core where the greatest concentration of employment is encouraged.

Recommendations for Sustainable Locations for Federal Facilities

In April 2010, the Council on Environmental Quality, in partnership with the U.S. Department of Transportation, GSA, DoD, and other agencies, developed *Recommendations for Sustainable Locations for Federal Facilities*, government-wide guidance for the location of federal facilities. This guidance directs federal location decisions around factors including affordable housing, development on infill sites, locating in central employment areas, and adaptive reuse of historic buildings. The recommendations prioritize locating federal offices near transit:

- When possible, site selection should give priority to areas with existing and/or planned transit service so that the building's primary entrance is within ½ mile of a well-served transit stop and is easily accessible by pedestrians.
- Transit should be available by regularly scheduled, fixed-route transit service at a level of convenience, speed, frequency, and overall level-of-service that connects employees and constituents to the federal facility.
- Locations where federal development would help anchor Transit Oriented Development should be prioritized.

In 2011, *A Study of Workforce House, Transportation and Employment Decisions: Implications for Siting Future Federal Facilities* was prepared for GSA. This study recommended future siting considerations to meet the housing, transportation and lifestyle preferences of the current and emerging workforce, and direct growth and transportation patterns that meet regional goals.

The Federal Workplace Element location policies reflect the priority of locating near transit and define proximity to transit as ½ mile from a well-served transit stop. *Recommendations for Sustainable Locations for Federal Facilities* defines a well-served transit stop as one that provides at least 10-minute headways during peak hours and at least 15-minute headways during off-peak hours, with operations for at least 14 hours daily.[25] The connection of federal facilities to transit is critical to developing a sustainable federal footprint in the NCR.

Base Realignment and Closure Act

While the Comprehensive Plan and Council on Environmental Quality guidance is general and applicable to location decisions for all agencies, there are examples of plans that address specific agency needs and requirements. The 2005 Base Realignment and Closure Act (BRAC) program significantly impacted civilian and active duty DoD facilities nationally and within the region. Affected installations gained and/or lost commands and related personnel, or were closed. BRAC was intended to enhance agency mission, support operational needs, and use resources more efficiently.

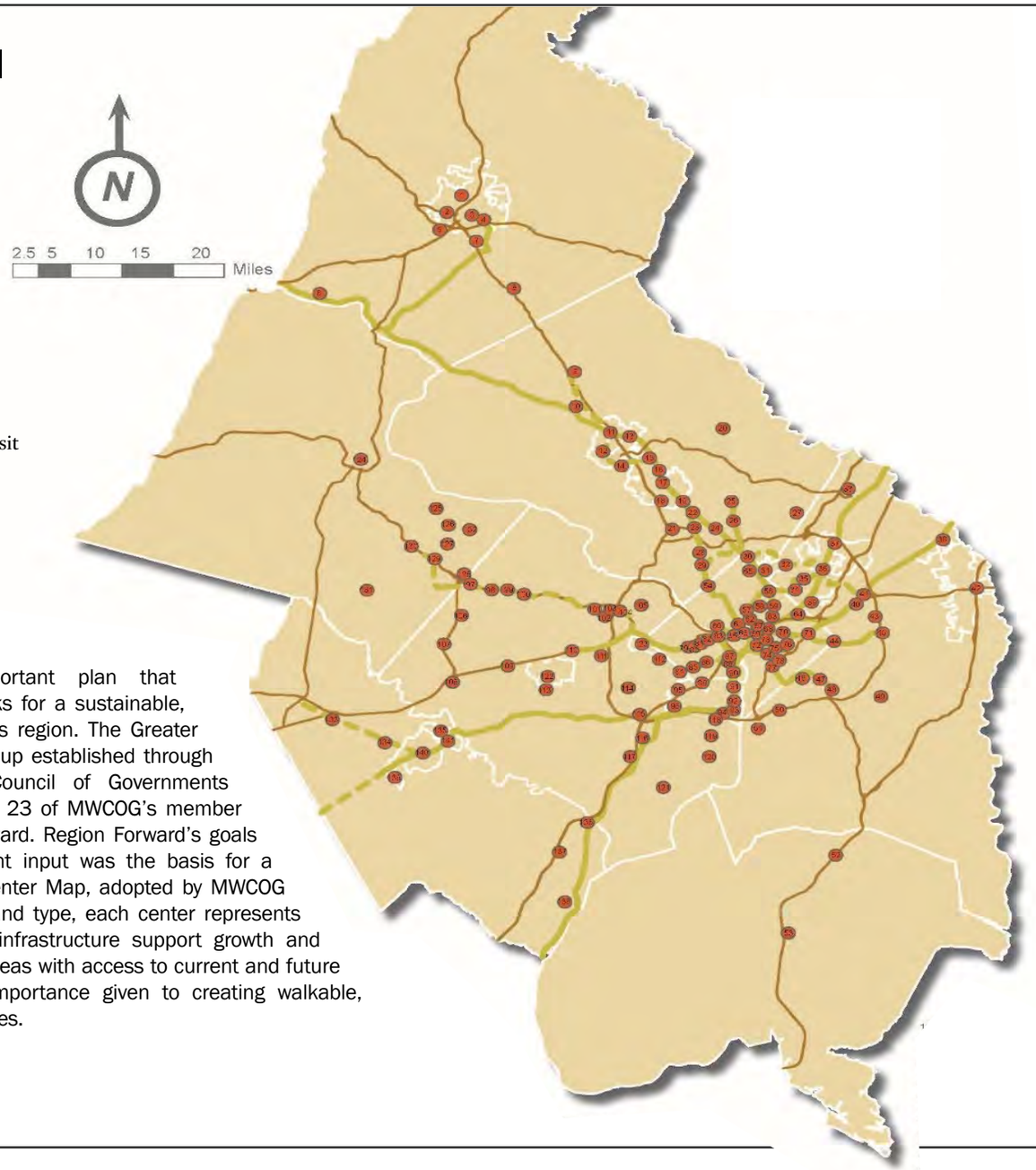
BRAC responded to specific policy goals, such as a desire to increase safety and strengthen anti-terrorism measures, which included moves from leased spaces to owned space. 'Joint base' proposals brought different branches of the military together at an installation, often supporting similar functions. For example, the military consolidated medical services at Joint Base Anacostia Bolling in Washington and the Walter Reed National Military Medical Center in Bethesda, Maryland.

BRAC actions include some of the region's largest construction projects between 2005-2015, particularly at Fort Belvoir's Main Post and Engineer Proving Ground in Virginia, Alexandria's Mark Center, and Bethesda's Walter Reed National Military Medical Center. These actions changed major employment locations, affected infrastructure, particularly transportation, and impacted regional office space leases.

BRAC presented several implementation challenges for the NCR with lessons for the future. Short deadlines often resulted in major project implementation without the benefit of an overall master plan to coordinate different projects, evaluate approaches to minimize negative impacts, or realize potential site opportunities. Currently, planning efforts are catching up to the major new developments that have already occurred at different installations.

Many of the affected installations were located in urban or urbanizing areas and have well served by existing transit, infrastructure, and services. Unfortunately, some DoD facilities moved from areas well served by transit and amenities to locations with neither. The Mark Center project moved 6,400 employees from transit-served leased locations to a new site adjacent to an already congested road network. While state and federal funds were pooled together to provide some road improvements, intensive efforts were required to expand existing bus and shuttle services to accommodate demand. Negotiations and discussions among DoD, federal, local, and state officials, and service providers continue to address approaches to the land use, economic development and transportation impacts from these major relocations.

Figure 7: Regional Activity Centers



Region Forward[21] is an important plan that establishes goals and benchmarks for a sustainable, accessible, livable and prosperous region. The Greater Washington 2050 Coalition, a group established through the Metropolitan Washington Council of Governments (MWCOG) developed the plan. All 23 of MWCOG's member jurisdictions adopted Region Forward. Region Forward's goals and subsequent local government input was the basis for a newly revised Regional Activity Center Map, adopted by MWCOG in 2013. While varying in scale and type, each center represents a location where planning and infrastructure support growth and development. Many centers are areas with access to current and future transit services, reflecting the importance given to creating walkable, multi-modal, mixed-use communities.



GSA

Thomas P. O'Neil, Jr. Federal Building was modernized and renovated to serve as a modern office building for the U.S. Government. Completed in 2013, the building includes several features to promote water efficiency and reuse, resulting in a 45 percent reduction in water usage as compared to similar commercial building standards.

SECTION A: Policies Related to Locating Federal Workplaces

Where federal facilities locate can have major impacts on the agency mission, operations, and the surrounding community and region. Federal facilities can bring new employment and economic opportunities to local communities and can affect the local and regional transportation network. The policies within the Federal Workplace Element prioritize federal building locations with respect to key planning goals and priorities related to the environment, operations, and transportation.

The federal government should:

FW.A.1 Consider the modernization, repair, and rehabilitation of existing federally owned facilities for federal workplaces before developing new facilities.

FW.A.2 Prioritize the location of federal workplaces within the designated Central Employment Area in Washington, DC. Beyond the CEA, consider other federal employment areas such as designated opportunity zones, other distressed areas, and areas in proximity to transit and identified by local jurisdictions as priority places for federal facilities. The District of Columbia, NCPC, and other federal agencies should evaluate the CEA, as needed, to ensure that it reflects current priorities.

FW.A.3 Consider the following additional criteria when locating federal workplaces:

1. Locate federal facilities within walking distance of existing or planned fixed route transit services, such as Metrorail, MARC, VRE; light rail transit; streetcar; or bus rapid transit. Priority should be given to locations within walking distance to Metrorail.

2. Locate new federal facilities to support regional and local agency objectives that encourage compact forms of growth and development and support local and federal goals to increase local and regional transit system ridership.

3. Locate federal workplaces to support the creation of employment opportunities in economically distressed areas identified through federal, state, and local economic development programs. Federal agencies should work with community officials and local stakeholders to identify suitable sites for federal workplaces when these workplaces can contribute to local planning and economic development goals.

4. Use historic properties, or properties located within historic districts in central employment areas, for new federal workplaces. If no such property is suitable, consider other developed or undeveloped sites within historic districts. Finally, consider historic properties outside of historic districts if no suitable site within a district exists.

5. Locate employees near other federal agencies and departments with which they regularly interact.

6. Locate federal workplaces in areas where efficiencies are gained through proximity to a market of private suppliers of goods and services.

7. Locate federal workplaces near a variety of housing options to benefit employees.

8. Minimize development of natural spaces by selecting disturbed land or brownfields for new federal workplaces, or by reusing existing buildings or sites.

FW.A.4 Engage the public throughout the location, planning, and construction process. Federal agencies should seek technical assistance for public planning processes if they do not have the expertise.

FW.A.5 Achieve within Washington, DC a relative share of the region's federal employment (civilian and military) that is not less than 60 percent of the region's.

FW.A.6 Reserve the most prominent development sites, particularly those with important symbolic visual connections to the U.S. Capitol and other landmarks in downtown Washington, for federal workplaces, particularly for headquarter facilities or preeminent commemorative works.

FW.A.7 Protect the natural environment by preserving environmental resources and considering the impact of the siting of federal facilities on existing natural resources.



Pennsylvania Avenue National Historic Site

The Pennsylvania Avenue National Historic Site encompasses the avenue between the U.S. Capitol and the White House and is within the Central Employment Area. This site was listed on the National Register of Historic Places in 1966 and includes federal buildings in the Federal Triangle.

SECTION B: Policies Related to Developing and Managing Federal Workplaces

Once a federal facility is sited and built, it should be operated, managed, and maintained in a manner that supports federal goals related to sustainability, energy efficiency, resource management, and transportation. The Federal Workplace Element includes policies for the operation and management of federal workplaces throughout the region. The element supports development of—and access to—public transit and alternative means of transportation such as pedestrian and bicycle access.

The Federal Workplace Element complements the Transportation, Federal Environment, and Federal Urban Design Elements. These elements can help federal facilities become more sustainable in their operations. Providing a workplace that includes amenities for federal employees and the surrounding community is an important objective of this section's policies.

The federal government should:

FW.B.1 Locate, design, construct, and operate federal facilities to minimize total energy use.

FW.B.2 Continue to provide and maintain safe and healthy working conditions at all federal facilities.

FW.B.3 Create federal workplaces that engender a sense of pride, purpose, and dedication for employees and agency missions.

FW.B.4 Encourage federal employees to use non-motorized modes and multi-occupant modes of travel including rideshare, carpools, vanpools, privately leased buses, and public transportation to get to/from work.

FW.B.5 Permit and encourage telework and alternative work schedules for federal employees where it benefits the federal government and the public.

FW.B.6 Support local agency efforts to create new housing options where federal workplaces exist or are planned.

FW.B.7 Promote Live-Near-Your-Work initiatives for a variety of housing options close to public transit and/or federal facilities.

FW.B.8 Develop master plans that guide the long-range development of installations where more than one principal building, structure, or activity is located or proposed.

FW.B.9 Establish the characteristics of an installation and its surroundings through the master planning process, as required by the Commission. Characteristics include qualities and resources to be protected; building groupings, massing, and architectural character; streetscape and landscape elements; and access elements to buildings and from surrounding streets and transit facilities.

FW.B.10 Encourage agencies to review master plans at least every five years to ensure that both inventory material and development proposals are current. Agencies should advise the Commission of the results of such reviews and provide NCPC with a proposed schedule for revising master plans when an update is needed. Revisions to master plans should reflect changed conditions and provide a current plan for the facility's development.

FW.B.11 Establish a level of employment that can be accommodated on installations where more than one principal building, structure, or activity is located or proposed through the master planning process established by the Commission.

FW.B.12 Continue to monitor installation employment levels and revise master plans as necessary to reflect changed conditions. Provide an up to date plan for the installation's development.

FW.B.13 Provide, or work with local jurisdictions, to develop, a variety of service uses and amenities for employees within a reasonable travel time or walking distance. Services should include restaurants, retail outlets, financial and professional services, day-care centers, and health and fitness centers, as well as public open space.

FW.B.14 When federal facilities are located near existing or planned business districts with amenities for federal employees, competing services should not be provided within the federal facility, installation, or campus.

FW.B.15 Plan federal workplaces to be compatible with the character of the surrounding public space, properties, and community, and where feasible, advance local planning objectives such as neighborhood revitalization.

FW.B.16 Consult with local agencies to ensure that federal workplaces enhance their communities' urban design and vitality.

FW.B.17 Make primary pedestrian entrances at federal workplaces readily ADA accessible to public transportation options, particularly Metrorail, where available. Facility entrances should be situated as close as possible to transit stops and stations where possible.

FW.B.18 Provide and maintain space for activities that encourage public access to, and stimulate public traffic around, into, and through federal facilities, including pedestrian or bicycle traffic where possible.

FW.B.19 Include a mix of uses, particularly on the ground floor where possible, at federal workplaces located in urban areas.

FW.B.20 Include publicly accessible amenities such as retail or public art, particularly at the street level where possible when modernizing, rehabilitating or developing new federally owned facilities. Also, explore opportunities to provide publicly accessible and actively programmed open space outside of the building envelope.

FW.B.21 Incorporate publicly accessible civic art, including memorials, plazas, public gardens, fountains, sculpture, and murals, into federal workplaces. Proposals for civic art should be coordinated with local agencies.

FW.B.22 Use appropriate commemoration and exhibits at federal workplaces. Buildings, auditoriums, plazas, courtyards, and other features can be named and embellished with plaques and sculptures. Exhibits are encouraged in widely used areas such as lobbies and corridors.

FW.B.23 Encourage the use of federal workplaces for occasional cultural, educational, and/or recreational activities, providing suitable space and infrastructure for such activities.

FW.B.24 Support an economically vibrant region that meets the government's procurement needs for goods and services through program collaborations with local, state, and regional economic development organizations. Support business development initiatives to create jobs and economic growth in disadvantaged communities throughout the region, in particular within Washington, DC.

FW.B.25 Lease or share space in federal workplaces for publicly accessible commercial, cultural, educational, civic, recreational, residential, and other high-traffic use activities where these uses will fulfill a local need, provide amenities for federal workers and residents, and support local development objectives.

FW.B.26 Explore public-private partnerships in adjacent communities that can create job training opportunities for the local community at all educational levels and help meet federal workforce needs.

FW.B.27 Support local agency and community efforts to use economic development incentives and infrastructure development to capture new commercial activities that can provide goods and services for federal workplaces. Federal procurement of goods and services should be focused in these areas.

FW.B.28 Foster the growth of socially and economically disadvantaged firms in areas around federal facilities through the use of existing federal programs and targeted resources to support existing and emerging industry clusters.

FW.B.29 Explore opportunities for federal laboratories to co-locate with related private and university research institutions and business incubators to encourage development, transfer, and commercialization of new technologies where such an arrangement will benefit the federal government, private sector, and general public.

FW.B.30 Maintain and reinforce the preeminence of the L'Enfant City by attracting and retaining federal employment through modernizing, repairing, and rehabilitating existing federal workplaces in the monumental core. Provide amenities for federal workers and the surrounding community on, and around, federal sites to enhance and activate the public realm.

FW.B.31 Support local and regional efforts to coordinate land use with the availability or development of transportation alternatives to the private automobile, including walking, bicycle riding, and public transit (Metrorail, VRE, MARC, or other type of transit service such as streetcar or bus rapid transit) systems when locating federal workplaces.



Walter Reed Army Medical Center

The largest BRAC closure in the region occurred at Walter Reed Army Medical Center in Washington, DC. As part of the 2005 Base Realignment and Closure Act, the DoD closed the Walter Reed Army Medical Center and moved many of its activities to installations in Maryland, Virginia, and elsewhere. The U.S. Department of State proposes to acquire approximately 43.5 acres of the northwest portion of the site and redevelop it as a Foreign Missions Center for the construction of new chancery facilities assigned to foreign governments. See the Foreign Missions & International Organizations Element. The federal government declared 67.5 acres on the main post, located on the site's northeast portion, as surplus property. This portion was transferred to the District of Columbia for redevelopment.[22]

SECTION C: Policies Related to Reuse of Federal Space and Land

New policies regarding mobility and federal space consolidation may lead to a smaller federal footprint in the NCR. DoD and GSA are leading agencies out of leased space and into federally owned space, generally concentrated in the region's core. As a result, vacant space may be created in localities around the region. How federal agencies handle the redevelopment or reuse of excess properties is an important factor in the regional economy's health. The policies in this section apply to the reuse of federal space and land and provide a framework that can guide federal agencies to provide opportunities for local communities to benefit from the shrinking federal footprint.

Utilizing Existing Properties

The Public Buildings Cooperative Use Act of 1976[23] encourages the public use of federal buildings and permits the inclusion of mixed uses in portions of federal buildings and the co-location of federal offices with other cultural institutions or services. The act encourages the location of commercial, cultural, education, and recreation facilities and activities within public buildings. In Washington, there are many examples where the federal government has utilized existing federal properties to incorporate public uses like the Ronald Reagan Building and International Trade Center, the Old Post Office Building, and the National Building Museum.

The federal government has opportunities to consider public-private partnerships and incorporate public uses as federal agencies reevaluate underutilized assets.

Excess Properties

GSA has considered other methods of disposing excess land, including the acquisition of construction services for the exchange of federal property. This allows agencies to exchange title to federal property for constructed asset or construction services of other federal properties that are utilized by the federal government.

When disposing of excess land, federal agencies should work with the community to undertake plans for economic development and/or use the property or facilities for other public (including open space) and private uses. The disposal of excess federally owned property should result in minimal adverse economic impacts on affected communities. Its future use should contribute to solving existing community development problems.

Guidance on the disposal of federally owned property can be found in the following:

- Defense Authorization Amendments and Base Closure and Realignment Act, as amended, (P.L. 100-526 and P.L. 101-510, 10 U.S.C. § 2687)
- Base Closure Community Development and Homeless Assistance Act of 1994 (P.L. 103-421, 10 U.S.C. § 2687)
- Federal Property and Administrative Services Act of 1949, as amended, (40 U.S.C. § 471 et seq.)
- Other laws and regulations.

The federal government should:

FW.C.1 Utilize available federally owned land or space before purchasing or leasing additional land or building space. Agencies should continuously monitor land and building space utilization rates to ensure their efficient use.

FW.C.2 Develop strategies to minimize adverse economic impacts on a jurisdiction when a facility, or a large number of federal employees relocates (federal facilities of 200 or more employees or more than 100,000 more square feet).

FW.C.3 Ensure, in the relocation of federal employees, that similar or improved availability of public transportation, employee services, and affordable housing are within a convenient commuting distance.

FW.C.4 Dispose of excess federal property in a manner that ensures that its future use is coordinated with surrounding development patterns and land uses and contributes effectively to existing community development goals.

FW.C.5 Explore new federal activities and civilian public activities before a property or facility is determined to be excess.

FW.C.6 Make better use of underutilized space within a federal facility for a public use such as commemoration, art, or retail where possible.

FW.C.7 Evaluate facility requirements and use assets more efficiently to reduce underutilized space.



West Heating Plant

The U.S. General Services Administration disposed of the former West Heating Plant and removed the property from federal ownership. The West Heating Plant was sold for $19.5 million to a team of developers that plan to convert the site into luxury condominiums with a public park that will tie into the existing Georgetown Waterfront Park. The decommissioned historic heating plant, previously used to provide steam to government facilities, sits on a two-acre site near the Georgetown waterfront. The building and adjacent land was identified as excess and the disposal of the parcel was needed to eliminate the costs associated with maintenance. This is consistent with Disposing of Unneeded Federal Real Estate, a Presidential Memorandum[24] issued June 10, 2010.

Endnotes

1 4 USC § 71

2 4 USC § 72

3 See, Report of the congressional Research Service “Location of Federal Government Offices,” L. Elaine Halchin, January 28, 2003.

4 Source: Bureau of Economic Analysis

5 U.S. Department of General Services, NCR’s Public Buildings Service, Data received February 24, 2015.

6 U.S. Department of Defense, Base Structure Report-Fiscal Year 2014 Baseline, A summary of the Real Property Inventory, http://www.acq.osd.mil/ie/download/bsr/Base%20Structure%20Report%20Y14

7 GMU Center for Regional Analysis, The U.S. and Washington Area Economic Performance and Outlook, Presentation, April 23, 2015.

8 Executive Order 13589: Promoting Efficient Spending, November 9, 2011

9 “Management Procedures Memorandum No. 2013-02. Implementation of OMB Memorandum M-12-12 Section 3: Freeze the Footprint,” March 14, 2012.

10 Executive Order 13589: Promoting Efficient Spending, November 9, 2011

11 “Management Procedures Memorandum No. 2013-02. Implementation of OMB Memorandum M-12-12 Section 3: Freeze the Footprint,” March 14, 2012.

12 Council on Environmental Quality, 76 FR 68170-Instructions for Implementing Sustainable Locations for Federal Facilities, November 3, 2011.

13 Executive Order 11988: Floodplain Management, 42 FR 26951, 3 CFR 121 (Supp. 1977) and Executive Order 13690, Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input, January 2015.

14 Executive Order 11988: Floodplain Management, 42 FR 26951, 3 CFR 121 (Supp. 1977) and Executive Order 13690, Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input, January 2015.

15 Executive Order 13693: Planning for Federal Sustainability in the Next Decade, March 19, 2015.

16 Telework Enhancement Act of 2010: https://www.telework.gov/guidance-legislation/telework-legislation/telework-enhancement-act/

17 Total Workplace Initiative: http://www.gsa.gov/portal/content/178259

18 Metropolitan Washington Council of Governments Regional Activity Center Maps: https://www.mwcog.org/documents/2013/01/13/activity-centers-maps/

19 Executive Order 12072 - Federal Space Management requires all federal agencies to first consider locating federal facilities in central business areas, and/or adjacent areas of similar character, to use them to make downtowns attractive places to work, conserve existing resources, and encourage redevelopment.

20 The term “qualified opportunity zone” means a population census tract that is a low-income community that is designated as a qualified opportunity zone.

21 https://www.mwcog.org/regionforward/

22 Defense Authorization Amendments and Base Closure and Realignment Act, as amended: https://www.govtrack.us/congress/bills/100/s2749/text/enr

23 Public Buildings Cooperative Use Act of 1976: http://www.gsa.gov/graphics/pbs/Coop_Use_Act_of_1976.pdf

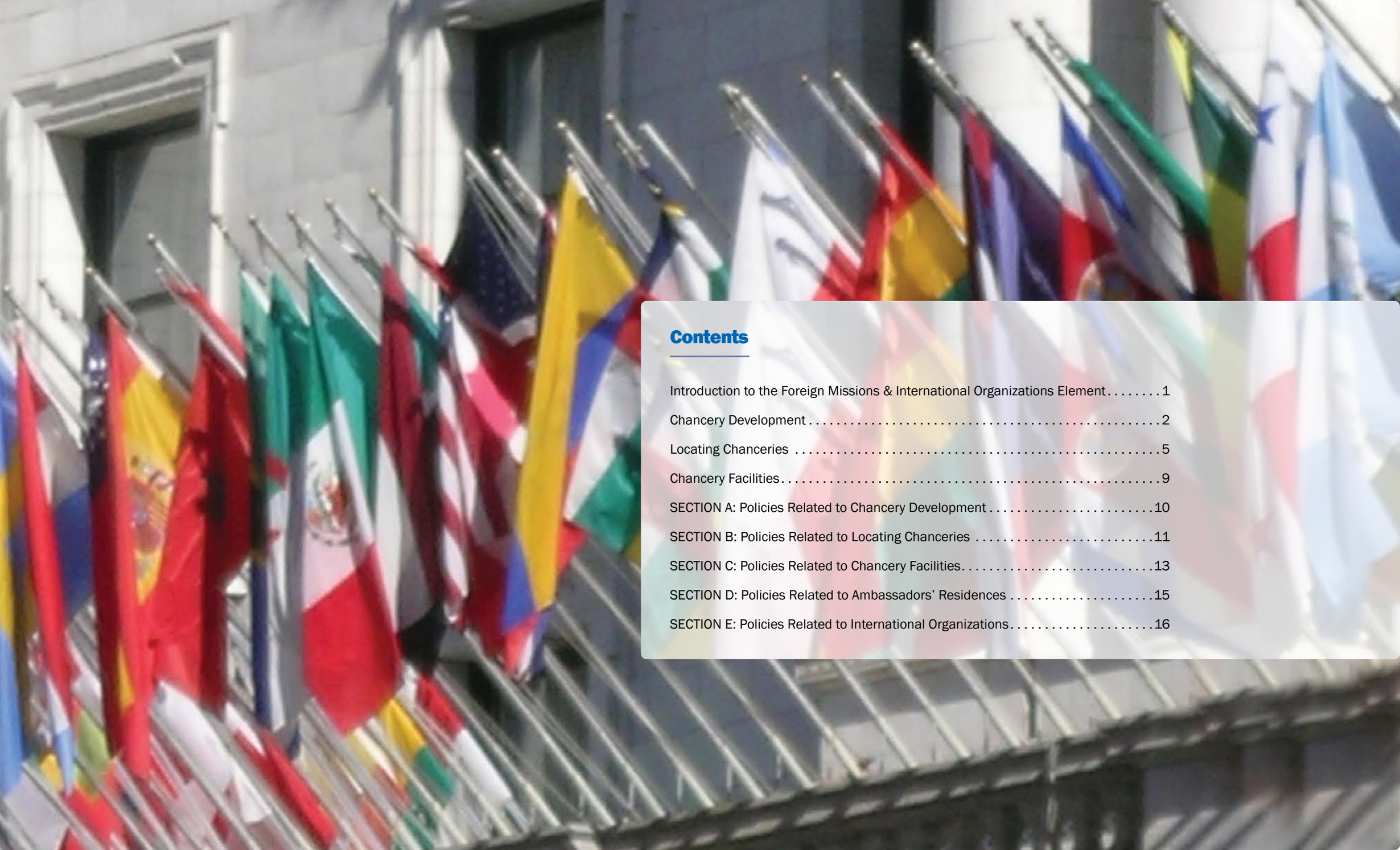
24 Federal Property and Administrative Services Act of 1949: http://www.epw.senate.gov/fpasa49.pdf

Foreign Missions & International Organizations Element



2016

National Capital Planning Commission



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Introduction to the Foreign Missions & International Organizations Element



There are 195 independent states in the world. The United States maintains diplomatic relations with 191 of them.

The federal government's goal is to plan a secure and welcoming environment for the location of diplomatic and international activities in Washington, DC. This should be done in a manner that is appropriate to the status and dignity of these activities; enhances Washington's role as one of the world's great capitals; and is sensitive to the character and use patterns of the city's neighborhoods.

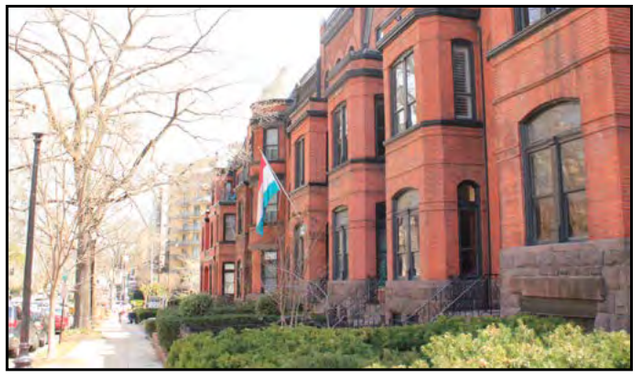
Washington, DC is one of the world's most important diplomatic centers. There are a total of 195 independent states in the world, and the United States maintains diplomatic relations with 191 of them.[1] The United States also has diplomatic relations with many international organizations. There are approximately 185 countries that have foreign missions in Washington, DC.[2] These missions are vital to the United States government in assisting diplomatic relations with international institutions, organizations, and states. Foreign missions help promote peace and stability and bring nations together to address global challenges.

The Foreign Missions & International Organizations Element of the *Comprehensive Plan for the National Capital: Federal Elements* (Comprehensive Plan) provides a policy framework for the United States to fulfill its international obligation to assist foreign governments and international organizations in obtaining suitable locations for their diplomatic missions. This in turn supports efficient functioning of diplomatic and international activities. The element also includes policies to ensure that foreign missions promote the prestigious nature of the diplomatic mission, contribute to the city, and acknowledge and maintain the unique characteristics of Washington's neighborhoods.

Honoring the United States' treaty obligations is an important component in accommodating foreign missions in the nation's capital. The Vienna Convention on Diplomatic Relations obligates the U.S. government to assist foreign governments in obtaining suitable facilities for diplomatic missions. The Convention states that "the receiving State shall either facilitate the acquisition on its territory, in accordance with its laws, by the sending State of premises necessary for its mission or assist the latter in obtaining accommodation in some other way."[3]

The Foreign Missions Act[4] of 1982 reaffirms the federal government's jurisdiction over the operation of foreign missions and international organizations in the United States. It enunciates the policy to support and facilitate the secure and efficient operation of U.S. missions abroad, and of foreign missions and international organizations in the United States.

To ensure reciprocal accommodations in foreign countries, the Act established the Office of Foreign Missions within the U.S. Department of State (State Department) to review and control the operations of foreign missions in the United States. It empowers the Secretary of State to set forth the mechanism and criteria relating to the location of foreign missions in Washington, DC.



Former residential row house



Commercial office building

Chancery Development

Foreign missions occupy buildings of all sizes, shapes, and ages. Some are housed in former residential row houses or mansions, while many are in custom-designed buildings. Others lease space in commercial office buildings.

The facilities that house diplomatic functions—office space where the mission is conducted, and the residence of the ambassador—are commonly referred to collectively as embassies. Individually, these facilities are referred to differently depending upon their use. These uses include:

- **Ambassador's residence:** The official home of the ambassador or the chief of mission.
- **Chancery:** The principal offices of a foreign mission used for diplomatic or related purposes.
- **Chancery annex:** Used for diplomatic purposes in support of the mission, such as cultural or military attachés, or consular operations. Chanceries and chancery annexes are the same in this element when considering the accommodation of foreign missions in Washington, DC.

Many foreign missions in Washington occupy chanceries, chancery annexes, and ambassadors' residences in more than one location. Collectively and individually, these buildings contribute to the vibrancy and diversity of Washington's neighborhoods and add significantly to the city's visual interest and character.

Some countries maintain limited diplomatic establishments in Washington, with only the minimal staff needed to maintain diplomatic relations. Others have quite extensive activities and employ hundreds of people to work in specialized offices with particular functions. For example, several foreign missions maintain trade offices to encourage the import and export of goods to and from their countries. Many missions have offices for military liaisons to the U.S. Department of Defense. The diplomatic and international community continues to be a source of economic growth in Washington, DC as it provides employment and attracts international culture and commerce.

The Economic and Fiscal Impact of Foreign Missions on the Nation's Capital

The foreign missions in the National Capital Region represent the world's major countries, and with few exceptions are those countries' largest missions. Even though foreign missions by themselves are not major generators of economic activity, they have an economic force far exceeding their measurable benefits.

International Business Industry in Washington, DC

In addition to direct and indirect spending, foreign missions represent a critical component of the international business industry in Washington, DC. The continued growth and vitality of the city's international business industry is closely tied to Washington maintaining its position as a power center among world capitals, generating country-to-country business opportunities, and attracting visitors seeking individual or multiple-country meetings.

Foreign missions support and facilitate a significant and growing sector within the District of Columbia economy in the following ways:

- Foreign missions employ workers in Washington, DC.
- Consumer spending by foreign mission employees.
- Non-payroll spending by foreign missions.
- Foreign missions attract a large volume of day visitors and business visitors staying overnight, who spend money on lodging, food, and shopping.
- The District of Columbia collects taxes generated by the office space and homes leased in the city by foreign missions and their employees, respectively.

International Investments in Virginia

Between 2009 and 2013, French companies invested more than $570 million in Virginia, making France the second-largest foreign direct investor in the state.[5] In 2014, the Ambassador of France to the United States and the Commonwealth of Virginia signed a partnership agreement to develop new solutions to face climate change, develop quality of life, create jobs, and generate new economic opportunities. This partnership symbolizes two countries working together to address climate change and sustainable economic development in Virginia.



ABC News Michael Vincent

Embassy of Cuba

Washington, DC (2013):
322 Chanceries
78 Ambassador Residences
46 Missions to the Organization of American States

Some countries maintain limited diplomatic establishments in Washington, with only the minimal staff needed to maintain diplomatic relations. Others have quite extensive activities and employ hundreds of people to work in specialized offices with particular functions. For example, several foreign missions maintain trade offices to encourage the import and export of goods to and from their countries. Many missions have offices for military liaisons to the U.S. Department of Defense. The diplomatic and international community continues to be a source of economic growth in Washington, DC as it provides employment and attracts international culture and commerce.

In recent decades, the nature of international diplomacy has shifted. In addition to political relationships, economic and cultural relationships have taken on added significance. This expansion of diplomatic functions has resulted in a commensurate shift in foreign mission facilities. Buildings are increasingly used to signify the importance a country places on its relations with its host country and to project a positive image.

In addition to their traditional function as places of negotiation, chanceries also act as communication vehicles for their countries. Increasingly, foreign missions use their chancery facilities as event spaces to foster intergovernmental relations at the political, economic, and cultural level. Using the power of architecture to convey a message in a way that spoken and written words cannot, many foreign missions now host public and private cultural events such as art exhibits, concerts, and films, or sponsor special events to increase awareness of their country and promote trade and tourism. These new programs often result in the need for larger buildings and specialized space. As a result, increased security requirements have become a consideration in chancery development.

Foreign Missions Since 2004: Key Developments and Trends

In 2004, when the Comprehensive Plan's Foreign Missions & International Organizations Element was last updated, there were 169 countries with foreign missions spread across 507 facilities (residential and non-residential) in the region: 451 facilities in the Washington, DC, 41 facilities in Maryland, and 15 facilities in Virginia. In Washington, DC, there were 195 chanceries—18 located on federal land and 177 located on non-federal land.

The collapse in the 1990s of both the Soviet Union and Yugoslavia resulted in the creation of 21 new countries, which established diplomatic missions in Washington, many located in small, historic townhouses in Northwest. Two decades later, many of these countries have outgrown their smaller facilities.

Since 2004, the growth and diplomatic presence of foreign missions such as Brazil, China, India, and Vietnam, have increased, resulting in larger facilities in the United States, as well as on the State Department's reciprocal presence and operations in those countries.

The construction of the new U.S. chancery in Beijing and the Chinese chancery in Washington provides an example of how reciprocity functions. Without the ability to accommodate China's construction at the International Chancery Center, the State Department's efforts to construct a new chancery in Beijing would likely not have been successful.[6]

Another example relates to a proposal from the Republic of Georgia to relocate to another property in Washington. The State Department determined that the case was a federal interest and acknowledged the Republic of Georgia's generous assistance in establishing a new U.S. Embassy in Tbilisi in 2005. Such cooperation was essential to successfully achieve the federal government's mission to provide safe, secure and functional facilities for the conduct of U.S. diplomacy and the promotion of U.S. interests worldwide.

In addition, the increasing "footprints" of U.S. diplomatic facilities abroad—largely due to security requirements—have resulted in additional pressure for similarly sized sites for foreign missions in the United States. Within Washington, DC, this task is challenging due to the lack of larger, undeveloped sites.

As foreign governments continue to face greater difficulty identifying properties within Washington that are either available for chancery use, or viewed by foreign governments as suitable for modern embassy operations, the State Department faces a number of challenges in its attempts to reciprocally acquire properties in other countries.

As of 2013, there were 322 chanceries (chancery and chancery annexes), 78 ambassador residences, and 46 missions to the Organization of American States in Washington, DC.[7] Since 2004, the Embassy of the Republic of Congo, Embassy of South Africa, and the Embassy of Brazil are just a few of the completed multiple renovation and expansion projects. Under development are the Chinese Embassy Annex on Connecticut Avenue, estimated to be completed in the summer of 2016, and the Moroccan Embassy at the International Chancery Center. With the restoration of diplomatic relations between the United States and Cuba, both countries have reestablished embassies in each other's countries. While most chancery facilities are owned by the countries that occupy them, several missions lease space in office buildings, small commercial buildings, or freestanding structures.

Where Foreign Missions Are Located

Currently, all chanceries in Washington, DC are located in the city's Northwest quadrant, with the majority located between 16th Street, NW (to the east) and Wisconsin Avenue, NW (to the west.) The Sheridan Kalorama neighborhood contains the largest number of chanceries, with the adjacent Dupont Circle neighborhood having the second most.

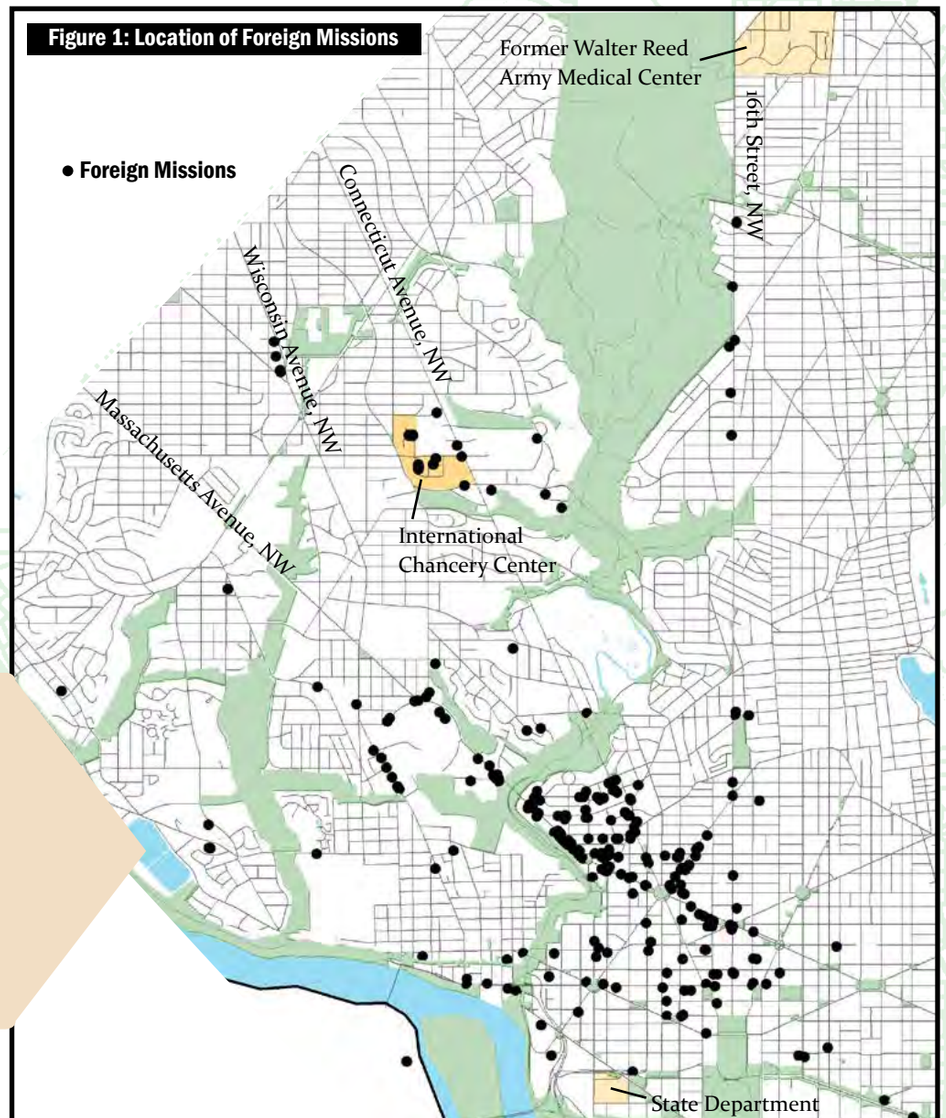
In 1968, the International Center Act established a 47-acre enclave in the Van Ness neighborhood known as the International Chancery Center, where foreign missions leased land from the U.S. government. The International Chancery Center became a purpose-built community designed to balance the federal government's need to accommodate foreign mission facilities while addressing the concerns of citizens about the location and operation of foreign missions in Washington.

The International Chancery Center houses 17 chanceries and is essentially built out, as all 47 acres have been developed with the exception of two lots for Morocco. The final plans for the new Moroccan chancery have been approved.

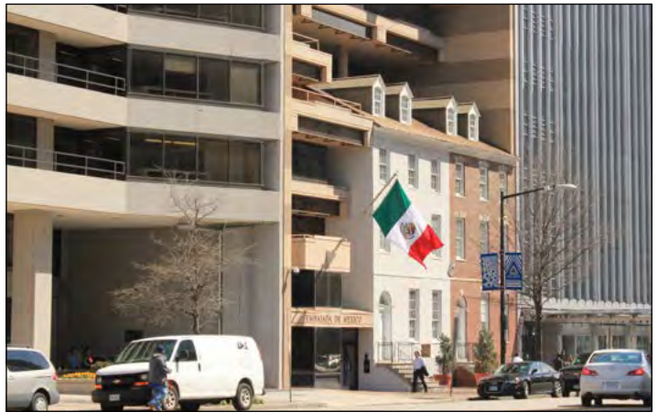


Embassies are located predominately in the northwest quadrant of Washington, with a high concentration along a stretch of Massachusetts Avenue, NW (known as "Embassy Row") and along New Hampshire Avenue, NW and 16th Street, NW. Many embassies are located in neighborhoods including Dupont Circle, downtown, Foggy Bottom, Georgetown, Kalorama, and Van Ness. Where foreign missions locate can influence neighborhood character. For example, the many embassies in Dupont Circle bring a constant flow of employment and distinctive international feel to the historically designated neighborhood.[8] These embassies generate demand for restaurants and the arts, helping establish the neighborhoods' distinct character.

Figure 1: Location of Foreign Missions



Chanceries are located as a matter-of-right in areas zoned commercial, industrial, waterfront, or mixed-use.



Commercial



Waterfront



Mixed-use

Future Demand

The greatest demand for new chancery facilities will likely come from existing foreign missions that expand as they increase their presence and the services performed. A few small countries that house their primary diplomatic missions to the U.S. in New York City may also choose to open chanceries in the capital. As new countries are created over time, it is likely that they too may establish diplomatic relations with the U.S. and will require new chanceries in Washington, DC.

New foreign missions, and the relocation of existing ones, could require the identification of chancery sites each year. It is unlikely that all foreign missions would require new sites—some may purchase or lease existing foreign mission facilities, while others may purchase or lease other existing buildings. However, the past trend has been toward new construction of larger facilities on large lots, both on privately owned land and in the International Chancery Center. Because of the full build-out of the International Chancery Center, another large tract of federally owned land to accommodate a new foreign missions center is planned. A discussion of the proposed foreign missions center at the former Walter Reed Army Medical Center campus is located in Section B: Policies Related to Locating Chanceries.

Locating Chanceries

Where Foreign Missions May Locate

The Foreign Missions Act establish procedures and criteria governing the location, replacement, or expansion of chanceries in the District of Columbia and identified areas where foreign missions may locate without regulatory review, and areas where foreign missions may locate subject to disapproval by the District of Columbia Board of Zoning Adjustment.

The areas where foreign missions may locate without regulatory review are referred to as matter-of-right. A foreign mission may locate a chancery in a matter-of-right area without it being subject to review by the BZA. The Foreign Missions Act establishes matter-of-right areas as those areas in the District of Columbia zoned commercial, industrial, waterfront, or mixed-use. According to the current District of Columbia zoning map, these areas are located in all quadrants of the city, with the single largest contiguous area within the Central Employment Area (see the Federal Workplace Element for more details). From this core, several matter-of-right areas extend outward along major avenues of the city. In addition, large matter-of-right areas are located south of the National Mall and east of the Anacostia River.

Foreign missions are also permitted to locate chanceries in areas outside of the matter-of-right areas subject to review and disapproval by the BZA as defined in Section 4306(b)(2) of the Act. These include areas zoned medium-high or high density residential, as well as "any other area" deemed suitable for a chancery use on a case-by-case basis. For these latter areas, prior to making a decision concerning the location of a chancery, the BZA must first determine whether the area within which the chancery is to be located is suitable based upon an evaluation of existing office or institutional uses in that area. As required by the Foreign Missions Act, any determination concerning the location of a chancery outside of the matter-of-right areas must be based solely on a set of six criteria found in Section 4306(d). While the areas considered outside of the matter-of-right can be found in all quadrants of Washington, these areas are primarily located in Northwest and Northeast Washington.

The District of Columbia Board of Zoning Adjustment (BZA)

The **BZA,** a five-member quasi-judicial board created by the Zoning Enabling Act of 1938,[9] is charged with hearing cases related to variances, special exceptions, and appeals of administrative decisions related to zoning. The BZA also undertakes special reviews of proposed chancery development for facilities proposed to be located in certain mixed-use areas of the city. When the BZA is performing functions regarding foreign missions and chancery applications, the BZA consists of three Mayoral appointees, the Director of the U.S. National Park Service (NPS) or designee, and the National Capital Planning Commission (NCPC) Executive Director.



Six Criteria for Locating Chanceries Outside of Matter-of-Right-Areas

Section 4306 (d) of the Foreign Missions Act

(d) Criteria for determination

Any determination concerning the location of a chancery under subsection (b)(2) of this section, or concerning an appeal of an administrative decision with respect to a chancery based in whole or in part upon any zoning regulation or map, shall be based solely on the following criteria:

(1) The international obligation of the United States to facilitate the provision of adequate and secure facilities for foreign missions in the nation's capital.

(2) Historic preservation, as determined by the Board of Zoning Adjustment, in carrying out this section; and in order to ensure compatibility with historic landmarks and districts, substantial compliance with District of Columbia and federal regulations governing historic preservation shall be required with respect to new construction and to demolition of or alteration to historic landmarks.

(3) The adequacy of off-street or other parking and the extent to which the area will be served by public transportation to reduce parking requirements, subject to such special security requirements as may be determined by the Secretary [of State Department], after consultation with federal agencies authorized to perform protective services.

(4) The extent to which the area is capable of being adequately protected, as determined by the Secretary of State, after consultation with federal agencies authorized to perform protective services.

(5) The municipal interest, as determined by the Mayor of the District of Columbia.

(6) The federal interest, as determined by the Secretary of State.

Location Decisions

All foreign missions in Washington are currently located in the city's Northwest quadrant. This is due to historic development patterns, availability of buildings and land, proximity to government offices and other chanceries, and former Comprehensive Plan policies that encouraged this practice.

Historic Patterns. The historic pattern came early in Washington's diplomatic history. The first foreign missions in the city were near the White House, and as outlying areas of the city became fashionable—and increasingly urbanized—foreign missions followed. The first concentration of foreign missions occurred along 16th Street, NW in the vicinity of Meridian Hill Park. By the 1920's 16th Street, NW was referred to as Embassy Row.

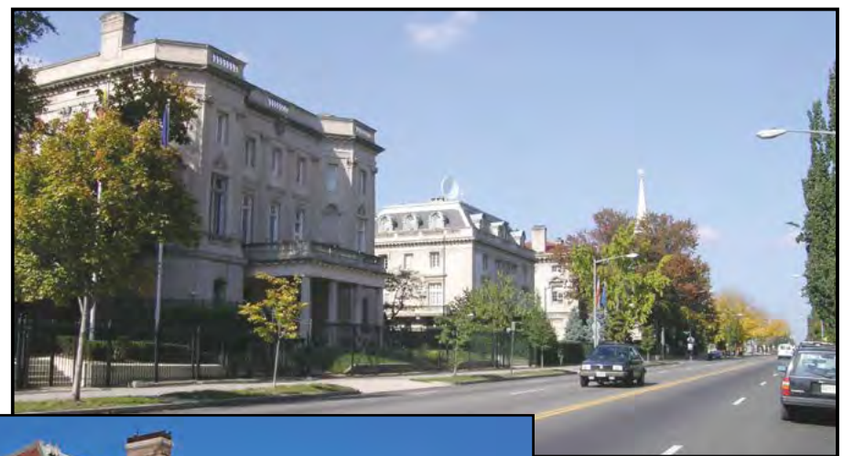
However, during the Depression, many of the grand homes in the area northwest of Dupont Circle became vacant and were bought by foreign missions that wanted to establish their presence in a stylish neighborhood. By the end of the 1930's Massachusetts Avenue, NW from Scott Circle to Wisconsin Avenue had become the new Embassy Row. As the United States became an international power and Washington became an increasingly important diplomatic center, more and more foreign missions clustered around this area. Its desirability continues to this day.

Available Buildings. As large private homes became available, many foreign missions purchased and occupied them. When these foreign missions later moved into larger facilities, new missions establishing or increasing their diplomatic presence often moved into these former residences.

Available Land. Although chancery construction has dispersed to areas including the Pennsylvania Avenue, NW corridor and Georgetown, for many years the availability of large lots along the Massachusetts Avenue corridor allowed for the construction of new chancery facilities that accommodated a variety of functions and uses.

Proximity to Government Offices and Other Chanceries. As increasing numbers of foreign missions clustered in the city's Northwest quadrant, the desirability of locating chanceries near or in the cluster increased. The neighborhood character and the prestige of the nearby foreign missions added to the desire to locate there. In addition, foreign missions in Northwest often prefer to be located in proximity to the State Department headquarters, with easy access to other government functions located around the monumental core.

Former Comprehensive Plan Policies. Based on prior development patterns over the course of 20 years, the Comprehensive Plan adopted in 2004 recognized a potential for future expansion of existing foreign missions and demand for new chancery sites. Planning challenges with chancery development in Washington, DC included the over-concentration of chanceries in specific neighborhoods and the impact on traffic, parking, noise, and land use patterns. To address those challenges, several potential development areas were identified in the 2004 Comprehensive Plan that could accommodate future chanceries including the 16th Street, NW Corridor and the South Capitol Street Corridor. Other policies encouraged the development of a new foreign missions center at the Armed Forces Retirement Home. However, due to changing conditions, future foreign missions centers at the Armed Forces Retirement Home and along the South Capitol Street Corridor are no longer viable.



Former Embassy Row, 16th Street, NW



Carol M. Highsmith

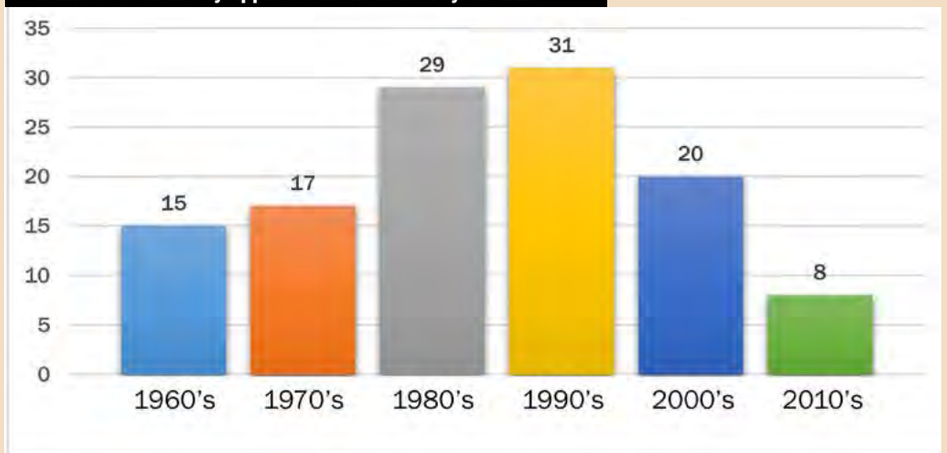
Embassy Row, Massachusetts Avenue

Key Policy Issues and Challenges. The Foreign Missions Act continues to serve as the federal regulatory framework that guides the location of chanceries in the District of Columbia. Section 4306 of the Foreign Missions Act establishes specific areas where chanceries are permitted as a matter-of-right, and areas where chanceries are permitted subject to the disapproval of the BZA (implemented at a local level through the District of Columbia Zoning Regulations). In general, the BZA process and the matter-of-right zoning restrictions are intended to balance a number of key planning challenges associated with locating chanceries within the context of both federal and local interests. For example, concentrating chanceries in neighborhoods may impact traffic, parking, noise, and land use patterns. There may be other issues related to protecting neighborhood character or site-specific historic preservation issues. These must be balanced with fundamental federal interests to respect the nation's diplomatic obligations and locate chanceries within the capital.

One issue for locating chanceries is how to define the "in any other area" section of the Foreign Missions Act in Section 4306(b)(2)(B) and described on page 6. In December 1983, NCPC amended the Foreign Missions & International Organizations Element to provide planning and policy guidance to the Zoning Commission and the BZA with a method developed to delineate the "in any other area." It included a methodology that identified areas with 1/3 office and institutional and 2/3 residential land uses. Thus, it was commonly referred to as the "1/3–2/3 method." This mixed-use ratio was then applied to city squares zoned low- to medium-density residential, and squares that met the ratio were identified as being appropriate for chanceries under Section 4306(b)(2)(B).

The 1/3-2/3 methodology was intended to clarify guidance in the Foreign Missions Act and help delineate areas where chanceries were appropriate in non-matter-of-right areas. However, from a process perspective, it was noted that the methodology has been applied somewhat inconsistently and in some cases caused an unanticipated increase in the concentration of chanceries in certain residential neighborhoods. Thus, NCPC is not including this methodology in this update. NCPC supports prioritizing matter-of-right areas and the proposed foreign missions center at the former Walter Reed Army Medical Center for location of chanceries. The location of chanceries outside of the matter-of-right areas are subject to the review of the District of Columbia BZA. The BZA makes their determination based on the six criteria defined in the Foreign Missions Act, which considers both local and federal interests.

Number of Chancery Applications Reviewed by the BZA



The BZA has reviewed approximately 120 chancery applications since the 1960's. Of these, approximately 67 percent were chancery applications reviewed after the 1982 Foreign Missions Act was established. The number of chancery applications have declined in the past two decades.



Davis Brody Bond

South African Embassy



Embassy of Finland

Finnish Embassy

Sustainable Design

Many countries are incorporating sustainable design in their architecture and green facility renovations. The Finnish Embassy's architecture includes materials that are age-old and contemporary, with simplicity and transparency which captures the essence of Finnish culture. The building was the first embassy in the United States to receive the U.S. Environmental Protection Agency's ENERGY STAR for superior energy efficiency, as well as the U.S. Green Building Council's Leadership in Energy and U.S. Environmental Design certificate for green buildings. More than 75 diplomatic missions and international organizations in Washington have signed a pledge with the city and mayor through the D.C. Greening Embassies Forum to commit to maintain their operations sustainably and to pursue environmental and efficiency goals consistent with those of the District of Columbia. The U.S. Department of State and Earth Day established the forum.



Wingardh Arkitektkontor AB

House of Sweden

Chancery Facilities

Future Building Requirements

In the past, foreign countries built new, large, distinctive chancery facilities on prominent, busy streets. Most of these chanceries were stand-alone, multi-use buildings with underground garage parking and increasingly sophisticated security. Although there is high demand for new construction, a lack of larger sites available for foreign mission development or redevelopment in Washington, DC have led to the emergence of three other patterns of chancery development:

1. Rehabilitating prestigious historic structures.
2. Relocating into vacated chancery buildings.
3. Leasing space in commercial office buildings.

Many foreign countries use the power of architecture in the design of their chancery facilities to convey a message. Buildings are often used as statements about their countries and relationships to the international community. For example, the design of the South African Embassy renovation and expansion project represents the "new" South Africa with a symbolic message that South Africa, while respecting the past, is moving towards a bright future free of the political strife that characterized the country's recent history. The contemporary Scandinavian architecture of the House of Sweden, located in Georgetown, exemplifies Swedish values such as openness, transparency, and democracy with a building that is light and airy with large glass segments.

SECTION A: Policies Related to Chancery Development

Future Chancery Development

As the seat of our nation's government and an important diplomatic center, future development opportunities should be provided within Washington, DC for new chanceries so that foreign missions will not have to relocate outside the boundaries of the nation's capital. The continuing demand for new chancery sites within Washington, the build-out of the International Chancery Center, and increasing private-sector land and development costs demonstrate the need to plan and establish additional foreign missions centers to assist in the accommodation of new and expanding foreign missions. NCPC anticipates an increased demand for larger foreign missions sites in the future. Foreign countries make their chancery siting decisions for a variety of reasons, including proximity to other foreign missions and government offices, neighborhood character, access, cost, and security requirements. The availability of sites that meet the needs within traditional diplomatic areas in the city is increasingly limited. Therefore, identification of additional areas is needed to accommodate future demand of foreign missions.

Future chancery development areas need to consider matter-of-right areas, compatible land uses with chancery development, adequate land for a variety of chancery sizes, and potential redevelopment and reuse opportunities. These areas should offer prominent sites that can accommodate the prestigious nature of the diplomatic mission, meet the planning objectives of the local and federal governments, are easily accessible by multiple modes of transportation, promote historic preservation and adaptive reuse, and strengthen the capital's image and character. Future chancery development areas should consider building mass and scale, and provide adequate and secure siting for foreign missions.

New chancery development should be encouraged at designated foreign missions centers and areas of the city that have not traditionally been considered, where chanceries and their functions are sensitive to the character and use patterns of the neighborhood. Chancery development can help strengthen neighborhood redevelopment, revitalization, and economic development goals, and promote diverse and lively communities. Many embassies already host events such as tours, exhibits, lectures, and performances that promote the country's culture. There are also organizations dedicated to cultural programs that work with embassies to help celebrate Washington's diplomatic community and add a rich and diverse culture in neighborhoods across the city by planning and promoting larger festivals and events. The NCPC, in collaboration with State Department and the District of Columbia government, should continue to study future potential chancery development areas in the city.

Potential Foreign Missions Center Development Area

In the foreseeable future, the prime development opportunity for a large-scale foreign missions center is at the former Walter Reed Army Medical Center, located on 16th Street, NW. As part of 2005 Defense Base Realignment and Closure, the U.S. Department of Defense closed the Walter Reed Army Medical Center campus in 2011, relocating its functions to facilities in Virginia and Maryland. After several years of considering the suitability of other locations throughout the District, the State Department concluded that the former Walter Reed Army Medical Center site presented a viable option for the development of a foreign missions center of a similar size and scale to the existing International Chancery Center. 16th Street is one of most important streets in Washington, with visual and symbolic connections to the White House and the historic embassy district centered on Meridian Hill, making it an appropriate location for the development of a new international center.

The State Department is preparing a master plan for a new foreign missions center on a 43.5-acre portion of the former Walter Reed Army Medical Center site. Similar to the International Chancery Center, it is envisioned that the master plan will divide the property into several development parcels that would be assigned to foreign governments, under long-term leases, for the construction of foreign missions facilities. The master plan estimates a planned 20-year buildout of this foreign missions center and may accommodate approximately 15 chanceries. The master plan is being developed with consideration given to the District of Columbia government's plan to redevelop the remainder of the campus with a mix of uses including office, institutional, residential, and retail.

The federal government should:

FM.A.1 Encourage all foreign missions to locate chanceries, combined chancery/ ambassadors' residences, and chancery annexes in owned or leased facilities in Washington due to its stature as the established seat of the federal government.

FM.A.2 Identify areas appropriate for the future location of foreign missions in the nation's capital.

Foreign missions are encouraged to:

FM.A.3 Site chanceries so that they satisfy their operational requirements to further the efficient conduct of diplomatic relations between the United States and other nations.

FM.A.4 Site chanceries so that they add visual interest and character, contribute to cultural life, and promote diverse and lively communities.



Foreign Missions Center site at the former Walter Reed Army Medical Center.

SECTION B: Policies Related to Locating Chanceries

As the number of foreign missions in Washington increased throughout the twentieth century, different regulatory mechanisms were enacted to guide chancery location decisions. Over time, technology driven methodologies were created to guide future chancery locations, which resulted in land-use controversies in some of the residential neighborhoods in which chanceries are located.

A key challenge with locating chanceries is balancing the need to plan secure locations for diplomatic activities while being sensitive to residential neighborhoods. The 1/3-2/3 method developed in the 1983 Comprehensive Plan resulted in an increase in the concentration of chanceries in certain residential neighborhoods not suitable for chancery uses. As a result of indirect impacts to residential neighborhoods, the Comprehensive Plan moves away from the previous 1/3-2/3 method. Instead, it prioritizes location of chanceries in matter-of-right areas and at designated foreign missions centers—areas compatible for chancery uses. The location of chanceries outside of the matter-of-right areas are subject to the review of the BZA. The BZA makes their determination based on the set of six criteria as defined in the Foreign Missions Act, which considers both local and federal interests. This public decision-making process includes the input and participation of stakeholders, and attempts to balance the need for diplomatic activities with the concerns of residential neighborhoods

The District of Columbia is updating the District Elements of the Comprehensive Plan. Throughout the District's Element update process, NCPC, the State Department, and the District of Columbia government should work collaboratively to ensure that any proposed plans and policies identified as suitable locations for foreign missions are consistent with the Foreign Missions Act.

Foreign Missions Center

Foreign missions can be expected to relocate their chanceries to a new foreign missions center for several reasons: a range of office space alternatives; office space that is appropriate for chancery use; increased security requirements; proximity to other chanceries; and amenities that serve the diplomatic community.

Incentives. At the existing International Chancery Center, foreign missions leased land at a favorable rate. The lease price for the land was determined by the size of the property and the commensurate cost of building the infrastructure necessary to support the facility. Although it is unlikely that the same low-cost lease rates could be offered in a new foreign missions center, it is anticipated that land acquisition costs would be more favorable than in the open market.

Office Space Alternatives. Several foreign missions currently occupy small buildings or office space in commercial buildings. Several foreign missions moved from small facilities to larger facilities as their missions expanded and the range of services they provided increased. The demand for varying space requirements over time would be met in a foreign missions center that contains a wide range of buildings available to foreign missions for shorter lease periods than is currently available.

Appropriate Office Space. Chancery office space in a foreign missions center can fulfill the unique requirements of the diplomatic community without the need for expensive renovation, and without negatively affecting the neighborhood's character. This might mean the construction of facilities with increased security and privacy requirements or parking requirements appropriate to the vehicular traffic a foreign mission may be expected to generate.

Security. It may be easier to control access and provide increased security to chanceries located in a foreign missions center. In addition, facilities built exclusively for chancery use can be built to accommodate specific security standards.

Proximity. As demonstrated by the success of the International Chancery Center, proximity to other foreign missions may create greater demand to relocate, and add to the prestige of a foreign missions center address.

Amenities. A large concentration of chanceries is likely to require amenities necessary to support the diplomatic community, such as restaurants, housing, retail, and back-office functions. As a foreign missions center is developed these amenities are likely to locate in the vicinity.

The federal government is encouraged to:

FM.B.1 Give priority consideration for the location of chancery facilities at the proposed foreign missions center.

FM.B.2 Give priority consideration for the location of chancery facilities in matter-of-right areas.

Foreign missions are encouraged to:

FM.B.3 Locate chanceries where they would support neighborhood revitalization and economic development.

FM.B.4 Locate chancery facilities in areas where adjacent existing and proposed land use and zoning are compatible (e.g., office, commercial, and mixed use), giving special care to protecting the integrity of residential areas.

FM.B.5 Renovate, expand, or reuse an existing chancery to the extent consistent with the Foreign Missions Act.

FM.B.6 Evaluate the availability of chancery sites in matter-of-right areas prior to considering sites within areas that are primarily residential in nature.





Canadian Embassy

SECTION C: Policies Related to Chancery Facilities

Federal and local planners in Washington have the unique responsibility of balancing the needs of foreign missions with the responsibility of creating orderly growth and fostering community development.

Consistency with federal and District of Columbia planning initiatives and compliance with federal and local plans and regulations are primary criteria for guiding planners' decisions. Some of these criteria include historic preservation and revitalization goals that must be balanced with the needs of the foreign missions. Other criteria include transportation goals, sustainability guidelines, and the desire to protect the city's unique character established by the L'Enfant Plan[10] (refer to the Federal Urban Design Element). Together, these criteria form a complementary set of guiding principles where the most desirable locations can be recommended for future chancery facilities. Foreign missions may locate without regulatory review in matter-of-right areas, including all areas zoned commercial, industrial, waterfront, or mixed-use.

The following policies provide general guidance in response to the identified needs of foreign missions and ensure that foreign missions maintain chanceries in a way that enhances the unique qualities of the nation's capital. When new chanceries are built, or foreign missions relocate to other facilities, these policies should be applied to ensure that chancery development is compatible with the neighborhood and that the integrity of residential neighborhoods is maintained. As foreign missions relocate their chanceries, the policies should be applied to ensure that older existing chanceries are maintained so they do not negatively impact a neighborhood's character.

Urban Design

Foreign missions are encouraged to:

FM.C.1 Protect the L'Enfant Plan's historic open space system and develop structures and landscaping that enhance and preserve its historic qualities.

FM.C.2 Preserve and enhance the urban spaces, circles, squares, and plazas generated by the L'Enfant Plan and the national capital's unique views and vistas.

FM.C.3 Protect Washington's historic legacy by ensuring that buildings and landscapes are consistent with the grandeur of a great world capital.

FM.C.4 Design chanceries to complement—and be consistent with—the height, size, and spatial orientation of existing buildings and the surrounding neighborhood character.

FM.C.5 Construct buildings and landscapes in a manner that demonstrates an appreciation for the architecture and landscape of the surroundings, while also expressing characteristics of the corresponding nation's native architectural styles.

FM.C.6 Maintain existing chancery facilities so they do not negatively impact neighborhood character.

FM.C.7 Where possible, include sustainable site and building design, green space, tree canopies, and pursue environmental and efficiency goals that are consistent with the District of Columbia's.



Samantha L. Quigley

Historic Memorial Chapel at the former Walter Reed Army Medical Center



The Dutch Embassy

Historic Preservation

Foreign missions are encouraged to:

FM.C.8 Protect, preserve, and rehabilitate historic buildings when locating chanceries in them.

FM.C.9 Ensure that chanceries located in historic districts are respectful of the architectural character established by the district.

FM.C.10 Protect and enhance historic landscapes by ensuring that development adjacent to such landscapes promotes their preservation and rehabilitation.

FM.C.11 Promote awareness of significant historic properties.

Open Space and Parkland

Foreign missions are encouraged to:

FM.C.12 Preserve and protect existing parks and open space.

FM.C.13 Enhance and make accessible adjacent open space or parkland, including waterfront locations.

FM.C.14 Construct landscapes that promote a beautiful and healthy environment by preserving the tree canopy and avoiding the destruction of mature trees.

FM.C.15 Maintain and enhance the public space adjacent to chancery facilities so they do not negatively impact the neighborhood's character.

Access

Foreign missions are encouraged to:

FM.C.16 Locate chanceries such that access is possible from multiple transportation modes (e.g. walking, bicycling, public transportation, and automobile).

FM.C.17 Consider urban design qualities, neighborhood characteristics, and traffic capacity in the configuration of vehicular access for diplomats, staff, and service, events, and delivery vehicles.

FM.C.18 Provide pedestrian access and offer safe, clean, and pleasant environments for pedestrians that include sidewalks and other amenities.

FM.C.19 Provide adequate off-street parking on private property that accommodates employees, visitors, and special event participants.

FM.C.20 Minimize obstructions to public connections for local and regional trails, bikeways, pedestrian ways, or open space networks where possible.

FM.C.21 Minimize public space obstructions such as vehicular curb cuts and orient service areas away from major streets or locate them in an area that will be the least disruptive on the site.

FM.C.22 Locate perimeter security elements within the building yard and not in public space. Where necessary, perimeter security elements located in public space should be minimized, unobtrusive, and designed to relate to the surrounding context.



SECTION D: Policies Related to Ambassadors' Residences

As the number of foreign missions in Washington has increased, so has the number of ambassadors' residences. Like most chancery facilities, most ambassadors' residences are under the ownership of the country that occupies them. Ambassadors' residences are located in Washington, DC, as well as in the Maryland and Northern Virginia suburbs immediately outside the city. As of 2013, there are 78 ambassadors' residences in Washington.

The number of new residences established in the National Capital Region is expected to be the same as the number of foreign countries that establish new foreign missions. While the majority of residences are expected to locate in Washington, some are expected to locate in the Maryland and Virginia suburbs. Ambassadors' residences are considered residential uses under the DC Zoning Regulations. As such, these residences are permitted to locate in all areas of the District of Columbia except areas zoned industrial. Many of the preceding policies related to urban design, historic preservation, open space and parkland, and access are applicable to ambassador's residences.

Foreign missions are encouraged to:

FM.D.1 Locate ambassadors' residences, as the official home of the ambassadors or heads of foreign missions, in Washington befitting their status as the established seat of the federal government.

FM.D.2 Locate ambassadors' residences in all of Washington's quadrants in areas which are compatible with residential uses.

SECTION E: Policies Related to International Organizations

International organizations perform a wide range of functions and activities in the National Capital Region. A public international organization is designated or created pursuant to the International Organizations Immunities Act[11] (22 U.S.C. 288-288f-2), treaty, or other international agreement where two or more foreign governments engage in some aspect of their conduct of international affairs. International organizations are official missions that are supported by real property and personnel. In 1983, there were 23 international organizations located in the region; in 2002, there were 28. As of 2013, there are 31 international organizations and 46 missions to the Organization of American States. Most international organizations are located in the downtown business district, particularly in the area west of the White House. Proximity to the State Department, the U.S. Department of Treasury, and other international activities is a key factor in the site selection of international organizations.

Most international organizations prefer high-density office and mixed-use areas that are convenient to the federal offices, organizations, and foreign missions with which they interact. The majority of the organizations occupy leased office space. While national symbolism is typically not a factor for international organizations, the location and design of international organizations' facilities can increase the organization's public awareness. Additionally, international organizations can contribute to the visual appearance of the nation's capital by maintaining and restoring historic structures and locating on the L'Enfant Plan's historic street network.

Under the Foreign Missions Act, the Secretary of State may extend the relevant provisions of the Act to an international organization. In that event, the references to chanceries in the preceding policies would also apply to the offices of that international organization. When subject to the Foreign Missions Act, international organizations are permitted to locate as a matter-of-right in areas zoned waterfront, mixed-use, and commercial. The location of international organizations outside of the matter-of-right areas are subject to the review of the BZA.

International organizations in the National Capital Region are encouraged to:

FM.E.1 Locate their principal offices in Washington, befitting its status as the established seat of the federal government.

FM.E.2 Locate so that access to them is possible from multiple transportation modes and in a manner that their activities can function efficiently and be compatible with the surrounding land uses.



Juan Manuel Herrera

Organization of American States

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Transportation Element

2020

National Capital Planning Commission

The Comprehensive Plan for the National Capital | Federal Elements

Transportation Element

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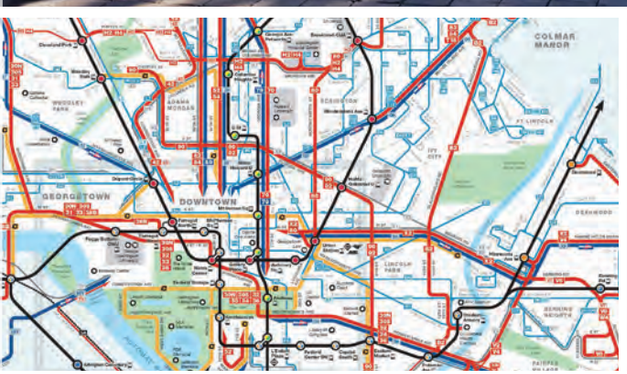
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Introduction to the Transportation Element

The federal government's goal is to support the development and maintenance of a multimodal transportation system that meets the needs of federal workers, residents, and visitors, while improving regional mobility, transportation access, and environmental quality.

Clear, coordinated transportation policies are critical to successful urban planning strategies. The Washington, DC region, like many metropolitan areas, faces significant transportation challenges, which impacts where people live and work, development patterns, environmental conditions, and quality of life. The region is among the most congested in the country and is served by an aging transportation system. Building resiliency in transportation systems across the region is critical in responding and maintaining a safe and efficient system, as tested by the current Covid-19 pandemic. Federal, state, and local land use and transportation policy decisions are interconnected and must be coordinated to develop long-term solutions for the success of the region.

The federal government has long played an influential role in the region's development, including helping to plan and fund the Metrorail system, which serves as the centerpiece of the region's transit system. With employees, federal facilities, tourist destinations, and other assets in the National Capital Region (NCR),[1] the federal government has a strong interest in improving the quality of transportation services and infrastructure. Moving people in an efficient manner to federal workplaces and visitor destinations is critical to the region's vitality and growth. Federal actions shape the location and design of federal facilities, the transportation decisions of workers and visitors, and the management of important components of the region's transportation network.

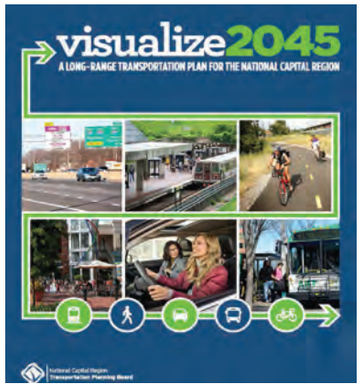
Developing and maintaining a connected multimodal system requires coordination, integrating transportation and land use, and implementing a range of improvements across the region.

The federal government benefits from an efficient multimodal regional transportation system. It is uniquely positioned to provide leadership and support to regional efforts to maintain and build the infrastructure for a modern transportation network that connects land use and transportation.

The Transportation Element is built upon the principles of reducing single-occupant vehicle (SOV) use, increasing transit use, and creating sustainable systems. As such, federal policies promote resource-efficient planning for travel (transit, bicycling, walking, shuttles, and car/vanpooling) and development (compact, mixed-use, transit-oriented) to maximize access to workplaces and federal destinations. Policies in this element support development of a "live, work, play" environment near federal facilities that minimizes the impacts of federal workers' travel.

Regional Transportation System

The region's extensive transportation system is linked to historic patterns of growth and development. The National Capital Region Transportation Planning Board (TPB) is the designated Metropolitan Planning Organization for the National Capital region and is responsible for developing and updating *Visualize 2045: A Long-Range Transportation Plan for the National Capital Region*. Adopted in 2018, Visualize 2045 provides an overview of the region's transportation system.[2]



The system includes:

- 17,000 lane miles of highways and major roads (approximately 400 miles are tolled lanes)
- 118 miles of Metrorail and 91 Metrorail stations
- 167 miles of commuter rail and 39 commuter rail stations
- Six miles of Bus Rapid Transit, light rail, and streetcars
- More than 500 miles of off-street paved trails and paths for walking and biking
- More than 200 miles of bike lanes
- More than 15 local and commuter bus systems and more than 10 paratransit service providers
- Nine intercity train stations and 14 intercity bus stations
- Three major airports (Baltimore/Washington International Thurgood Marshall Airport, Ronald Reagan Washington National Airport, and Washington Dulles International Airport)[3]

Numerous public agencies play a role in planning, building, operating, and maintaining the regional transportation system. Key state agencies involved with transportation infrastructure include the Maryland, Virginia, and District Departments of Transportation. City and county governments also play a significant role in making local decisions on transportation and land use. The Washington Metropolitan Area Transit Authority (WMATA), the region's primary public transportation provider, operates Metrorail and Metrobus. Amtrak operates the national rail system and provides inter-city passenger service while Maryland Area Regional Commuter (MARC) and Virginia Railway Express (VRE) provide commuter rail systems that serve regional commuters in Maryland and Virginia, respectively. The Metro Washington Airports Authority (MWAA) oversees and operates two major airports serving the region. Federal agencies also operate a range of transportation assets, many of which serve as major components of the regional transportation system (see Section A.2).

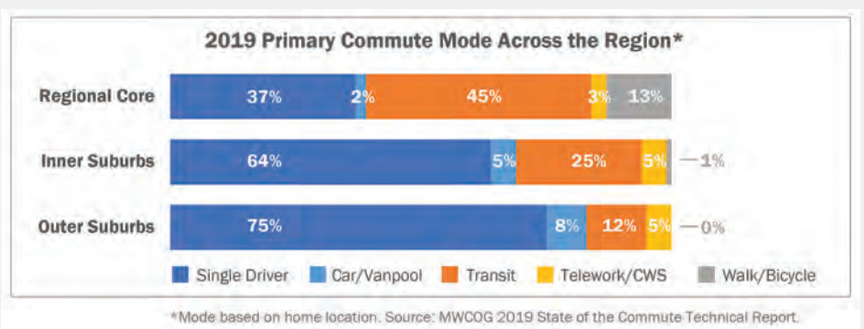
The region is well served by several public and private transportation providers that provide a range of mobility services. This includes commuter bus, taxi, ride-hailing, bikeshare, and scooter services. Car rental and car-sharing companies offer short-term vehicle rental.

Trends Shaping Transportation Planning

The TPB completed an analysis of the region's travel trends to inform the development of Visualize 2045. Over the past few decades regional job growth has contributed to consistently strong population growth. Between 2000 and 2017 the region gained one million residents—from 4.4 to 5.6 million—and added 400,000 jobs.[4] Future regional job growth trends remain unknwon following the public health pandemic that halted growth across the region.

In 2013, the Metropolitan Washington Council of Governments (MWCOG) designated 141 activity centers which include existing urban centers, priority development areas, transit hubs, suburban town centers, and traditional towns throughout the region. By 2045, approximately one-third of the region's population is expected to live in these activity centers, and two-thirds of the region's jobs will be located there. Recent studies by TPB[5] indicate the region is successfully directing growth to these centers.

There is a large difference in commute mode share regionally. In the regional core (Washington, DC, Arlington County, and Alexandria) more than 45 percent of trips to work are made by bus or rail and 13 percent by walking or biking. The percentage of these modes dramatically declines in the inner suburbs (Montgomery, Prince George's and Fairfax Counties) and outer suburbs (Prince William, Loudoun, Frederick, and Charles Counties) where the greatest percent of work trips are made by single occupant vehicles.



Analysis by TPB in 2018 shows that the region has experienced a shift in commuter travel. The number of people driving alone or riding in a carpool has decreased while the share of people using transit, walking, bicycling, or telecommuting has increased. However, the primary way people commute remains single-occupant vehicles which accounts for 65 percent of all commute travel. Transit is the next-highest travel mode at 15 percent.[6] Between 2000 and 2016, bicycle commuting increased by 200 percent; though overall, bicycling accounts for only 1 percent of total commuting. Average weekday Metrorail ridership has declined from its highest level in 2008 (752,000). In 2019, this downward trend ended, when average weekday ridership reached 626,000 -- a four percent increase.

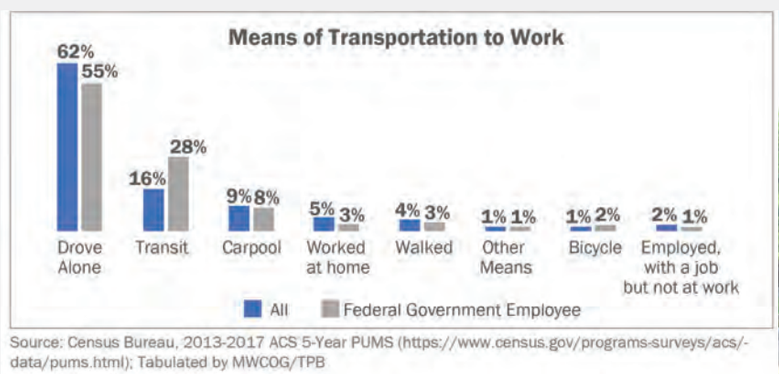
There are a number of factors contributing to these trends, such as an increase in teleworking and alternate work schedules; the rapid growth of bikeshare and other bicycle infrastructure, which prompted growth in non-motorized modes of travel; and transportation and development investments in regional activity centers and other areas served by transit, which result in a reduction in the number of vehicle trips. The drop in Metrorail ridership can likely be attributed to several factors, including the system's declining performance, WMATA's SafeTrack program to rehabilitate the Metrorail system (it began in 2016), and the increase in use of ride-hailing services.

Federal Commuting and Travel to Other Federal Destinations

Federal employees commute to work in a variety of ways and are much more likely to commute by transit than the whole regional population. According to WMATA, more than half of all Metrorail stations serve federal facilities, and approximately one third of Metrorail's peak period commuters are federal employees.[7]

This reflects ongoing decisions to locate Metrorail stations near federal work centers (and locate federal offices near transit), as well as the success of federal programs, planning policies, and incentives that encourage multimodal travel options.

The federal government's use of alternative work schedules and telework options contributes to commuter flexibility and reduced trips. Federal employees telework at a higher rate (48%) than the regional average (32%), and at a higher rate than employees in the private sector (30%).[8] Federal employees are also more likely to have access to commuter services such as transit and carpool subsidies, commute information, and bike/walk services. Trends in the workforce such as reducing the federal footprint,[9] increased mobility, and advances in technology will further affect commuting patterns.



Source: Census Bureau, 2013-2017 ACS 5-Year PUMS (https://www.census.gov/programs-surveys/acs/-data/pums.html); Tabulated by MWCOG/TPB



Federal agencies track employee travel behavior through the master planning process and development of transportation management plans. Agencies who oversee cultural sites and visitor destinations (museums, memorials, the National Zoo, etc.) and parks also conduct transportation planning to understand how visitors travel to, from, and around these federal destinations.



The National Park Service (NPS) recently completed the *National Capital Region Long Range Transportation Plan*. This plan sets forth a 20-year vision for providing and maintaining access to NPS units throughout the region, including goals, objectives, and performance measures for how it will move towards that vision. An assessment of visitor constraints was conducted as part of the effort, where the NPS examined the proximity of transit facilities (local and regional bus stops, Metrorail, other railway stations such as MARC, and Capital Bikeshare) to each park unit. Out of the 52 park units, 40 had access to transit facilities within a half-mile from the assumed main point of entry of each park.[10] In general, parks located closer to downtown Washington, DC are more accessible than those located further from the city, and these parks are more likely to be accessible via multiple modes of transportation.

Guiding Principles

This element provides policy guidance to support a regional multimodal transportation system that promotes responsible land use and development and contributes to a high quality of life for residents, workers, and visitors. Four guiding principles serve as the element's organizational framework.

These principles speak to the federal government's role in advancing regional transportation goals, supporting a range of mobility options, and promoting sustainable land use decisions. The principles also address the Commission's review authority and role in encouraging and promoting travel to federal facilities and destinations in a safe and efficient manner. The principles and the policies in this element work in concert with other elements of the Comprehensive Plan to reinforce larger ideas that the Commission supports including responsible development and environmental protection.

A

Advance an Interconnected Transportation System that Meets Regional Planning Goals and Objectives



B

Integrate a Range of Equitable Mobility Options to Improve Transportation Access Throughout the Region



C

Connect Transportation and Land Use to Encourage Responsible Development Patterns



D

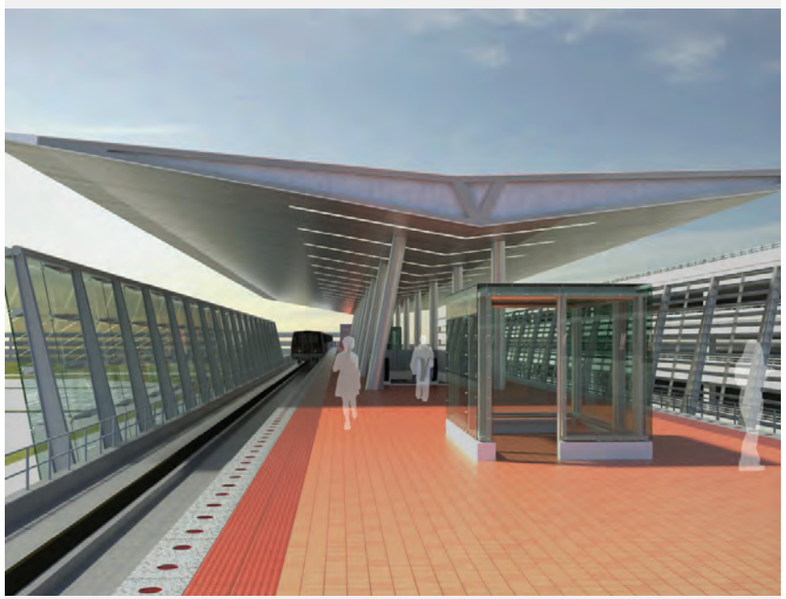
Promote Efficient and Sustainable Travel to Federal Destinations





R. Duran Ortiz

The Pentagon City Metrorail Station has pedestrian access, bicycle parking including a Capital Bikeshare station, and curb space for shuttles and buses.



Dulles Corridor Metrorail Project

A conceptual rending of the Dulles Airport Station on the Metrorail Silver Line.

Section A: Advance an Interconnected Transportation System that Meets Regional Planning Goals and Objectives

To achieve transportation goals and objectives, the federal government coordinates and collaborates with regional and local agencies, and other stakeholders, on a range of planning activities. Coordination is critically important for creating a unified transportation network that serves both federal and local needs. Coordination ensures that federal, regional, and local agencies can meet mutual transportation goals and best manage the impacts and benefits of planned and proposed transportation projects. Many of these projects have the potential to improve transportation services for federal commuters and visitors, greatly reduce regional congestion and improve quality of life. Further, they can better support transit-oriented development that could serve as prime locations for new federal facilities or provide transit-accessible housing for the federal workforce.

Policies within this section provide guidance on developing an integrated transportation system that supports regional planning goals and objectives.

A.1 Regional Policy Framework and Agency Coordination

Several Transportation Planning Board (TPB) plans provide a policy framework that is the foundation for transportation planning. Visualize 2045, the long-range transportation plan for the region, builds upon planning work over the past twenty years including the TPB Vision (1998), the Region Forward Initiative adopted by the Metropolitan Washington Council of Governments (2010), and TPB's Regional Transportation Priorities Plan (2014). These plans established a regional policy framework that includes comprehensive strategies to promote an interconnected transportation system, a strong regional economy, and improve quality of life for all residents. The federal government has a vested interest in supporting efforts to meet the goals articulated in these plans.

Visualize 2045 includes a long-range planning component that goes beyond financial constraints to identify aspirational initiatives that address some of the biggest transportation challenges that the region will face in the coming decades. TPB predicts that the region's major challenges will include increased congestion on roadways and the provision of adequate transit to serve anticipated passengers. To address these challenges and reach larger policy goals laid out in endorsed plans, Visualize 2045 includes the following seven aspirational initiatives:

- Bring jobs and housing closer together
- Expand Bus Rapid Transit and transitways
- Move more people on Metrorail
- Increase telecommuting and other options for commuting
- Expand the express highway network
- Improve walk and bike access to transit
- Complete the National Capital Trail

These initiatives will help the region grow in a responsible manner while also providing a range of efficient, affordable, and safe mobility options for travel. In general, many of these initiatives are already being implemented or are in the planning phase. The federal government can play an important role in advancing these initiatives and should be a leader in developing projects that support the goals of these initiatives. Other regional goals and policies the federal government can support include Vision Zero, a strategy to eliminate all traffic fatalities and severe injuries while increasing safe, healthy, equitable mobility for all.[11] Most local jurisdictions are working towards achieving this goal, but given the range of contexts (urban, suburban, rural) in the region, solutions will vary between locations. The federal government should collaborate and coordinate with appropriate jurisdictions on Vision Zero strategies in areas adjacent to federal property.

The federal government engages in a range of transportation planning activities to advance regional plans and support the transportation system. One of the primary methods in which the federal government does this is through its financial support of the Washington Metropolitan Area Transit Authority (WMATA). The federal government supports WMATA through its worker transit subsidy benefits program by providing a monthly subsidy for employees. According to WMATA's 2016 Metrorail survey and 2018 Metrobus passenger survey, 36 percent of peak period Metrorail passengers and 15 percent of peak period Metrobus passengers are federal employees.[12] Metrorail carries the second highest daily ridership of rail systems in the country and reinforces the region's development patterns.[13] With the federal government's unique role in transportation infrastructure, federal agencies must work with state, local, and regional organizations to ensure that the system is adequately funded for continued operation and expanded services, and that appropriate contributions are made to accommodate projected regional population and employment growth.

Along with WMATA, the federal government has an interest in supporting other transit service providers to ensure that the region is well served by public transportation in areas that WMATA does not operate. This extends to working with transit providers to encourage that stations are equipped to provide amenities for bicyclists and pedestrians and are designed in a manner that considers curb space for shuttles, circulators, and ride-hailing services.

The rapid growth seen throughout the Northeast Corridor, and specifically in the Washington, DC metropolitan region, has prompted the development or expansion of major transportation initiatives that have the potential to greatly change the way that people move through the region and beyond. Expansion of high speed and high capacity passenger rail can help improve inter-city connectivity from the region to other destinations across the eastern United States. Major transportation initiatives within the region range from megaprojects like the Baltimore-Washington Superconducting Magnetic Levitation Project, to more focused efforts to manage traffic like the expansion of high-occupancy toll lanes on area roadways. Federal employees and visitors live, work, and visit throughout the region, so the federal government has an interest in collaborating on these types of efforts throughout the planning process to ensure that they can meet the needs of a broad range of stakeholders, including both federal and nonfederal entities. It is critically important to ensure that these initiatives support regional transportation and land use objectives, address impacts to environmental, historic, and cultural resources, and meet agency mission needs.

In the future, private companies may take on larger operational or management roles for transportation projects. The Purple Line, a light rail system that will connect Bethesda with New Carrollton, Maryland, is currently under construction. Although the Maryland Transit Administration will own the Purple Line, a private company will manage and operate the service through a public-private partnership arrangement. The I-495 Express Lanes in Virginia are also the result of a public-private partnership between the Virginia Department of Transportation (VDOT) and Transurban. VDOT owns and oversees the lanes while Transurban is responsible for the financing and operations. These public-private partnerships will become more common as federal funding declines for large-scale regional transit projects. As such, multiple public and private groups will have to work together to continue the success of the regional system by maximizing multimodal transportation options for residents, visitors, and workers.

Through engagement on major regional projects, the federal government seeks to both understand the bigger regional transportation picture and shape the impacts of such projects, including the ways in which they could support access to and from federal destinations. For example, Montgomery County received a grant from the U.S. Department of Transportation to construct a new Bus Rapid Transit system called FLASH along Colesville Road to connect Burtonsville with downtown Silver Spring. The availability of this system may increase the number of employees commuting by transit to the Food and Drug Administration's White Oak Campus. By supporting these types of projects, the federal government can contribute to achieving larger regional goals of reducing congestion and increasing connectivity.



The National Park Service conducted a tour bus study and this map shows the recommended sites for tour buses to park around the National Mall and Memorial Parks.



Clark Concepts

A rendering of the proposed FLASH Bus Rapid Transit system on U.S. 29 in Montgomery County, Maryland. Source: www.ridetheflash.com

Tour Bus Operations

With the number of federal attractions in the region, and the distances between those sites, visitors often choose to arrive and travel by tour bus. This is especially true of international visitors, many of whom arrive in tour groups. In 2015, the National Park Service completed the *National Mall and Memorial Parks Tour Bus Study,* to research and make recommendations for tour bus operations on the National Mall. Along with site-specific recommendations, the study highlighted broad strategies that could be effective if implemented at a regional scale and in cooperation with partners and stakeholders.

Among the topics addressed were information delivery; regulations, signage, and enforcement; parking and route consideration; and protection of sensitive natural, cultural, and historical resources.

The lack of tour bus parking within or close to the National Mall has an impact on the surrounding transportation system by increasing congestion. The issue is particularly noticeable during peak times of the day and year. Tour bus congestion can impact visitor experience and cultural resources as buses park along congested roadways and interrupt viewsheds.

By working with tour bus operators, as well as regional and local agencies, the federal government can develop strategies to manage tour bus operations and parking to minimize impacts on circulation, parks, and cultural resources.



Along with large regional projects, the federal government has an interest in coordinating with regional and local agencies and other stakeholders on a range of transportation issues. From establishing an integrated bicycle and trail network to improving tour bus operations and encouraging resource coordination among commuter bus systems, the federal government influences how travelers use and experience the transportation system. There can be challenges in connecting federal and regional systems, such as bicycle trails, due to differences in agency missions. Security requirements for some federal facilities can also pose a challenge to developing an integrated network. To the extent possible, it is important to create a seamless experience for users and integrate federal and regional trails and systems, which could be achieved through physical design and/or consistency in rules and regulations.



Purple Line light rail system.

The federal government should:

T.A.1 Support the development of a comprehensive and connected transportation system that meets land use, environmental, and economic goals articulated in regional plans and policies.

T.A.2 Support capacity and service expansion of regional and local transit services, including Metrorail and Bus Rapid Transit, to increase access to public transportation and federal destinations.

T.A.3 Work with transit providers to ensure that stations are accessible with informational signage and equipped to accommodate a range of travel options by providing parking for car-sharing services, amenities for bicyclists and pedestrians, and curb space for shuttles, circulators, and ride-hailing services.

T.A.4 Support expanded levels of service for regional commuter rail between the District of Columbia, Maryland, and Virginia.

T.A.5 Support the expansion of high speed and high capacity passenger rail to improve inter-city connectivity across the eastern United States, with Washington Union Station as a regional hub.

T.A.6 Consider regional transportation and land use objectives and potential impacts to natural and cultural resources when evaluating transportation projects that would improve travel.

T.A.7 Work with relevant agencies and other stakeholders to promote bicycling and establish a connected regional bicycle network.

T.A. 8 Coordinate with regional and local agencies to develop an integrated system of bicycle and pedestrian trails that provide connections throughout the region, including to and from federal destinations.

T.A.9 Coordinate with regional and local agencies to ensure that trail connections and rules in areas with multiple jurisdictional boundaries are clear to users and result in seamless transitions.

T.A.10 Work with stakeholders to develop strategies to manage tour bus and commuter bus operations and parking to minimize negative impacts on circulation, parks, viewsheds, and cultural resources.

A.2 Management and Maintenance of Federal Transportation Assets

While the vast majority of transportation infrastructure is owned and maintained by municipal and state entities, there are many important transportation assets in the region that are operated and maintained directly by the federal government, generally through federal land management agencies, such as the National Park Service and U.S. Fish and Wildlife Service. In fact, some of the most important links in the regional transportation network, such as the George Washington Memorial Parkway, Baltimore-Washington Parkway, Suitland Parkway, and Arlington Memorial Bridge are maintained by federal agencies with federal funds. NPS transportation assets in the region are not only critical for accessing and exploring nationally significant destinations, but many times are themselves culturally significant resources that must be protected. Further, many NPS assets function as commuting routes and face the same challenges of other urban roadways, such as congestion and safety considerations, which strain facility conditions and create a burden on maintenance. This dual function can create tensions between maintaining assets to an acceptable level for the heavy use they receive, protecting natural and cultural resources, and supporting agency missions.

It is important to note that the long-term sustainability of the NPS National Capital Region transportation system faces financial challenges. In recent years, some major transportation funding programs have leveled, dropped, or been eliminated, and the estimated capital, operations, and maintenance needs are higher than projected funding. NPS estimates its regional transportation maintenance needs to be $86.8 million with an estimated annual average of $36.5 million in funding, which results in a $50.3 million funding gap based on forecasted funding levels.[14] To manage this gap, NPS developed a strategy that directs available funding towards the highest priority assets, such as bridges and major roads to ensure that the most important transportation assets remain in good condition to support NPS objectives for resource stewardship, visitor enjoyment, and safety.

Beyond federal assets, the federal government has an interest in the maintenance and improvement of existing transportation infrastructure, particularly along multimodal corridors that support transit, pedestrian, and bicycle use. In fact, many of the region's bicycle and pedestrian trails are on NPS or federal property, including the Chesapeake and Ohio Canal, Rock Creek Park, and others. Ensuring that these corridors can accommodate a high level of use is critical to meeting larger sustainability goals, reducing congestion, and moving people throughout the region in an efficient manner.

The federal government should:

T.A.11 Support the maintenance and improvement of existing transportation infrastructure, with a priority on multimodal transportation corridors that support transit, pedestrian, and bicycle use.

T.A.12 Support efforts to prioritize transportation funding towards maintenance of federal infrastructure that function as part of the regional commuter system.

T .A.13 Support improvements that increase safety and reliability and preserves the historic character and cultural and national significance of the parkways.

T.A.14 Coordinate with local, federal, and other stakeholders to accommodate safety improvements consistent with industry standards in a manner that minimizes impacts on natural and cultural resources.



NPS

Arlington Memorial Bridge, a National Park Service asset, is an important link in the regional transportation network.

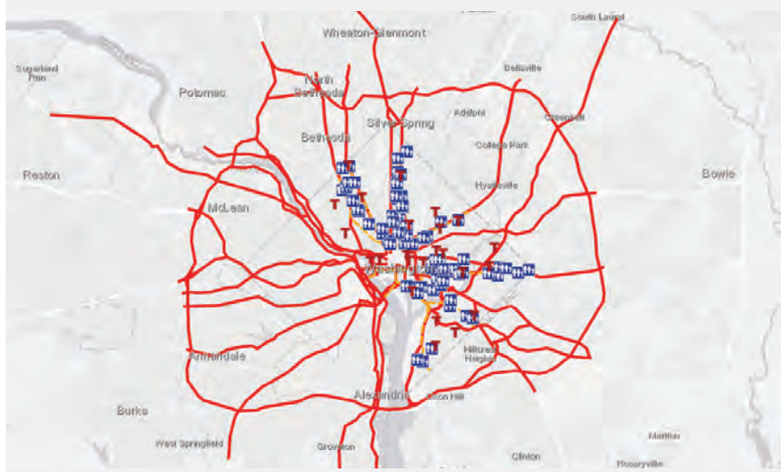


Pennsylvania Avenue supports all modes of transportation.



Alex Brandon

Flooding along Constitution Avenue in Washington, DC



Map of Evacuation Routes in the District of Columbia. Blue Walkout Route Collection Points indicate where evacuees can board buses to exit the city.

A.3 Resiliency in Transportation Planning

To ensure a safe and efficient transportation system in the NCR, the federal government must consider emergency preparedness and resiliency. Maintaining transportation assets is important to ensure that during emergencies critical infrastructure functions as needed and emergency responders can travel freely. Public safety, particularly during and after emergencies, depends on the mobility and accessibility that the regional transportation system provides. The federal government can support efforts to manage transportation infrastructure in response to states of emergency by facilitating coordination across the region and by effectively maintaining its own assets to meet regional emergency needs.

Resiliency from a transportation perspective is the ability to withstand or recover from extreme or changing conditions to ensure the region remains accessible through a range of mobility options. Both natural (extreme weather events, flooding, heat, public health, etc.) and man-made hazards or events (terrorism, cyberattacks, etc.) can disrupt the transportation system. To respond to such events, the federal government needs to understand hazards and threats, and also identify potential mitigation strategies to ensure that the transportation system continues to function and provide reliable mobility options during and after disruptions. While some safety considerations or evacuation services can lead to temporary or permanent transportation closures, these must be carefully considered to understand system-wide impacts (for instance, the temporary closure of the Metro system).

Planning and designing infrastructure that responds to these challenges requires a regional approach that is informed by past efforts and existing conditions and is coordinated with multiple stakeholders. When designing, locating, or improving transportation infrastructure, the federal government should consider asset resilience in selecting materials and ensure that maintenance requirements are captured in life-cycle costs.

Resiliency in Public Health Emergency Response

In early 2020, cities around the world had to redefine the use of public transportation to support the health and safety of their communities during the novel coronavirus (COVID-19) pandemic. Government directives to stay home and public concerns encouraged widespread teleworking and increased investment in supporting technology and practices, while also highlighting groups that lacked access and types of operations that could not be readily conducted remotely. With fewer workers commuting into work, the region experienced fewer cars on the road, reduced use in public transit, and improved air quality. With impacts ranging from increased use of public space and bicycles, to improved air quality from fewer vehicle trips, NCPC will continue to monitor the short and long term planning implications of public health emergencies.

The federal government should:

T.A.15 Support regional efforts to manage transportation infrastructure in response to states of emergency.

T.A.16 Support efforts to understand hazards and threats to transportation infrastructure and identify mitigation strategies to ensure system reliability.

T.A.17 Consider asset resilience to natural events or man-made hazards when designing, locating or improving transportation infrastructure. Utilize industry best practices when selecting appropriate materials, and ensure that any increased maintenance requirements are reflected in life-cycle costs.



Dockless bicycles and electric scooters have emerged in the micromobility transport options.

Section B: Integrate a Range of Equitable Mobility Options to Improve Transportation Access throughout the Region

The region's transportation system is complex and includes rail and bus transit, highways and toll roads, trails, and other infrastructure for bicyclists and pedestrians. In addition, recent innovations in bike-sharing, ride-hailing, and car-sharing services allow workers, residents, and visitors a range of options for travelling within the region. The flexibility afforded by new transportation technologies, such as dockless bicycles and electric scooters, may allow them to fill a gap in transportation connectivity in urban areas of the region. Providing a range of mobility options that can be equitably accessed by all users is critical for protecting the environment, utilizing resources efficiently, and contributing to healthy lifestyles. The federal government plays an important role in contributing to these goals.

Policies within this section promote integrating multimodal options across the region to improve connectivity and ensure that all users have access to a variety of transportation resources.

B.1 Expansion of Mobility Options

With a steadily increasing population, the National Capital Region has seen a commensurate increase in roadway congestion over the years. Significant investment has been made in regional transportation infrastructure, including an expanding network of multimodal transportation options (e.g., Metrorail, bus rapid transit, etc.), but automobile use continues to make up a large share of regional travel. More automobile use increases regional traffic, has implications for environmental quality (air quality, water quality, erosion, etc.), and poses a maintenance burden for entities that are responsible for the upkeep of an expanding network of facilities.

NCPC recognizes that cars are still an important component of regional mobility but supports efforts to reduce reliance on automobiles and expand regional access to multimodal transportation solutions. While driving may be the only way to reach certain federal destinations in the region, many facilities are sited in locations that support the use of alternatives such as transit, biking, carpooling, etc. The most comprehensive and widely used of these alternatives has traditionally been the regional transit system, which includes Metrorail, Metrobus, and other high-capacity public transportation systems. In addition, carpooling and vanpooling have been effective in reducing single-occupancy vehicle travel.

Given the hub-oriented nature of transit, a comprehensive transportation network consisting of multiple modes is critical to promoting mobility and interconnectivity to destinations throughout the region. Smaller transportation services that facilitate travel between transit hubs and destinations, as well as off-campus shuttle and on-campus circulator services for employees, can serve as important links that provide first- and last-mile connectivity. Walkable, pedestrian-friendly streets that link stations with destinations can also help facilitate connectivity, as can infrastructure to support safe bicycle use, including cycle tracks, protected bike lanes, multiuse trails, and shared lane markings.

A shift to lower-impact transportation modes is already well underway across the region, particularly among the federal workforce, as is evidenced in surveys completed by the Metropolitan Washington Council of Governments. Surveys of federal workers indicate that drive alone mode share has consistently decreased over the years, while federal commuting via transit has increased. As reported in the 2013-2017 American Community Survey, there is a notable difference between commuting patterns of federal employees and the general population in this regard. Federal employees reported driving alone eight percent less frequently than other workers, and use transit 12 percent more often.

These shifts are likely due, in large part, to efforts by the federal government to reduce parking demand and incentivize multimodal travel to federal sites through transportation demand management programs, telework programs, and commuter assistance benefits and services. In the 2019 State of the Commute Survey Report, 85 percent of respondents who worked for federal agencies had such services available, including transit benefits, commute information, bike/walk services, and carpool subsidies, among others. Further, federal agencies tend to have more comprehensive telework programs, which reduce regional transportation demand overall for federal commuters.[15] As described in the 2019 survey, the federal telework rate was 48 percent, which is much higher than any other employment sector. The development of robust transportation demand management programs at federal facilities, which include many of these services and strategies, has been a major goal of NCPC policy for decades.

By shifting travel away from congested regional roadways to alternative modes of transportation, mobility options are improved for all users, including those who must drive. While recognizing that certain users must use automobiles as their primary mode of transportation, NCPC seeks to continue the trend away from single-occupancy vehicles to the extent practicable, and has developed a set of policies that aim to enhance access to federal destinations via a variety of travel modes, including transit, bicycle, pedestrian, and vehicle. Through both federal investment and collaboration with local jurisdictions, the federal government can create an effective multimodal network that meets the mobility needs of all users.

The federal government should:

T.B.1 Support efforts of local jurisdictions to design and implement new, expanded, and innovative multimodal services that connect to the existing public transportation network and enhance first- and last-mile connectivity, including supplemental transit services and micro-mobility solutions like dockless bikes and scooters.

T.B.2 Work with local jurisdictions to ensure that there is adequate infrastructure for bicycles and pedestrians to safely and efficiently travel to and from federal destinations, including usable sidewalks, enough lighting, protected bike lanes, and multiuse trails, as appropriate.

T.B.3 Provide secure bicycle parking spaces or bicycle lockers in close proximity to federal building entrances and in convenient locations throughout federal campuses, such as in parking facilities and at transit centers.

T.B.4 Coordinate with local and regional bike sharing programs to expand service at federal facilities to provide a flexible, comprehensive, and efficient bike sharing network.

T.B.5 Find opportunities to allow regional and neighborhood trail access across federal land, working with federal security staff to determine appropriate access points, pathways, and hours of operation.

T.B.6 Operate shuttles that provide access between transit and federal destinations if adequate off-site transit service is not otherwise present. When providing access to federal campuses, such shuttles should also provide on-campus circulation between buildings. Any shuttle system should include waiting facilities with shelters and benches and adequate wayfinding signage. Shuttle services should be coordinated among federal agencies with overlapping route requirements to minimize costs and improve service.



The College Park-U of MD Metrorail Station has a secure bike and ride facility that users can access for free with a SmartTrip card.

T.B.7 Operate cross-town shuttles in urban areas with limited local service to provide transit between federal agencies that regularly do business with one another, or among multiple agency office locations.

T.B.8 Provide publicly accessible bicycle racks, bicycle sharing stations, and parking for vehicle-sharing services on federal land, where possible, or coordinate with local jurisdictions to provide them near federal facilities.

T.B.9 Support roadway improvements that prioritize carpooling and the use of low-emission vehicles, including the use of high-occupancy vehicle lanes that provide priority access for high-capacity transit providers.

B.2 Transportation Equity

In developing an effective multimodal transportation network, it is important to ensure that all users have access to mobility options. Historically, factors such as affordability and physical connectivity have prohibited transportation access for certain users. For example, while many highways in the region cross through underserved areas, users in these communities may be unable to utilize these highways by automobile travel, which can be prohibitively expensive given the costs of car ownership and operation. Other, more affordable transportation modes, such as public transportation, may have gaps in connectivity that do not provide direct access in communities that need it most. While new, more flexible transportation services, such as dockless bicycles and scooters, may improve first- and last-mile connectivity between transportation services, these services generally require smart phone access, which can be a barrier for some.

To ensure that the transportation network can operate in a manner that provides the greatest benefit, regional transportation planning should focus on equitable access. This should include the development of new transportation services or physical improvements that can improve access for users of all incomes and abilities. It should also include the expansion of established and proposed public transportation systems to the communities that need them most. The Transportation Planning Board took an important step in engaging such communities in the transportation planning process by identifying Equity Emphasis Areas,[16] areas within the region with higher than average concentrations of low-income and/or minority populations. This identification will help avoid adverse effects of its programs, policies, and activities on vulnerable populations.

In the development or expansion of transportation services, transit providers and government agencies should fully consider any potential impacts on the range of communities through which transportation systems pass, including whether they place any undue burden on vulnerable populations. Certain communities have been disproportionately impacted by transportation decisions in the past, including the expansion of the Interstate Highway System through America's cities. This is evident in areas throughout the region, including Southeast Washington, where the Anacostia Freeway creates a physical barrier between the residential communities to the east of the Anacostia River and recreational amenities to the west. The freeway also prohibits pedestrian access to sites and neighborhoods across the Anacostia River, such as the Capitol Riverfront and Southwest Waterfront.

As urban freeways reach the end of their lifespans or need major improvements, there may be opportunities to replace or reconfigure them to reestablish the urban fabric and street grid to restore affected neighborhoods. Further, there may be opportunities to extend the multimodal transportation network into traditionally underserved communities to enhance transportation access, including public transit, trails, and sidewalks.

The federal government should:

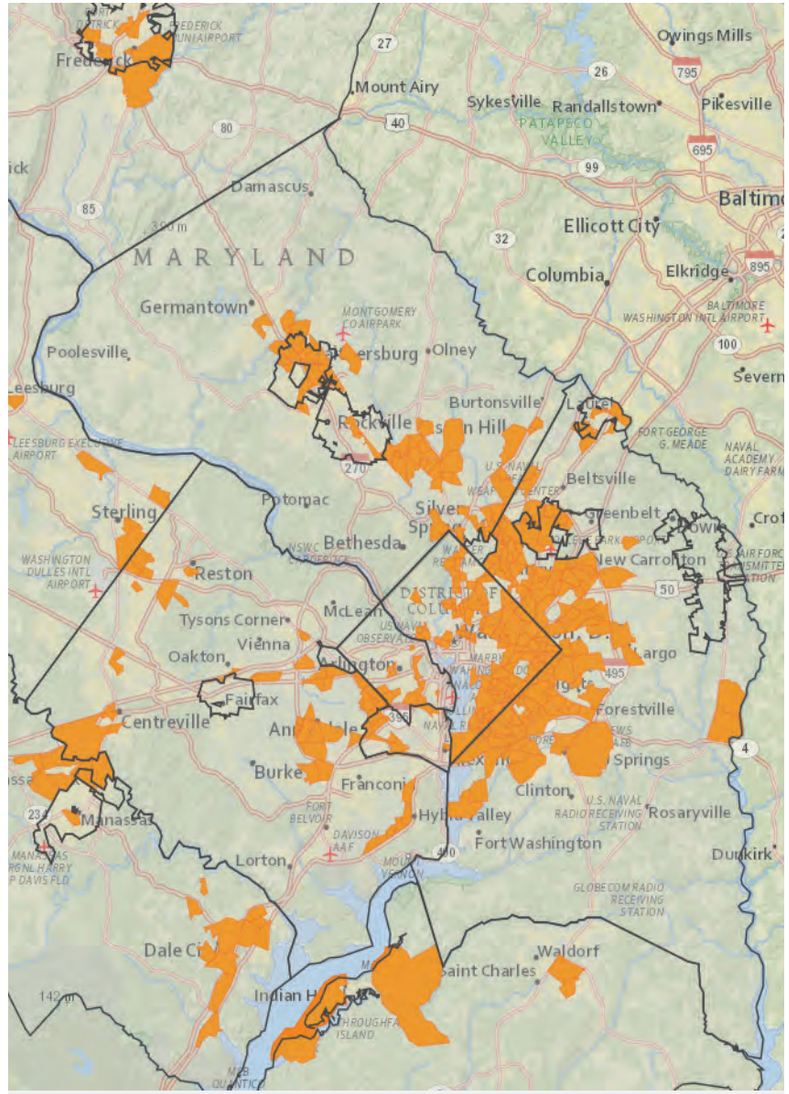
T.B.10 Establish a multimodal transportation network that supports a range of mobility options accessible to users of all incomes and abilities.

T.B.11 Support the extension or improvement of the public transportation system's service area into developed, but underserved, areas of the region.

T.B.12 Minimize negative impacts of transportation infrastructure projects on minority and low-income communities.

T.B.13 Support federal and local government efforts to remove or deck freeways and other transportation infrastructure that create barriers to physical access throughout the region, particularly in communities that have been disproportionately impacted by transportation infrastructure.

T.B.14 Work with local jurisdictions to improve the accessibility between the regional transit system and federal properties for all users through accessible pathways, sidewalks, streets, and curb ramps.



B.3 Emerging Transportation Modes

While NCPC transportation policy has historically focused on more traditional modes of transportation, there has been an expansion of new, innovative transportation modes in recent years that provide an opportunity to improve transportation access throughout the region. For example, dockless bicycles and electric scooters were introduced throughout the region, and are being used to assist both federal commuters and visitors to reach federal destinations in more urban areas. Ride-hailing services have also served to improve first- and last-mile connections.

While their impacts are largely unknown at this point, the large-scale introduction of autonomous vehicles is also likely in the future, which could change the way people access federal destinations and shift parking needs. Further, the recent expansion of other, non-traditional transportation services, such as water taxis or fast ferry systems that link key economic centers and visitor destinations along the Potomac River, also serves to meet transportation needs of commuters and visitors while reducing the burden on a constrained regional transportation network.

Though NCPC recognizes that emerging transportation modes have the potential to greatly improve transportation access, it is important to note that they create new challenges that must be effectively managed to reduce potential negative impacts. The introduction of electric scooters, in particular, resulted in conflicts with pedestrians and vehicles that were not accustomed to their rapid speeds and nimble movements. Further, improperly parked dockless bikes and electric scooters have created clutter that impede pedestrian movement, visually impact streetscape character, and may conflict with operations at federal facilities and destinations. This has been a particular burden for certain federal agencies, some of which have expressed frustration with the proliferation and abandonment of these vehicles at federal destinations. In addition, while ride-hailing services have increased transportation access, they have also resulted in an increase in vehicle miles traveled, and compete for curbside space with other transportation uses.

Recognizing that advanced planning is needed to effectively and safely accommodate emerging transportation modes, federal agencies should encourage the use of new transportation technologies to the extent that they are able to fill a connectivity gap for employees and visitors to federal destinations.

The federal government should:

T.B.15 Support expansion of the water taxi system to provide an alternative commuting mode and access to waterfront attractions and employment centers. Coordination with federal entities to address security, mission requirements, transportation connectivity, and land use issues is critical.

T.B.16 Coordinate with regional transportation agencies and providers of emerging transportation technologies to ensure that these services improve regional travel and reduce reliance on single-occupancy vehicles, and address negative impacts.

T.B.17 Consider providing dedicated curb and public space within the right-of-way to accommodate beneficial transportation uses, as appropriate.

T.B.18 Provide designated pickup/drop-off locations for ride-hailing services at or near federal destinations to reduce parking demand, improve traffic circulation, and minimize conflicts with other travel modes.

T.B.19 Encourage collaboration between federal agencies and local government sponsors of dockless mobility programs to enhance multimodal access to and through federal properties while reducing the potential for negative impacts, such as physical and visual clutter.



A water taxi at The Wharf in Southwest Washington. This service offers another mode of transport to link key economic centers and visitor destinations along the Potomac River.



Amanda Bowen Photography

Union Station is a major hub for passenger trains including commuter and regional systems.



Amanda Bowen Photography

The NoMa-Gallaudet U / New York Ave Metro Station is within an Equity Emphasis Area and has experienced increased ridership in recent years.

Section C: Connect Transportation and Land Use to Encourage Responsible Development Patterns

Land use and transportation decisions are integral to one another and directly influence livability in our region. Issues such as traffic congestion, infrastructure costs, housing affordability, and greenhouse gas emissions are impacted by how we integrate transportation and land use decisions. The location of a Metrorail station or transportation facilities, such as roads, bridges, parking areas, bicycle facilities, and sidewalks, directly impacts the type of development around them. Conversely, the type of development in a specific area influences the travel choices and how people get to work, home, or other destinations. As the region continues to grow, both in terms of population and jobs, it is even more important to coordinate land use and transportation planning to accommodate pedestrian and bicycle safety, enhance public transportation service, improve road network connectivity, and encourage a multimodal approach to transportation.

Policies within this section provide guidance on integrating transportation planning and land use decisions to promote responsible development patterns.

C.1 Regional Transit-Oriented Development

Improving regional mobility and facilitating economic activity are both critical to our region's economic health and overall livability. With its large workforce living and working in the region, the federal government is a key player and has a responsibility to promote sustainable development. This responsibility is not limited to minimizing the impact of federal commuting on the region—it extends to advancing a regional strategy that encourages employees to live closer to their jobs and transit, supports transit and multimodal investments, and promotes compact and transit-oriented development. It also supports efforts to provide a variety of housing options for a range of incomes along major transportation corridors and hubs.

The federal government can help limit sprawl by supporting compact, transit-oriented development and locating federal workplaces within regional activity centers, which are the region's priority growth areas. Regional activity centers are often established around existing urban centers, suburban town centers, traditional towns, and transit hubs. The region's highest density housing is often located close to transit centers in these locations.

The Metropolitan Washington Council of Government's Visualize 2045 plan highlights how new housing and employment will increase in regional activity centers by 2045 and that new transportation connections, particularly transit, will complement this growth to reduce sprawl, commute times, and congestion.[17] By locating new federal workplaces in regional activity centers and working with regional and local agencies, the federal government can support transit-oriented and transit-accessible employment throughout the region. The federal government can promote compact development by placing federal workplaces and attractions close to transit nodes and encouraging the use of public transit, thereby, reducing reliance on single occupancy vehicles and offering more transportation options.

The federal government should:

T.C.1 Create partnerships between federal agencies and local governments that incentivize housing options close to work, support multimodal commuting, and support shorter commute times through federal facility location decisions.

T.C.2 Support efforts to provide a range of housing types for a variety of income levels along major transportation corridors.

T.C.3 Support compact development patterns at or adjacent to Metrorail stations, other transit centers, or multimodal corridors that maximize access to transit services for federal workers and visitors.

T.C.4 Encourage the development of, and access to, intermodal transit centers within highly developed areas and regional activity centers to maximize transit use and provide improved connectivity for all users.

C.2 Development on Federal Facilities

There are many factors that influence the location and design of federal facilities (e.g., workplaces, cultural sites, and other destinations) within the region including agency mission, security requirements, operational needs, and budget. The Federal Workplace Element provides guidance on locating new workplaces in areas with access to transit. Policies in this section reinforce that element and provide direction on how federal agencies should plan and design their facilities to link to the transportation system and promote responsible development patterns. New federal workplaces, cultural sites, or other destinations should maximize opportunities to locate adjacent to multimodal corridors and, where possible, prioritize transit-accessible locations.

The region includes a range of facilities that reflect different planning and design eras. Facilities located in or close to downtown Washington, DC, such as the Washington Navy Yard or Marine Barracks Washington, tend to be older and reflect a denser, more walkable development pattern than those located in suburban locations, such as Fort Belvoir in Virginia. Typically, sites in urban areas are well served by transit and have greater travel options than those in the region. However, there are urban campuses, such as the U.S. Naval Observatory, that are not well served by transit and where single-occupant vehicles remain the primary mode by which employees and visitors reach the facility.

Regional transit systems, including Metrorail, were designed to serve many major federal employment centers. There is also strong interest in locating federal worksites to take advantage of transit service. At the same time, many federal buildings and campuses have security requirements or mission needs that can limit access to transit facilities or services for federal users and surrounding communities. Security requirements or mission needs can disrupt regional and local transportation networks, including sidewalks, trails, and roads. It is important to balance these considerations when selecting new locations for federal uses, and to minimize transportation disruptions from security measures and, where feasible, provide access to, and connections through, federal facilities.

A facility's location and availability of transit or other mobility options influences travel behavior and determines the level of impact on the local and regional transportation system. In locations that already provide nearby transit, pedestrian, and bicycle infrastructure, federal facilities should connect to and enhance these systems in a way that is compatible in scale and design. In more suburban locations, federal facilities should provide direct connections for all modes of travel to adjacent streets and through installations so that the transportation network is continuous. While security considerations may prevent direct or continuous connections, entry points or gateways to federal facilities should be accessible and accommodate a range of mobility options.

As discussed in the Federal Workplace Element, new technologies and work practices are redefining the workplace, allowing employees to work anywhere and anytime. Flexibility in the workplace can help advance goals for environmental stewardship and help influence travel behavior. Previous policies in the 2016 Transportation Element encouraging telework, alternative work schedules, and use of transit subsidies have been incorporated into the Federal Workplace Element update.

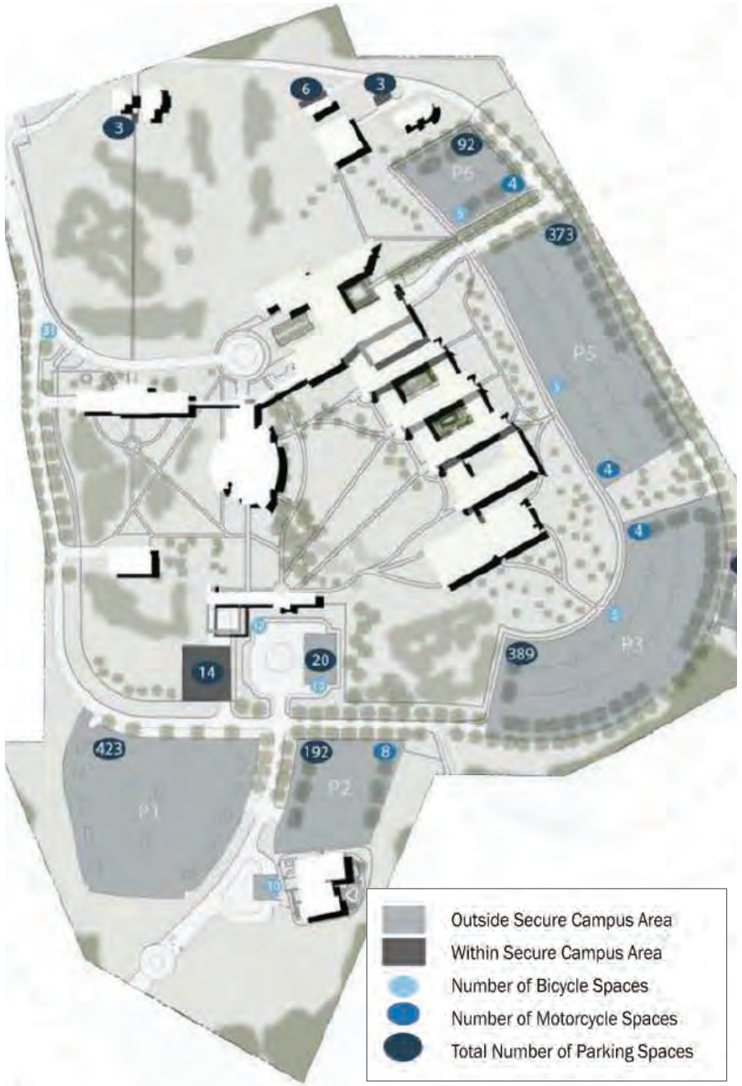
Federal agencies should also assess the impacts of their projects on the transportation network and provide mitigation to ensure that the network functions adequately when projects are completed. In addition, when planning transportation projects, the federal government should consider opportunities to incorporate green infrastructure such as permeable pavers, bioretention areas, bioswales, rain gardens, and vegetated swales where possible. The federal government should also support strategies that reflect a complete streets approach by acknowledging that streets should be designed and enables safe access for all users, including pedestrians, bicyclists, motorists, and transit riders of all ages and abilities. Transportation improvements should consider the surrounding context, including location within or adjacent to historic districts or view corridors, or areas with design guidelines, in the design, layout, scale, and materials of facilities or streetscape features.



The Food and Drug Administration campus in White Oak, Maryland.

Development patterns at federal sites have a notable impact on transportation demand and internal circulation patterns. Federal campuses should be designed with park-once-and-walk districts, so that several needs are met in compact development areas and travel between buildings on campus can be reached through a system of dedicated, connected, and continuous trails, protected bike lanes, and sidewalks. Well-designed, compact development areas can create urban environments that encourage walking and biking for travel between buildings, and rely less on motorized transportation to reach destinations. For campuses located in areas with limited amenities such as retail services and dining options, providing a mix of uses is a benefit to employees and minimizes congestion on local roadways.

The federal government must consider several factors when locating, designing, and managing parking. When designing parking facilities at federal properties, it is important to support design solutions that are compatible with other adjacent uses and reduce the impacts of curb cuts on public spaces. Parking facilities should integrate bicycle facilities such as bike racks and lockers to encourage multimodal modes of travel. Parking facilities should be designed in a manner that can be adapted for another use should parking no longer be needed.



The George P. Schultz National Foreign Affairs Training Center integrates bicycle parking within the landscaped buffers around several surface parking lots.

For example, vegetated buffers or directed, controlled lighting may be needed to reduce the visual impacts of parking facilities. Other mitigation may include incorporating retail into parking facilities. While below-grade parking structures are preferred, if surface parking lots are needed, they should be designed in an environmentally sensitive manner. Surface parking should be removed, converted to open space, or used for planned development projects when no longer needed.

The federal government should:

T.C.5 Maximize opportunities to locate workplaces, cultural sites, or other destinations adjacent to multimodal corridors and prioritize transit-accessible locations, where possible.

T.C.6 Provide access and connections through federal campuses/workplaces to the local and regional transportation system, as appropriate, and minimize disruptions that result from security measures.

T.C.7 Ensure transportation improvements are compatible with the existing transportation network and available services in the surrounding area.

T.C.8 Consider the surrounding context, including location in historic districts, view corridors, or any applicable design guidelines, in determining the design, layout, scale, and materials of streetscape features.

T.C.9 Assess impacts of development projects on the transportation system and provide mitigation to ensure that the system functions adequately when projects are completed, with an emphasis on multimodal solutions.

T.C.10 Provide a system of dedicated, inter-connected trails, protected bike lanes, and sidewalks, for pedestrians and other micro-mobility options, among federal campus entrance points and all on-site buildings.

T.C.11 Integrate green infrastructure measures into transportation projects to meet sustainability goals.

T.C.12 Encourage compact development and connected walking, bicycle, shuttle/transit infrastructure and wayfinding on federal campuses so users can easily and comfortably travel between on-site destinations.

T.C.13 Prioritize parking structures over surface parking. Encourage parking structures to be located below ground, in the interest of efficient land use and good urban design.

T.C.14 Encourage surface parking lots to be designed in an environmentally sensitive manner using features such as permeable pavers, bioswales, green roofs over covered parking, and/or solar panels.

T.C.15 Encourage parking structure design to be sensitive to the surrounding context and provide opportunities for integrating other uses or adaptable reuse, where possible.

T.C.16 Encourage that surface parking lots, when no longer needed, are removed, converted to open space, or used for proposed development.

T.C.17 Locate parking facilities so they do not obstruct pedestrian or bicycle access to buildings and minimize their visibility from surrounding public rights-of-way.

T.C.18 Consolidate parking facility access to minimize curb cuts where possible.

C.3 Multimodal Corridors in the Monumental Core

Washington's public realm, including its streets and avenues, are linked to its image and character as the nation's capital. The Urban Design and Historic Preservation Elements highlight the importance and design quality of these streetscapes and provide guidance on their preservation, maintenance, and adaptation. Many of these streets also function as multimodal corridors. This section provides guidance on these resources with respect to transportation issues.

The monumental core as defined in the Urban Design Element includes the U.S. Capitol grounds, the White House, the National Mall, Federal Triangle, and the surrounding government buildings and civic, cultural, and symbolic structures. Because of this significant setting, monumental core streets have a strong and cohesive character elevating them from other capital city streets. Many of these streets, such as Pennsylvania Avenue, NW between the White House and the Capitol, function as multimodal corridors and at the same time are often temporarily closed for celebrations, special events, and festivals. These streets must be designed to accommodate these activities as well as provide safe and reliable mobility options for all users. Pennsylvania Avenue is well served by multiple transportation modes, but it lacks clear north-south pedestrian connections through the Federal Triangle, and east-west pedestrian connections through the U.S. Capitol grounds and President's Park. It also has additional roadway width that could be reallocated for other purposes while maintaining acceptable levels of service for vehicles.[18]

The Pennsylvania Avenue Initiative is exploring strategies to improve connectivity and rebalance the public space to better accommodate pedestrians, bicyclists, and transit users. These strategies may incorporate reduced travel lane widths, create compact intersections, clearly designate pedestrian and bicycle zones, and include traffic calming measures that help create a more balanced and efficient transportation system in a manner that respects the character of the monumental core.

The federal government should:

T.C.19 Support the development of multimodal corridors that respect the character of monumental core streets that provide safe, convenient, and equitable mobility options.

T.C.20 Ensure that monumental core streets function as multimodal transportation corridors while allowing flexibility to accommodate special events and gatherings.

T.C.21 Support efforts to reconfigure travel lanes within the right-of-way to balance multimodal travel including reduction in travel lane widths and large curb radii, where possible.



Pennsylvania Avenue is a multimodal corridor in downtown Washington.

Section D: Promote Efficient and Sustainable Travel to Federal Destinations

Transportation management planning and parking policies collectively serve as important tools toward improving access, resource utilization, environmental stewardship, and overall quality of life. With the concentration of federal employees and destinations, NCPC's policies are intended to facilitate multimodal access and reduce demand for resource-intensive transportation, particularly single-occupancy vehicle travel.

D.1 Transportation Management Plans

A Transportation Management Plan (TMP) is a campus or site-specific plan that sets forth short- and long-term transportation goals for federal facilities and establishes Transportation Demand Management (TDM) strategies to help meet those goals. TDM strategies are designed to change traveler behavior, such as reducing the number of peak travelers, reducing the total number of travelers, encouraging more travelers to share vehicles, and shifting travelers to transportation systems with excess capacity. TMPs are a tool to help federal facilities operate in a sustainable manner; modify employee commuting behavior to more efficient and less impactful levels; reduce traffic congestion; and create efficient facilities that reduce emissions, impervious surfaces, and parking needs.

TMPs should include both short- and long-term travel goals, implementation methods and monitoring practices. Goals should include a reduction in automobile parking to meet and maintain a facility's applicable employee parking ratio. Commute mode share targets should be based on the facility's access to public transit and other non-automobile infrastructure. Agencies should also consider how alternative work arrangements such as teleworking and compressed work schedules can contribute towards managing transportation impacts. Agencies also have the opportunity to consider long-term strategies such as charging employees for agency provided parking or treating parking as a taxable benefit to the extent permitted by law. This approach could lead to fewer employees driving and help meet parking ratio goals.

Federal agencies should regularly engage with employees and adjacent community groups to devise transportation management plans that reduce congestion and meet sustainability goals.

NCPC requires the completion of a TMP for all master plans and any project that staff determined has transportation implications. Examples include projects that result in an increase in the number of employees or visitors travelling to a workplace or other destination, a change in use, or propose physical alterations or improvements that cause transportation and circulation impacts. The level of TMP complexity will depend on the project scope as well as the context and intensity of transportation and circulation implications. In completing a TMP, federal agencies should determine whether plans or projects have impacts on regional transportation infrastructure and provide appropriate mitigation to reduce impacts.

It is important to understanding how transportation conditions at facilities are changing and whether TMPs are effectively managing transportation demand. NCPC will check in with applicants every two years and ask for a status report on their transportation metrics including information on mode splits. Refer to the Transportation Element Addendum and the NCPC Submission Guidelines for more information on TMP requirements, TDM strategies, and monitoring and reporting requirements.

The federal government should:

T.D.1 Prepare Transportation Management Plans for federal facilities that encourage a multimodal transportation system that meets the needs of workers, residents, and visitors, while improving regional mobility, transportation access, and environmental quality. TMPs should be used as ongoing guidance documents over the term of the plan, particularly to help agencies meet NCPC parking ratio policies and reduce SOV travel.

T.D.2 Develop an integrated Transportation Demand Management program as part of Transportation Management Plans to reduce impacts on regional congestion, improve environmental quality, and minimize parking demand at federal destinations.

T.D.3 Continue to monitor existing transportation demand management programs and transportation metrics, including the commute mode split for the facility.



Transportation Management Plans.

Transportation Management

The Transportation Element Addendum details requirements for Transportation Management Plans (TMP) and Transportation Demand Management (TDM). It discusses the purpose of TMPs, and their use by the Commission in the review of master plans and projects. Guidance on developing TMPs and a general outline of TMPs is provided. The addendum also explains the role of TDM in meeting transportation goals and managing the impact of federal government operations on the region's transportation system. Suggested TDM strategies for federal facilities are provided along with relevant case studies and recent examples of TMPs reviewed by NCPC.

D.2 Workplace Parking

The availability of parking is perhaps the most important factor that influences how individuals commute. Given this reality, NCPC has emphasized the importance of parking ratios that limit or reduce parking provided at federal workplaces for decades. Further, when a reduction in parking supply is offset by transportation management approaches that increase multimodal transportation options, such ratios can effectively reduce the federal government's contribution to regional congestion, improve environmental quality, and reduce parking maintenance costs. Parking ratios encourage federal agencies to think creatively about ways than can reduce demand for limited parking spots, while encouraging their employees to reduce their commuting footprint on regional resources.

Since the emergence of the Metrorail system in the 1970s, these parking ratios have been an integral component of NCPC's project review. The ratios—the number of employees for each employee parking space—are divided into four general zones reflecting the area's transit accessibility.[19] They reinforce a sustainable regional development pattern characterized by greater density closer to the core of Washington, DC and to public transit service.[20] This development pattern also reflects that the greatest concentration of federal employees work in Washington, DC. Accordingly, facilities closer to the core, with greater access to transit, have stricter parking requirements, while facilities in the environs are generally allowed to retain more parking. Federal facilities with more stringent parking requirements should plan for more transit-supportive, compact development on their property and institute more robust TMPs.

The policies in this section assign a parking ratio to each zone throughout the region, which allows for a certain number of parking spaces for each employee within that zone based on transit accessibility. Additional policies provide direction for workplace parking facility design, placement, access, and closely related TDM measures. Policies encourage coordinating with stakeholders near the facility to minimize automobile parking space development. In other circumstances, coordination may be necessary to limit federal employee parking demand from spilling over and occupying nearby residential parking spaces.

The Federal Workplace Element includes policies discouraging new employee-intensive facilities in outlying areas with poor accessibility, since funding infrastructure expansions are inefficient, expensive, and increasingly more difficult. However, agencies may find some efficiencies in developing new facilities, as they have an opportunity to thoughtfully plan for transportation access, including the effective accommodation of newer, more innovative transportation modes, which is generally more complicated and costly when retrofitting existing facilities. In siting new facilities, all agencies should work with local jurisdictions to reduce transportation demand in a manner that would allow the facility to exceed NCPC parking ratio standards, if possible.

Applicant agencies are expected to comply with all applicable policies in the Comprehensive Plan's Federal Elements. Nonetheless, some uncertainty is inherent in transportation development. Challenges can include a lack of specified funding for TDM programs. NCPC recognizes these uncertainties and complexities. In rare circumstances where broader goals are more important, deviations from the particular employee ratio may be appropriate. The criteria to request a deviation for a specific project are detailed in NCPC's Submission Guidelines (https://www.ncpc.gov/review/guidelines/).

National Capital Region Federal Parking Study

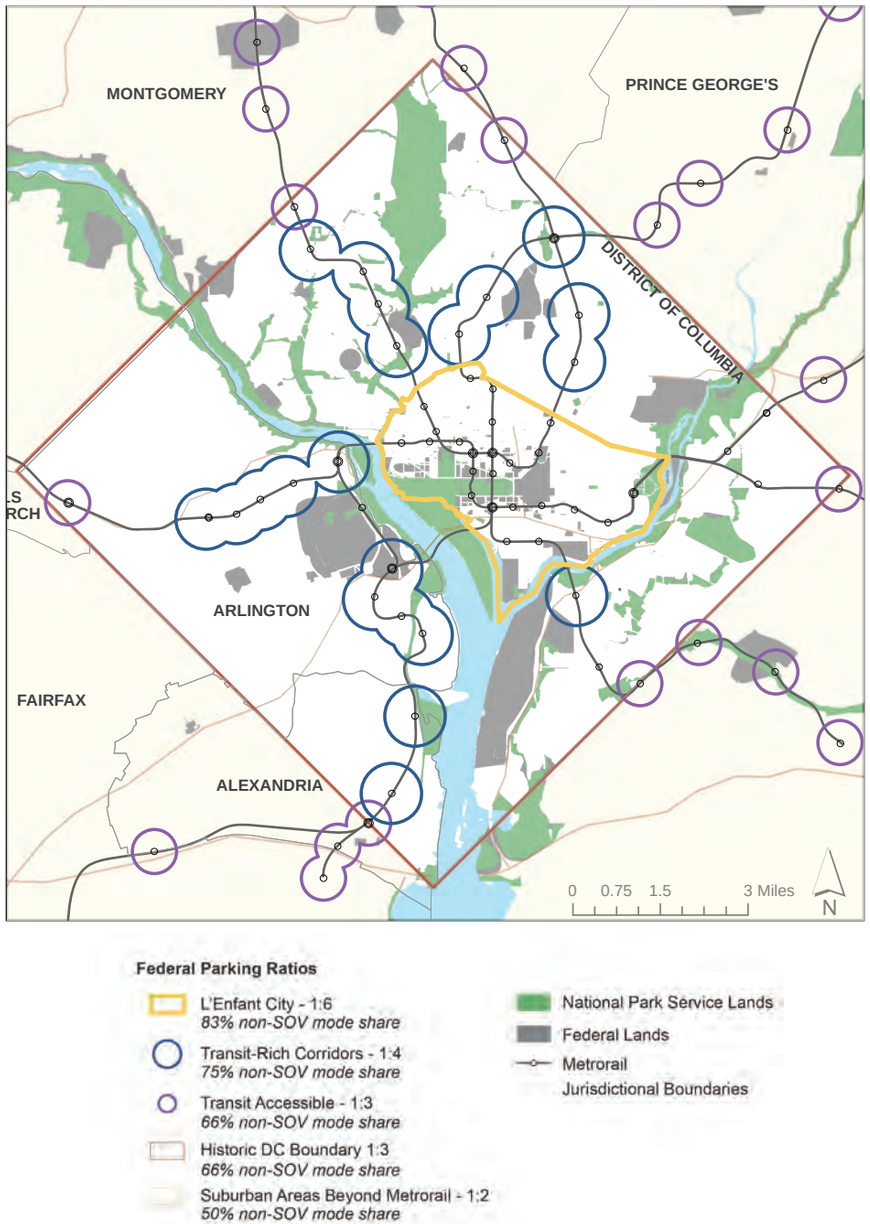


NCPC partnered with the U.S. Department of Transportation John A. Volpe National Transportation Systems Center to evaluate its parking ratio policies in light of industry best practices and available regional transportation data. This technical study included a transportation literature review, analysis of local jurisdictions' parking policies, and assessment of current and predicted transportation accessibility at federal facility locations within the National Capital Region.

The study made several recommendations to improve NCPC policies, including:

- Making NCPC's parking policies and processes more data-driven, standardized, and performance-based. This recommendation is implemented by the development of a data-driven approach to parking policies at federal facilities based on transportation accessibility and planned regional transit and highway improvements. Policy T.D.4 reflects this recommendation.
- A formalized process for allowing deviations from the parking ratios prescribed for a particular facility. While all facilities will be expected to meet their prescribed parking ratio in a master planning process, NCPC staff developed a process for deviations for individual projects, which is described in the NCPC Submission Guidelines on page 16.
- Routinely monitoring the performance of TDM programs at federal facilities. Policy T.D.3 reflects this recommendation and monitoring is further described in the Addendum to the Transportation Element on page 7.

Figure 1: Parking Ratios for the Historic Core Area



The federal government should:

T.D.4 Meet the following zone-based (refer to map on this page and page 21) parking space-to-employee[21] ratios:

L'Enfant City: In the L'Enfant City, the parking ratio should not exceed one space for every six employees (1:6). *[83 percent non-SOV mode share]*

Transit-Rich Corridors: In highly Metro-accessible portions of the Historic DC Boundary, the parking ratio should not exceed one space for every four employees (1:4). *[75 percent non-SOV mode share]*

Transit Accessible: For the remainder of the Historic DC Boundary Zone and suburban locations within 2,000 feet of a Metrorail station, the parking ratio should not exceed one space for every three employees (1:3). *[66 percent non-SOV mode share]*

Suburban Areas Beyond Metrorail: For all other locations in the region, including areas served by high-occupancy toll/high-occupancy vehicle lanes or high-frequency commuter rail, the parking ratio should not exceed one space for every two employees (1:2). *[50 percent non-SOV mode share]*

If a facility falls between two zones, the stricter parking ratio will be upheld.

T.D.5 Provide priority parking spaces in convenient locations for high-occupancy and energy-efficient vehicles to improve sustainability.

T.D.6 In accordance with federal law, locate dedicated parking spaces for employees with ability impairments in locations that connect to the shortest accessible route to building entrances.

T.D.7 Limit parking for temporary users conducting official business at a given federal workplace. These spaces shall be exempted from the installation's employee/parking ratio as specific in Policy T.D.4. Visitor destinations with more substantial parking needs should refer to Section D.3 for applicable parking policies.

T.D.8 Provide limited parking spaces for fleet or operational vehicles as needed to meet mission requirements. These spaces shall be exempted from the installation's employee/parking ratio as specified in Policy T.D.4.

T.D.9 Consider leasing existing parking near federal facilities to meet parking needs before building new parking at a facility. These spaces shall not be exempted from the installation's employee/parking ratio as specified in Policy T.D.4.

T.D.10 Minimize adverse impacts of transportation decisions on adjacent communities including spillover parking and congestion.

T.D.11 Consider charging employees for agency provided parking or treating agency provided parking as a taxable benefit to the extent permitted by law as a transportation demand management tool to reduce overall single-occupancy vehicles.

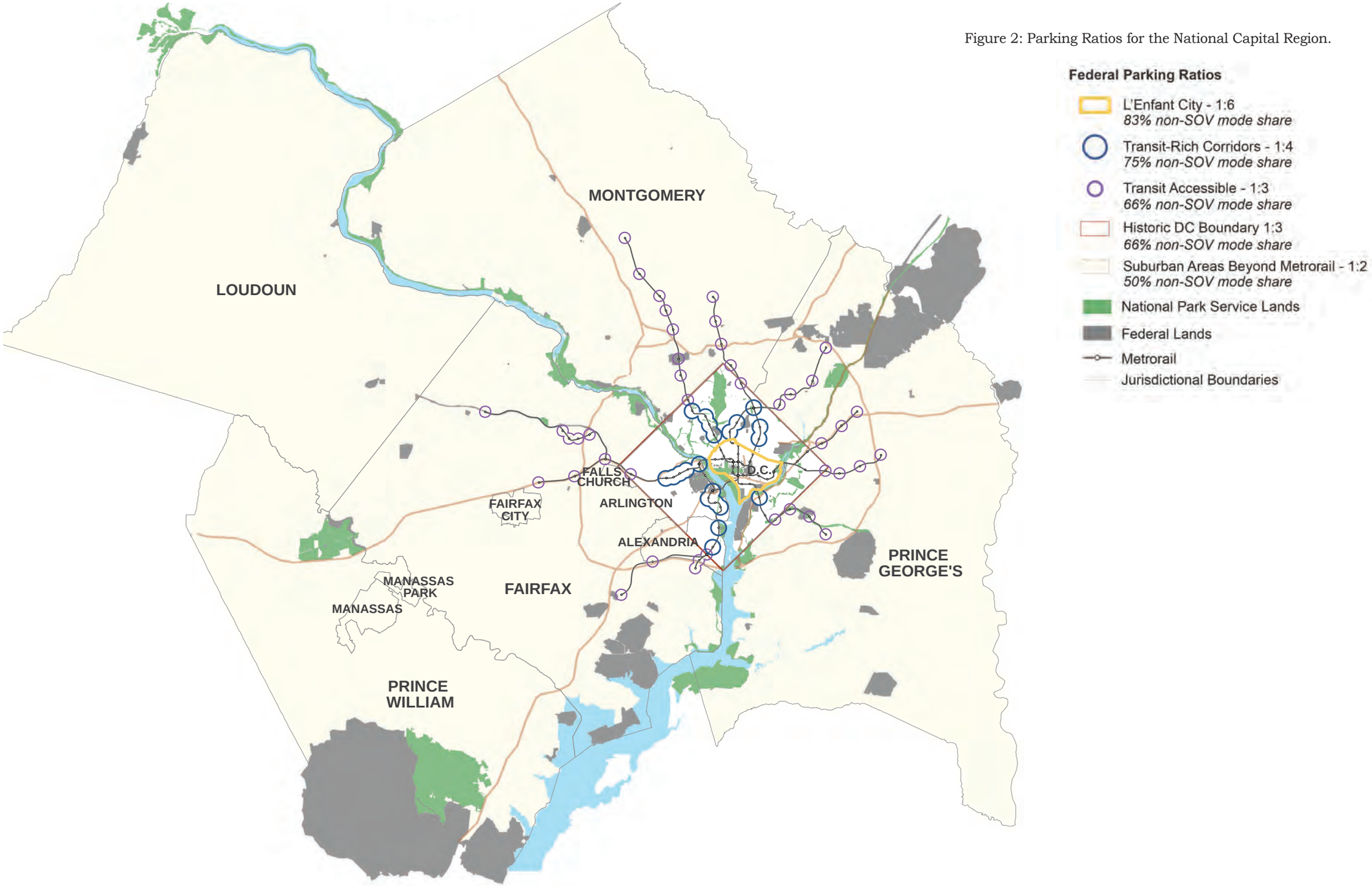


Figure 2: Parking Ratios for the National Capital Region.

D.3 Visitor Parking

The National Capital Region is one of the most widely visited in the country—due in large part to its role as the seat of the federal government and the range of cultural and natural resources located in the area. These sites include nationally significant monuments and memorials, and more common non-workplace federal uses like grocery stores and movie theaters on military installations. They also include training or conference centers at world-class federal research institutions which welcome local, national, or international visitors as part of their missions.

While a concentration of popular visitor sites is in downtown Washington, many visitor destinations are spread throughout the region, as standalone sites and on federal campuses. The dispersed nature of these sites means that visitor access can be a challenge, and availability of a range of travel modes to reach them can be highly variable. It is important to manage trips to and from destinations, as well as transportation choices once visitors reach a destination.

Though many sites in Washington, such as the National Mall, can be easily accessed by multiple modes including Metrorail and bicycle, access to other sites in the region, such as Great Falls Park in Virginia, is easiest via automobile. And with a rapidly expanding multimodal network throughout the region, the level of access is constantly changing. Accordingly, transportation needs at many of these locations, including parking, vary from site to site.

The demand for parking at visitor destinations, particularly national attractions, can vary based on time of year, day of the week, and if a special event is taking place. During special events such as the Cherry Blossom Festival, when travel demand is the highest, agencies often emphasize the importance of transit as an alternative to travel by personal vehicle. Accordingly, visitor parking should not seek to accommodate peak demand, but instead a more reasonable estimate of demand on a typical high-visitation day.

The federal government should:

T.D.12 Consult the parking policies of local jurisdictions to determine appropriate parking standards for non-workplace federal uses, including residential, commercial, and institutional uses. Absent clear local guidance, the federal government should determine appropriate parking ratios consistent with other comparable regional standards or industry best practices.

T.D.13 Consider a range of transportation management techniques to enhance multimodal access to visitor destinations before expanding parking, particularly for destinations in more isolated areas of the region. Such strategies may include improved multiuse trail connections, bus facilities, and sidewalks, along with improved pedestrian wayfinding.

T.D.14 Evaluate current parking conditions at visitor destinations, as well as projected parking demand related to any anticipated plans and projects, to demonstrate the need for expanded parking facilities. Such studies should include an assessment of parking congestion, turnover rates, and any impacts to resource conditions or the visitor experience.



Visitors to an event on the National Mall.

Endnotes

1 The National Capital Region, as defined in the National Capital Planning Act includes Washington, DC; Montgomery and Prince George's Counties in Maryland; Arlington, Fairfax, Loudoun, and Prince William Counties in Virginia; and all cities within the boundaries of those counties.

2 The jurisdictions within the Transportation Planning Board's defined National Capital Region also includes Frederick and Charles Counties in Maryland, outside of NCPC's defined NCR. Several federal agencies participate as non-voting, ex-officio members of the TPB, including the National Park Service, NCPC, Federal Highway Administration and the Federal Transit Administration.

3 *Visualize 2045: A Long-Range Transportation Plan for the National Capital Region,* Metropolitan Washington Council of Governments Transportation Planning Board, 2018, p.11.

4 *Visualize 2045*, p. 5.

5 *Travel Trends of the Metropolitan Washington Region*, Metropolitan Washington Council of Governments Transportation Planning Board 2018. https://gis.mwcog.org/webmaps/tpb/traveltrends/

6 Ibid.

7 WMATA Metro Snapshot, April 2018.

8 2019 State of the Commute Survey - Draft Technical Report https://www.mwcog.org/file.aspx?D=wVVFcy6c4%2froBLQPOi3kBq8jLrfTOMP8QTerR%2fMx%2fno%3d&A=9axCbEOkWXCjDoxUAR81V9zBTFuKuzfadgWer6%2fTTQE%3d

9 https://www.whitehouse.gov/wp-content/uploads/2017/11/m-15.01Reduce-the-Footprint-Policy.pdf

10 *National Capital Region Long Range Transportation Plan*, National Park Service, 2018, p.85.

11 https://visionzeronetwork.org/about/what-is-vision-zero/

12 Data was provided in WMATA's public comment letter dated November 6, 2019.

13 https://www.wmata.com/initiatives/strategic-plans/upload/KMSRA-Strategic-Plan-Jan-2019.pdf

14 *National Capital Region Long Range Transportation Plan*, National Park Service, 2018, p.xiii.

15 2019 State of the Commute Survey - Draft Technical Report https://www.mwcog.org/file.aspx?D=wVVFcy6c4%2froBLQPOi3kBq8jLrfTOMP8QTerR%2fMx%2fno%3d&A=9axCbEOkWXCjDoxUAR81V9zBTFuKuzfadgWer6%2fTTQE%3d

16 Source: gis.mwcog.org/webmaps/tpb/clrp/ej

17 *Visualize 2045*, p. 48.

18 https://www.ncpc.gov/docs/Pennsylvania_Avenue_Action_Plan_Summary_May2018.pdf

19 NCPC will reevaluate the parking ratios when updating the Transportation Element, and may make modifications if needed to reflect major changes in regional accessibility.

20 In measuring public transit access, the ratios define reasonable walking distance as 2,000 feet (about a 10-minute walk).

21 Employees, for the purposes of the Federal Transportation Element, refers to both federal employees and on-site contractors, who would have regular commute patterns to a federal facility.



Transportation Element Addendum

This addendum is a resource that supports policies within the Comprehensive Plan's Transportation Element. The addendum articulates NCPC's requirements for Transportation Demand Management and Transportation Management Plans and explains key concepts.

The addendum is comprised of two sections:

1. The role of Transportation Demand Management in meeting transportation goals and managing the impact of federal government operations on the region's transportation system.

2. An overview of the purpose of Transportation Management Plans, and their use by the Commission in the review of master plans and projects.

The addendum is adopted as part of the Comprehensive Plan and may be referenced in Commission activities, as appropriate.

Transportation Element Addendum

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Transportation Demand Management

Overview

Transportation Demand Management (TDM) refers to a series of strategies designed to maximize traveler choices.[1] Historically, TDM strategies have focused on commuter ridesharing and included a range of options such as increasing the number of people in a vehicle, increasing transit ridership, or influencing the time of or need to travel. These strategies continue to play an important role in influencing travel choices. More recently, with advances in technology and the expansion of mobility options (dockless bicycles, electric scooters, etc.), personal travel decisions have become more dynamic and adaptable. In response, TDM strategies are evolving to incorporate new travel modes that offer travelers expanded transportation options.

TDM and the Federal Government

Effective TDM strategies can help federal agencies meet larger NCPC policy objectives of environmental protection, sustainable development, congestion reduction, energy conservation, and improved quality of life. They can also help reduce parking demand to meet established parking ratios for federal facilities. Policies in the Transportation Element outline the major goals of managing transportation demand, and provide a framework for promoting TDM as part of the federal planning process.

With 429,000 federal employees and more than 400,000 contractors in a region of 3.8 million workers, the federal government has a vested interest in ensuring the transportation system is efficient and reliable.[2] The federal government is in a position to provide leadership regarding transportation decisions and meet its mobility needs by using TDM to influence employee decisions regarding travel to and from the workplace. TDM can also apply to federal visitor destinations, such as the National Zoo and other attractions, by influencing the way visitors travel throughout the region.

A federal facility's location within the region directly influences its impacts on the local and regional transportation system and employee/visitor travel behavior, which, consequently, relates to the range of TDM strategies that may be appropriate for the facility. Generally, facilities located closer to downtown Washington have access to greater travel options, and benefit from better bicycle and pedestrian infrastructure. These facilities can typically support more multimodal travel, with a reduced reliance on single-occupancy vehicle (SOV) trips. TDM strategies for these more urban facilities may focus more on programmatic changes, such as policy modifications or transit incentives to encourage multimodal travel.

In contrast, federal facilities situated further away from downtown Washington, in areas with fewer travel options, may require more comprehensive TDM approaches that encompass both programmatic and physical strategies to reduce SOV trips. These strategies would likely include close collaboration with local municipalities to ensure federal facilities are effectively leveraging local resources to improve travel, such as local transit lines, planned bicycle/pedestrian infrastructure improvements, etc. For example, if transit is available in proximity to a facility, the agency may be able to work with the appropriate service provider to implement convenient transit for the facility. Regardless of where a federal facility is located, federal agencies should strive to minimize SOV trips by instituting aggressive travel goals and implementing a wide variety of TDM strategies.

The planning and development of federal facilities greatly influences travel behavior both on- and off-site. With proper planning, federal agencies can implement TDM strategies that minimize the federal impact on regional congestion and seek to improve transportation efficiency. As part of the planning process, federal agencies are encouraged to work with regional and local agencies to develop TDM strategies that meet mutual sustainability goals and minimize the impact of federal transportation decisions on surrounding communities.

Effective TDM Strategies

The *National Capital Region Federal Parking Study* highlighted several TDM strategies that could effectively reduce parking demand. The study identified policies and programs as well as land use management as categories for TDM strategies. Within policies and programs, the parking study noted the following strategies that could be useful to federal agencies: commute trip reduction programs, active commuting, transit/parking/biking allowances, bicycle parking and provision, walking conditions, telework/alternative working arrangements, traffic calming, and transit improvements.

Within land use management, the parking study noted shared parking and land banking as tools that reduce reliance on automobiles, thereby reducing parking demand. Shared parking refers to adjacent or neighboring sites using the same parking spaces, but at different times of the day or week. Land banking reserves undeveloped or lightly developed space to be used for parking if such a need arises.

Agencies in the NCR have considered a range of TDM strategies as part of their transportation planning processes, which vary depending on on internal agency policies and directives, and. external factors such as the location of the site within the region, urban/suburban context, and security level. Successful TDM programs could include a range of individual strategies to meet regional transportation goals articulated in the Transportation Element and reduce reliance on SOV modes of travel. They might range from very simple, inexpensive strategies, like creating a rideshare bulletin board, to more complex, bigger-impact strategies, like developing a shuttle to provide access to and around a major federal campus. Among the most successful strategies are the transit subsidy and telework programs for federal employees. Increasing the transit subsidy or applying subsidies or other incentives to bicycling, carpooling, vanpooling would contribute towards reducing SOV travel.

In general, effective TDM strategies tend to fall within the following broad categories of actions:

- Information sharing (e.g., establish an employee transportation coordinator)
- Parking management (e.g., develop installation-wide parking guidelines, charging for parking)
- Telework or alternative work schedules (e.g., promote the use of flexible work schedules, as appropriate to meet agency missions)
- Subsidy programs (e.g., implement a bicycle commuting benefit)
- Local/regional coordination (e.g., work with local transit providers to improve service to and from the installation)
- Mobility options (e.g., develop a pedestrian and cyclist master plan)
- Land use and urban design (e.g., install bike storage, lockers, and/or showers for facility modernization projects)

Transportation Management Plans

Overview

A Transportation Management Plan (TMP) is a campus or site-specific plan that sets forth short- and long-term transportation goals for federal facilities and documents TDM strategies to help meet those goals. In general, TMPs should help facilities operate in a more sustainable manner, and modify employee commuting behavior to more efficient and less impactful levels. TMPs are also intended to describe how a federal facility will meet federal transportation policies, which are described in the Transportation Element, including federal employee parking ratios.

Since 1984, NCPC has overseen a system of employee parking ratio policies for federal facilities, which limit the amount of allowable parking at federal workplaces to help drive desirable development and achieve larger environmental goals. The ratios are based on the extent of transportation alternatives available at a given site, with more stringent ratios in proximity to existing and planned transit. To meet these policies, facilities should develop TMPs that incorporate a range of TDM strategies to reduce reliance on single occupant vehicles for federal commuting. By limiting SOV commuting, agencies can reduce roadway congestion, emissions, impervious surfaces, and parking demand, as well as costs associated with building and maintaining parking infrastructure.

Pricing as a TDM Tool

Charging for agency provided parking is a transportation demand management strategy to help reduce parking demand to achieve parking ratio goals. While implementing this strategy is dependent upon an agency's authority, it can be an effective tool in changing travel behavior, reducing parking, and reusing land occupied by parking facilities for other mission needs. The Transportation Element encourages agencies to consider charging employees for agency provided parking as a transportation demand management tool, or treating agency provided parking as a taxable benefit to the extent permitted by law.

For example, beginning in 2014 the General Services Administration (GSA) stopped providing free parking to GSA employees at many of their facilities. Through this effort, GSA seeks to encourage the use of public transportation and mobile work arrangements to help reduce traffic congestion and meet sustainability goals.

Parking Ratio Deviations – Master Plan vs. Project?

Deviations will not be permitted at the master plan level but may be considered for individual projects. The master plan is a comprehensive document that considers mission needs and anticipates new or changing activities, workforce and visitor projections, and facility conditions, typically over a 20-year planning horizon. They consider complex planning issues such as accommodating future changes in transportation and is designed to meet long-term transportation goals. Therefore, the master plan should identify how the long-term parking ratios will be achieved as identified in Section D.2 of the Transportation Element. However, as individual projects are conceptualized during the master plan timeline, temporary needs may be considered for a deviation from the parking ratio.





TMPs and the NCPC Review Process

NCPC requires the completion of a TMP for all master plans and any project that staff determined has transportation implications. Examples of projects that may have transportation implications include those that cause an increase in the number of employees or visitors travelling to a workplace or other destination, change established uses, or propose physical alterations or improvements that affect transportation and circulation. The level of TMP complexity will depend on the type of project and context and intensity of transportation and circulation implications. For smaller sites with fewer employees or visitors, the document may be relatively minimal, with an assessment of current conditions and simple list of TDM strategies, while larger sites should include more comprehensive data collection and analysis, along with a robust program of TDM strategies.

Federal agencies should consult with NCPC, local jurisdictions, and transit planners early in the planning to identify existing/future travel issues and opportunities, both locally and regionally. Master plans and projects, along with their associated TMPs, will likely require multiple consultations due to their comprehensive scale and relative complexity. Planned improvements (e.g. wider sidewalks/better lighting, bicycle routes, etc.) and regional development/transportation infrastructure projects—reflected in the Metropolitan Washington Council of Governments vision plan—will influence future travel decisions and worksite parking demand. Federal planners may need to advocate for additional transit service and/or infrastructure improvements to help improve non-SOV travel.

TMPs should be submitted as part of the required master plan update or project submission for NCPC review and potential referral to appropriate local, regional, and state agencies. The applicant should be prepared to consider all comments made by the Commission and local/state agencies as part of the planning process, and to incorporate any recommended new strategies and programs as funding is available and off-site infrastructure improvements permit. The mandatory federal referral process for master plans is described in more detail in NCPC's Submission Guidelines.

Outline of a TMP

TMPs and master plans should be developed and fully integrated with one another with the recognition that the built environment and travel behavior are inextricably linked. As such, master plans should support TMP goals through sound strategies that foster mixed-use, denser development, and development near existing or proposed transit routes. Successful TMPs rely on supportive master plans and the implementation of master plans require integrating transportation planning into the process.

TMPs should serve as practical, usable documents, revised to reflect changing agency needs, employee demographics, and on/off-site travel conditions, and should be updated in conjunction with master plan updates. Plans are based on thorough analysis of travel conditions (i.e., local transportation network, on-site infrastructure, employee commuting characteristics), with assumptions used to set goals based on data from agency and non-agency sources. NCPC requires that federal agencies review their master plans and TMPs at least every five years to ensure that they accurately reflect forecasted changes to the campus/installation. Typically, a TMP will include the following elements:

1. Introduction with defined goals and objectives
2. Description of existing and planned transportation system
3. Travel patterns and behavior
4. Projected travel and impacts
5. Transportation demand management
6. Implementation
7. Monitoring and evaluation

1. Introduction

The introduction should summarize how the TMP supports the master plan, provide an overview of the projected growth and development at a federal site, and articulate transportation goals and objectives. Goals should be designed for short, medium, and long-term time horizons that are clearly outlined in the TMP. Federal applicants are encouraged to consult with NCPC and local jurisdictions to set specific worksite travel goals. The introduction should include a written policy statement that demonstrates the federal agency's commitment to reducing SOV travel and meeting applicable NCPC policies.

NCPC parking ratios are intended to serve as targets for federal worksites based on anticipated future transit accessibility by 2030. Accordingly, all federal TMPs, which are intended to examine the long-term transportation outlook for a given facility, should include TDM strategies and mode split goals that would meet applicable parking ratios. Deviations from the ratio will only be considered for individual projects within a master plan when they are submitted for Commission review. Additional information on deviations and the criteria applicants must meet are provided in NCPC's Submission Guidelines.

Key Questions to Consider when Creating a TMP:

1. What is the purpose of the TMP and how does it support regional, state, and local transportation plans and projects?
2. What is the projected change in employee population?
3. What are the major construction projects and improvements planned for the facility, and how will the influence travel patterns at the facility?
4. What are the goals and objectives of the TMP? Specifically, what are the goals for trip reduction, mode split, and vehicle occupancy?

2. Description of an Existing and Planned Transportation System

The TMP should include a description and analysis of the existing transportation system on and adjacent to a federal facility, as well as planned infrastructure and service improvements. It is important to understand the existing environment surrounding a federal campus/installation to ascertain what types of changes are necessary to enable more efficient, sustainable, cost-effective travel. The TMP should describe the local roadway network, parking facilities, transit facilities, and pedestrian and bicycle facilities.

Along with the existing transportation system, the TMP should describe planned regional and local transportation infrastructure or service improvements within the adjacent area (within five miles) of a facility. Future transportation projects should be considered as agencies prepare TMPs to determine how a facility could leverage these improvements to help manage transportation demand, and where specific conversations with transportation providers may help maximize access for federal commuters.

Key Questions to Consider when Creating a TMP:

1. How do commuters currently travel to and from the facility? How have commuters traveled to and from the facility? Are there any trends?
2. What are the range of travel options available at the facility, including transit, commuter rail, bikeshare, bicycle/pedestrian routes, high-occupancy vehicle lanes?
3. What types of transportation programs or incentives are available to employees, such as carpool/vanpool, telework, alternative work schedules, etc.?
4. What is the extent of parking provided for employees and visitors at the facility? Is the facility in compliance with the NCPC parking ratio?
5. What regional and local transportation projects are planned adjacent to the facility, and how would these projects influence travel to the facility?
6. Is development planned for nearby regional activity centers that would increase the range of housing options and thereby result in future pedestrian, bicycle, and transit mode share gains?





3. Travel Patterns and Commuter Behavior

TMPs should set out travel goals based on planning and survey data, as well as future planned master plan development. To appropriately set these goals, TMPs should include a detailed assessment of commuter behavior, employee housing information, and non-SOV travel challenges/opportunities. An understanding of shifts in workforce housing patterns over several years can help determine if employees are choosing to reside closer to worksites and in more accessible locations near transit stations/stops, which can help reduce SOV use. A series of thematic maps with zip code or census tract data can help illustrate changes in where workers live over time. Commuter surveys should collect data related to barriers to non-SOV travel and willingness to change commuting patterns. This will assist agencies with focusing outreach and education on workers who indicate that they would consider changing from SOV to non-SOV travel modes.

Key Questions to Consider when Creating a TMP:

1. Where do employees or visitors travelling to a facility live? Have employee residential locations changed over the past 5 to 10 years?
2. How, or by what mode, do employees/visitors currently travel to the facility?
3. How long does it take to commute/travel to a facility from a place of residence?
4. What times of day do employees/visitors work/travel to the facility?
5. What are the challenges/opportunities to commuting by non-SOV modes? Are there barriers that could be addressed to shift travel behavior?
6. Are telework or alternative work schedules allowed for agency employees, and, if so, how do these schedules affect employee travel patterns?
7. What kind of commuter benefits/subsidies are available, such as transit subsidies or bicycle commuter programs?
8. How might the expansion of alternative transportation services or traveler incentives influence employee/visitor travel, including shuttle services or subsidies for alternative transportation?

4. Projected Travel and Transportation Impacts

TMPs should include an analysis that describes how anticipated employee population shifts or development projects contemplated in the master plan will affect the transportation system and travel to a federal facility. The analysis should forecast impacts on the surrounding roadway network, transit service, and bicycle and pedestrian access. This section should describe projected peak hour traffic by mode and include a summary of existing and proposed parking by type of assignment (e.g., official vehicles, carpools/vanpools,, commuter vehicles, visitors, etc.). If future development is projected to cause adverse transportation impacts, mitigation measures should be identified and accounted for in TMP goals, consistent with any required environmental compliance documentation.

Key Questions to Consider when Creating a TMP:

1. How will implementation of the master plan affect the transportation system, including the surrounding roadway network, transit service, and pedestrian and bicycle routes?
2. What mitigation measures could alleviate the adverse impacts on the transportation system?
3. Are new parking facilities proposed in the master plan? How would the addition of new parking spaces impact compliance with NCPC parking policies?



5. Transportation Demand Management

TMPs should include a range of TDM strategies to assist an agency with managing travel to its facility, reducing parking demand, and meeting NCPC parking ratio goals. Specific TDM strategies should be designed to minimize vehicle trips and discourage single-occupant travel during peak and off-peak hours, consistent with transportation goals outlined in the introduction. This should include an assessment of how these strategies would help meet desired mode split for the facility. The strategies should mitigate the specific impacts associated with master plan development and should be developed in coordination with regional and local agencies. The TMP should describe the strategies in detail, including anticipated benefits, measures of success, and an assessment of relationships between identified measures.

TDM strategies should respond to the scale and context of the transportation impacts. In some cases, only minor improvements may be sufficient, while in others, a more extensive strategies may be needed. For example, when transportation impacts are expected to be minor, strategies such as improved wayfinding signage, bikeshare stations, bike racks, and reserved van/carpool spaces may suffice to influence travel decisions. Where significant impacts are expected, more extensive strategies may be required, including shuttle systems, new or expanded sidewalks, or multiuse trails. Ultimately, federal planners should work to establish comfortable and safe pedestrian/bicycle conditions, both at the worksite and along routes between federal properties, nearby transit stations/stops, and off-site development. In some cases, telework and alternative work arrangements can be effective TDM strategies to assist agencies in achieving their goals.

Key Questions to Consider when Creating a TMP:

1. Is the extent of transportation impacts expected to be minor or significant?
2. What TDM strategies would be most effective in mitigating transportation impacts?
3. How do the recommended TDM strategies reduce parking demand and help meet desired mode split goals for the facility?

6. Implementation

TMPs should include an implementation strategy that details specific commitments to success, and a timetable with milestones to minimize vehicle trips and discourage single-occupant travel during peak and off-peak hours (see Case Studies and Examples on page 8). Specific future non-SOV mode share goals should be supported by transportation demand management strategies including action steps, schedules, roles/responsibilities, cost/funding, and performance metrics. Successful TDM program implementation requires working with employees and upper management to overcome perceived and real barriers to change.

An Employee Transportation Coordinator (ETC) can be an effective way of implementing, administering, and managing a TMP. The roles and responsibilities of an ETC will vary from agency to agency, but generally ETCs develop, implement, and update commuter programs and policies, including oversight of a facility's TMP. The Metropolitan Washington Council of Governments serves as the primary resource agency for federal ETCs in the region, and NCPC staff is also available to provide guidance on implementing approved transportation management plans. Agency management should provide substantive decision-making authority and strong support to the ETC. Agencies should allocate adequate funding to enable the ETC to conduct regular employee commuter surveys; hold informational meetings/fairs for employees; design and distribute marketing materials; coordinate programs with other nearby federal campus installations, and actively participate in local, regional and national continuing education and training efforts to foster professional development in TDM efforts.

Key Questions to Consider when Creating a TMP:

1. What specific steps are required to successfully implement the TMP?
2. What is the schedule, timeline, and associated goals for implementing the TMP and recommended TDM strategies?
3. Does the ETC have the funding, resources, and support from management to implement the TMP?

7. Monitoring and Evaluation

As part of best practices for transportation management planning, federal worksites should institute a monitoring process to assess TDM performance, and adjust the strategies as needed to improve performance over time. This may include implementing certain strategies, determining whether or not they have been effective in reducing SOV mode share (or meeting other transportation goals), and if not, applying different strategies. This monitoring process should include regular commuter surveys, and may also incorporate other informational efforts such as on-site traffic monitoring, completion of traffic studies, and/or coordination with the human resources department. Travel data should be measured against pre-determined goals/metrics to reveal TMP effectiveness.

In addition to conducting an internal monitoring process to ensure TMP success, NCPC has determined that regular reporting is critical to understanding how transportation conditions at facilities are changing over time, and whether TDM programs are effectively managing travel demand. Accordingly, NCPC will request certain transportation metrics on a biennial basis for all facilities with master plans or for projects that have transportation implications, including those that seek a parking ratio deviation in accordance with the criteria outlined in the NCPC Submission Guidelines.

This biennial report is intended to update NCPC with TMP progress, and generally reflects the data that most agencies should already be collecting to evaluate their transportation planning goals. A sample of those questions is shown at right. At a minimum, facilities will be required to provide an updated mode split as part of this reporting process, as well as a status update on select TDM strategies that the Commission determines have the greatest potential to help a facility meet its transportation goals. This reporting protocol will help the Commission understand larger transportation trends for the facility, and determine whether TMPs are adequately helping facilities meet transportation goals. NCPC staff will coordinate with agencies to initiate and complete the reporting process to ensure the necessary information is provided.

Key Questions to Consider when Creating a TMP:

1. How will the agency measure the success of the TMP and associated TDM strategies?
2. How might the agency adjust the approach to TMP implementation if the plan is not meeting transportation goals?
3. What is the timeline for completing required monitoring protocols, such as commuter surveys?



Sample Monitoring Questions

1. Have you met any of your agency TMP milestones? Which milestones are currently in process?
2. Have any projects been implemented since master plan approval that influence parking? Please include any information from the Commission on deviations or conditions.
3. Is there new infrastructure near the building/ campus that influences transportation?
4. What is your current number of employees?
5. What is your current parking ratio?
6. Please provide mode choice information for your employees commuting patterns.

Case Studies and Examples

The following elements are from recent master plan/TMP submissions to NCPC, highlighted as good examples of future transportation management planning, analysis, and programming. These are meant to help federal applicants think creatively when developing their TMPs. The examples below highlight how a range of strategies, from physical improvements to outreach efforts, can be employed to manage transportation demand and influence travel behavior.

National Institute of Standards and Technology – Gaithersburg Campus

The 2018 Master Plan reflects a number of planned future improvements to encourage non-SOV travel including: establishing an easement outside the campus perimeter to allow construction of a trail connection between two identified pedestrian/bicycle routes; allowing public bus service on to the secure campus; and establishing an on-site pedestrian mall to encourage future ridership on an a planned Bus Rapid Transit (BRT) route. The Plan also identifies a network of recreational trails within the campus and potential future bikeshare stations in convenient locations.

Fort Belvoir

The 2015 TMP includes a comprehensive list of potential TDM strategies that may be useful for on-site missions to use when attempting to reduce their overall travel impact and helping Fort Belvoir attain its overall NCPC parking goal of 1:1.5 spaces (67 percent). The list includes strategies related to various categories including parking management, agency coordination, regional collaboration, information outreach, mobility choices, and land use and facilities. The plan separates the strategies into short-term (two years), mid-term (five years), and long-term (10+ years) implementation categories, with specific descriptions about why each strategy is important, what each is intended to accomplish, and how each will benefit their agency/employees.

Marine Corps Base Quantico (MCBQ)

The Bicycle and Pedestrian Mobility Plan is an important part of the installation's TDM program, intended to improve and expand pedestrian and bicycle-serving infrastructure. The plan includes detailed assessment of existing pedestrian/bicycle travel conditions, identifies specific improvement measures, and articulates how each measure will be implemented during the next 20 years. MCBQ plans to focus on improving the travel environment for pedestrians/bicyclists to encourage a safe training environment, promote the health and well-being of its population, and foster a "park once" environment. More favorable on-site pedestrian/bicycle conditions will also help promote more sustainable commuting to the installation.

Food and Drug Administration – White Oak Federal Research Campus

The TMP provides a thoughtful discussion of challenges and opportunities associated with various potential TDM strategies that are specifically identified for the campus based on its built environment, surrounding context, and FDA employee travel behavior. TDM goals, which are summarized through an implementation phasing plan table, are developed based on recent commuter survey data. The implementation table articulates anticipated future non-SOV mode share changes based on future recommended action steps.

Endnotes

1 https://ops.fhwa.dot.gov/plan4ops/trans_demand.htm

2 Draft Federal Workplace Element, July 11, 2019, p.3.

Parks & Open Space Element



National Capital Planning Commission



COMPREHENSIVE PLAN

FEDERAL ELEMENTS

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Parks & Open Space Element: Adopted by the Commission on December 6, 2018.
The revised element and policies are effective on February 15, 2019.

Digital Design and Imaging Service



Katie Harbath

The National Mall hosts national celebrations, special events, First Amendment activities, and other recreational activities.

Introduction to the Parks & Open Space Element

The federal government's goal is to protect and enhance the National Capital Region's parks and open space system—for recreation; as commemorative and symbolic space; as social, civic, and celebratory space; and to provide environmental and educational benefits.

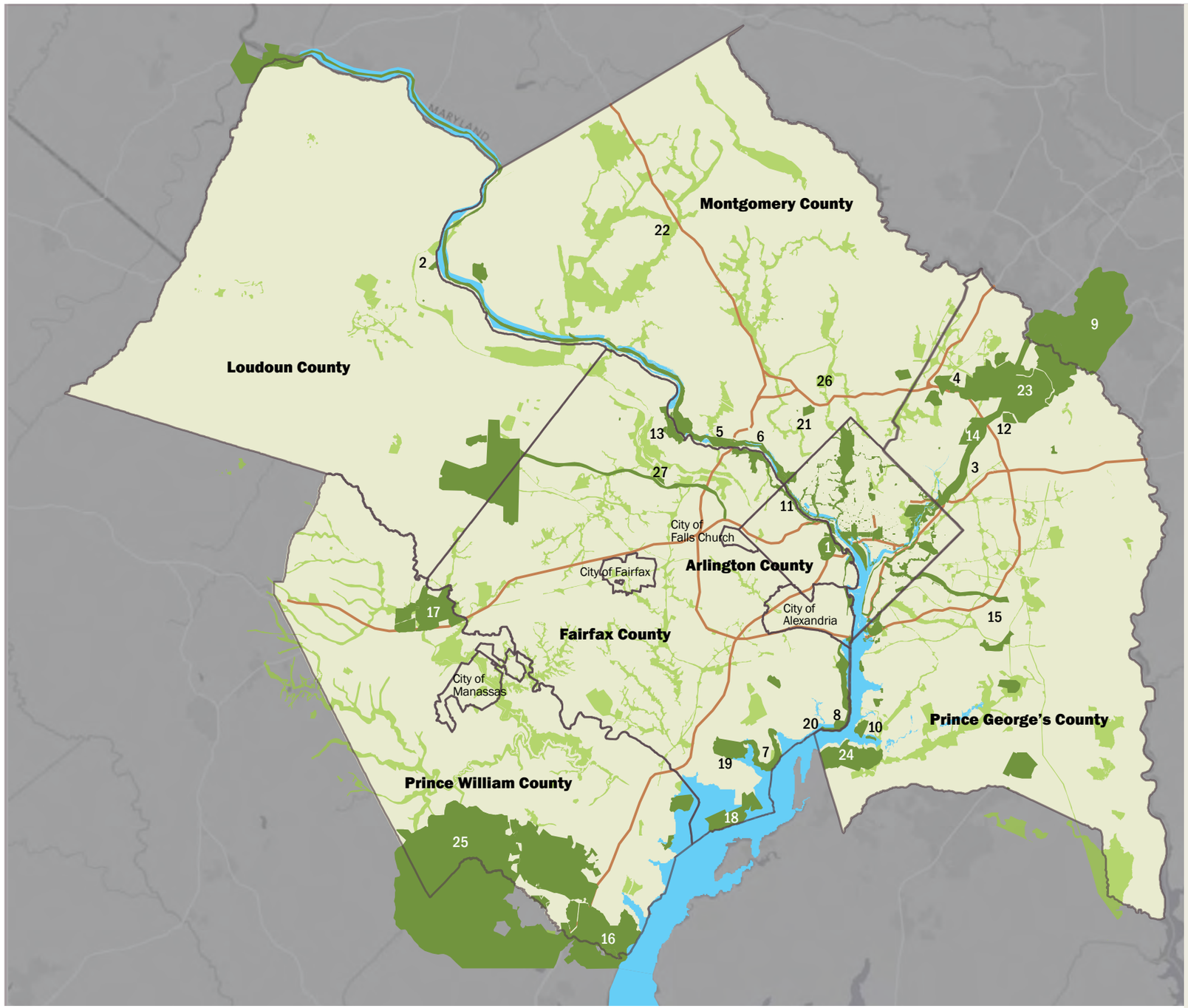
Parks and Open Space in the National Capital Region

One of the defining characteristics of the National Capital Region[1] (NCR or region) is its parks and open space system. The NCR has diverse outdoor spaces for public use that range from community parks in residential neighborhoods to urban downtown parks, and from the National Mall's grand expanse to extensive open space and natural areas.

Open space offers environmental benefits, supports recreational uses, provides areas for wildlife habitat, and helps with cultural and natural resource protection. It also allows people to explore history and nature while providing diverse recreational opportunities that strengthen our communities. In the capital, the planned public spaces are settings for renowned memorials, museums, and historic landscapes; function as grand public promenades; protect visual corridors; and allow for large civic gatherings such as national celebrations, special events, and First Amendment gatherings.

Several federal agencies and other entities administer large amounts of parks and open space in the region, including the National Park Service (NPS), U.S. Department of Agriculture (USDA), U.S. Department of Defense (DOD), U.S. Fish and Wildlife Service (FWS), General Services Administration (GSA), and Architect of the Capitol (AOC). Entities or trust instrumentalities that are partially federally supported include the Smithsonian Institution (SI), National Gallery of Art (NGA), and John F. Kennedy Center for the Performing Arts.

In the region, several federal campuses also have large amounts of open space. These include National Institutes of Health; Balls Bluff National Cemetery; Mason Neck National Wildlife Refuge; Meadowood Special Recreation Management Area; and the United States Army's Arlington National Cemetery. In addition, many non-publicly accessible federal facilities and campuses, contribute to the region's overall open space. They also often function as natural habitat areas. Examples include Joint Base Andrews, Fort Belvoir, Marine Corps Base Quantico, the National Institute of Standards and Technology, and the Beltsville Agricultural Research Center.



The geographic extents of the National Capital Region includes Washington, DC (also referred to as Washington or the capital); Montgomery and Prince George's Counties in Maryland; Arlington, Fairfax, Loudoun, and Prince William Counties in Virginia; as well as the cities of Alexandria, Fairfax, and Falls Church in Virginia.

Regional Parks & Open Space*

1. Arlington National Cemetery
2. Balls Bluff National Cemetery
3. Baltimore-Washington Parkway
4. Beltsville Agricultural Research Center
5. Chesapeake & Ohio Canal National Historical Park
6. Clara Barton Parkway
7. Fort Belvoir
8. Fort Hunt
9. Fort Meade
10. Fort Washington
11. George Washington Memorial Parkway
12. Goddard Space Flight Center
13. Great Falls Park
14. Greenbelt Park
15. Joint Base Andrews
16. Marine Corps Base Quantico
17. Manassas National Battlefield Park
18. Mason Neck National Wildlife Refuge
19. Meadowood Special Recreation Management Area
20. Mount Vernon
21. National Institutes of Health
22. National Institute of Standards and Technology
23. Patuxent Research Refuge
24. Piscataway Park
25. Prince William Forest Park
26. Rock Creek Regional Park
27. Wolf Trap National Park for the Performing Arts

*This map shows federal parks and open space in the National Capital Region that are referenced in this element



NPS

The Mason Neck National Wildlife Refuge was the first refuge in the nation created to protect critical habitat for bald eagles.



O. Charlene/Flickr

Wolf Trap National Park for the Performing Arts is the only national park dedicated to presenting the performing arts.

Within the NCR, NPS administers approximately 27 percent of the parks and open space[2]. These include historic sites, natural and cultural landscapes, urban forests, and conservation areas[3] at places such as Piscataway Park, Prince William Forest Park, Great Falls Park, and the Wolf Trap National Park for the Performing Arts.

Parks and open space are critical components of the region and encompass different forms and experiences. Publically accessible federal lands not only fulfill their primary obligation to meet federal and national needs, but they also provide opportunities for recreation for surrounding neighborhoods. While meeting federal agency missions and protecting natural and cultural resourcesare priorities, there are federal parks that are also able to accommodate local recreation needs. When developed with a clear understanding of different goals, collaboration and partnerships can successfully bring additional resources and appropriate activities to enhance parks. In surrounding jurisdictions in the NCR, federal parkland contributes to the natural resource and public parkland inventory. Additionally, they are part of a comprehensive regional network of parks and open space that supports local residents and visitors.



Army Corps of Engineers

Arlington National Cemetery extends over 600 acres of open space.

Parks and Open Space in Washington

In Washington, DC, federally administered parks and open space include not just designated parkland, but a majority of shoreline areas along the Potomac and Anacostia Rivers. Other prominent areas with large designated open space include the U.S. Department of Agriculture's National Arboretum and the Smithsonian Institution's National Zoological Park.

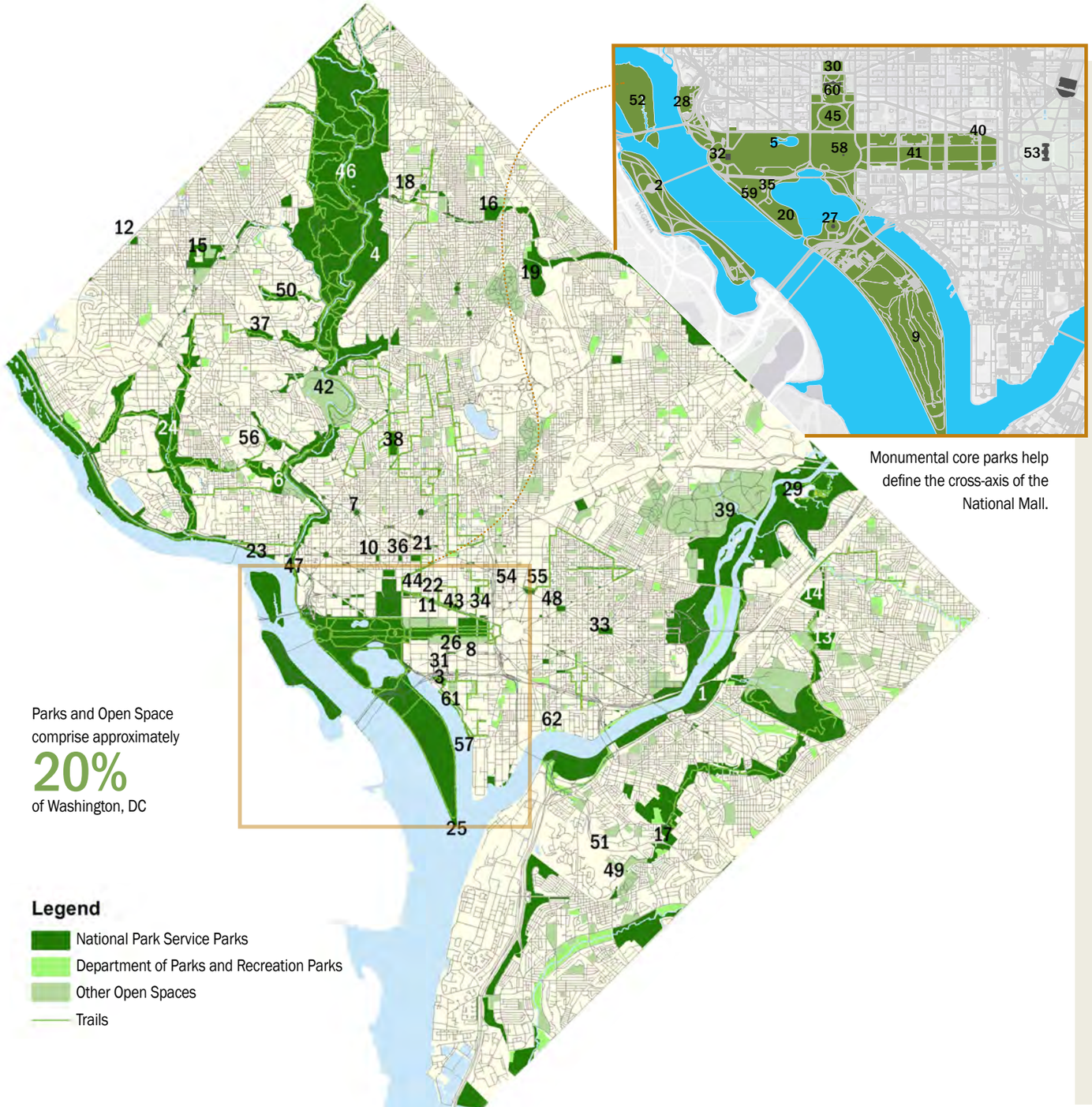
Within Washington's city limits, the federal government administers 80 percent of the total land dedicated to parks and open space[4]. Of that, NPS is responsible for approximately 74 percent of the land[5] that includes formal parks and open space that complement memorials and monuments; L'Enfant circles, squares, and triangles; natural and cultural landscapes; historic sites; conservation and natural areas; parkways; rivers; and canals. Some well-known examples include the National Mall, President's Park, Rock Creek Park, Anacostia Park, Civil War Defenses of Washington (commonly referred as the Fort Circle Parks), Chesapeake & Ohio Canal National Historical Park, and the Baltimore-Washington Parkway.

Several District of Columbia (District) government agencies oversee non-federal parks, primarily located in neighborhood areas, with a focus on providing recreation opportunities to city residents. There are a number of parks administered by District government agencies, but the underlying ownership is with the U.S. government.

As defined in the federal Urban Design Element, Washington's spatial and symbolic center is the monumental core, with the greatest concentration of federal properties and resources. It includes the U.S. Capitol grounds, the White House, the National Mall, Smithsonian grounds, Federal Triangle, Arlington National Cemetery, and the public spaces that function as settings for the surrounding memorials, museums, and civic structures. The parks and open space associated with the above-mentioned areas help define the National Mall's cross-axes and are collectively referred to as the monumental core parks.

It is important to note that the monumental core parks address a national audience and have different functions, as well as maintenance and management needs, as do city or regional parks. Monumental core parks accommodate a wide range of activities; are a physical and symbolic setting for our government; and house the nation's most renowned memorials and museums.

Urban parks are distinct from natural areas, as they require different maintenance, management, and programming strategies. Urban parks are dynamic cultural and social hubs, which support a variety of user needs and have many stakeholders. For the many federally administered urban parks, federal-local partnerships or public-private partnerships often provide additional funding sources, consistent oversight, visitor services, and help generate economic activity for the community.



Monumental core parks help define the cross-axis of the National Mall.

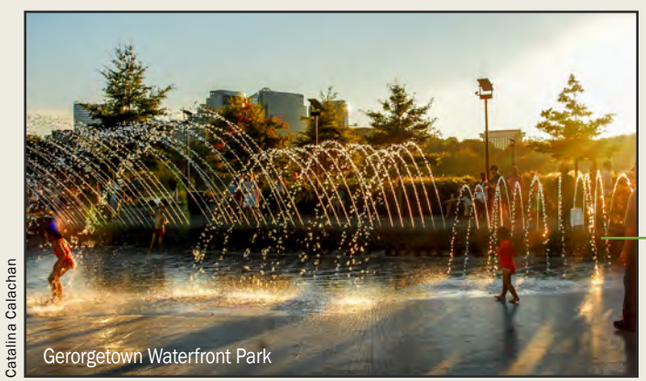
Washington, DC Parks and Open Space*

1. Anacostia Park
2. Arlington Memorial Bridge and Columbia Island
3. Banneker Park
4. Carter Barron Amphitheater
5. Constitution Gardens
6. Dumbarton Oaks Park
7. Dupont Circle
8. Dwight D. Eisenhower Memorial
9. East Potomac Park
10. Farragut Square
11. Federal Triangle
12. Fort Bayard
13. Fort Dupont
14. Fort Mahan
15. Fort Reno
16. Fort Slocum
17. Fort Stanton
18. Fort Stevens
19. Fort Totten
20. Franklin Delano Roosevelt Memorial
21. Franklin Park
22. Freedom Plaza
23. Georgetown Waterfront Park
24. Glover-Archbold Park
25. Hains Point
26 Hirshhorn Sculpture Garden
27. Jefferson Memorial
28. John F. Kennedy Center for the Performing Arts
29. Kenilworth Aquatic Gardens
30. Lafayette Park
31. L'Enfant Plaza
32. Lincoln Memorial
33. Lincoln Park
34. Marshall Park
35. Martin Luther King, Jr. Memorial
36. McPherson Square
37. Melvin Hazen Park
38. Meridian Hill Park
39. National Arboretum
40. National Gallery's East Wing Plaza and Sculpture Garden
41. National Mall
42. National Zoological Park
43. U.S. Navy Memorial
44. Pershing Park
45. President's Park
46. Rock Creek Park
47. Rock Creek and Potomac Parkway
48. Stanton Park
49. St. Elizabeths Campus
50. Soapstone Valley Park
51. Suitland Parkway
52. Theodore Roosevelt Island
53. U.S. Capitol
54. Ukrainian Manmade Famine Memorial of 1932-1933
55. Union Station and Columbus Circle
56. United States Naval Observatory
57. Washington Channel
58. Washington Monument
59. West Potomac Park
60. White House
61. The Wharf at Southwest Waterfront
62. Yards Park

*This map shows parks and open space in Washington, DC that are referenced in this element.


Steven Markos
Prince William Forest Park


Eleanor Craig
Chesapeake & Ohio Canal National Historical Park


Catalina Calachan
Gerorgetown Waterfront Park


NPS
Fort Dupont Park


Hiking Upward
Great Falls Park

Parks and Open Space Categories

In this element, parks and open space are discussed under one, and often several, of the following broad categories.

Cultural Landscapes

Geographic areas associated with a historic event, activity, person, or exhibiting characteristics of a specific design style or aesthetic values. These landscapes were affected, influenced, or shaped by human involvement and consist of natural and constructed elements.

Natural Parks

Protected natural or semi-natural areas—including terrain features, forests, wetlands, stream valley, or tributary parks, wildlife refuge areas, easements and conservation areas—that help preserve, protect, or restore the natural environment, natural ecosystems, vegetation, and wildlife.

Waterfront Parks

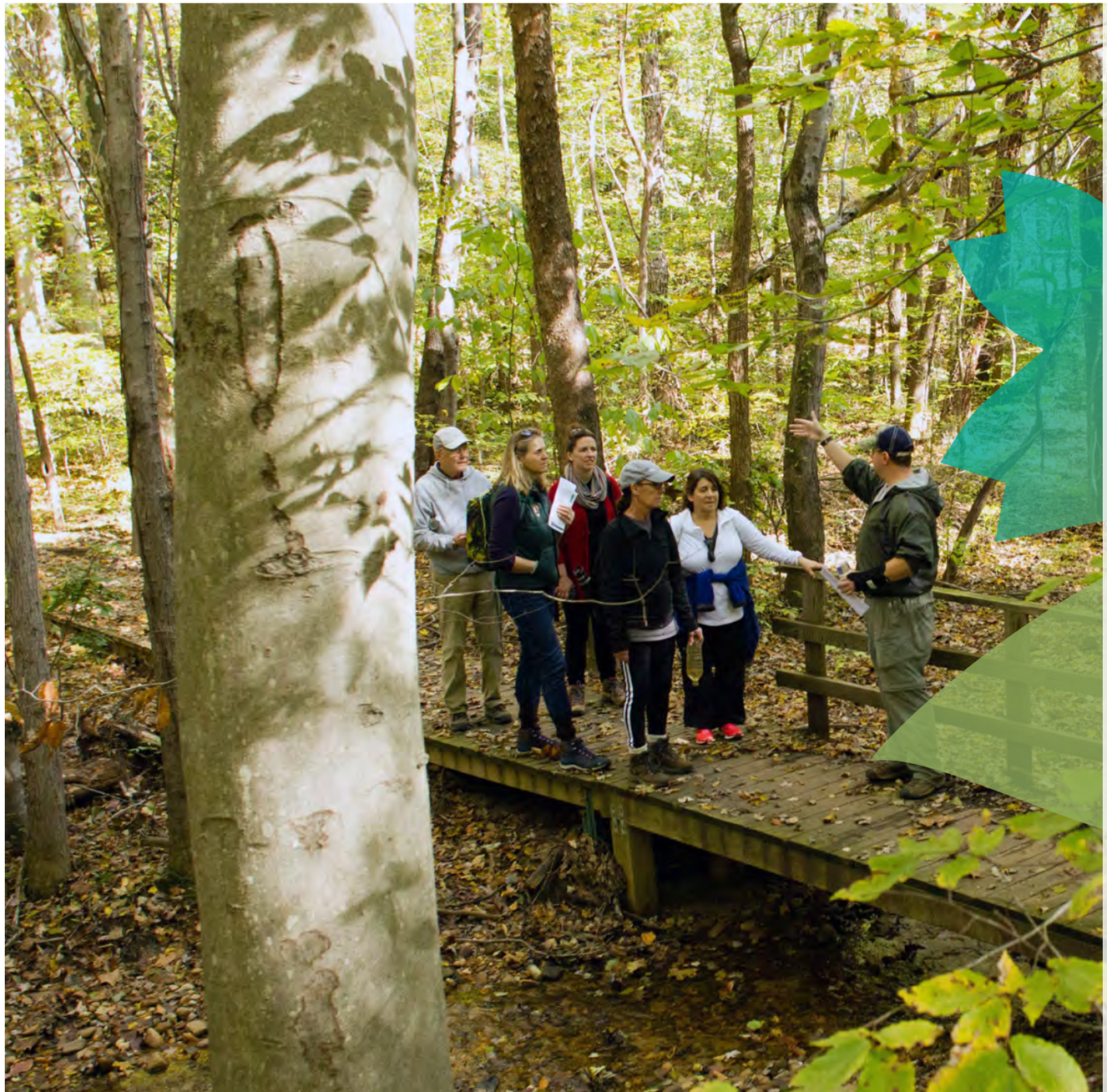
Rivers and waterways including public space along rivers and waterways that often incorporate water-related activities.

Recreation Parks

Parks that accommodate outdoor recreation activities such as designated areas for hiking, camping, picnics, athletic fields, pools, skating rinks, and playgrounds.

Trails, Parkways, and Greenways

Designated linear routes used by motorists, bicyclists, or pedestrians, or linear habitat corridors that follow natural or constructed features.



Guiding Principles

This element provides policy guidance to protect, enhance, and help shape the region's parks and open space while balancing federal and local interests. The following guiding principles serve as the element's organizational framework. These principles reflect current issues, trends, challenges, and opportunities faced by parks and open space in the region. Together they create a cohesive vision through improved stewardship, utilization, maintenance, planning, and design and may apply to more than one parks and open space category. In addition, the Federal Urban Design, Historic Preservation, Environment, and Visitors & Commemoration Elements have related policy guidance.

Section A

Protect the Historic Features of Parks and Open Space

The Plan of the City of Washington (the L'Enfant and McMillan Plans) influenced the parks and open space network that is the foundation of Washington's nationally recognized character. As the nation's capital and surrounding region grew, subsequent planning and design eras contributed to its parks and open space design legacy. Many historic parks and designed landscapes are important cultural resources of landscape and architectural significance. Several of these natural and constructed elements also feature scenic viewsheds that contribute to the region's aesthetic quality and enhance the visitor experience. Protecting these parks and their significant features, while considering modifications for contemporary uses, requires balancing multiple interests with user needs and understanding a park's local and regional context.

Section B

Encourage Stewardship of Natural Resources

As a major landholder and manager of parks and open space across the region, the federal government has an important role in protecting and managing these natural resources for future generations. The federal government's stewardship role also includes protecting landscapes for their scenic and aesthetic values. Past and current plans take advantage of the region's topography and natural settings, with many parks and open spaces encompassing unique terrain features and a variety of natural areas such as wetlands, stream valley areas, floodplains, and forests. The natural resources within parks and open space face development-related challenges that need protection from overuse; changing environmental conditions; fragmentation of habitat corridors; stormwater run-off; and invasive plant species.

Section C

Balance Commemorative Works within Parks

One of the unique characteristics of the parks and open space system in the nation's capital is the role of commemorative works. Effectively balancing commemorative requirements with other important park uses is critical to creating successful public spaces. Memorials are often located in national parks and are important elements of prominent viewsheds. Often, larger memorials include several commemorative components consisting of landscape and built elements. Size and scale is an important consideration when planning and designing memorials as space becomes harder to find. Many memorials are located within urban parks that also function as recreation and public gathering areas. These places have to balance quiet areas for contemplation with the need for space for other activities. This approach is central to creating both a successful memorial and a welcoming park. In addition, as new memorials are increasingly located beyond the monumental core, there will be a need to balance the function of neighborhood parks with commemorative functions.

Section D

Improve Access to, and Connections between, Parks and Open Space

Providing access to and through parks is key to linking parks with surrounding communities and visitors, and expands opportunities for different park experiences. Connecting parks and open spaces together reinforces and builds a regional park system. In regional parks systems, such connections support the need for wildlife corridors. Access to, and connections through, federal parks and open space vary significantly, and are often driven by security and agency mission. Improving access and enhancing connections includes improving physical and visual connectivity and filling the gaps in the existing system. It requires a shift from thinking of parks and open space as isolated spaces to planning how the park system functions as a whole. It also requires recognizing how streets, sidewalks, trails, and plazas complement and connect parks and open space and facilitate movement within the system.

Section E

Balance Multiple Uses within Parks

As the region continues to grow, there will be additional demands on parks and open space to accommodate more people and a greater variety of uses and programs. In addition to public assembly, celebration, education, and recreation, parks and open space provide ecological and environmental benefits, mitigate changing environmental conditions, serve as settings for commemorative works, and function as transportation and wildlife corridors. Some parks suffer from overuse while others are under-used due to barriers that limit access; lack of park amenities; perceived lack of safety; inadequate signage; and poor maintenance. It is important to address these challenges, and more effectively use and program our parks to address growing and changing demands, while still protecting their natural and cultural resources.

Section F

Build a Cohesive Parks and Open Space System

Parks and open space cross jurisdictional boundaries and have multiple agencies or stakeholders involved in various aspects of planning, preservation, management, and maintenance. Building partnerships and improving coordination among stakeholders is imperative to improve the park system's quality and achieve joint goals and objectives for a cohesive park and open space network. Encouraging collaboration among federal and local agencies, along with engaging communities and other stakeholders, further encourages flexibility and creativity in the design, use, and maintenance of parks.

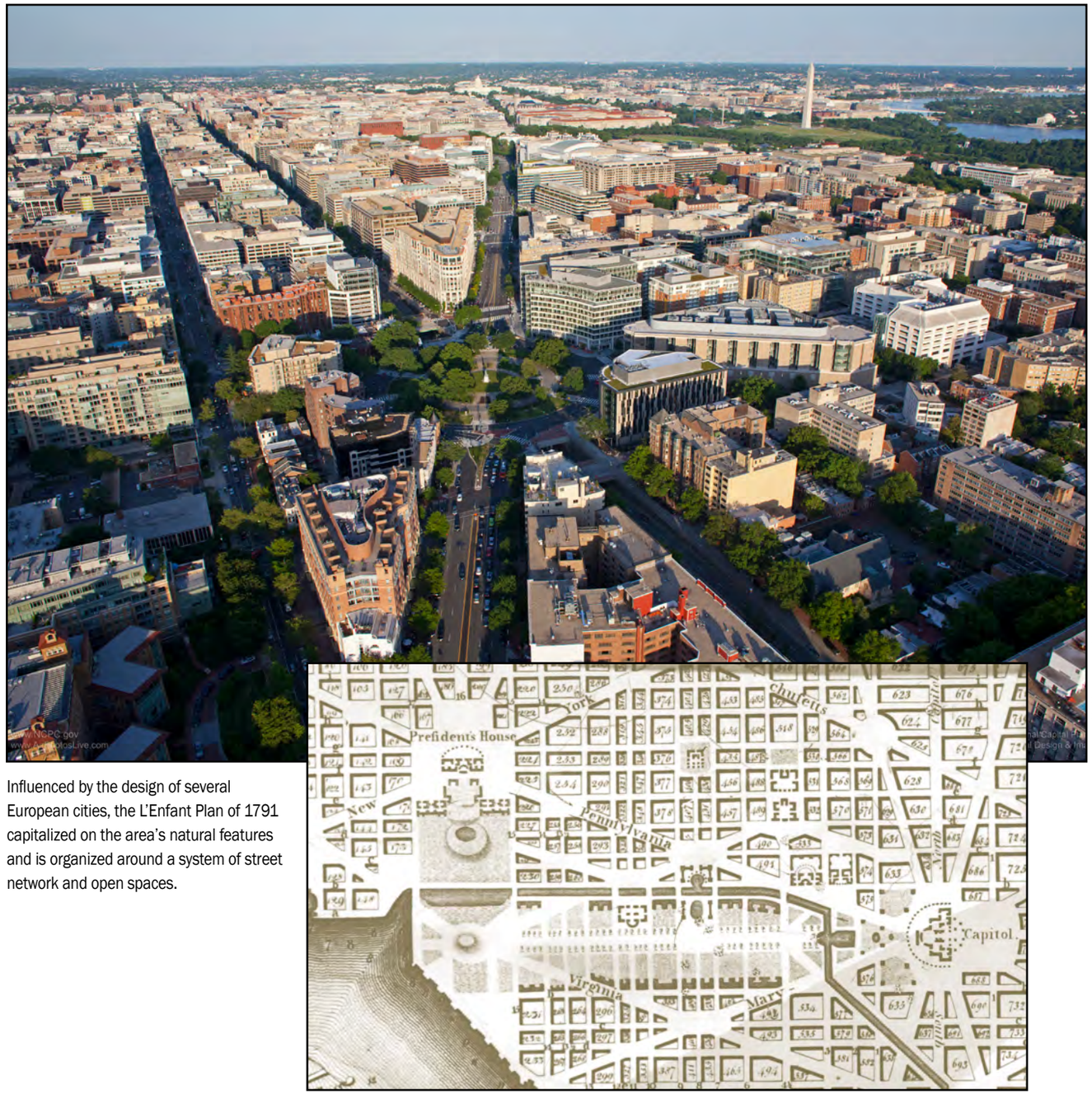
Section A. Protect the Historic Features of Parks and Open Space

The parks and open space system includes a variety of historic features that reflect different periods and provide a variety of visitor experiences. The small urban parks that resulted from the L'Enfant Plan, and natural parks, with historic resources such as Piscataway Park in Maryland, reflect the evolution of the region and different aspects of its history. This policy section provides guidance on protecting the historic features of parks and open space while also acknowledging the need to accommodate contemporary functions.

A.1 History of Parks and Open Space

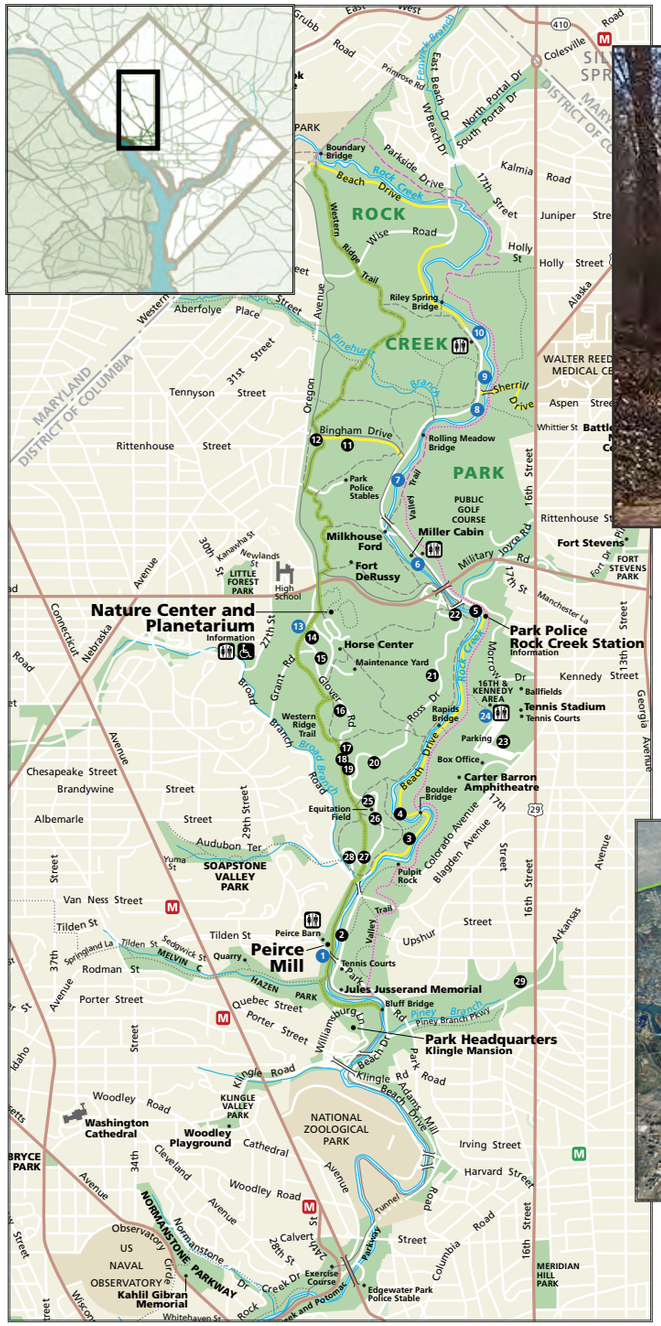
A.1.1 L'Enfant Plan Era: 1800-1850

The L'Enfant Plan centered Washington within a distinctive topographic bowl, accentuating the natural beauty of the rivers and allowing extensive views from the surrounding elevated ridges. The L'Enfant Plan, organized around a street network and open spaces, established a physical and visual hierarchy that still defines the shape of parks and open space today. It set the foundation and a vision for many of the capital's most important park areas including large reservations such as the National Mall, the U.S. Capitol grounds, and President's Park, and smaller reservations resulting from the intersection of avenues and streets. The plan's geometric form resulted in green space, including circle, square, and triangle parks found at streets transected by wide, park-like, diagonal avenues. One of the plan's central ideas was that the parks would feature fountains, monuments, memorials, and other features of civic art. Examples include Farragut Square, McPherson Square, Dupont Circle, Franklin Park, Lafayette Park, Lincoln Park, and Stanton Park, as well as many smaller neighborhood triangular parks.



Influenced by the design of several European cities, the L'Enfant Plan of 1791 capitalized on the area's natural features and is organized around a system of street network and open spaces.

Digital Design and Imaging Service



In 1890, Rock Creek Park became one of the first federally administered natural park preserves. The park protects the rugged terrain, steep bluffs, side slopes, ridgelines, terraces, deep ravines, and narrow floodplains of Rock Creek and its tributaries.



DC Fray



The Highway Plan of 1893 established a street structure outside the L'Enfant City, utilizing boulevards and parkways to link the area's large parks and open space into a regional network.

A.1.2 Civil War/Victorian Era: 1850-1900

Several of the L'Enfant Plan recommendations were implemented after the Civil War when the city experienced significant population growth. Interest in making the National Mall the nation's public park led to Andrew Jackson Downing's plan, which departed from L'Enfant's original design. It envisioned individual parks connected by curvilinear walks and drives and further defined with trees. Downing's plan was executed at the President's Park Ellipse and Lafayette Park. During this time, Washington aspired to be a worthy capital by repairing wartime damage and improving infrastructure and public spaces with amenities and tree plantings. The U.S. Army Corps of Engineers (USACE) embarked on the systematic construction of roads, parks, and open space as envisioned in the L'Enfant Plan. Public space improvements provided for landscaping in the rights-of-way and the creation of park reservations along avenues. These improvements also added a more pedestrian scale to the sidewalks, parks, and plazas.

In 1873, Congress commissioned Frederick Law Olmsted, Sr. to design the grounds of the U.S. Capitol. He proposed a marble terrace that wrapped around the buildings north, south, and west facades and designed a landscape that complemented the building's classical structure. His symmetrical design incorporated park-like edging, low walls, lamps, trees, shrubs, and a series of curved walkways that provided views of the Capitol. Olmstead was also instrumental in designing the National Zoological Park as part of Rock Creek Park. Established by Congress in 1890, Rock Creek Park was one of the first national parks. Today it is one of the largest natural urban parks in the United States.

As Washington grew beyond the original L'Enfant City, new development often included features of the L'Enfant Plan such as circles, small pocket parks, and the street grid layout. The Highway Plan of 1893, developed by Olmsted and his firm, took its cue from the L'Enfant Plan and established a coordinated street structure outside of the boundaries designed by L'Enfant. It utilized boulevards to connect the city's large parks and open space. It also located winding parkways that responded to the topography and extended them into a regional network. Examples include Nebraska Avenue from Rock Creek Park to the Potomac River; the alignment of Minnesota Avenue parallel to the Anacostia River; and the location of MacArthur Boulevard and Alabama Avenue along significant topographic features.

A.1.3 McMillan Plan Era: 1900-1950

The McMillan Plan of 1901-02, developed under the influence of the City Beautiful Movement, reinforced the L'Enfant Plan's vision, established a neoclassic architectural style within the monumental core, and called for a comprehensive public park system throughout the region. It formalized the layout of the National Mall, proposed major memorials on its western and southern ends, and grouped museums and public buildings along the north and south. In accordance with the McMillan Plan, the USACE dredged the Potomac and Anacostia Rivers to create East Potomac Park. Similarly, the hydraulic dredging of the swampy area southwest of the Washington Monument resulted in the creation of West Potomac Park. Several elements of the McMillan Plan constructed over the next quarter-century include the Lincoln Memorial, Arlington Memorial Bridge, and Union Station.

The McMillan Plan also recognized opportunities presented by Civil War forts, once a part of the defenses of Washington, located along the Washington escarpment. The federal government acquired several and incorporated them into the park system during this time. These include Fort Bayard, Fort Stevens, Fort Stanton, Fort Slocum, Fort Mahan, and Fort Reno. These sites, linked by green corridors, were envisioned as a parkway known as Fort Circle Drive. Although the drive was never completed, these historic fort earthworks and their associated parks are a significant open space asset for the nation's capital.

The McMillan Plan also proposed a linked system of public parks and open space to ensure access to green space throughout the city. During this period, land acquisition by the federal government helped expand the park system. These include Glover-Archbold Park, Anacostia Waterfront Park, and numerous smaller parks such as Meridian Hill Park. Other important land acquisitions and land transfers at this time include Carter Barron Amphitheater in Rock Creek Park, Theodore Roosevelt Island, Kenilworth Aquatic Gardens, Soapstone Valley Park, and Dumbarton Oaks Park.

At the same time, the federal government also gave considerable thought and action to a regional park system. The McMillan Plan proposed the acquisition of new park areas in the form of scenic drives and parkways along the area's rivers and streams. Rock Creek and Potomac Parkway was one of the first scenic drives. It connected West Potomac Park, the National Zoo, and Rock Creek Park.

With an emphasis on the development of a greater national capital park system, in 1924 Congress created the National Capital Park and Planning Commission (NCPPC, currently known as NCPC) to develop a comprehensive, consistent, and coordinated plan for the National Capital Region. The region included Washington, DC; Montgomery and Prince George's Counties in Maryland; and Arlington, Fairfax, Loudoun, and Prince William Counties in Virginia. The groundwork for a carefully designed system of regional parks was given legislative approval by the passage of the Capper-Cramton Act of 1930[6]. The act charged NCPC with "conservation of important natural and historical features" in the region. It authorized funding to help acquire and protect stream valleys and to assemble parcels for proposed parkways. Funds from this act were used to acquire land for the George Washington Memorial Parkway, for the extension of Rock Creek Park (as Rock Creek Regional Park) into Maryland, for the extension of the Anacostia Park System (put under the jurisdiction of the National Park Service in 1933), followed by Kenilworth Park and Aquatic Gardens in 1938. It also set the stage for the development of Anacostia Park where the USACE constructed a seawall on the banks of the Anacostia, dredged the river bottom, and used the sediment to fill in the wetlands behind the wall.

Several other land acquisitions during this time added valuable resources to the park system and extended the park system in the region. These include the Chesapeake & Ohio Canal, Fort Washington, Greenbelt Park, Prince William Forest Park, and Catoctin Mountain Park.





The McMillan Plan reinforced the L'Enfant's Plan's vision within the monumental core and called for a comprehensive public park system throughout the region. The plan recognized opportunities presented by the old Civil War defenses ringing the city along the escarpment of hills that form the topographic bowl.

A.1.4 Post-World War II Era: 1950-1973

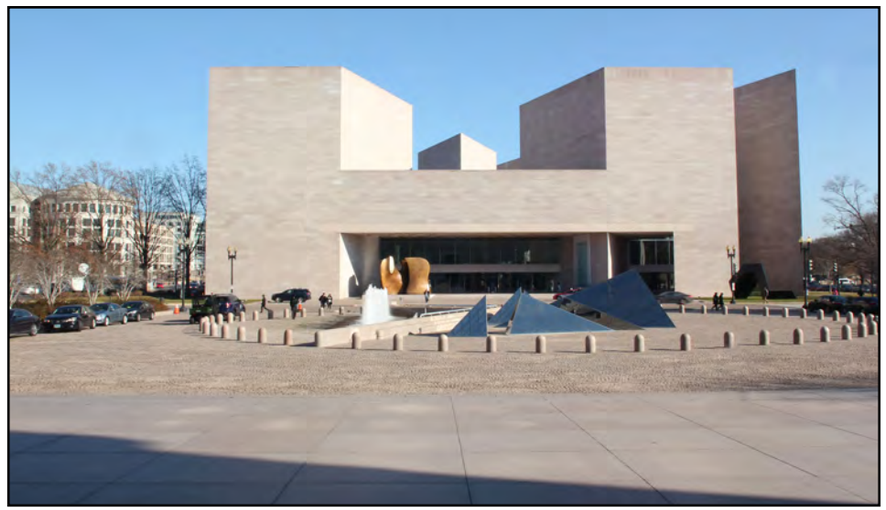
During the post-World War II era, the park system grew and evolved as the region expanded. The influx of federal office spaces in Washington and placement of federal facilities in the outer reaches of the region influenced the role and function of parkways. Parkways served as transportation routes; provided a dignified approach to the capital; connected the region's parks, workplaces, and housing; and provided environmental benefits by protecting stream and canal corridors from degradation and providing flood control. The Baltimore-Washington Parkway ran through Greenbelt Park and linked major federal facilities such as Fort Meade and the Beltsville Agricultural Research Center to Washington, DC. Similarly, Suitland Parkway was envisioned as a national defense highway, linked Andrews Air Force Base to Washington.

The mid-twentieth century saw refocused planning, urban renewal efforts, and the advent of design movements that combined functionalism with aesthetic ideals and rejected historical precepts and styles. Southwest Washington is an example where entire neighborhoods were transformed, with both buildings and landscapes rebuilt with a modernist vocabulary utilizing constructed materials, such as concrete, for open plaza areas between buildings, and simple plantings and vegetation were used in green spaces. The 10th Street Promenade and Overlook, now Banneker Park, were components of an urban renewal program in Southwest Washington. New civic and memorial construction projects utilized the tenants of the modernist movement. Significant modernist landscapes include the National Gallery's East Wing Plaza, portions of L'Enfant Plaza, areas within the National Zoo, the Hirshhorn Sculpture Garden, and master plans for the National Arboretum, Pennsylvania Avenue, and Arlington National Cemetery.

Towards the end of the 1960's, the importance of environmental planning was recognized, and an increased awareness about historic preservation began to influence how parks were used and rehabilitated. Many of the parks identified by the L'Enfant and McMillan Plans were located along stream valleys, steep slopes, and rivers, and were acknowledged as important natural resource areas. With an intent to strengthen the public's appreciation for natural history and to recognize sites for their exceptional scenery, rarity, and diversity, Congress passed the Land and Water Conservation Fund in 1964. Similarly, the passage of National Historic Preservation Act in 1966 laid the groundwork for historic properties and landscapes to be included to the National Register of Historic Places. Over the years, several landscapes were nominated including L'Enfant and McMillan Plan circles and squares, the Civil War Defenses of Washington park system, and Kenilworth Aquatic Gardens. Landmarks in the region outside of Washington, such as Fort Washington, were also included.



In 1986, in honor of the Bicentennial of the U.S. Constitution, President Ronald Reagan issued a proclamation making the gardens a living legacy tribute to the Constitution.



The modernist landscape of the National Gallery of Art's East Wing Plaza connects the classical west wing to the modernist east wing.

In 1970, in preparation for the nation's Bicentennial, funding increased for park improvements including infrastructure, historic preservation, interpretation, and visitor services. Several park areas relevant to the Bicentennial benefited from the program including a master plan for the National Mall, development of Constitution Gardens, plans for Pennsylvania Avenue, and regional efforts such as restoration of the Chesapeake & Ohio Canal, including its locks and towpaths. The program also aimed to improve neighborhood parks by adding basketball courts, softball fields, and other amenities. Skating rinks were built in Anacostia and Fort Dupont Parks, bike trails added at some Civil War Defenses of Washington, picnic areas at Fort Stanton, and tot lots at Fort Totten.

A.1.5 Post Home Rule Era: 1973-Present

Up until Home Rule, the federal government was responsible for planning and managing all of Washington's park spaces. In this capacity, the park system served both local and national needs, designating recreational centers and envisioning connected, open public spaces on federal facilities. When the Home Rule Act of 1973 established self-governance for the District of Columbia, the federal government transferred some public land deemed not nationally significant to the District government. More commonly, there were transfers of jurisdiction where the federal government retained ownership yet allowed the District to use the sites for specific purposes such as parks and recreation, education, or transportation. Many of the properties transferred to the District were recreational facilities or open spaces associated with schoolyards, fields, streets, and recreational centers. These sites, managed by several different District agencies, reflected changing administrative structures and responsibilities.

While the preceding decades of park acquisition and design development laid the groundwork, the late 1970's saw an increased appreciation for the identification, interpretation, and conservation of cultural landscapes. Since Home Rule, with a shift from acquiring park space, the federal government and the District collaborated to maximize resources; maintain and improve parks; and create a stronger park system. An example of such collaboration was the Anacostia Waterfront Initiative that led to the *Anacostia Waterfront Framework Plan* in 2003. It brought together District and federal agencies to develop a vision for the future of the Anacostia waterfront. The ongoing 30-year effort recognized the Anacostia River as an important resource for the region.

In 2014, to plan for future changes along Pennsylvania Avenue as part of its dual role for the city and nation, NCPC, NPS, the General Services Administration (GSA), and the District launched the Pennsylvania Avenue Initiative. The portion of the Avenue that runs between the U.S. Capitol and the White House is a National Historic Site that includes a number of commemorative elements, parks, and plazas, as well as grand streetscape framing iconic views to the Capitol. The ongoing initiative builds upon the 1974 *Pennsylvania Avenue Plan* that adapted L'Enfant and McMillan Plan principles to the post-war urban development and envisioned the avenue as an urban boulevard and civic event destination for the nation's capital.



Mayor's Office on Asian and Pacific Islander Affairs

Chinatown Park, Washington, DC



Established in 1918, Anacostia Park recently celebrated its centennial. The park offers educational, recreational, and community opportunities in the heart of Washington.

A.2 Protect Cultural Resources and Landscapes

The region's parks and open space system includes cultural resources and landscapes from all the eras previously described. Cultural resources are physical evidence of past human activity: a site, object, landscape, structure; or a site, structure, landscape, object or natural feature of significance to a group of people traditionally associated with it. Types of cultural resources often found in parks and open space include archaeological resources, historic structures, cultural landscapes, and ethnographic resources.

In Washington, the L'Enfant Plan is the foundation of many urban parks, and rehabilitation and protection of these landscapes is a priority. Similarly, many parks in the region are cultural landscapes that contribute to the area character and setting of the area; reflect architectural and landscape legacies of national and regional significance; and protect viewsheds that contribute to their aesthetic quality, historic significance, and visitor experience. The most recognized cultural landscape in the region is the National Mall. It is often a venue for national celebrations, special events, First Amendment activities, and many types of recreation. To protect the Mall's resources and open space, large events, gatherings and celebrations that are not mandated by law, should be considered at other suitable locations in the monumental core or region.

Other regional cultural landscapes range in size from small urban triangle parks to Rock Creek Park, Chesapeake & Ohio Canal National Historical Park, the Manassas National Battlefield Park, and the Civil War Defenses of Washington.

Most designed and vernacular landscapes are intricately connected to natural resources including land, air, water, vegetation, and wildlife. This connection to natural resources distinguishes cultural landscapes from a historic building. As noted in the Urban Design Element,[7] the natural setting heavily influenced the Capital's design and layout by creating parks and green settings that surround important federal buildings and civic spaces. Protecting both the natural features and constructed elements of cultural landscapes is critical to preserving their historic and aesthetic values.



Chesapeake & Ohio Canal National Historical Park provides a place to enjoy nature and recreation, but most importantly, it tells the story of the canal's important role in the nation's history.

It is important for the federal government to protect the historic features of parks in the region and balance the contributions of different design eras and major plans with improvements that allow this critical network to function for current uses. Similarly, federal agencies have a responsibility to protect these resources and evaluate impacts from development proposals. The responsibility to protect valuable viewsheds extends to cultural resources including the scenic quality and character of the area surrounding them. The treatment and management of cultural landscapes needs to be in concert with individual park management plans, historic structures reports, and cultural landscape reports.

The federal government should:

POS.A.1 Rehabilitate, protect, and, where feasible, enhance historic designed landscapes and civic streets, including squares, circles, and triangles associated with *The Plan of the City of Washington* (The L'Enfant and McMillan Plans).

POS.A.2 Protect and maintain both the north-south and east-west cross-axes of the National Mall and its historic landscape as a complete work of civic art.

POS.A.3 Protect the resources and open space qualities of the National Mall and other heavily used parks by encouraging outdoor cultural events, gatherings, and celebrations to take place at other venues throughout the monumental core and the National Capital Region.

POS.A.4 Preserve and maintain cultural landscapes, including their natural and constructed elements.

POS.A.5 Protect and maintain cultural landscapes as important architectural and landscape legacies of national and regional significance.

POS.A.6 Protect the character of parks and open space with significant cultural or natural resources that contribute to the National Capital Region's setting.

POS.A.7 Protect or restore viewsheds that contribute to cultural landscapes and the aesthetic quality, historic significance, and visitor experience of the parks and open space system.

Cultural Landscapes

NPS defines four types of cultural landscapes.

1. Designed Landscape: A landscape consciously designed or laid out by a landscape architect, master gardener, architect, or horticulturist according to design principles in a recognized style or tradition. The landscape may be associated with a significant person(s), trend, or event in landscape architecture; or illustrate an important development in the theory and practice of landscape architecture. Aesthetic values play a significant role in designed landscapes. Examples include parks, campuses, and estates.

2. Vernacular Landscape: A landscape that evolved through use by the people whose activities or occupancy shaped that landscape. Through social or cultural attitudes of an individual, family or a community, the landscape reflects the physical, biological, and cultural character of those everyday lives. Function plays a significant role in vernacular landscapes. They can be a single property such as a farm, or a collection of properties such as a district of historic farms along a river valley. Examples include rural villages, industrial complexes, and agricultural landscapes.

3. Historic Site: A landscape significant for its association with a historic event, activity, or person. Examples include battlefields and president's homes.

4. Ethnographic Landscape: A landscape containing a variety of natural and cultural resources that associated people define as heritage resources. Examples are contemporary settlements, religious sacred sites, and massive geological structures. Small plant communities, animals, subsistence, and ceremonial grounds are often components.



U.S. National Arboretum



Steven Markos

Piscataway Park



NPS

Frederick Douglass National Historic Site

A.3 Adapt Designed Landscapes Sensitively

While Washington is largely known for its neoclassical architecture and landscapes that reflect the visions of the L'Enfant and McMillan Plans, it is also influenced by other eras that contribute to the city's nationally recognized design character. These include the Italianate landscape of Meridian Hill Park; landscapes in the Victorian Garden tradition like President's Park; and Modernist landscapes like Constitution Gardens or the Franklin Delano Roosevelt Memorial. Other parks and plazas designed in the Modernist and Post-modern period include landscapes along the Southwest Waterfront such as Banneker Park, and public spaces along Pennsylvania Avenue such as Freedom Plaza, Pershing Park, and Marshall Park.

As some architectural and landscape design styles become less influential, how to retain their best examples becomes a question posed by historic preservationists and urban planners alike. Concurrently, it is also important to consider programmatic changes, user needs, and changes to the surrounding area when making adaptations to such landscapes.

Designed landscapes face various pressures, ranging from alterations in the surrounding areas to changes in their use and management. Redevelopment on adjacent parcels, for example, can influence a landscape's use, access, and circulation patterns. Changes can include a new development, introduction of barriers such as highways and bridges, new traffic patterns that make pedestrian access difficult, or security features such as bollards or planters that modify pedestrian routes. An example where the function and use of a designed landscape has evolved over time is Banneker Park, originally designed as the terminus of 10th Street, SW. As a result of new development along the Southwest Waterfront, and anticipated increases in pedestrian and bike traffic, a new stairway and ramp were added to Banneker Park in 2018 to improve an important pedestrian connection between the National Mall and the waterfront.

Physical changes are not the only catalysts driving adaptation for designed landscapes. As urban environments develop and become denser, demographics shift and so does the public's expectations of the spaces they use to recreate, commemorate, and gather. As a result, designed



Curbed DC

Meridian Hill Park



U.S. Capitol Grounds and The National Mall



Pershing Park



Henry Arnold

Banneker Park

landscapes and the needs they serve have to evolve as well. Many of these urban spaces need to accommodate changes in use, new programmatic goals, infrastructure improvements, modified funding, and ongoing maintenance issues. For example, in 2014 Congress authorized the incorporation of a national World War I memorial into Pershing Park, an urban park along Pennsylvania Avenue. As a result, modifications to the park's original design will incorporate a commemorative element and associated contemplative space.

Recent improvements to the National Mall respond to the types and intensity of use and highlight how landscapes must adapt. The National Mall is a place for national celebrations, parades, festivals, ceremonies, and rallies, as well as local and regional events. Over time, events contributed to the Mall's deterioration, which resulted in worn turf, heavily compacted soil, and poor drainage. As one of the preeminent public spaces that hosts events of national significance, the National Mall needs to be able to accommodate large numbers of people flexibly, efficiently, and sustainably. The improvements completed in 2016, as recommended in the *National Mall Plan*, included widening walkways and paved areas to improve circulation, better accommodate public events on hard surfaces, and protect lawn and landscapes areas.

Irrespective of the forces driving the need to modify a designed landscape, it is important to consider and evaluate key issues before determining if restoration, rehabilitation, or redesign is the appropriate treatment. This evaluation can also help clarify the history and evolution of a landscape, the original intent behind the design, its current use pattern, and its local and regional context.

In addition, modifications need to consider a variety of users, incorporate seating and shaded areas, promote opportunities for social interaction, and maintain physical and visual connectivity to surrounding areas. Many designed landscapes represent a particular time and context that may be important to acknowledge when considering modifications or improvements.

The federal government should:

POS.A.8 Balance significant and sometimes differing planning principles and design features, along with elements from different eras, when adapting designed landscapes to meet contemporary programmatic goals and user needs.

POS.A.9 Recognize the value of more recent landscapes with special design and/or cultural significance. Maintain a sense of historic continuity and evolution by preserving park and landscape characteristics that represent different eras and styles.

POS.A.10 Recognize that the original design intent may remain relevant for some landscapes due to their planning, design, cultural, and/or historic significance. Consider the original design intent when making adaptations or improvements to designed landscapes.

POS.A.11 Maintain and improve a strong physical and/or visual connectivity with the surrounding neighborhood context when making adaptations or improvements to designed landscapes.

POS.A.12 Reinforce Washington's design evolution, grounded in the L'Enfant and McMillan Plans, and the distinguishing characteristics of designed landscapes when making adaptations to address contemporary needs and/or changes in use, access, and maintenance.

Key Considerations to Assess Designed Landscapes

To be consistent, consider the following—in both context and of the existing space and the proposed improvements—when assessing a designed landscape.

1) Use of Space

Understand how the current use and users evolved over time. Compare how the needs of existing users, along with a proposed/modified user group, help define scope, program, and proposed improvements.

2) Design Characteristics

Identify the existing design characteristics, including site elements, style, and amenities that help define the character and role of the unique landscape. Compare the existing conditions against the proposed improvements to understand the programmatic changes and their potential impacts.

3) Original Design Intent

Consider information regarding the original design, including the spatial orientation of the site, style, and site elements, when evaluating proposals.

4) Design Context

Evaluate how the surrounding context of a landscape—including adjacent land-use, demographics, physical and visual characteristics— can influence the perception, and use of a specific site. Use this context to inform how the landscape responds to, and fits within, its surroundings.

5) Performance and Maintenance

Understand the overall performance and function of an existing landscape to help determine inherent design issues and maintenance limitations. Use this information to improve the existing design, or to inform the new design of site systems such as stormwater management, water features, and a site's resilience with respect to climate conditions.

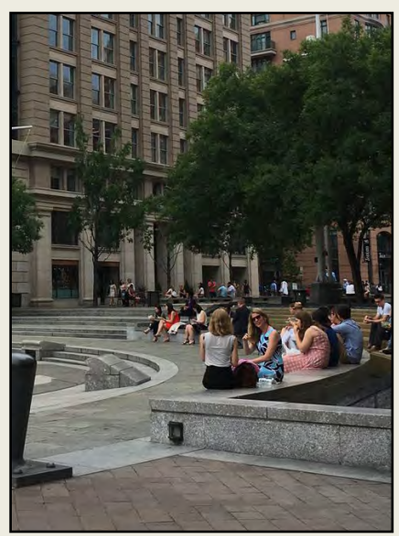
6) Historic and Cultural Significance

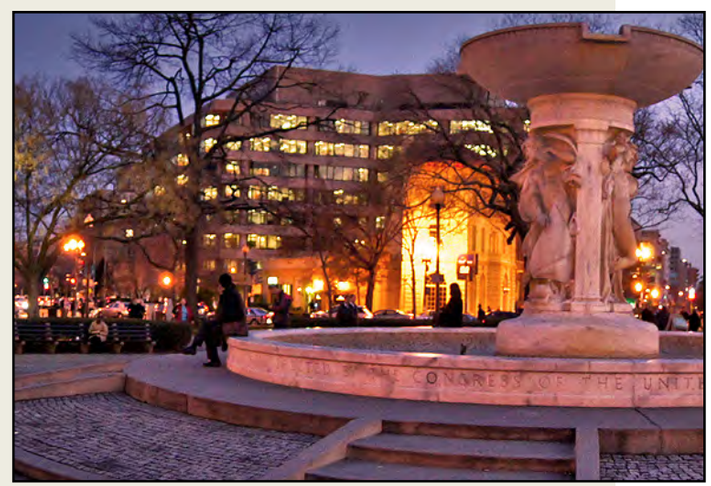
Consider the historic and cultural significance of a landscape when evaluating proposed improvements and modifications. This includes a site's character-defining elements, views, or viewsheds, any cultural traditions, and if the site is associated with a notable designer.





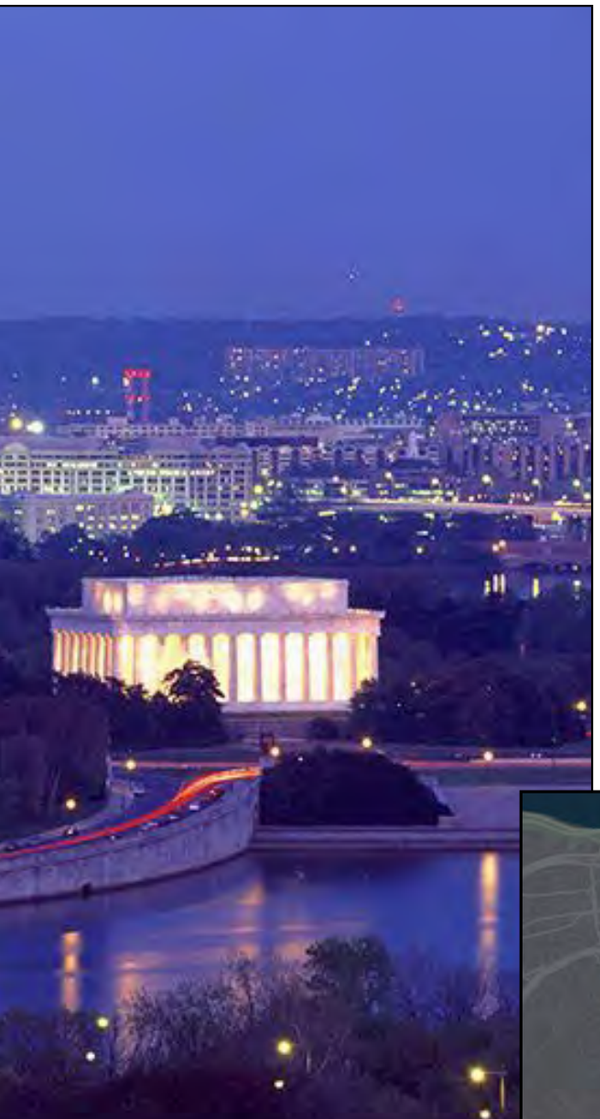








Washington's Nighttime Skyline



A.4 Sensitive Lighting of the Monumental Core Parks

Thoughtful nighttime illumination of the monumental core parks affords an opportunity to strengthen the identity and experience of the nation's capital. Lighting in these parks is not just important to ensure safety and visual comfort; it also plays a role in a city's image and nighttime experience. The capital's nighttime image is closely associated with the architectural lighting of significant civic landmarks that make it recognizable around the nation and world.

In Washington, DC, the five most prominent and iconic civic landmarks are the U.S. Capitol, White House, Washington Monument, Lincoln Memorial, and Jefferson Memorial. At night, these landmarks stand out due to their soft white architectural lighting and the contrasting relative darkness of the National Mall and adjacent park spaces. This contrast is part of an intentional lighting hierarchy that prioritizes them in the nighttime skyline. The John F. Kennedy Center for the Performing Arts, located along the northwest corner of the monumental core, is another prominent landmark and its architectural lighting plays an important role in the nighttime skyline.

Just as civic landmarks in the monumental core parks are distinct symbols of Washington, there are prominent monuments and memorials located in circle, square, and park reservations throughout the capital. These parks define prominent street intersections and contribute to the city's nighttime identity. It is important to consider lighting schemes that emphasize focal elements within these parks in addition to acknowledging the character and setting of adjacent land uses, surrounding natural and cultural resources, nearby historic properties, and important viewsheds.



As lighting technologies evolve, the ability to illuminate architecture and urban features is constantly changing. Technological advances allow for complex light installations, ease of manipulation, and a variety of colors and lighting levels. Sophisticated lighting designs are used for temporary special events and permanent applications. In order to protect Washington's nighttime image, careful consideration needs to be given to how multiple illuminated elements (illuminated signs, colored lighting, temporary event lighting, and bridge architectural lighting) affect parks and open space—including the natural environment—as well as the city's established lighting hierarchy and its nighttime identity.

The federal government should:

POS.A.13 Protect the image of Washington, along with the lighting hierarchy established by iconic civic landmarks including the U.S. Capitol, White House, Washington Monument, Lincoln Memorial, and Jefferson Memorial.

POS.A.14 Maintain the dark, minimally lit setting of the National Mall, East Potomac Park, Columbia Island, and adjacent parkland in order to highlight the lighting of the capital's iconic civic landmarks.

POS.A.15 Protect the nighttime image of Washington, including views to and from the cross–axes of the National Mall, when evaluating lighting proposals or considering the location and orientation of illuminated signs

POS.A.16 Minimize the cumulative effect of ambient illumination in the vicinity of monumental core parks.

Section B: Encourage Stewardship of Natural Resources

Parks and open space are valuable resources that help shape a sustainable, livable, and beautiful region. Their ecological functions help improve air and water quality; support better physical and mental health; provide habitat corridors and wilderness protection, and increase groundwater retention. Parks provide social value as gathering places for families, friends, and individuals of all ages and economic status. Urban parks are critical public spaces that provide opportunities for recreation and are essential to the quality of life. Neighborhood open spaces, such as community gardens and play lots, often serve a vital function in bringing people together, as well as educating communities about the value of green space.

Stewardship begins with understanding the value of existing resources; responsible use and protection; adopting sustainable practices; and communicating what individuals can do to be good stewards. Coordination among various federal agencies and surrounding jurisdictions is critical when managing parks and natural resources that cross jurisdictional lines. This policy section highlights the unique natural resources in the region and provides guidance to ensure their protection, appropriate usage, and enhancement for years to come.



FCVa

Great Falls Park protects the unique geological characteristics and scenic views of the Great Falls of the Potomac.

B.1 Natural Resource Areas in the Region

The region has a variety of resources that protect unique geological characteristics, native ecosystems, plant and animal habitats, and scenic landscapes. Some of these areas include terrain features, greenways, waterways, and stream valley parks.

B.1.1 Terrain Features

The region's terrain features are key natural resources areas that contribute to its character and setting. They include the escarpment of hills that form the topographic bowl surrounding the L'Enfant City,[8] the palisades and gorges along the Potomac River and Rock Creek, the Coastal Plain and Piedmont Plateau in which Washington is situated, and the mountains of the region's western and northwestern parts. The geology, terrain features, and variation in topography help create a wide variety of habitats for different plant and animal communities.

Lowland and rim features of the L'Enfant City and its environs form the topographic bowl. Its geographic boundaries are the Florida Avenue escarpment, Anacostia Hills, and Arlington Hills. The topographic bowl's forested ridgelines provide sweeping panoramic views of the monumental core. The natural juxtaposition of highlands and lowlands emphasized by extensive tree cover and tree lines contributes to the area's unique views and vistas, including those seen from topographic vantage points.

The region's topography and landscape reflect the geology of the Coastal Plain and the Piedmont Plateau. The low-lying, flat Coastal Plain is characterized by many shallow inland bays and meandering tidal rivers. Further west are the low, rolling hills



All Events

Manassas Battlefield Park, Virginia



Korrin Bishop

Soapstone Valley Park, Washington, DC

of the Piedmont Plateau. These hills are like stair steps to the higher mountains of the region to the west. Areas of typical Coastal Plain and Piedmont Plateau character are preserved at several federally owned sites such as the Beltsville Agricultural Research Center, Patuxent Research Refuge, Mason Neck National Wildlife Refuge, Baltimore-Washington Parkway, Fort Meade, Marine Corps Base Quantico, and Prince William Forest Park.

The palisades and gorges of the rivers and streams, including the Potomac Gorge and Rock Creek Valley, are areas of dramatic elevation changes where calm, upstream rivers and creeks converge at spectacular fall lines. The palisades and gorges are predominantly in their natural state, free of intrusive constructed forms.

The Blue Ridge Mountains, which include the Bull Run, South Catoctin, and Sugarloaf Mountains in the western and northwestern part of the region, rise above the gently rolling hills of the Virginia Piedmont to the east. Portions of these natural forested areas are visible from the region's suburban locations; for example, Sugarloaf Mountain is visible from northern Montgomery County.

B.1.2 Greenways

Greenways contribute significantly to the region's green setting, a defining characteristic. These natural resource areas are vegetated corridors of open space or undeveloped land that typically follow natural features, such as streams and ridgelines, or constructed features, such as abandoned railroads and utility corridors. They primarily function as environmental corridors that often accommodate contiguous circulation routes such as trails and narrow scenic drives. Examples of linear parks that function as greenways include Melvin Hazen Park, Soapstone Valley Park, Glover-Archbold Park, Anacostia River shoreline, and parts of the Civil War Defenses of Washington.

Greenways with trails enhance existing recreational opportunities and provide routes for alternative transportation. They traverse urban, suburban, and rural communities and are ideal for many recreational uses such as walking, bicycling, and horseback riding.

The abundant tree cover and vegetation along greenways provide a landscape and park setting that encompasses the urbanized areas of the capital city and extends to the suburbs of Maryland and Virginia. Within the city limits of Washington, they are primarily administered by NPS. As they transition out from the city, they are managed by state and local jurisdictions. Greenways, when managed as vegetated buffers with native vegetation, support local ecosystems. Similarly, greenways along streams and canals, improve water quality, reduce impacts of flooding in floodplain areas, provide wildlife habitat, and support migration corridors.

B.1.3 Rivers and Waterways

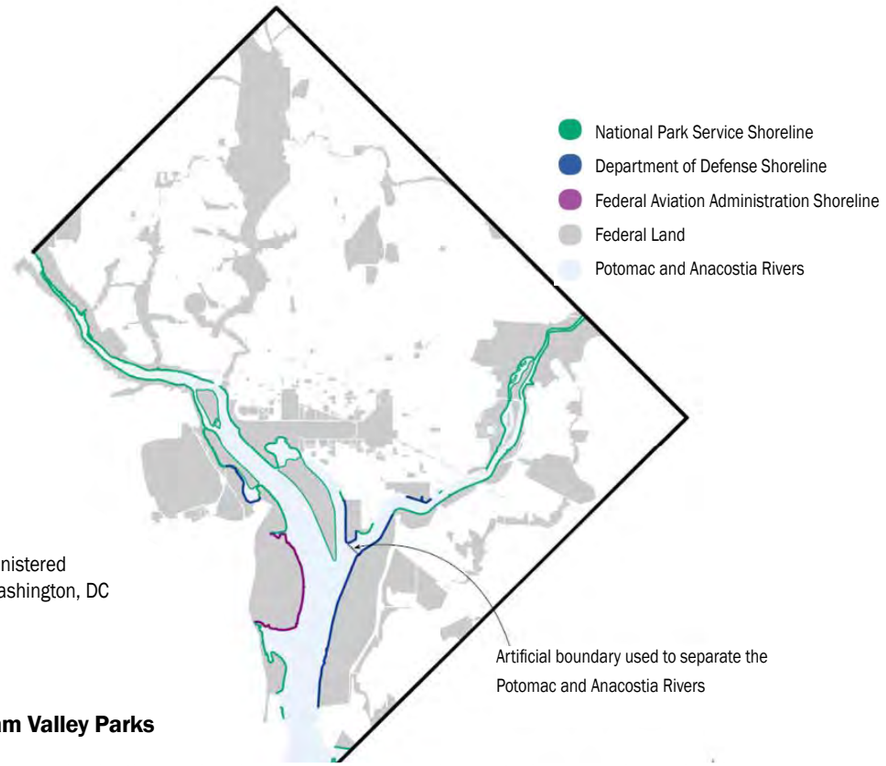
Rivers and waterways are resources that are valued for their recreational and scenic qualities. They also provide habitat for plant and animal species, protect native ecosystems, and are transportation resources. The Potomac and Anacostia Rivers, along with the Chesapeake Bay, are important water resources in the region. In Washington, the confluence of the two rivers forms a "Y" shape near Hains Point, part of East Potomac Park. Approximately 90 percent of the river shorelines in Washington, DC are on federal land.

The most common shoreline conditions found in the region include natural or semi-natural areas or constructed seawalls located along the water's edge. Natural shorelines are located in areas such as Kenilworth Park and Aquatic Gardens, and the coves and headlands south of Mount Vernon, Great Falls, Dyke Marsh, and the Gaps at Point of Rocks. These ecosystems are important open space resources that support significant aquatic life and shoreline habitat in addition to protecting watersheds, protecting land from storm surge, and filtering pollutants. Significant for their ecological quality and scenic character, these areas also offer unique recreational opportunities that are important in a dense urban environment.

Seawall conditions along the water's edge are located in areas of the National Mall (Tidal Basin and West Potomac Park), East Potomac Park, and along portions of the Anacostia River. The seawalls, levees, and landfill areas, which help manage excessive flooding, were a result of dredging a deep channel in the rivers. Erosion and aging, in addition to rising waters, often affects seawalls. Along the Anacostia River, the seawalls confine the river and limit its width during high and low tides, where vegetated wetlands might normally occur.

The region's shorelines are ecologically sensitive areas. Along with natural areas of the shoreline, riparian buffers, woodlands, and mature trees help protect steep slopes and floodplains, prevent erosion, and help prevent sediment and associated pollutants from reaching water bodies. Shoreline parks with a constructed seawall condition, like East and West Potomac Parks, the Tidal Basin, and Anacostia Park, also provide important recreational space and sometimes accommodate commemorative uses.

Waterfront parks in urban areas accommodate passive recreational uses, in areas such as Hains Point and Anacostia Park; and active recreational uses in areas such as Georgetown Waterfront Park. A number of non-federal waterfront locations also accommodate active recreation uses in the proximity of mixed-use private development, such as the Wharf at Southwest Waterfront. In contrast, federally administered waterfront parks are primarily programmed for passive uses, viewshed protection, and as commemorative sites. West Potomac Park and the Tidal Basin include a number of memorials. East Potomac Park is a site for future memorials but currently houses public golf, tennis, and swimming amenities. Hains Point, located at the southern tip of East Potomac Park, offers views of the Potomac River, Anacostia River, and the Washington Channel. The area is a popular destination for picnics.



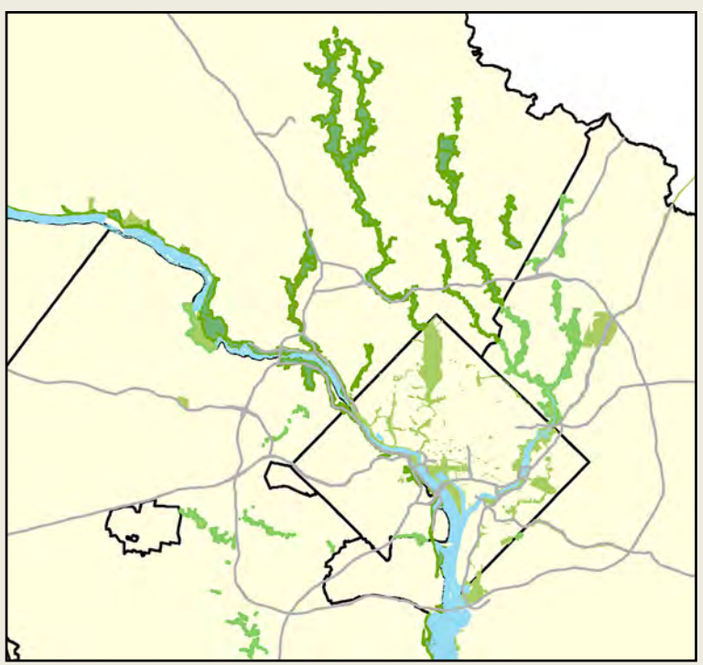
B.1.4 Stream Valley Parks

Stream valley parks in the region include natural and forested areas along rivers, streams, and tributaries. These natural resources are important for their ecological and scenic value. Their forested riparian buffers help filter nutrients, sediment, and other pollutants from entering streams; protect stream banks from erosion; slow the flow of water during storm events; provide shade; and prevent the water from becoming too warm for sensitive species. These parks also function as greenways, as their vegetated buffers along streams and canals, provide wildlife habitat and support migration corridors.

River and stream valley parks protect approximately 70 percent of Washington's floodplains and wetlands, 68 percent of the wooded areas, and 72 percent of land with steep slopes[9]. Parks protect most stream valleys, including Rock Creek, Oxon Run, and Watts Branch. Due to early planning efforts, federal funds allocated from the Capper-Cramton Act (CCA), help acquire and protect several stream valley parks in the region. NPS administers and manages the vast majority of the federally owned shoreline in Washington, DC. Furthermore, the legislation helped extend the Anacostia Park system further up the Anacostia River valley and set a mandate for NPS to preserve the flow of water and prevent pollution in Rock Creek and the Potomac and Anacostia Rivers. It called to preserve forests and natural areas along streams and rivers in the region.

Capper-Cramton Act

Along with allocating funds for a comprehensive park, parkway, and playground system in the nation's capital, the Capper-Crampton Act allocated funds for the acquisition of certain enumerated stream valleys in order to preserve land and to protect the water quality of the region's waterways. All land acquired outside Washington, DC was titled in the name of the individual state or designated park authority. Examples include Cabin John Creek, Paint Branch, Northwest Branch, and Sligo Creek. CCA preserved and protected more than 2,200 acres of stream valley parks in the National Capital Region. In addition to funding for acquisition, CCA authorized the National Capital Park and Planning Commission (now NCPC), to approve any development projects in parks acquired under CCA to ensure protection and preservation of the region's valuable watersheds and parklands in perpetuity.



Capper-Cramton Parks ensure protection and preservation of the region's valuable watersheds and parklands in perpetuity.

B.2 Stewardship of Natural Resource Areas

The federal government has an important stewardship role to protect many of the region's natural areas including forests, parkland, waterways, shorelines, wetlands, and riparian corridors.

B.2.1 Environmentally Sensitive Areas

Many natural areas are also environmentally sensitive as they provide habitat for plant and animal species and ensure sustainable ecosystems. They are vital to the long-term maintenance of biological diversity, soil, water, and other natural resources. Maintaining an interconnected system of protected lands and waters allows wildlife to follow natural migration routes with changing climate conditions. The region's shorelines are uniquely sensitive areas prone to erosion and flooding. Natural shoreline areas, riparian buffers, woodlands, and mature trees help protect steep slopes and floodplains, prevent erosion, and help prevent sediment and associated pollutants from reaching water bodies.

B.2.2 Resilient Shorelines

Along both constructed seawall conditions and natural shoreline areas, ongoing stewardship efforts can improve resiliency in the face of intense storms, manage fluctuating water levels, and reduce sewage and stormwater pollution. At Hains Point, the rivers often overflow along the seawall banks during high tide, covering adjacent paths with water. Constructed shorelines along Anacostia Park and the Tidal Basin house many commemorative sites and are important recreational spaces.

In areas where the seawalls are deteriorating, it is important to consider restoration techniques or vegetated natural shorelines that help manage fluctuating water levels and their impacts. Similarly, recreating wetlands, planting riparian buffers, and constructing living shorelines that use plants and other natural elements to stabilize the water's edge can further reduce erosion while simultaneously providing sediment removal and water quality improvement.

B.2.3 The Character and Setting of Capper-Cramton Parks

Capper-Cramton parks often incorporate environmentally sensitive areas, such as wetlands, steep slopes, and sensitive habitat areas along the region's rivers, waterways, and streams. The federal government's stewardship role derives from NCPC's review authority that includes overseeing Capper-Cramton park development projects to ensure continued protection and preservation of the region's valuable watersheds and parklands. Stewardship of Capper-Cramton lands requires coordination with local park partners and focuses on protecting the character and setting of these parks to ensure that any development or improvements are compatible with existing park uses. Projects that incorporate public benefits, such as improving the water quality of streams along with improving park accessibility and park resources, are encouraged.

Examples of compatible improvements include adding wetlands and meadow areas to a stream valley park, adding a multi-use trail to improve the regional trail network, or adding a footbridge and connector trail to improve access to an existing park. A majority of project improvements in Capper-Cramton parks fall under watershed management or stormwater management categories. When maintaining and replacing stormwater infrastructure, adding treatment facilities (such as green streets), or using green or natural infrastructure techniques helps maintain the park's natural character and setting. Use of bio-retention basins, bio-swales, and vegetation as stormwater solutions should be encouraged. Similarly, along streams, more natural streambank restoration techniques for slope protection and erosion control should be encouraged.



Anacostia Park

Anacostia Park, originally acquired with Capper-Cramton funds, is one of the largest recreation areas in the region. It encompasses approximately 1,100 acres of land composed of natural areas, cultural sites, managed waterfront areas, and public recreation facilities along the shores of the Anacostia River in Washington. Anacostia Park serves as an important urban park between heavily developed urban spaces and the Anacostia River. It includes natural shoreline areas that provide habitat for a diverse population of plants and animal species such as the bald eagle; woodlands and wetlands that contribute to the protection of the water quality of the river; and a range of recreational opportunities for local residents and visitors.

The 2010 *Anacostia Waterfront Initiative-10 Years of Progress* report outlined the vision, accomplishments, and goals established by several District and federal agencies to collaborate on restoring and revitalizing the river and its waterfront. The plan outlined long-term partnerships between the District of Columbia and the federal government to achieve several goals, one of which was to restore the river's environmental condition. Ongoing efforts focus on eliminating combined sewer overflows and pollution discharges, installing bio-retention systems, restoring natural riparian functions, restoring and expanding wetlands, daylighting tributary streams, increasing river oxygen levels, and developing environmental guidelines for future waterfront development.

Projects implemented include the creation of more than 98 acres of wetland at Kingman Island in partnership with the U.S. Army Corps of Engineers and NPS. This wetland filters water from the Anacostia River by absorbing and reducing pollutants carried to the river from upstream activities. Other areas where District and federal agencies collaborated include implementing a resident Canada geese management plan, creating the Anacostia River No Discharge Zone, and conducting stream habitat and stormwater monitoring of Watts Branch to determine pollutant load reductions.

B.2.4 Valuable Scenic Viewsheds

Another important stewardship responsibility is to protect viewsheds associated with natural areas. While the Urban Design Element documents important views associated with *The Plan of the City of Washington*, many parks and open space managed as natural areas protect prominent viewsheds or provide views and vistas of terrain in its natural state. Similarly, higher elevation areas allow unobstructed views to the lowlands below. Sensitive siting of small cell infrastructure, cell towers, antennas, or similar structures ensures the protection of views and vistas. Development adjacent to the shorelines has the potential to affect the character and scenic qualities of the rivers and waterways. The mass and scale of development should consider the surrounding open space's scenic qualities and character.

B.2.5 The Night Sky

Reducing light pollution–excessive artificial light–protects the night sky and the natural environment. Light pollution can diminish the experience of a park and negatively affect adjoining uses. Plants and animals depend on the cycle of light and dark for critical behaviors, including eating, sleep, reproduction, navigation, and protection from predators. Artificial lighting, while important for way-finding, security, and aesthetics, can interfere with these nocturnal functions and negatively affect environmentally sensitive areas.

Light pollution is primarily from light sources that emit up or sideways. Minimizing light pollution in and around parks protects their character and the natural environment. Light pollution can be reduced through careful attention when determining how much, and where, lighting is needed, and through strategic placement and design of light fixtures.

The federal government should:

POS.B.1 Protect and improve the condition of the region's natural terrain and its features including:

a. The rivers and streams, their associated valleys and bluffs, and the shoreline park system.

b. The palisades and gorges of rivers and streams.

c. The headwater and reservoir areas along the rivers.

d. The forested ridgelines of the topographic bowl.

e. Other scenic and ecologically significant features.

POS.B.2 Protect, and where necessary restore, the region's natural shorelines such as riparian landscapes, wetlands, steep slopes, mature/healthy trees, and understory vegetation, floodplains, woodlands, and highly permeable soils.

POS.B.3 Protect and maintain the role of greenways as natural resources, for their environmental benefits, when incorporating trail or roadway improvements.

POS.B.4 Protect and preserve the terrain features, greenways, rivers and waterways, stream valley parks, and forested natural areas so they continue to serve as valuable scenic, ecological, cultural, and recreational resources.

POS.B.5 Encourage urban shoreline areas to be resilient and adaptable to variations in water level. Along the natural shorelines, restore riverine edge habitats and avoid hardscape surfaces.

POS.B.6 Preserve and maintain trees, vegetation, natural areas, and open space on federal campuses that support wildlife habitats, improve scenic quality, and enhance aesthetic character. Preservation of these spaces should be compatible with the campus mission and programmatic needs.

POS.B.7 Encourage land uses and actions that protect and improve the water quality of the Potomac and Anacostia Rivers. Restore their constructed and natural shorelines to enhance their ecological quality and as scenic and recreational resources.

POS.B.8 Protect the character and setting of all Capper-Cramton parks as critical elements of the region's park and open space system.

POS.B.9 Improve Capper-Cramton lands to be compatible with their existing park use. Encourage projects that provide public benefits such as improving stream water quality, promoting park access, and protecting park resources.

POS.B.10 Encourage the use of parks, trees, and natural areas as gradual transitions from the natural areas surrounding the terrain features to densely developed urban environments.

POS.B.11 Preserve and protect the Potomac Gorge and its related palisades and gorges in their natural condition. Keep their transition highlands, rim areas, and surroundings free of intrusive constructed forms and provide a gradual transition between them and developed areas.

POS.B.12 The mass and scale of development along, or adjacent to the shoreline, should preserve view corridors and be compatible with the character and quality of open space.

POS.B.13 When designing and locating small cell infrastructure, cell towers, antennas, or similar structures, discourage their location in, or adjacent to, federal parks. If this is not possible then:

a. Avoid locating these elements within the viewsheds of natural and cultural landscapes, urban plazas, and open spaces.

b. Encourage innovative designs that reduce the visibility of antennas and towers.

POS.B.14 Minimize light pollution in and adjacent to parks and open spaces, with special consideration for natural parks and environmentally sensitive areas. Use lighting only where needed for safety and use only the amount of light necessary. Pay careful attention to light direction and color, retrofit existing lighting where needed, and use energy efficient fixtures.

POS.B.15 Utilize shields or other appropriate means to minimize glare from light sources and light fixtures within parks in urban neighborhoods and near natural resources.



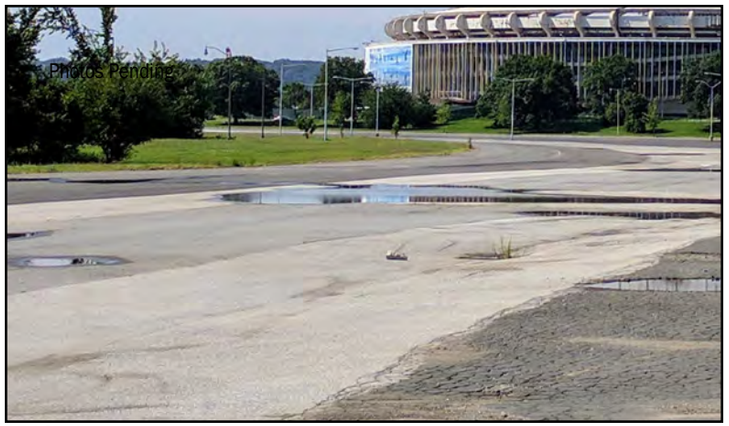
Banneker Park

B.3 Sustainable Practices in Parks and Open Space

Parks and open space play an important role in ensuring that our communities successfully adapt and thrive in rapidly changing environmental conditions. A sustainable approach to any park or landscape is one where natural areas are protected, where wildlife habitat is improved, and where human uses and maintenance practices do not harm the environment. As reinforced in the Federal Environment Element, sustainable practices can be part of the construction, renovation, and maintenance of the region's parks and open space. These practices can reduce the consumption of water and energy and improve the use of renewable energy sources. A big part of adopting and fulfilling sustainable practices is engaging park partners, local communities, and other stakeholders. The federal government can create opportunities to educate and raise awareness of the ecological functions and historic value of the region's parks and open space. Finding ways for people to participate and engage with the natural environment through interpretative signage; educational programs; and community clean-up, planting, and maintenance will encourage continued stewardship of the environment and landscape. Prominent areas with opportunities for environmental stewardship with respect to parks are listed below.

B.3.1 Green Infrastructure Techniques

Green infrastructure solutions protect, restore, and mimic the natural water cycle and as a result, reduce stormwater runoff and flooding. They play a vital role in managing stormwater by infiltrating it in the groundwater or by capturing it for later reuse. Bio-retention areas, vegetated swales, permeable pavements, green roofs, and rainwater harvesting significantly help to meet local stormwater regulations, manage water supplies, prevent pollution, and create more sustainable urban environments. They also effectively reduce energy needs, reduce potable water demands, and can reduce maintenance costs. Daylighting streams, which involves the redirection of a piped or culverted stream into an aboveground channel, restores the stream to a more natural state and improves the riparian environment. The resulting restored stream or tributary provides stormwater benefits as well as numerous aesthetic, economic, and environmental benefits.



RFK Stadium


National Arboretum


Mount Vernon Trail


NW Washington, DC

B.3.2 Non-Porous Surfaces

Untreated stormwater runoff often carries pollutants such as oil, dirt, and chemicals directly to streams and rivers, where they seriously harm water quality. To protect surface water quality and groundwater resources, non-porous surfaces should be discouraged along rivers, streams, and waterfront areas. In other areas of the parks, minimize the use of non-porous surfaces where necessary and consider permeable surfaces to replace asphalt and concrete pavements. Porous or permeable pavements mimic the natural process that occurs on the ground's surface, reduce runoff, and allow rainwater to infiltrate to the ground below. They filter out pollutants, eliminate the need for retention basins and water collection areas, reduce erosion, and lessen flooding events.

B.3.3 Native Plant Species in Natural Areas

Many designed parks and landscapes in the region are known for non-native ornamental plant species, formal planting, and plant diversity. However, native plant species are the foundation of our natural ecosystems, especially in environmentally sensitive areas. They help preserve biodiversity, are uniquely adapted to a particular ecosystem, and successfully provide food and shelter for native wild animals as compared to non-native plant species. In historic designed landscapes, it is important to replace plant materials in kind to maintain the integrity of the landscape. However, native trees and plants species in natural areas are better adapted to local environmental conditions, require less water, and require little maintenance once established.

B.3.4 The Urban Tree Canopy

Protecting mature trees and increasing the urban tree canopy in parks and along urban streetscapes helps improve air and water quality, can absorb and reduce stormwater runoff by intercepting rainfall, creates shade, mitigates the urban heat island effect and reduces energy usage due to their cooling capabilities. Tree canopy and understory vegetation in natural areas create a more diverse ecosystem where wildlife can thrive and stormwater infiltration in soils is improved. As the region continues to grow, protecting mature trees and emphasizing the value of tree canopy and landscape cover needs to be a priority.

The federal government should:

POS.B.16 Retain and restore natural shoreline areas to a more natural state, including daylighting streams and planting trees/vegetation to provide more sustainable and resilient conditions.

POS.B.17 Discourage impervious paved surfaces, especially parking areas, along the shorelines of rivers, streams, and at waterfront parks. Remove existing waterfront parking when feasible and restore these areas to a landscaped condition, which could include recreational uses.

POS.B.18 Enhance Washington's green setting, which provides long-term aesthetic and environmental benefits, by protecting mature trees and increasing the urban tree canopy and landscape cover.

POS.B.19 Enhance the region's natural setting by conserving and protecting large tree preserves, forests, mature trees, understory plantings, and landscape cover.

POS.B20 Consider hardy trees and vegetation in urban areas. Similarly, encourage native plant species, in natural areas and where appropriate, as they are uniquely adapted to the local ecosystem and require minimal water and maintenance requirements.

POS.B.21 Support and expand opportunities to educate and engage communities and local non-profits in the cleanup, planting, removal of invasive species, and maintenance of the region's rivers, trails, parks, and open space.

POS.B.22 Promote sustainable practices within the parks and open space system by raising awareness about ecological functions of natural areas through educational programming, interpretive signage, and the use of technology.

Section C: Balance Commemorative Works within Parks

Memorials are a signature component of Washington's symbolic landscape and intricately connected to the park system. *The Plan of the City of Washington* established the city's urban design framework and a park system that created a foundation for memorial planning. Commemorative works in Washington are primarily located in urban parks and open space, but can also be found in natural settings. This policy section provides guidance on the most common planning and design issues related to commemorative works in parks.

C.1 Siting and Designing Commemorative Works

Based on the 2012 *Memorial Trends and Practice Report*[10] and from NCPC's recent review of proposed commemorative works, common issues include the protection of *The Plan of the City of Washington*; historic preservation; and balancing the commemorative experience with a park's character, use, size, scale, and circulation. In the review of memorial design, design guidelines provide parameters and a framework to address planning issues as a memorial moves forward in the design development process. NCPC adopted site-specific guidelines to address these and other issues when reviewing memorials including the Martin Luther King, Jr. Memorial; Victims of the Ukrainian Manmade Famine Memorial; and the Dwight D. Eisenhower Memorial.

Protection of *The Plan of the City of Washington* and other historic properties is a key planning consideration with the design of most commemorative works. The plan and subsequent planning efforts in Washington created reciprocal views between natural and built elements. Memorials or statues are often located at the center of parks and open space, and at times become the focal point of a viewshed. Protection of features such as streets, rights-of-way, building lines, and views is a consideration when creating a memorial. The placement and relationship of memorial elements to these features have the potential to affect public space and influence the park's programming and usability. Memorial or landscape elements may be used to frame or define an edge condition of a view corridor to maintain the openness of vistas and relate to the surrounding context, but new commemorative works should not detract from an existing prominent viewshed.

Memorial Approval Process

The Commemorative Work Act (CWA) guides the process for development, approval, and location of new memorials on federal lands, administered by NPS and GSA, in the District of Columbia and environs. Both the *Memorials and Museums Master Plan* and the Visitors & Commemoration Element provide additional guidance on the memorial approval process. While the plan provides guidance regarding memorial location and design and identifies memorial sites in Washington, DC, and Virginia, the Visitors & Commemoration Element sets forth guidance and policies for visitor destinations, including commemorative works. The element also lists the various federal agencies involved in the memorial approval process, as outlined by the CWA. NCPC and the U.S. Commission of Fine Arts are responsible for reviewing and approving the preferred site and design of memorials. They can also develop site-specific guidelines to ensure that a proposed commemorative work carries out the purpose of the law.



Jane Martin

Successful memorials and parks are often in locations where there are multiple opportunities for placemaking.

A key issue when planning and designing memorials is striking a balance between the contemplative areas associated with commemorative elements and the enjoyment of public parkland. The Commemorative Works Act (see Memorial Approval Process on pg. 28) calls for new memorials, to the maximum extent practicable, to protect open space, existing public uses, and cultural and natural resources. However, the CWA does not provide guidance on how to achieve this goal.

Recent memorials have varied in size depending on subject, program, and site selection parameters. Memorials that consume large areas of land should be discouraged. NCPC and other agencies must consider the memorial subject and how much of a site or park is appropriate to dedicate to the memorial experience versus public space that can accommodate other uses. Commemoration sites often need to accommodate a range of programs, events, or ceremonies. Integrating memorials with context-sensitive solutions is critical to a successful commemorative work and public park. Once a framework and program for a memorial are defined, the size of individual memorial elements must be considered in relation to the site and its surrounding context. The appropriate size for a memorial will depend on several factors, including its subject, the scale, and use of adjacent buildings and landscapes, historic properties, and any existing features that contribute to the character or function of the site or park space.

In Washington, federal parks and open space are often located at roadway intersections or in areas with limited neighborhood park space, and therefore are the only green space available to residents. While commemorative elements in neighborhood parks help create a sense of identity for communities, many visitors expect a certain level of decorum, respect, and dignity at these sites. These spaces also need to accommodate everyday park uses, such as community gathering areas or playgrounds. In such areas, balancing commemoration with local neighborhood needs is critical to creating successful urban parks. The most successful parks with memorials are ones that engage people and activities from the surrounding community. Dupont Circle, Lincoln Park, and Stanton Park all function as memorials and neighborhood parks.

Other planning considerations previously addressed in design guidelines related to circulation and access. Providing clear circulation is important for the visitor experience and to the success of the memorial as a public space and park. Circulation must be considered at various scales and levels. During site selection, the location of the site within the city or region is critical. At the design development stage, considerations become specific to the selected site and how the site is accessed by pedestrians, bicyclists, motorists, or tour buses, as well as how to meet American with Disabilities Act requirements. At times, depending on the surrounding context, it may be appropriate to limit parking and/or vehicular drop off areas to minimize impacts on landscape elements and the surrounding environment. Circulation routes should connect to the larger transportation network and consider the experience of visitors traveling to, and through, a site.



UHCL

Large urban parks accommodate many uses, including commemoration and recreation. Commemorative elements at Lincoln Park (above) include President Lincoln's emancipation statue and a monument to civil rights activist and educator Mary McLeod Bethune. The park also has two playgrounds, a large grass panel, and seating areas.

The federal government should:

POS.C.1 Balance the need for public space with the memorial program and contemplative space required by memorials based on size, surrounding context, and function of the site.

POS.C.2 Preserve and protect a park's features that contribute to its unique character and function while balancing the addition of new commemorative uses.

POS.C.3 Provide areas for diverse park uses and functions by balancing landscape and built elements and reserving space for the commemorative programs and experiences.

POS.C.4 Within neighborhood parks acknowledge that the site may currently serve multiple functions for residents. Scale and place memorial elements in a manner that balances existing functions along with the commemorative experience.

POS.C.5 Maintain and protect the urban design framework of *The Plan of the City of Washington* including original rights-of-way, streets, and vistas. Protect the squares, circles, and triangles of the L'Enfant Plan as potential sites for memorials. Avoid the introduction of visual incursions into the rights-of-way or placement of physical elements that would detract from the views of national memorials, civic institutions, or landmarks.

POS.C.6 Locate memorial elements in a manner that is compatible with adjacent buildings, structures, landscapes, and historic properties by considering existing building lines, massing, and scale. Memorial elements should complement and not compete with the scale of the surrounding landscape and built environment.

POS.C.7 Relate memorial landscape elements to the adjacent streetscape elements to create a physical and visual transition that responds to the surrounding context.

POS.C.8 Improve and enhance the visual connections and transitions between park space, commemorative elements, and the surrounding environment.

POS.C.9 Plan circulation routes that accommodate visitors or passers-by, and meet accessibility requirements to connect the memorial and park space with the adjacent transportation network.

C.2 Consider Creative Programming and Innovative Memorials

Balancing commemorative uses with park space requires careful program planning. As demands grow on the park system, it is important that a variety of programming and events can occur within commemorative settings. Providing space for different types of uses and events contributes to an active, vibrant park, and can enrich the meaning of a commemorative work. While programming can relate to the memorial theme, events that respect the commemorative setting and do not negatively affect cultural or natural resources may also be appropriate.

Along with programming opportunities, the federal government should consider what future forms memorials will take and how to continue to provide enriching visits to memorials. In 2016, NCPC, NPS, and the Van Alen Institute organized Memorials for the Future, an ideas competition to reimagine the way we think about, feel, and experience memorials. The competition presented new ideas to engage diverse new subject matters, allow for reinterpretation over time, enable and respect multiple narratives, consider the use of technology, and honor national contexts and local experiences.



U.S. Navy

The design of the United States Navy Memorial successfully integrates a commemorative work and its urban context by creating flexible space for formal ceremonies, informal social engagement, and relaxation. Residents, workers, and visitors regularly use the space for a range of activities.

The federal government should:

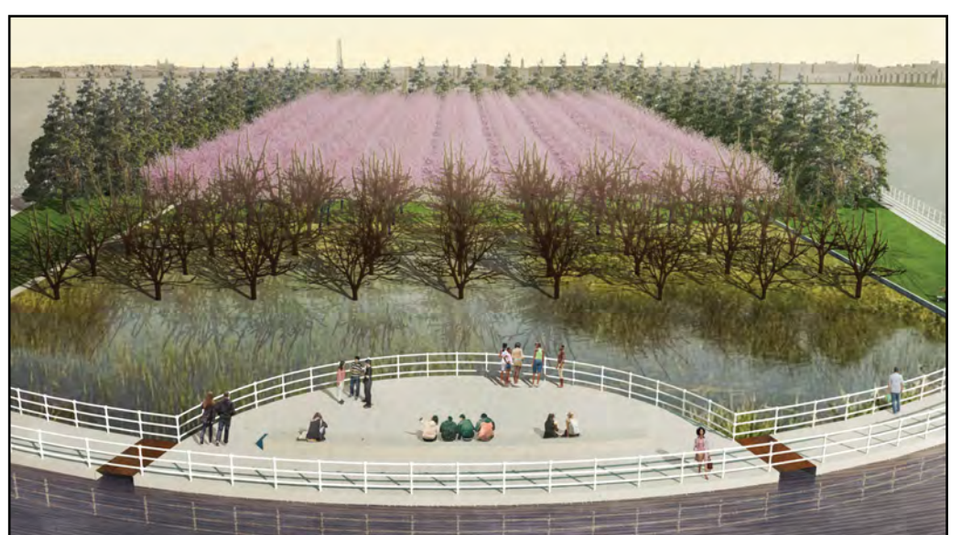
POS.C.10 Support innovative programming and events within commemorative settings, that cause minimal impacts on cultural and natural resources and visitor experience.

POS.C.11 Support the installation of temporary memorials or artwork that cause minimal impacts on cultural and natural resources and visitor experience.

POS.C.12 Encourage alternative approaches to commemoration including temporary installations, non-traditional materials, and the use of technology-based formats.



Lessons learned from the Memorials for the Future ideas competition merit further exploration to ensure that memorials continue to evolve and reflect a diverse range of narratives and innovative designs.



Azimuth Land Craft

Section D: Improve Access to, and Connections between, Parks and Open Space

The region has diverse parks and open space types spanning multiple jurisdictions. While jurisdictional boundaries between different cities and states are important for effective management of park spaces, they do not matter to visitors who want to enjoy the spaces. As a significant regional landholder, the federal government is in a unique position to maintain and improve access and connections between parks and open space.

Providing a connected and accessible park system may require acquiring new spaces. However, it also includes using existing spaces in new and different ways; establishing new connections between parks and the people that use them; and thinking about how the park system functions as a whole. Additionally, creating new physical, visual, and transportation connections between existing parks helps improve accessibility especially where open space is limited. A pedestrian-friendly street network that includes traffic-calming measures, bikeways, wide sidewalks, and seating allows streets to become connectors and gathering places. Well-connected street networks encourage walking, bicycling, and extend the park experience into the community. Green infrastructure techniques and plantings further help to visually extend park space into the street and create a unified experience.

This policy section provides guidance on how to prioritize pedestrian and other multimodal access to, and connectivity between, parks and open space in the region.

D.1 Reduce Physical and Visual Barriers

Despite the quantity and variety of parks and open space in the region, physical and pedestrian access can be a challenge for a variety of reasons. Physical barriers that limit access include large buildings, freeways, railroads, steep terrain, and security fencing. Similarly, missing, poorly maintained, or inaccessible sidewalks, trails, pedestrian amenities, and other infrastructure make it difficult to connect to existing parks and open space. Visual barriers, such as limited visibility of entrances, lack of signage, poor maintenance at park edges, and overgrown vegetation can also limit connectivity, contributing to uninviting and underused parks. Prioritizing the removal of barriers, both physical and perceptual, is important to connecting parks and open space with surrounding communities.

Many of the region's parks and open spaces consist of either large passive natural areas or pocket parks that are too small to meet many local needs. With limited medium-sized parks suitable for recreational amenities and facilities, certain neighborhoods and communities have limited access to green space. In addition, at times these spaces are often not suitable for a variety of possible user groups, including people with mobility limitations.

These problems increase over time due to a lack of funding to maintain or improve park facilities or a general lack of investment in physical connections to parks and open space. It is important to address access and connectivity early in the planning and development process. Similarly, for areas where access to parks and open space may be limited, the federal government should identify opportunities to improve connections to existing parks and ensure access to users of all ages, abilities, incomes, and backgrounds.



Brian Gibbons

CapitalSpace
A Park System for the Nation's Capital

Ideas to Achieve the Full Potential of Washington's Parks and Open Space

Washington's parks are not uniformly distributed, size variations and conditions affect use options, and physical and perceptual barriers limit access. 2010's *CapitalSpace: Ideas to Achieve the Full Potential of Washington's Parks and Open Space* highlighted areas of the city that have less walkable access to park resources. Continued residential growth in those areas will only exacerbate the need for parks. District agencies have a responsibility to plan and develop space to meet these needs. Similarly, federal agencies must consider how to meet the needs of increasing number of visitors to the nation's capital. Close coordination between federal and District entities are critical to addressing growth and accessibility to parks.

D.2 Connect to, and along, the Waterfront

Waterfront areas can provide public space opportunities for the surrounding community in addition to being regional destinations. A walkable connection to, and along, the waterfront requires much more than a sidewalk, path, or boardwalk. In urban areas, these connections require the involvement of various stakeholders to ensure that pedestrians are safe and welcome; they have to provide a range of public space opportunities, including places to sit; they have to incorporate water-related activities; and allow for large and small-scale gathering areas for a diverse set of users.

Multimodal connections increase the number and types of connections to waterfront parks, thus contributing to their use and enjoyment. Recent redevelopment in Washington led to the creation of several new waterfront parks and improved river connections. Yards Park, part of the former Southeast Federal Center, features paved and landscaped areas, a water feature, performance and event space, and multiple locations to enjoy river views. The Anacostia Riverwalk Trail runs through Yards Park connecting Anacostia Park along the waterfront and to multiple residential communities.

Other ongoing redevelopment efforts continue to improve the pedestrian experience and provide new connections along or across the rivers. These include a proposed pedestrian and bicycle path along the Frederick Douglass Memorial Bridge, which would provide connections across the Anacostia River and to surrounding neighborhoods and existing trails. Along the Potomac River, the REACH (the Kennedy Center's expansion project), will provide a safe pedestrian and bicycle connection between the Kennedy Center, the Rock Creek Paved Recreation Trail, and the waterfront.

The Wharf, a destination along the Southwest Waterfront—with restaurants, shops, offices, concert halls, apartments, and promenade transformed the role of Banneker Park from an overlook to an important connection from the National Mall to the waterfront. The Banneker Park connection project includes pedestrian and bicycle access improvements, tree plantings, integrated lighting, and stormwater management improvements. Similarly, the 11th Street Bridge Park will provide a pedestrian connection between two sides of the Anacostia Park.



Steven Holl Architects

The REACH at the Kennedy Center



AECOM

New Frederick Douglass Memorial Bridge



ZGF Architects

Banneker Park Connection



OMA + OLIN

11th Street Bridge Project

D.3 Enhance the Existing Trail Network

Trails in the region link some of our nation's most significant cultural and natural areas, parks, and destinations. A strong, interconnected, inter-jurisdictional system of land and water trails create opportunities for recreation, multimodal transportation, and education. They provide diverse trail experiences and are used for walking, biking, boating, and horseback riding. They connect people to parks, offer alternatives to driving, and help define the region's multimodal transportation infrastructure. They often follow scenic routes and traverse environmentally sensitive areas.

There are nearly 100 miles of federally administered paved trails in the region's national parks that travel through Washington, DC, two states, five counties, and the City of Alexandria. This complex trail network requires careful planning and design, especially near sensitive areas and habitats. The federal government strives to lead the region in providing exceptional outdoor trail experiences, seamlessly linking diverse places of natural and historic significance while providing safe and enjoyable places for people to walk, run, bike, and commute.

Trails in the region often belong to one or more systems: local, regional, or national. Federally built and maintained trail segments are part of larger regional systems. As the area continues to grow, trail usage has increased, encouraging federal and local governments to address challenges associated with meeting commuter and visitor needs and expanding the trail network. Although the region has hundreds of miles of trails, they are not all connected in a cohesive, easy-to-navigate network. Trail segments are often administered by multiple jurisdictions with different design standards and funding constraints. Access improvements, supported by wayfinding signage, can connect a trail to other local and regional trail systems. Trail links to surrounding neighborhood parks, recreational facilities, and community amenities can provide additional opportunities for recreation, enjoyment of natural resources and wildlife, historical interpretation, and cultural education.

One of the many congressionally designated scenic and historic trails in the National Trails System is the Potomac Heritage National Scenic Trail (PHT), an evolving network of locally managed trails between the mouth of the Potomac River and the Allegheny Highlands. The authorized PHT corridor runs through many parks and protected areas, historic sites and communities, and notably, the nation's capital. Within the region, segments of the PHT network include the Chesapeake & Ohio Canal Towpath, a walking route connecting many Civil War Defenses of Washington, various Potomac Heritage Trail segments in Northern Virginia, the Mount Vernon Trail, and the Southern Maryland On-Road Potomac Heritage Trail Bicycling Route.

The recently completed Kenilworth Segment of the Anacostia Riverwalk Trail connects Anacostia Park in Washington, DC with Bladensburg Waterfront Park in Prince George's County, Maryland. The three-mile connection links Washington, Maryland, and Virginia as part of a sixteen-mile trail. It provides a safe and accessible route for bicyclists and offers convenient access to the surrounding natural areas.

Another trail network that connects some of the Civil War fort sites, associated green space, and forested areas is the Civil War Defenses of Washington hiking-biking trail. The seven-mile-long trail runs from Fort Stanton to Fort Mahan in southeastern Washington. It provides impressive views of the capital, and is a means to explore the region's Civil War history. Efforts to improve access to, and connections between, other fort sites; education and awareness regarding preservation of existing structures; and improved wayfinding and interpretive signage would further improve the trail system.

Trails create an integrated, inter-jurisdictional network for recreation, multimodal transportation, and education. They often follow scenic routes, linking destinations including significant cultural properties and natural areas. However, these often traverse environmentally sensitive areas, such as floodplains, steep slopes, or wetlands. Trail development in or near sensitive areas and habitats must be planned with thorough research and careful design.

Paved Trail Study

In 2016, NPS completed its Paved Trail Study, setting a vision to guide future planning and coordination for the region's paved trails network.[12] These trails often traverse historic landscapes, scenic viewsheds, or ecologically sensitive areas.



Capital Trails Coalition

The Mount Vernon Trail runs along the Potomac River offering uninterrupted views of Washington, DC's skyline.

D.4 Encourage Public Access to Federal Open Spaces

Along with parks, there are a number of publicly accessible federal open spaces in the region. Examples include the National Arboretum, Arlington National Cemetery, and portions of the National Zoological Park. Many of these spaces, in addition to their primary mission, also serve similar functions as parks in that they provide recreational, educational, and ecological benefits. Federal properties along the region's shorelines should consider public access to, and along, the waterfront. Open space on federal campuses such as the United States Naval Observatory, Armed Forces Retirement Home, St. Elizabeths Campus, and regional military installations, have limited access due to security and mission-driven considerations. As federal uses on these sites change, security and mission conditions evolve. Federal campuses should be encouraged to periodically assess their security requirements and consider trail access through them. They should also evaluate opportunities to provide limited or occasional public access to federally administered open spaces.



Pohick Bay, Fort Belvoir, Virginia

The federal government should:

POS.D.1 Plan and improve connections between parks and open space through streets, sidewalks, plazas, and trails to create a unified and accessible park system for the National Capital Region.

POS.D.2 Provide safe and convenient pedestrian access to parks and open space. Additionally, plan pedestrian connections through and around physical barriers, such as roads and bridges, which limit physical or visual connectivity.

POS.D.3 Consider the siting of entrances and access points from adjacent communities to the region's park system.

POS.D.4 Connect open space along the Potomac and Anacostia shorelines, and encourage water access where appropriate, in order to provide a continuous public open space system.

POS.D.5 Encourage access to waterfront parks by considering improved pedestrian and other multimodal connections and wayfinding signage from adjacent communities.

POS.D.6 Develop, improve, and maintain a regional trail system that serves recreational and commuter needs by closing gaps and connecting parks and open space, natural areas, and destinations. Ensure that regional trails connect with the national trail network.

POS.D.7 Identify opportunities to develop trails or connect trail systems when planning and designing projects throughout the region. Ensure that new development does not preclude future improvements to trail connections.

POS.D.8 Improve access to, and connections between, the Civil War Defenses of Washington historic fort sites. Link them to surrounding communities using existing streets, sidewalks, and trails where possible.

POS.D.9 Promote public access along the region's shorelines, including on or adjacent to federal properties, when security considerations permit.

POS.D.10 Provide public access to open space on or adjacent to federal properties as mission and security considerations permit while minimizing impacts on natural and cultural resources. Where security is an issue, encourage limited access through coordinated programs and events.

POS.D.11 Conserve portions of federal campuses and installations that add significantly to the open space system. To the extent practicable, provide public access to and through these open spaces.

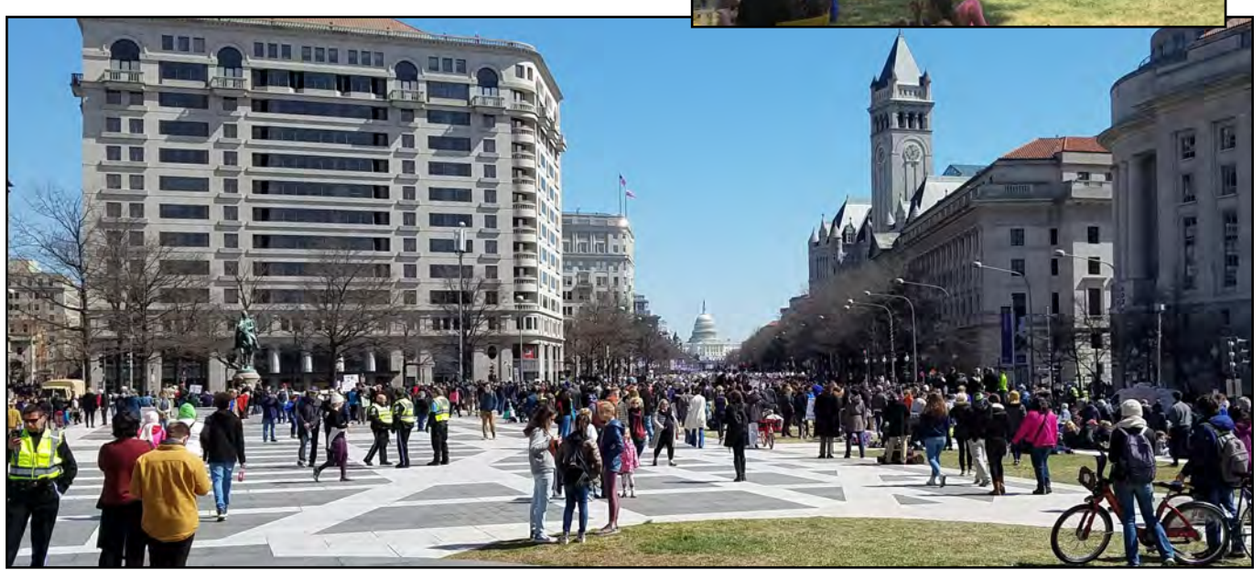
Section E: Balance Multiple Uses within Parks

A great strength of parks is their ability to accommodate multiple uses and functions, including recreation, education, commemoration, celebration, demonstration, and transportation. Parks protect valuable scenic viewsheds as well as natural and cultural resources. In addition, parks help mitigate changing climate conditions, and function as transportation and wildlife corridors. With multiple uses, conflicts can arise that present management challenges.

This policy section provides guidance on accommodating different uses while also protecting the natural and cultural features of the park system.

Farragut Fridays hosted by the Golden Triangle BID during the summer months is a free all-day event that brings together area workers, local residents, and visitors to enjoy fun and innovative activities.





Pennsylvania Avenue is often used as a civic gathering space.

E.1 Accommodate Different Activities in Urban Parks

Parks can accommodate the needs of different user groups and allow for both active and passive recreation. In urban areas, where there is limited open space, parks have to accommodate multiple uses and programmatic needs. At times, streets function as temporary civic gathering spaces.

There are many examples of successful federal/local collaborations in urban parks that engage residents and create meaningful and enriching experiences. NPS works with local groups, including business improvement districts (BIDs), to help program a variety of activities in downtown urban parks. Meridian Hill Park, a National Historic Landmark, accommodates a wide range of uses, including a drum circle, dance performances, and local community activities within its distinct levels of well-connected space. The park offers a place for social and cultural exchange and accommodates multiple users while protecting its historic significance.

E.2 Balance Recreational Uses in Regional Parks

For many federally managed parks and open space in the region, while the underlying agency mission and other federal legislation guide use and management, they still offer recreational opportunities for local residents and visitors. Recreational uses that incorporate educational and interpretative opportunities ensure the protection and preservation of historic, natural, and cultural resources within parks for future generations.

The Chesapeake & Ohio Canal National Historical Park, located along the Potomac River, served as a transportation corridor for coal, lumber, and agricultural products. Today, as an important cultural landscape, it balances its mission to tell the story of the canal's important role in America's history while providing recreational opportunities such as hiking, camping, boating, fishing, and horseback riding.

Prince William Forest Park is one of the region's largest protected natural areas, totaling nearly 15,000 acres. The park is the largest example of a Piedmont forest in the national park system, serving as a sanctuary for a diversity of plants and animals.

The Patuxent Research Refuge, managed by the U.S. Fish & Wildlife Service, is the nation's only national wildlife refuge established to support wildlife research. The U.S. Geological Survey, through the Patuxent Wildlife Research Center, conducts most of the research in the refuge. Throughout decades of change, Patuxent's mission of conserving and protecting the nation's wildlife and habitat through research and wildlife management techniques has remained virtually unchanged. The refuge also offers hiking, hunting, fishing, and educational opportunities.



Natural Bridge Science Program

Prince William Forest Park offers a range of recreational activities and research opportunities on the natural landscape.

E.3 Protect the Scenic Value of Parkways

Parkways are linear, landscaped parks designed to link visitor destinations throughout the region through a leisurely driving experience. In the early 20th century, the federal government planned and developed several parkways along vegetated park corridors. These parkways, conceived of as scenic drives, linked large parks and federal workplace destinations, served as important travel corridors and gateways to the nation's capital, and functioned as environmental corridors. Today these parkways, administered by NPS, serve as major transportation corridors, protect valuable scenic viewsheds, and often incorporate recreational amenities including pedestrian and biking trails. Prominent parkways in the region include Rock Creek and Potomac Parkway, the George Washington Memorial Parkway, Baltimore-Washington Parkway, Suitland Parkway, and the Clara Barton Parkway. All are instrumental in open space preservation and incorporate scenic or pastoral views.

The Baltimore-Washington Parkway evolved from a scenic roadway into a major commuter corridor. It has to balance transportation needs and modern roadway safety standards with its role as a recreational amenity. The parkway is a scenic, forested transportation corridor, designed to connect federal facilities such as USDA's Beltsville Research Area, NASA's Goddard Spaceflight Center, and Fort Meade.

The Rock Creek and Potomac Parkway occupies the gorge and rim of the lower Rock Creek Valley and is one of the best-preserved and earliest examples of motor parkway development.

The George Washington Memorial Parkway was the first comprehensively designed modern motorway built by the federal government. Originally intended to connect the historic site of Mount Vernon to Washington and to preserve the natural setting along the Potomac River, the parkway features views of iconic monuments. The parkway helps protect viewsheds of adjacent cultural resources or other privately managed cultural open spaces. The Mount Vernon Memorial Highway section of the George Washington Memorial Parkway, Piscataway Park, Fort Washington, Fort Hunt, and other areas within the viewshed from Mount Vernon, are integral to the historic property's landscape setting. Similarly, on the Maryland side of the George Washington Memorial Parkway is a short segment named in honor of Clara Barton. It runs along the Maryland shore of the Potomac River between Washington and the Capital Beltway. Dotted along Clara Barton Parkway are several small access points to the adjacent Chesapeake & Ohio Canal towpath.

The Suitland Parkway, which connects Joint Base Andrews to South Capitol Street, accommodates motorcades, visitors, and commuters approaching the nation's capital from the southeast.

A continuing challenge for parkways is to balance transportation needs and modern roadway safety standards with their role as a park and recreational amenity. For parkways that function as primary commuter routes, it is important to strategically plan vehicular, pedestrian and bicycle circulation along and across the roadways. Similarly, it is important to evaluate and protect valuable scenic viewsheds, carefully plan development around parkways, and limit visual and physical encroachment on and adjacent to parkways and associated parklands. In addition to comprehensively looking at the parkway system, any infrastructure improvements should minimize impacts to, and maintain the integrity of, parkway elements. Proposed improvements along parkways must consider the location of berms, type of vegetation, and retaining wall treatments.



APK on Flickr

Rock Creek and Potomac Parkway is one of the best-preserved and earliest examples of motor parkway development.

E.4 Plan for Security in Parks

The Urban Design Element provides guidance on permanent security improvements for federal facilities and public spaces in Washington[11]. Many of these policies are applicable to parks and open space as they address issues such as circulation, design context, aesthetics, and visual quality. When considering safety and security features in parks, it is important to maintain the perception of an inviting and easily accessible space, consider multiple uses and activities, ensure physical and visual connectivity, and maintain safe and secure public gathering areas. Park safety and security improvements should consider the threat level against the location of historic properties, user needs, surrounding uses, and circulations needs. In addition, security improvements should be coordinated with maintenance, management, and programming strategies.



Security features around the Washington Monument.

The federal government should:

POS.E.1 Plan and design parks and open space that meet agency mission requirements and protect natural and cultural resources. Additionally, where appropriate, accommodate the needs of diverse age groups and consider opportunities for active recreation.

POS.E.2 Accommodate different activities and programming in urban parks that enrich the visitor experience, address the needs of diverse populations and age groups, and protect and minimize impacts to resources.

POS.E.3 Support the expansion of existing parks, on a temporary basis, by using adjacent spaces such as streets to accommodate special events.

POS.E.4 Accommodate different activities and programming in waterfront parks while protecting and enhancing the resilience and cultural and natural features waterfronts.

POS.E.5 Ensure that proposed improvements and maintenance projects along trails and parkways minimize impacts to viewsheds and are sensitive to the natural and historic qualities that make them significant.

POS.E.6 Minimize impacts from development adjacent to parks and open space, including trails and parkways, to protect their natural and historic features.

POS.E.7 Maintain and improve the park-like setting of the Anacostia Riverwalk Trail, in coordination with local governments, as a regional resource that provides multiple recreational opportunities.

POS.E.8 Plan and incorporate safe, convenient, and distinct multi-use trails as part of the parkway system.

POS.E.9 Minimize impacts from park safety and security improvements so they remain inviting public spaces, accommodate multiple users and activities, retain physical and visual connectivity, and are consistent with maintenance, management, and programming strategies.

Section F: Build a Cohesive Parks and Open Space System

Parks and open space in the region cross city and county lines, jurisdictions, and geographic boundaries. Federal, state, and local agencies along with educational institutions, private landholders, and other stakeholders own and administer parkland. Managing and maintaining cohesive parks and open space system requires coordination and partnerships. With its significant parks and open space holdings, the federal government is a critical partner and uniquely positioned to support regional goals.

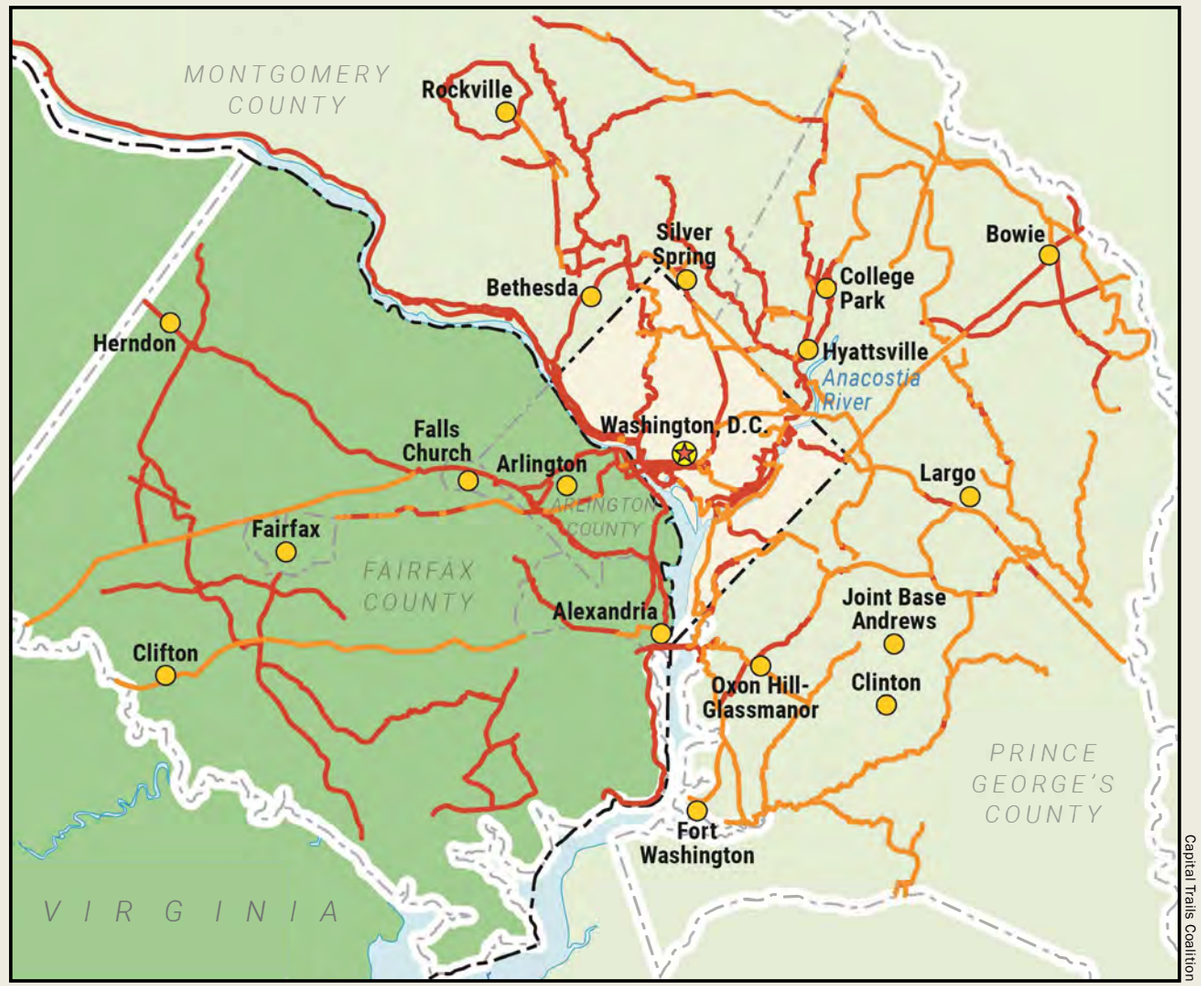
This policy section identifies opportunities for partnership and coordination efforts when planning, managing, and protecting parks and open space.

F.1 Create a Unified Regional Open Space Network

Planning for a unified parks and open space system requires working with stakeholders and developing a shared vision to strengthen and connect the network of parks, open spaces, greenways, and trails. Connecting federally administered lands to regional parks requires collaboration and partnerships. For example, Rock Creek Park in Washington abuts Rock Creek Regional Park in Montgomery County and requires close collaboration between NPS and the county to manage park resources and the visitor experience.

Collaboration is crucial to ensure there is adequate park space for current and future generations and to address large-scale regional issues such as water quality, linking habitat corridors, and connecting transportation networks. As an example, cooperation between federal and local jurisdictions can ensure that multi-jurisdictional trails continue to serve both recreational and transportation functions.

The Capital Trails Coalition Network



The Capital Trails Coalition is a collaborative effort between of public and private organizations, agencies, and citizen volunteers to unify the region's trails by advancing the completion of an interconnected network of multi-use trails in the region. The coalition's goals include closing gaps, improving trail access, and creating a network that links communities and major destinations.

Existing Trails	Planned Trails
Length: 400.47 miles	Length: 276.03 miles

Total Trails Length: 676.50 miles

State Line — — — —

County Line ———



National Mall



B. Meizm

Rock Creek Park



David Rubin Land Collective/Sudios Architecture

NPS, the District of Columbia, and the DowntownDC Business Improvement District are working together to transform Franklin Park into an active, flexible, sustainable, and historic urban park better connected to its community. A new public-private management structure will fund, program, maintain, and provide security for the park.

F.2 Balance Management of Federal Parkland in Washington with Local Community Needs

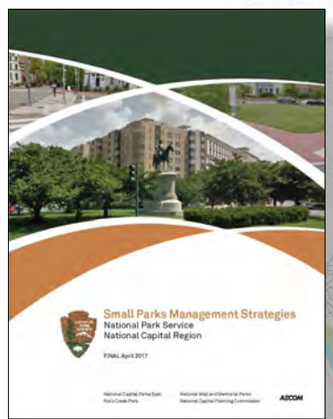
Downtown Washington's resurgence and the resulting increase in population have led to an increased demand for high-quality urban parks. Federal park use and development must strike a balance between recognition of national significance, resource protection, and local needs. Developing collaborative relationships, partnerships, cooperative agreements, and transferring of properties are different strategies to manage federal parkland and address local needs. Federal-local partnerships should focus on fulfilling shared goals while remaining sensitive to federal interest issues. Establishing these types of partnerships is a lengthy, complex process; however, when done successfully there are many benefits for both parties.

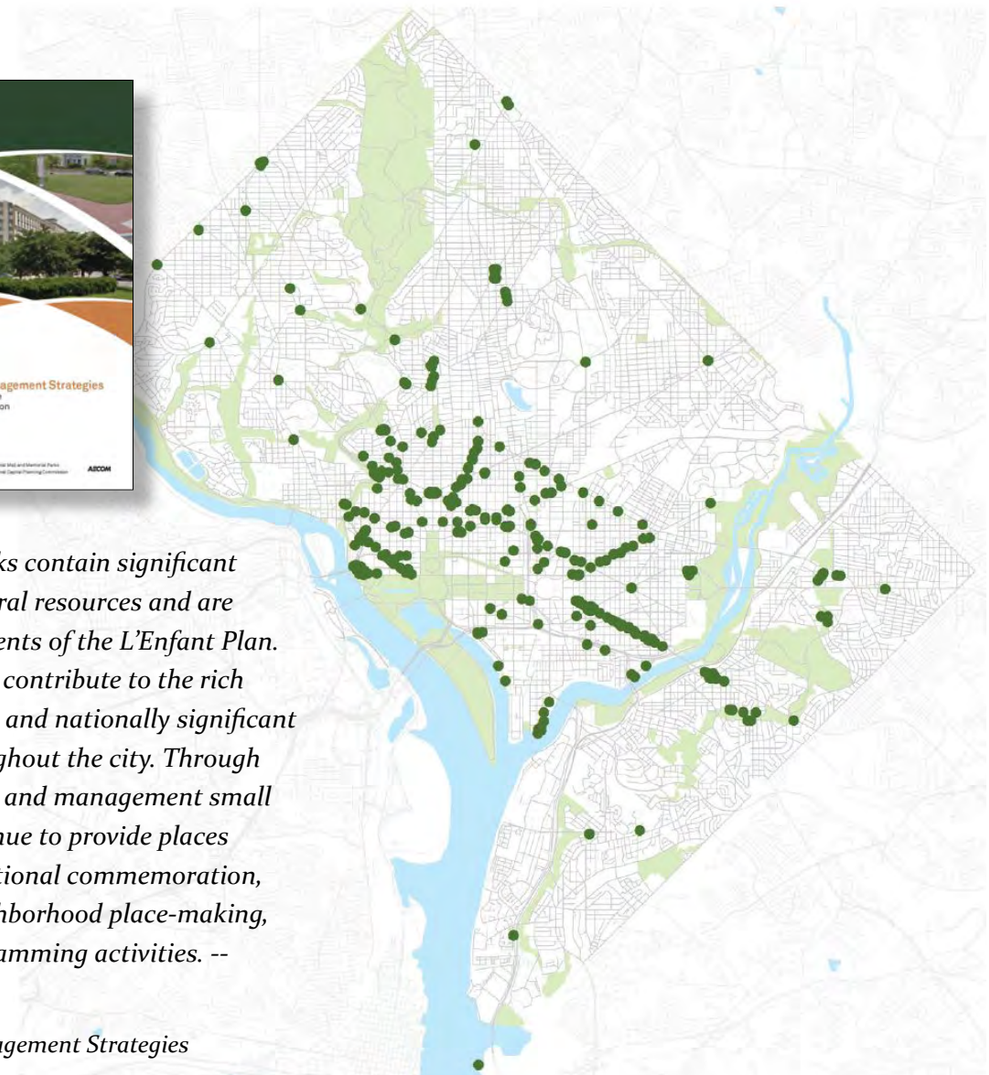
Small urban parks present an opportunity where federal and local partners can collaborate to accommodate recreational, ecological, and commemorative uses. With more people living in the city center, there is a greater demand for federal parks to serve a residential base. Additionally, the federal government has struggled to provide adequate funding to plan, develop, and maintain the range of parks and open space that it operates. In urban parks that also serve local neighborhoods, business improvement districts, interest groups, and other partners can participate in rehabilitation, development, maintenance, and operations.

2010's *CapitalSpace: Ideas to Achieve the Full Potential of Washington's Parks and Open Space* provides a vision for a beautiful, high quality and unified park system for Washington. As a multi-agency initiative between NCPC, NPS, and the District of Columbia Department of Parks and Recreation, the plan's goals are to coordinate existing management plans, maximize assets, address current and future needs, and create a stronger park system for the city. The plan recommends that the partner agencies commit to strengthening parks and open space through improving information sharing, exploring legislative changes, and identifying opportunities for cooperative agreements. The plan identifies common goals between the District's mission to maintain and provide recreational opportunities to residents and visitors and NPS' mission to preserve the region's natural and cultural resources.

One CapitalSpace's recommendations focused on the planning and management of small urban parks created by the L'Enfant Plan, offering guidance on how to transform them into a connected network of successful public spaces. They serve multiple functions, including as sites for national and local commemoration; as venues for events and celebrations; and as neighborhood parks, playgrounds, traffic circles, street medians, and traffic islands. While an important feature of the city's park and open space system, many small urban parks are hard to program and could benefit from increased collaboration among federal and local agencies.

Building upon CapitalSpace, in 2017, NPS, in collaboration with NCPC, completed the *Small Parks Management Strategies* report that focused on the planning and management of small parks. The study identified approximately 300 small parks under the jurisdiction of NPS that ranged from less than one acre to seven acres in size. The report developed goals to recognize the complex challenges and opportunities facing small parks and reflects a broad range of desired outcomes from resource protection to branding. The report provides the framework and decision-making methodology used by NPS to identify potential management options. These management options, driven foremost by the underlying resource values of individual parks, are categorized as follows: NPS retaining sole management responsibility; establishing cooperative management/partnerships; or considering conveyance of property or interest, if authorized by Congress.





Many small parks contain significant natural or cultural resources and are critical components of the L'Enfant Plan. These resources contribute to the rich tapestry of local and nationally significant resources throughout the city. Through proper planning and management small parks can continue to provide places for local and national commemoration, recreation, neighborhood place-making, and other programming activities. --

Small Parks Management Strategies

F.3 Coordinate the Federal and Local Development Review Process

Adjacent development pressures and encroachment of new development along park borders threaten many parks and open space in the National Capital Region. Modifications and improvements to adjacent properties can affect park character and function. In addition, conversion of parkland to different uses, or a lack of resources for adequate maintenance, are important issues the federal government must address. Protecting important viewsheds and minimizing adverse environmental impacts are also federal priorities. Greater emphasis should be given to coordinating federal parks and open space plans with development plans for surrounding jurisdictions. Working together, federal, and local agencies can minimize potential impacts on parkland while achieving shared and individual development goals.

The federal government should:

POS.F.1 Continue to use conservation easements, donations, purchases, exchanges, or other means to create, expand, and enhance a cohesive and connected park and open space system.

POS.F.2 Continue to develop partnerships and build coalitions among local agencies, non-profit organizations, educational institutions, foundations, and other stakeholders to create, manage, maintain, and connect a cohesive park and open space system on land and along shorelines and waterfronts.

POS.F.3 Continue to coordinate the planning, development, and management of federal and local parkland to identify opportunities for shared recreation, open space preservation, and resource protection to address current and future needs.

POS.F.4 Balance the national significance of parks with local interests and the need to accommodate a range of uses and events without adversely affecting natural and cultural resources.

POS.F.5 Encourage the use of a variety of management and maintenance strategies including partnerships, cooperative management agreements, or when appropriate, transfer of administrative jurisdiction, to improve parks and create a unified open space network.

POS.F.6 Develop federal and local collaborative partnerships to maximize the functionality of small parks as well-maintained local neighborhood green space without adversely affecting natural and cultural resources.

POS.F.7 Coordinate with responsible agencies and local jurisdictions to minimize physical and visual impacts of development projects on natural and cultural resources and viewsheds of the regional park and open space system.

POS.F.8 Coordinate with responsible agencies and local jurisdictions during development projects to encourage adding new parks and open space, as well as preserving and enhancing existing parks to meet current and future needs.



Arlington Courthouse Square Study

In 2014-2015, NCPC worked with Arlington County, CFA, and NPS to transform Arlington County's civic center into a public destination. The courthouse is located in the viewshed of the National Mall's primary east-west axis and is an important contributor to the character of the monumental core and its setting. From the steps of the U.S. Capitol, the viewshed to the western horizon includes the Washington Monument, the Lincoln Memorial, and the courthouse. All the stakeholders committed to protect the viewshed and collaborate to determine the appropriate height for new buildings in the courthouse area while maintaining the iconic viewshed's character and quality. By working together, the agencies agreed on 210 feet as the maximum height for new development one of the parcels included in Arlington County's *Courthouse Sector Plan Addendum* (2015).

Endnotes

1. This element addresses federal parks and open space within the National Capital Region as defined by the National Capital Planning Commission.
2. Approximate numbers from the 2004 Parks & Open Space Element as discrepancies in boundary areas between jurisdictions, ownership, and definitions of parks and open space result in data that does not perfectly match across the region. Several groups, including NPS, with boundaries that differ from NCPC's, also use the term "National Capital Region."
3. A protected area of land. In these areas human occupation, or the use of resources, is limited.
4. The Trust for Public Land, 2017 City Park Facts.
5. **CapitalSpace Plan:** https://www.ncpc.gov/docs/CapitalSpace_Plan_full.pdf
6. **Capper-Cramton Act of 1930:** https://www.ncpc.gov/docs/capper-cramton-act.pdf
7. Page 23 of the Urban Design Element notes how the natural setting heavily influenced the capital's design and layout: https://www.ncpc.gov/docs/02_CP_2016_Urban_Design_Element_2.29.16.pdf
8. See page 7 of the Urban Design Element for the extents of the L'Enfant City: https://www.ncpc.gov/docs/02_CP_2016_Urban_Design_Element_2.29.16.pdf
9. **CapitalSpace Plan:** https://www.ncpc.gov/docs/CapitalSpace_Plan_full.pdf
10. **Memorial Trends and Practice Report:** https://www.ncpc.gov/docs/NCPC_Memorial_Trends_Practice_Report.pdf
11. Urban design guidance on permanent security improvements.
12. The National Capital Region Transportation Planning Board adopted the trail plan to address gaps and deficiencies in the region's trail system. The Capital Trails Coalition also adopted this plan as central to their efforts to create a system.

COMPREHENSIVE PLAN
FEDERAL ELEMENTS



The Federal Environment Element

2016

National Capital Planning Commission

The Comprehensive Plan for the National Capital | Federal Elements

Federal Environment Element

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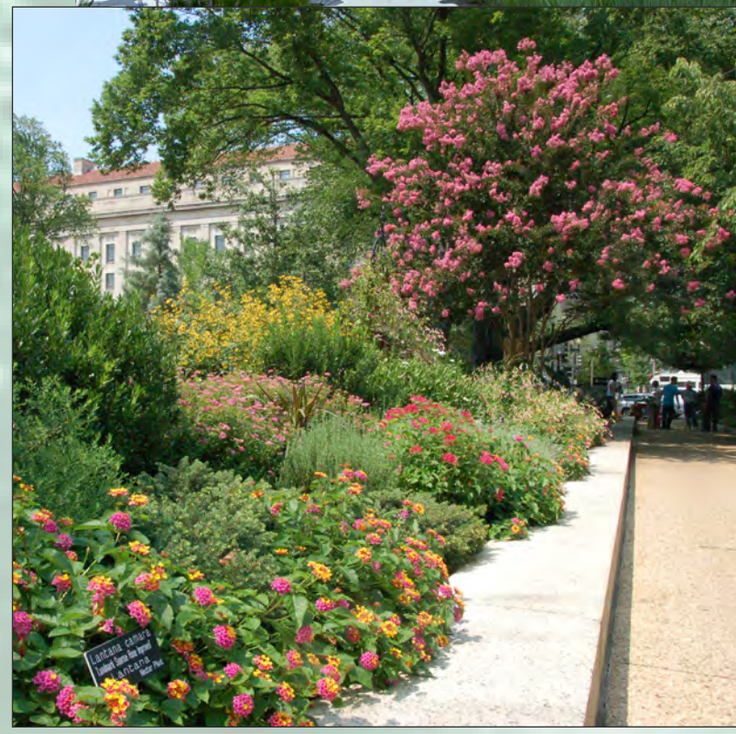
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Flickr: MrTinDC

Introduction to the Federal Environment Element

The federal government's goal is to promote the National Capital Region as a leader in environmental stewardship and sustainability. The federal government seeks to preserve and enhance the quality of the region's natural resources to ensure that their benefits are available for future generations to enjoy.

The National Capital Region's (NCR) natural resources have influenced development throughout its history, from agricultural beginnings and early port cities to the siting of the capital city at the confluence of the Potomac and Anacostia Rivers. The region's topography, forests, and waterways give the nation's capital a unique natural setting that has been respected and protected for generations. These natural resources remain valued, and the region has grown to become one of the nation's largest metropolitan areas in terms of population, jobs, and annual visitors. This growth requires conscious management and stewardship to maintain proper balance between the region's natural and built environments.

The Federal Environment Element identifies planning policies related to the maintenance, protection, and enhancement of the region's environment. This includes the natural and physical environments as well as the relationship of people with that environment. The element provides an overall framework for the Commission and others to evaluate the implications of federal projects to the environment, encourages improved low impact design and development practices, and facilitates coordinated management of resources among agencies. The element identifies several presidential executive orders, federal and local laws and regulations, and initiatives that encourage federal and local governments to work together and assume leadership roles in improving the environment.

The federal government has a significant influence and strong interest in protecting the region's environment:

- The federal government owns important environmental resources, including a large portion of the region's land and water bodies. The federal government is the region's single largest employer, tenant, and property owner. As a result, the government's environmental stewardship has a significant impact on the region's overall environmental quality.
- The federal government maintains a long-term perspective on the region's environmental quality as a permanent presence in the region.
- The nation and world look to the NCR as a symbol and model of leadership. Environmental policy in this region has an impact far beyond the area's immediate environment.
- The region is interconnected to environmental resources beyond its borders. As a result, environmental policies within the region affect other populations and ecosystems.
- As home to the government agencies that set national policies, the region often plays a role in testing innovative policies and demonstrating the benefits of sound environmental stewardship.

Legislative and Regulatory Framework

Federal agencies are individually responsible to comply with a number of environmental laws and executive orders that protect and conserve environmental resources. The U.S. Environmental Protection Agency (EPA) develops and sets national standards for topics such as clean air, water, and waste material and enforces regulations that implement many of these laws.

The primary environmental law that applies to all federal activities is the National Environmental Policy Act[1] (of 1969) (NEPA). Commonly referred as the 'umbrella act,' it requires federal agencies to evaluate the effect of their actions on the environment, and consider multiple laws, executive orders, and regulations before they make final decisions to ensure informed decision-making. Federal agencies must document the impacts of their potential actions on the environment as part of their decision-making process. The Council on Environmental Quality's (CEQ) regulations further define aspects of environmental implementation and compliance.

The National Capital Planning Commission (NCPC) provides planning guidance to many agencies on how they can meet these requirements and contribute to environmental stewardship in the region. NCPC also reviews environmental documentation as part of its project review process. Together, NEPA and other environmental requirements help the Commission and submitting agencies evaluate and properly address impacts early in the master planning and project planning processes.

The extensive federal presence in the region makes it imperative that specific efforts be made by federal facilities to follow policies considered in NEPA, related laws, and executive orders. Agencies should involve NCPC early on in the NEPA and project planning process to ensure that environmental issues are properly identified and considered. Planning considerations addressed early in the decision-making process will help the federal government preserve and enhance the quality of the region's natural resources.

Environmental Issues

The broad environmental challenges of climate change; watershed and habitat protection; and air, water, and land protection must all be addressed within the Mid-Atlantic context of the region. Restoration of the Cheasapeake Bay includes hurricanes and extreme weather events and the specific impacts from regional growth patterns. Integrating resilience into federal planning and decision-making are important steps in addressing challenges facing the region.

The NCR has a complex economy fueled by millions of residents and visitors that work for, or interact with, federally related functions. As in any metropolitan area, it is a challenge to accommodate offices, housing, transportation, and other development with minimal disruption to the natural environment. To decrease potential disruptions, the element supports policies that direct development and encourage greater density to established areas and near transit. Sound planning recognizes the value of compact, efficient, and well-designed development as a necessary part of the protection and enhancement of existing natural resources.

The Federal Environment Element includes overarching goals and policies designed to reinforce the federal government's role in sustainable development while considering potential impacts to the environment resulting from federal actions. The element provides a policy framework that supports a sustainable region using best planning practices, as well as thoughtful site planning and design solutions, to maintain and increase the region's environmental resources. The element consists of fourteen policy areas that provide guidance on numerous environmental issues.

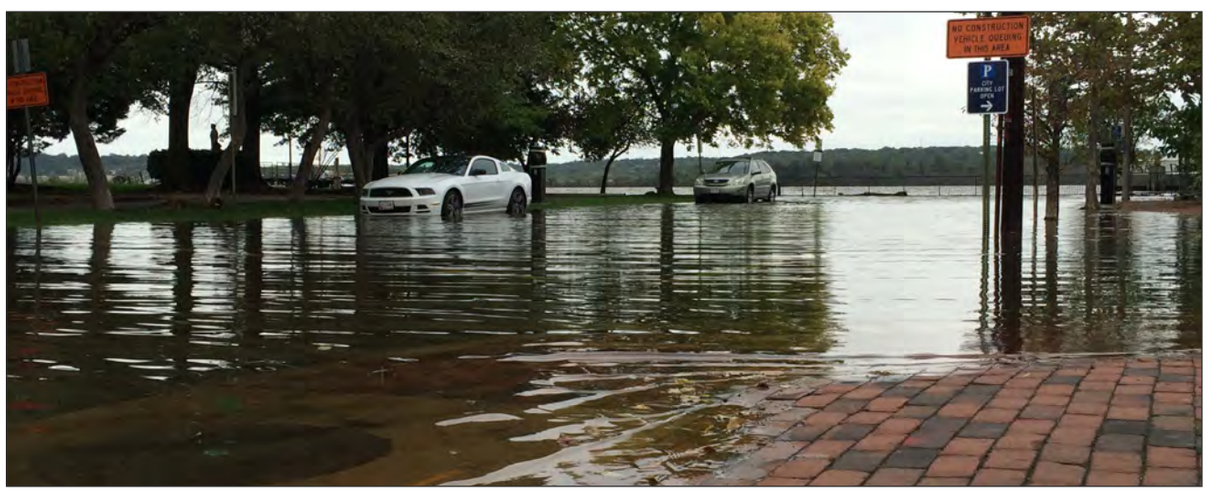


The 17th Street Levee closure protects downtown Washington from river and storm surge flooding.

SECTION A: Policies Related To Climate Change

Climate change, a significant and lasting shift in weather patterns over periods ranging from decades to millions of years, is a critical issue for the region, the country, and the world. According to the U.S. Global Change Research Program, there is evidence from the top of the atmosphere to the depths of the oceans that the planet is warming. Over the last half century this warming was primarily driven by human activity, predominantly through the burning of fossil fuels.[2] Warming is causing glaciers and Arctic sea ice to melt, affecting ecosystems and contributing to sea level rise. Beyond warming, climate change affects the type, frequency, and intensity of weather events, including heat waves, significant storms, floods, and droughts. Recent U.S. and international climate change studies document that globally the average sea level rise was approximately 1.7 millimeters per year through the twentieth century, after a period of little change during the previous two thousand years.[3] Ocean acidification, caused through the absorption of carbon, is affecting biodiversity and ecosystems around the world.[4]

While the global trend of warmer temperatures is clear, different regions can experience different impacts. For example, the Southwest United States should expect decreased winter and spring rainfall while the North, which includes Maryland and Washington, DC should expect greater precipitation.[5] For this reason, it is important to localize climate projections to determine local impacts. Federal agencies should use the best available data and projections in planning and decision-making tools.



Climate change can increase the frequency and intensity of flooding in urban areas.

Climate Change In The Region

Various recent studies have explored regional climate change.

Increased Rainfall. The District of Columbia Department of Energy & Environment projected that by the 2080s the number of days with more than one inch of rainfall would increase from 10 to 13 days.[6] This would result in more frequent flash-flooding that overwhelms the existing stormwater infrastructure, and poorer water quality flowing directly into the Potomac and Anacostia Rivers, as well as other water bodies.

Urban Heat Island Effect and Air Quality Impact. Days with temperatures over 95 degrees would increase to 7-9 days/year by 2020 and to 40-70 days/year by the 2080s[7] This presents energy consumption challenges (such as increased cooling loads), as well as health and safety concerns for residents, workers, and visitors.

Increased Sea Level Rise. By the 2050s, the National Aeronautics and Space Administration (NASA) predicted a regional sea level rise between 7-28 inches with an average annual temperature increase of 3-5°F.[8] Vulnerability to threats associated with rising sea levels is compounded by high population densities along coastal areas and rivers leading to major estuaries, such as the Chesapeake Bay. Low-lying areas in Washington, DC and locations along water bodies, including the Anacostia and Potomac Rivers, are affected by rising sea levels. Shorelines of the Chesapeake Bay and the Potomac River are among the region's most threatened resources from the effects of climate change. Even the rise of a few feet would exacerbate the effects of storms, tides, or floods and increase the risk of damage. There are significant numbers of federally-owned properties in these locations, including parkland, military installations, museums, and agency headquarters.

Mitigation and Adaptation

Federal and local agencies are focused on two important aspects of climate change: how to minimize further climate change from occurring (mitigation); and how to plan for, and address, the impacts of climate change (adaptation). The key to mitigation is reducing greenhouse gas (GHG) emissions. The use of fossil fuels such as coal, oil, and natural gas produce GHG emissions, which enter the Earth's atmosphere and prevent heat from escaping into space. As a result, the planet grows warmer and is more susceptible to extreme weather events. The federal government administers a wide array of public-private partnerships to reduce GHG emissions in the United States, including energy efficiency, renewable energy, subsidizing alternative modes of transportation, and implementation of other technologies.

Greenhouse gases are categorized into three broad scopes:

Scope 1 Emissions: Direct emissions derived from sources that are owned or controlled by the reporting entity; for example fuel used for heating federal buildings or for entity vehicles.

Scope 2 Emissions: Indirect emissions derived from the consumption of purchased electricity, heat, or steam.

Scope 3 Emissions: Indirect emissions from sources not owned or directly controlled by the entity but related to the entity's activities, such as employee travel and commuting.

In addition to reducing GHG emissions, the federal government is committed to planning for, and addressing, the impacts of climate change. Adaptation recognizes that even if global mitigation efforts are successful, there will still be impacts and consequences because of inaction over the last few decades. Adapting requires evaluation of how climate variability and change will affect assets, operations and service while planning and making decisions with these outcomes in mind. Both adaptation and mitigation have been a focus of legislative and procedural documents in federal and local agencies.

Resilience

Resilience is another form of adaptation that focuses not just on preparing for climate impacts, but also on a community's ability to sustain shocks and bounce back from them. Climate resilient planning involves thinking about how to strengthen social and economic networks to increase a community's adaptive capacity. The federal government has embraced climate resilience as a major planning effort through initiatives such as the U.S. Climate Resilience Toolkit[9] and the U.S. Department of Housing and Urban Development's National Disaster Resilience Competition.[10] Federal agencies are encouraged to plan for resilience in the National Capital Region.

Federal Mitigation and Adaptation Efforts

Two executive orders focus on climate change and sustainability. Executive Order 13693: Planning for Federal Sustainability in the Next Decade[11] (2015) requires federal agencies to meet ambitious sustainability goals for their own operations and account for their direct and indirect environmental impacts. The primary goal of this Executive Order is for federal agencies to reduce GHG emissions. Executive Order 13653: Preparing the United States for the Impacts of Climate Change[12] (2013) instructs federal agencies to improve the location's preparation and resiliency to the impacts of climate change by managing the associated climate risks to federal assets, operations, services and programs. Together these two executive orders make up the primary federal guidance for climate change mitigation and adaptation.

Within Washington's monumental core is an unparalleled concentration of federal headquarters, buildings, military installations, national security facilities, and significant national cultural treasures. This clustering of federal resources and operations makes it imperative that federal agencies in the region prepare for climate change as the potential consequences are too high to ignore. NCPC is working to better understand how federal policy can shape regional development, bringing multiple federal agencies together to discuss climate change in the region and how they can work together to adapt.

Interagency efforts include NCPC's Monumental Core Climate Adaptation Working Group. In 2013-2014, NCPC, U.S. General Services Administration (GSA), NASA, Metropolitan Washington Council of Governments (MWCOG), the U.S. Global Change Research Program, and the Smithsonian Institution sponsored the Building a Climate Resilient Region webinars and workshops to assist with climate adaptation planning and to help improve regional coordination. The workshops included new downscaled climate data provided by NASA, as well as opportunities to share climate information and a chance to brainstorm climate adaptation strategies tailored to the NCR. This project received the 2014 American Planning Association Federal Planning Division's Outstanding Collaborative Planning Project Award.

The Federal Interagency Climate Change Adaptation Task Force's 2010 Progress Report[13] provided a set of implementing instructions for federal agencies to integrate climate change adaptation into their planning, operations, policies, and programs. The Office of Management and Budget's annual Circular A-11 directs federal agencies to consider climate preparedness and resilience as part of their FY 2017 construction and maintenance budget requests.

A Cross-Cutting Issue

Climate change is a cross-cutting issue in this region that particularly affects stormwater (increased intensity and frequency of rain), flooding (rising sea levels and increased frequency and intensity of surge generating coastal storms), vegetation and wildlife (changes such as increased heat and ocean acidification result in loss of habitat and biodiversity, infrastructure (increased energy demand) and public health (increased heat and severe storms). Climate change serves as a force multiplier, increasing the severity and frequency of impacts. Climate change solutions are equally cross-cutting, and will have positive impacts on other environmental issues.

The federal government has the opportunity to play a major role in responding to climate change regionally, due to its large federal presence. The policies in this section address mitigation by reducing the amount of GHG emitted directly or indirectly by federal activities and adaptation by protecting federal assets from the impacts of climate change. Decreasing energy use in federally owned buildings and decreasing indirect emissions resulting from employee commutes are two primary ways to help reduce GHG emissions and mitigate climate change. Encouraging compact, transit-oriented development that reduces employee reliance on automobiles is another broad strategy for mitigation. Another important strategy is to share climate adaptation expertise and information across agencies and among local governments, so that the federal government can properly plan for future consequences. Armed with better information, federal agencies can make better decisions to protect federal assets from climate change impacts.

The federal government should:

FE.A.1 Implement sustainable building design and transportation strategies to address the challenges of climate change and advance projects that will minimize fossil fuel consumption and reduce greenhouse gas emissions.

FE.A.2 Establish compact, transit-oriented development to reduce greenhouse gas emissions.

FE.A.3 Pursue opportunities with vendors and contractors to reduce greenhouse gas emissions (e.g., transportation options and supply chain activities).

FE.A.4 Decrease, and where possible eliminate, the use of chemicals directly associated with greenhouse gas emissions.

FE.A.5 Develop and implement innovative, agency-specific policies and practices to reduce Scope 3 greenhouse gas emissions in agency operations.

FE.A.6 Design buildings to achieve energy, waste, and water net-zero use, where feasible.

FE.A.7 Increase renewable energy and renewable energy generation on federal agency properties. Institute aggressive development of energy districts in federal project construction involving multiple buildings and/or other physical assets.

FE.A.8 Address climate change impacts in long-range plans, site selection, and capital projects by considering, among others, the effects of:

1. Risks of flooding (sea level rise, annual rainfall, intensity of rainfall)
2. Pollutant levels in runoff
3. Soil erosion
4. Increased stormwater runoff
5. Temperature extremes
6. Increased number and severity of storms such as hurricanes
7. Impact to tree viability and vegetation
8. Critical services and infrastructure reliability

FE.A.9 Assist in the development of regional climate adaptation and resilience plans to enable the National Capital Region and individual localities and utilities to prepare vulnerability assessments, conduct adaptation planning, and facilitate regional emergency preparedness.

FE.A.10 Support local and regional analysis of impacts from climate change and associated risks to the region's infrastructure, buildings, natural resources, populations, and, in particular, federal lands and facilities adjacent to the Potomac and Anacostia Rivers and their tributaries.

FE.A.11 Develop federal plans and projects consistent with agency, local, and regional climate adaptation and mitigation plans by:

1. Prioritizing capital investments that are climate resilient and will increase the region's adaptive capacity.
2. Coordinating climate adaptation actions with other federal, regional, and local agencies within the same geographic area (such as a drainage basin, shoreline community or coastal region).
3. Ensuring that federal actions do not create greater climate change vulnerabilities in local communities or the region.
4. Considering the long-term vulnerability of a community's critical infrastructure to climate change risks during the site-selection process.

SECTION B: Policies Related to Air Quality

Population growth and related automobile use has made air quality one of the region's leading environmental concerns. In addition to detrimental effects on human health, air pollution degrades visibility to important viewsheds. Air pollution and the accompanying acid rain also cause the deterioration of materials in many historic federal buildings, memorials, and other susceptible structures.

Impacts of Poor Air Quality

Poor air quality has direct impacts to human health. Exposure to toxic air pollutants can cause serious health effects, including damage to the immune, neurological, reproductive, developmental, and respiratory systems, as well as other health problems.[14] Humans and animals are exposed to air pollutants from breathing in air toxins and from ingesting air pollutants deposited in water sources or in the soil. Once in the water or soil, the pollutants are taken up by plants and ingested by other animals and wildlife, making their way up the food chain.[15]

Air pollution has other environmental consequences. Poor air quality can lead to vegetation damage: from the way trees and plants look, to impaired reproduction and growth, and to decreased crop yields (refer to Section G: Policies Related to Tree Canopy and Vegetation for more discussion about trees and how they can improve air quality). Air pollution contributes to acid rain, which causes damage to structures (especially marble and limestone). It is also destructive to fish and animal life when it makes its way to rivers and oceans. Air pollution contributes to regional haze and visibility, which can obstruct important viewsheds.[16]

Air pollutants can also impact indoor air quality. These pollutants include combustion sources, off-gassing building materials and furnishings, cleaning products, and outdoor sources brought inside. Air quality is highly regulated at the local, state, regional, and federal levels. Following the Clean Air Act of 1970, the National Ambient Air Quality Standards were established to regulate pollutants shown to threaten human health and public welfare. The Clean Air Act and the standards include six criteria pollutants standards set by the EPA. The criteria pollutants are carbon monoxide, lead, nitrogen oxide, ozone, particulate matter, and sulfur dioxide. Areas where a criteria pollutant level exceeds the standards are designated as non-attainment status.

The Washington region is in a non-attainment status for ozone and fine particulate matter. Exhaust from cars, trucks, and buses primarily cause high ozone levels. In order to improve air quality in non-attainment areas, the Clean Air Act requires states to develop long-term State Implementation Plans to identify measures to help the region meet air standards, including transportation control measures designed to offset auto emissions. Federal activities should apply measures identified in the long-term plans to help the region meet air quality standards.[18]

Sources of Air Pollution in the Region

Pollution is emitted by either stationary or mobile sources. Stationary sources include point sources such as individual facilities with smoke stacks as well as area sources such as gas stations, painting operations, and use of consumer projects (not identified individually because they have only cumulative impacts). Mobile sources include "on-road" sources such as cars, trucks, and buses, and "non-road" sources such as aircraft, boats, construction equipment, and lawn and garden equipment.

Pollutants from mobile sources affect the entire region. In 2011, 28 percent of volatile organic compounds, 47 percent of nitrogen oxides, and 50 percent of carbon monoxide came from on-road sources.[19] In the presence of sunlight, these pollutants chemically react to form ground level ozone. The impact of these pollutants, as well as others including particulate matter, are most dramatic within 600 feet of major highways and roads. Their effects can extend as far as 1.5 miles away.[20] Federal facilities located, or that plan to locate, within 600 feet of a highway should consider the hazardous pollutants emitted from mobile sources and the impact they may have on employee health and safety.

In addition to local pollution, interstate transport of pollutants is another source of pollutants. One EPA study estimated that nearly 75 percent of ozone pollution in the region is transported in the wind from other states.[21] This includes long-range transport of pollutants from west of the Appalachians, medium-range transport from the southwest Mid-Atlantic, and local transport along the I-95 corridor. Pollutant transfer is an important reminder of the need for coordinated regional and national efforts, and that emissions generated in the region can harm public health and welfare in downwind jurisdictions.

The federal government's activities directly impact regional air quality. Policies in the element support the reduction of pollution from mobile sources by reducing vehicle miles traveled, and from stationary sources by reducing the amount of energy consumed. Because point sources of pollution are already regulated, federal agencies will have the greatest impact in the region by reducing pollution emitted by mobile sources. Many federal employees use public transit; however, the federal government should increase its efforts to support transportation infrastructure needs and provide amenities that encourage public transportation use. Other federal activities contribute to air pollution, including facility emissions from heating and air conditioning systems, power generators, and waste incinerators. Many agencies are incorporating "green" building materials and systems, which can improve indoor air quality and minimize power generation requirements. Federal agencies and employees can also improve air quality by choosing low-polluting transportation modes, reducing vehicle trips and trip lengths, conserving energy, and using low-polluting energy sources for buildings.

The federal government should:

FE.B.1 Reduce mobile source air pollutants by:

1. Encouraging federal, state, and local governments, as well as private employers, to support improvements to, and use of, public transportation systems and enhance bicycle and pedestrian mobility.

2. Decreasing federal employee use of single-occupant vehicles and reducing the number and length of trips through operational policies, such as reduced parking ratios using Transportation Demand Management techniques and the location and design of workplace facilities. Transportation Demand Management techniques are defined in the Transportation Element.

3. Encouraging use of alternative clean fuels (e.g., electric, fuel cell, compressed natural gas, and "clean" diesel fuels) and promoting or increasing use of Alternative Fuel Vehicles. Alternative fuels are defined by federal law.[22]

4. Establishing alternative fueling locations on federal property and assigning preferred parking spots for low emission vehicles.

5. Encouraging the use of aircraft that meet or exceed the current emission standards set by EPA.

6. Designing parking lots to support electric vehicle charging stations, where electricity sources are from renewable resources.

FE.B.2 Reduce stationary sources of air pollutants by:

1. Minimizing power generation requirements, such as by using best available green building systems and technologies.

2. Using less-polluting sources of energy like clean renewable energy (e.g., solar, geothermal, and wind).

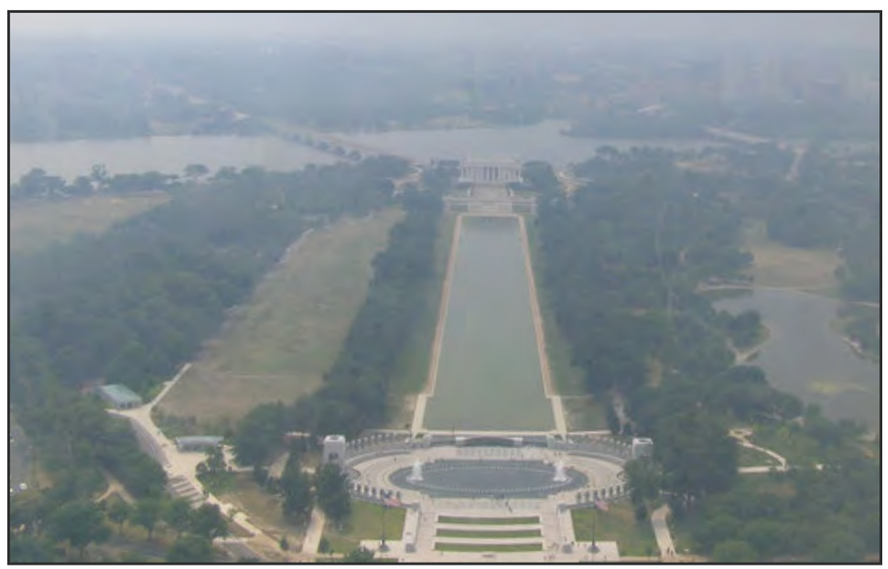
3. Encouraging the development and use of alternative and distributed energy sources to reduce the reliance on fossil fuels.

4. Carefully controlling and reducing the incineration of waste materials, particularly those that may contain toxic substances.

FE.B.3 Use environmentally-friendly green building materials, construction methods, and building designs to promote safe indoor air quality.

FE.B.4 Take measures to temporarily reduce the generation of emissions that contribute to ozone formation in response to Ozone Action Days, when the highest ozone levels occur. Similar measures should be applied to long-term plans to reduce mobile and stationary sources.

FE.B.5 Protect employees from breathing pollutants produced from mobile sources, especially when located within 600 feet of a major highway.



Limited visibility due to poor air quality looking from the Washington Monument.

SECTION C: Policies Related to Water Resources and Stormwater Management

Water Supply

The Potomac River supplies about 80 percent of the region's water.[23] The Washington Suburban Sanitary Commission's Patuxent River Plan and Fairfax County Water Authority's Occoquan River Plan provide the remaining balance. The region's major water supply agencies coordinate operations in the Potomac watershed, essentially operating as a single entity in sharing water across the Potomac, Patuxent, and Occoquan basins during periods of low flow.

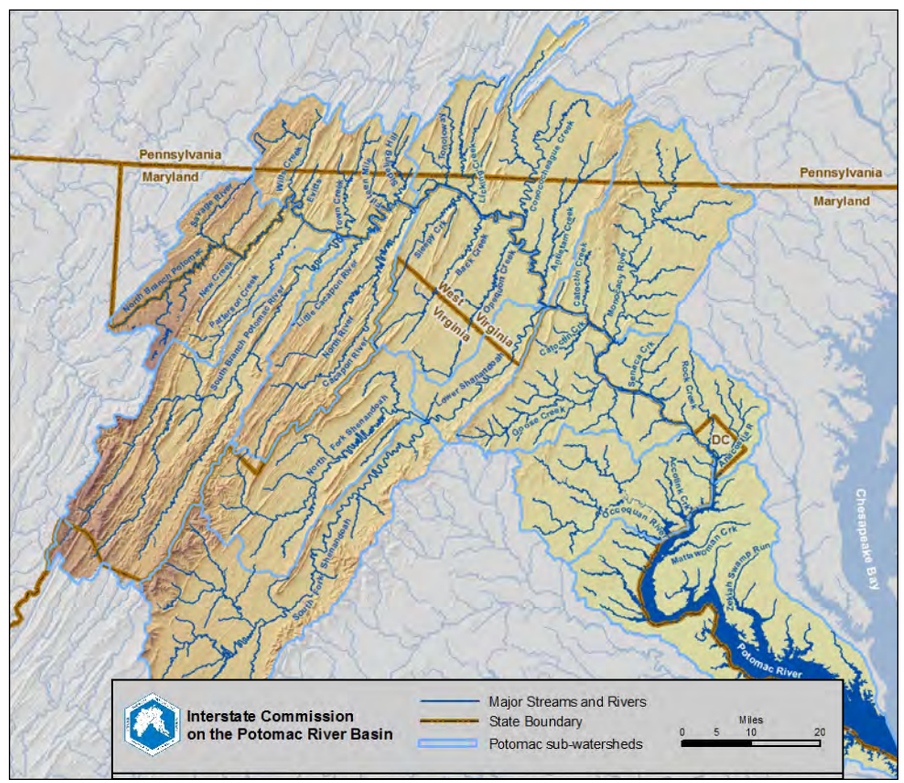
Despite occasional low flows in the Potomac River, and ongoing growth in the region, MWCOG projects that the region has sufficient water supply from its regional resources to accommodate expected future demand up to 2040. By the year 2040,[24] the existing system may have difficulty meeting demand during periods of drought without water use restrictions or the development of additional supply capabilities.

Federal government operations are dependent on the regional water supply system. As a result, it is important to retain and reuse stormwater as a resource in federal facilities to reduce the region's water consumption. Greater infiltration rates across the region will help recharge the groundwater and aquifer system and help achieve higher stream flows during dry weather.[25] The federal government, along with state and local authorities, has a responsibility to help ensure that the region's water supply is protected from contamination, and that the future water supply is adequate for federal facility operations, private sector activities, and general public consumption.

Water Quality

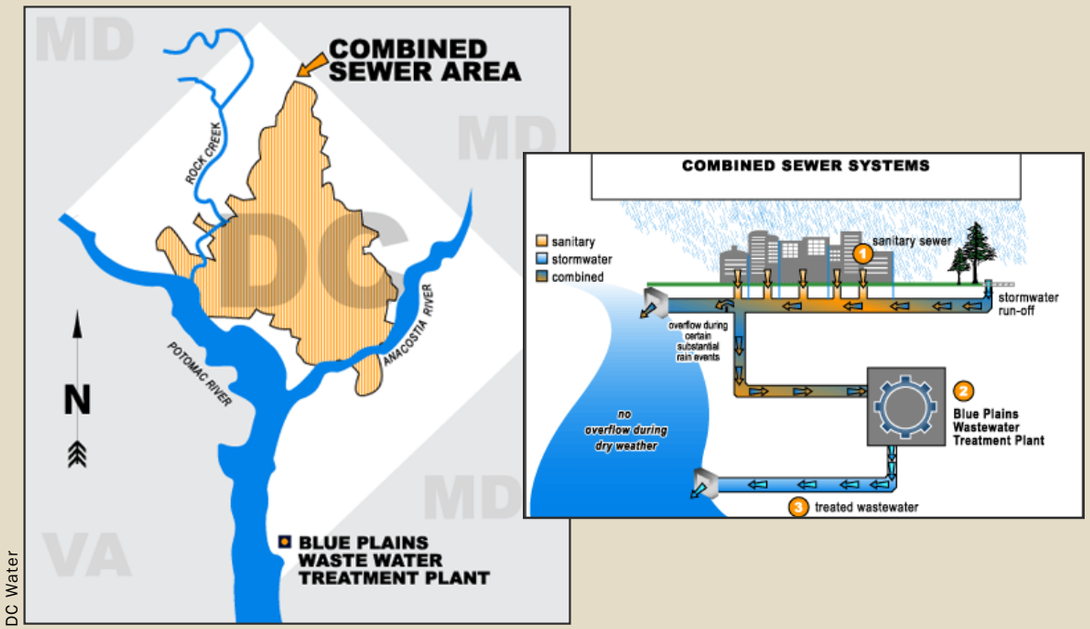
The region's rivers, streams, and groundwater systems are critical natural features and support a diverse array of wildlife and flora. The quality of these features is important for human use and enjoyment, and a variety of sources contribute to them. In the Washington area, major point source pollution is discharged from the region's sewage treatment plants and combined sewer overflows; and non-point source pollution is produced principally from stormwater and agricultural runoff.

Stormwater runoff occurs when precipitation does not infiltrate into the ground and instead flows over the land, accumulating debris and other pollutants.[26] Pollutants commonly include grease, oil, heavy metals from cars, fertilizers, pesticides, sediment from construction sites and agricultural areas, other loose soils, and bacteria from pet wastes. Eventually this polluted runoff is deposited into the rivers or streams. When the ground is no longer saturated, the polluted runoff can percolate into the ground water system. Once in the water supply, these pollutants can harm fish and wildlife populations, kill native vegetation, foul drinking water supplies, and make recreational areas unsafe and unpleasant.[27] Municipalities that operate combined sewer systems also negatively affect water quality because raw sewage flows into the rivers during rainstorms.



Potomac River Watershed

DC Water Clean Rivers Project



DC Water

When Washington's original sewer system was built in the 1800s, it was constructed as a combined sewer overflow (CSO) system that discharged sewage directly into the rivers during heavy rains. A 1994 EPA policy required all municipalities with CSOs to develop Long Term Control Plans to control CSO discharges into the nation's waters, which would be administered through the National Pollutant Discharge Elimination System permits. The District of Columbia, through DC Water (the city's water and sewer authority) began its LTCP process in 1998 and finalized it in 2002. The long term control plan was renamed the Clean Rivers Project in 2010.

The project calls for a 98 percent reduction of overflow events through the use of two large underground tunnel systems (a 30 million gallon Potomac River Tunnel and a 157 million gallon Anacostia River Tunnel system) to collect and send the diluted sewage during overflow events to the Blue Plains Water Treatment Plant. The plan was modified in 2015 to eliminate a planned tunnel for Rock Creek and instead build green infrastructure in the sewershed to help reduce the runoff generated during storms. The tunnels and green infrastructure will be completed in phases, allowing incremental benefits to water quality that will reach completion in 2030 when the project is finished.

Improving the Region's Water Quality

By the late twentieth century, the Potomac and Anacostia Rivers had suffered serious water quality deterioration. Officials banned fishing in many areas and discouraged direct human contact with the water. In response, federal and local agencies developed strategies to improve regional water quality. Several efforts are addressing these issues, including the Chesapeake Bay Program,[28] multiple Anacostia River initiatives,[29] and the DC Water Clean Rivers Project.[30] The Chesapeake Bay Program is an initiative developed to protect, restore, and enhance the Chesapeake Bay and the natural resources that rely on the Bay's continued good health (see Section H: Policies Related to Wildlife). Some solutions involve careful and coordinated regulation of future land development and densities to minimize impervious surfaces, control runoff, and ensure appropriate buffer areas along rivers, streams, and other sensitive areas. Other solutions require costly modernization of sewer and stormwater management systems. The Clean Rivers Project is DC Water's ongoing program to reduce pollution from combined sewer overflows to Rock Creek and the Anacostia and Potomac Rivers.

Stormwater Management

The federal government controls a significant amount of shoreline and adjacent properties along the Anacostia and Potomac Rivers and related tributaries, particularly in Washington, DC. In order to protect the region's waterways and water resources for generations to come, the federal government should reduce the amount of stormwater that flows into the sewer system and rivers; clean the stormwater that does flow into streams and rivers; increase regional infiltration rates and aquifer recharge; and reduce water consumption by reusing stormwater.

Under the Clean Water Act,[31] (1972) EPA is responsible for developing and implementing the National Pollutant Discharge Elimination System (NPDES) Stormwater Program, which regulates stormwater discharges from three sources: municipal separate storm sewer systems, construction activities, and industrial activities. The act requires each state to identify impaired waters (those that do not meet water quality standards even after point sources of pollution have installed the minimum required levels of pollution control technology) and develop strategies to limit pollution in the waters to a Total Maximum Daily Load. There are multiple plans in place to address the region's impaired water bodies including the Potomac River, Anacostia River, and the Chesapeake Bay. Federal agencies have a shared responsibility to help restore these waters.

Under Section 438 of the Energy Independence and Security Act of 2007 (EISA), federal agencies are required to reduce stormwater runoff from federal development and redevelopment projects in order to protect water resources.[32] Any development or redevelopment of a federal facility, with a footprint that exceeds 5,000 square feet, is required to use site planning, design, construction, and maintenance strategies to maintain or restore, to the maximum extent feasible, the predevelopment hydrology of the property with regard to the temperature, rate, volume, and duration of flow.

EPA has provided technical guidance on implementing EISA, focusing on retaining rainfall on-site through infiltration, evaporation/transpiration, and re-use of water resources to the same extent as occurred prior to development. Many federal facilities comply with federal, state, and local stormwater requirements using a variety of stormwater management practices including low impact development and best management practices and procedures.

The federal government should:

FE.C.1 Develop stormwater management plans that:

1. Encourage federal agencies and local jurisdictions to work together to develop stormwater management plans.

2. Encourage stormwater management at a campus or district-level.

FE.C.2 Strengthen stormwater management practices for federal facilities and federal land to meet federal and regional requirements, specifically to restore clean water, recover habitat, sustain fish and wildlife, and increase public access.

FE.C.3 Upgrade water supply and sewage treatment systems, modernize storm and sanitary sewer systems, and integrate green infrastructure approaches to avoid the discharge of pollutants into waterways.

FE.C.4 Avoid the use of pesticides, herbicides, fertilizers, chemicals, oil, salts, and other threats to prevent the pollution of groundwater and waterways.

FE.C.5 Use pervious surfaces and bio-retention facilities, if appropriate to the site, to reduce stormwater runoff and impacts on off-site water quality.

FE.C.6 Encourage the use of innovative and environmentally-friendly “Best Management Practices” in site and building design and construction practice, such as green roofs, bio-retention ponds, vegetated filtration strips, rain gardens, and permeable surface walkways, to reduce erosion and clean and capture stormwater on-site.

FE.C.7 Use technical guidance provided by EPA, in addition to working with local jurisdictions, to meet both federal and local stormwater requirements.

FE.C.8 Ensure that stormwater runoff does not impact neighboring properties.

FE.C.9 Prevent unnecessary wastewater discharge and the potential for combined sewer overflow events. Require reduced wastewater output through conservation and reuse in all new federal buildings and major federal renovation projects consistent with the Energy Independence and Security Act of 2007 and all other applicable policies.

FE.C.10 Participate in regional agreements and programs that improve water quality and address watershed issues.

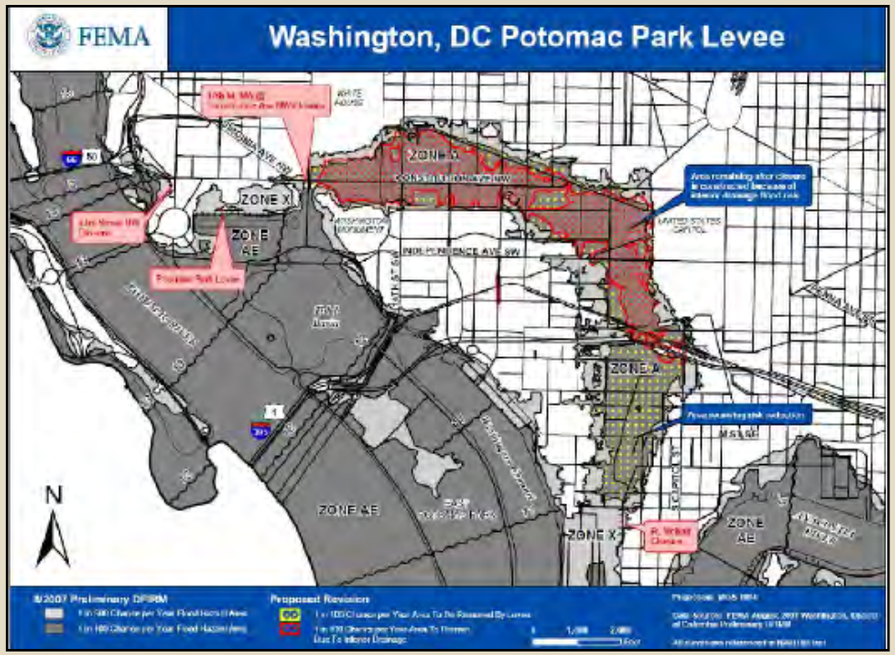
FE.C.11 Encourage the natural recharge of groundwater and aquifers by limiting the creation of impervious surfaces, avoiding disturbance to wetlands and floodplains, designing stormwater swales and collection basins on federal installations, and using pervious surfaces wherever possible.

FE.C.12 Promote water conservation programs and the use of water-saving technologies including landscaping and irrigation strategies that conserve and monitor water consumption in all federal facilities.

FE.C.13 Encourage the implementation of water reclamation programs at federal facilities for landscape irrigation purposes and other appropriate uses.

FE.C.14 Reduce or eliminate the use of potable water (water that is safe for humans to drink) for landscaping or water features. Encourage the reuse of greywater.

FE.C.15 Avoid sites that have high stormwater retention value, such as areas with soils that have high infiltration rates or discharge directly into wetlands or water bodies. Promote development on previously disturbed sites, especially those with impervious surfaces or compacted soil so that redevelopment can achieve better filtration.



Historic floods led to the construction of the Potomac Park Levee system in the 1930s and the Anacostia Levee system in the 1950s, which protects the city from river and storm surge flooding (but not interior flooding). The Potomac Park Levee runs through the National Mall into Southwest Washington. The system today includes earthen berms on the north side of the Reflecting Pool and the 17th Street closure, which was reconstructed in 2014. While the new 17th Street Closure is built to withstand a 500-year flood with 0.2 percent chance or less of occurring in a single year, the adjoining earthen berm walls are not as high and as a result, the current levee system only protects against a flood event with a 0.5 percent chance of occurring. With future planned improvements to the earthen berm, the Potomac Park Levee will protect the city against 500-year flood events. The Washington, DC Flood Insurance Rate Map[26] will be revised to reflect flood risk reduction from the 17th Street closure improvements.

100-year flood: A flood event with one percent chance (or greater), of occurring in a single year.

500-year flood: A flood event with 0.2 percent chance of occurring in a single year.

SECTION D: Policies Related to Flooding

Flooding in the Region

In the region, a significant number of federal properties and buildings, including agency headquarters, cultural institutions, and iconic monuments are located in areas at risk of flooding. The region is vulnerable to three types of flooding: riverine flooding, tidal/storm surge flooding, and interior flooding.

Riverine flooding is caused by heavy sustained rainfall or rapid snowmelt upstream in the Potomac River watershed that results in increased water flowing down the Potomac and Anacostia Rivers. Tidal and storm surge flooding occurs when coastal storms push water up the Potomac River from the Chesapeake Bay and Atlantic Ocean. In both riverine and storm surge flooding, the results are the same: water overflows the banks of the Potomac and Anacostia Rivers onto land. Insufficient stormwater management in the region can cause greater river flooding occurrences downstream on the Potomac River. The most vulnerable areas in the region are those that are at the lowest elevation points that are connected to the rivers.

Flooding can also occur when excess water enters a stormwater system (both natural and manmade). Urban areas have poor infiltration rates, requiring greater capacity in the stormwater sewer systems to handle excess runoff from impervious ground cover like streets and building roofs. Interior flooding occurs when rain overwhelms the stormwater system capacity and the ground's ability to infiltrate the water. As a result, stormwater ponds in streets and low-lying areas.

Impacts of Flooding

Floods have a variety of negative consequences, including direct impacts such as loss of life and damage to property, infrastructure, and natural systems. When infrastructure such as power stations, roads, and Metro stations are damaged by floods, there are further impacts to services and the local economy, as normal life is disrupted. Because of the high concentration of federal buildings, military installations, national security facilities, and significant national cultural treasures in the NCR, the federal government faces significant flood risks. The Federal Triangle Floods[34] in 2006 are one example of how the government can be impacted by floods. Heavy rains in Washington, DC resulted in over 20 feet of water inundating buildings and Metro tunnels in the Federal Triangle. Damage estimates show that GSA and the IRS expected to spend $54 million in repairs, in addition to $4 million associated with employee time lost.[35] Many of Washington's infrastructure (Metro and power facilities) are located underground and are vulnerable to flooding.

Floodplains

One of the best ways to protect federal resources from the impacts of flooding is the preservation of floodplains. Floodplains perform important water management functions, including temporarily storing floodwaters to reduce peak flows; maintaining water quality; recharging groundwater; and preventing soil erosion. Floodplains provide habitat for wildlife, recreational opportunities, and aesthetic benefits. By preserving floodplains in the NCR and only allowing uses where occasional flooding is acceptable, the federal government can reduce its risks of flooding in areas downstream.

Executive Order 11988: Floodplain Management,[36] (1977) and Executive Order 13690: Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input[37] (2015), guide federal agencies to avoid development in floodplains where possible, and minimize potential impacts to ensure that development does not exacerbate possible flood impacts. In Executive Order 11988, the federal government defined floodplains as flood events with one percent annual chance or greater, of occurring in a single year. Executive Order 13690 asks agencies to consider the impacts of higher floods when planning federally funded projects (actions where federal funds are used for new construction, substantial improvements, or to address substantial damage to structures of facilities) and to apply one of three stricter floodplain standards when evaluating these projects. This Executive Order directs agencies to think critically about the level of flood risk they are willing to accept, and to plan with higher elevation floods in mind to account for uncertainties associated with climate change, increased heavy rain events, and sea level rise. NCPC encourages consideration of the most conservative floodplain definition when planning for critical facilities and the many significant cultural and historic resources.

The policies in this section aim to protect federal facilities from the risks of floods and protect floodplains as a resource.

The federal government should:

FE.D.1 Collaborate with federal and regional agencies on flood management plans and flood protection projects.

FE.D.2 Prohibit hazardous activities and critical actions in floodplain areas.

FE.D.3 Encourage modification of existing developments to remove or mitigate flood hazards, restore floodplain values, and improve water management. If the necessary modifications cannot be accomplished, the buildings should be removed when feasible to allow restoration of the floodplain and to correct flood hazards and restore floodplain values.

FE.D.4 Discourage investment in floodplain areas unless related to correcting flood hazards, restoring floodplain values, or supporting conservation, passive recreation, or memorial uses.

FE.D.5 If construction in a floodplain is necessary:

1. Preserve natural drainage where possible.
2. Elevate structures above base flood level.
3. Use best available flood proofing and protection measures.
4. Return the site as closely as possible to its natural contours.
5. Consider the cumulative impacts to the floodplain.
6. Consider long-term operational and capital costs associated with preparing and recovering from potential floods.

FE.D.6 Consider relocating outside of the floodplain when planning substantial improvements or repairs to an existing facility in a floodplain. If locating in a floodplain is necessary:

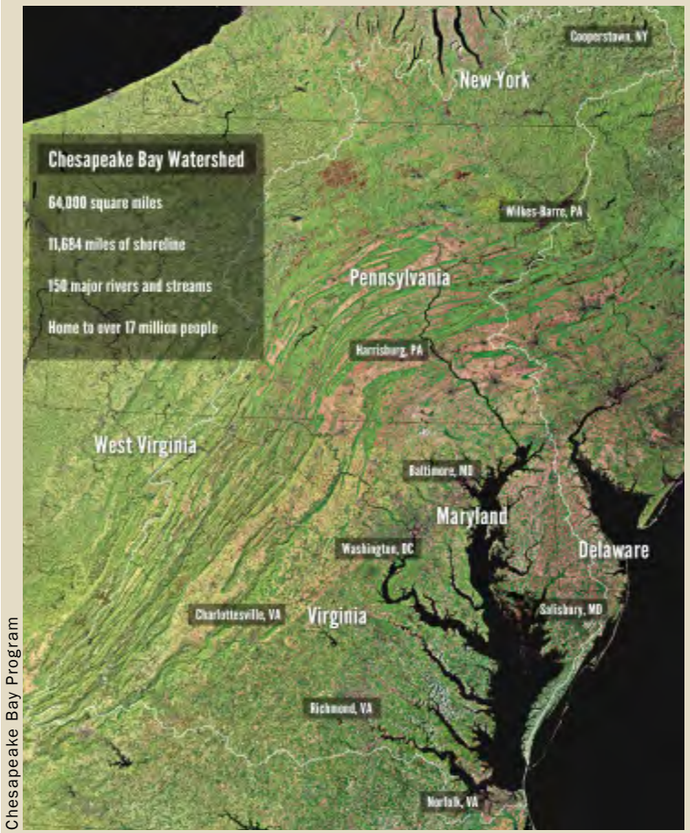
1. Elevate all equipment and assets from the ground level floor, where flooding might be expected.
2. Apply flood proofing and protection measures to existing infrastructure to ensure that critical operations will not be disrupted during flood events.



David C. MacLean

Anacostia Waterfront Initiative

The Anacostia Waterfront Initiative, launched in 2000, is a $10 billion, 30-year program to restore the health of the Anacostia River and revitalize neighboring areas. It is led by the District of Columbia and endorsed by multiple regional and federal partners. The initiative includes innovative transportation improvements such as the Anacostia Riverwalk Trail that can spur economic development and help clean stormwater. It also includes environmental initiatives such as the River Smart Home program and the "catch basin trash screen" pilot program. Though a separate initiative, the DC Clean Rivers project (see page 9) will also greatly increase water quality in the Anacostia River.



Chesapeake Bay Program

Chesapeake Bay Program

After a Congressionally funded study in the late 1970s concluded that rapid loss of wildlife and aquatic life in the Chesapeake Bay was a result of excess nutrient pollution, the Chesapeake Bay Program was formed in 1983 as a means to restore the bay. The program was initially formed through the Chesapeake Bay Agreement of 1983 that was signed by the governors of Virginia, Maryland, and Pennsylvania, the mayor of the District of Columbia, and the EPA Administrator. Since then, the program has made new agreements and plans, and added Delaware, New York, and West Virginia as signatories. Plans include setting goals for reduction of phosphorous and nitrogen entering the bay as well as goals for land conservation and forest buffer restoration. Executive Order: 13508 Chesapeake Bay Protection and Restoration[38] (2009), further bolstered efforts to restore the bay and led to EPA's Chesapeake Bay Total Maximum Daily Load requirements in 2010, which set mandatory limits on the amount of nutrients and sediment that can enter the Bay and its tidal rivers. In order to meet the requirements, each of the seven jurisdictions has created Watershed Implementation Plans outlining how they will meet the pollution reductions by 2025.

SECTION E: Policies Related to Waterbodies and Wetlands

The protection of the region's wetlands and waterbodies is important not only to maintain water quality for human use and enjoyment, but to protect the ecosystems that depend on them. Waterbodies in the region include rivers, streams, lakes, and wetlands. The impact of stormwater on water quality is further discussed in Section C of this element. Policies in this section aim to protect important waterbodies and wetland ecosystems as well as the recreational, navigational, and other services they provide.

Ecosystem Services

As directed in the Presidential Memorandum, Incorporating Ecosystem Services into Federal Decision Making[39] (2015), agencies shall develop policies to promote consideration of ecosystem service assessments within existing agency planning and decision frameworks. Ecosystem services are generally described as the benefits that flow from nature to people, such as nature's ability to provide clean air and drinking water, habitat for wildlife and mitigating the effects of storms and floods. These services have immense value, but are often overlooked because of the difficulty in placing a monetary value to them. Recognizing that healthy ecosystems are essential to human welfare, security, and the health of social and economic systems, federal agencies incorporating ecosystem services into the planning and decision making process will effectively address the challenges facing the nation and ensure ecosystems are healthy for this and future generations.

Regional Waterbodies

The Potomac and Anacostia Rivers are the region's two primary waterbodies, both of which are listed as impaired by the EPA. These rivers are fed by a number of tributaries. The Anacostia River has 13 major tributary creeks and streams and its watershed is a 176 square mile area of land that encompasses most of the eastern half of Washington, DC and large portions of Prince George's and Montgomery Counties in Maryland. The Potomac River watershed is much bigger, covering 14,670 square miles across four states (West Virginia, Maryland, Virginia, and Pennsylvania) as well as Washington, DC. The NCR is also entirely within the Chesapeake Bay watershed, which means that the water quality and health of the Potomac and Anacostia Rivers directly translates to the health of the Chesapeake Bay. There are a number of regional initiatives that focus on enhancing the health of the region's waterbodies, including the Anacostia Waterfront Initiative and the Chesapeake Bay Program.

There are many streams and lakes throughout the region which are not as heavily monitored as the Potomac and Anacostia Rivers. High velocity stormwater, a common occurrence in urban rivers and streams, can also physically alter the course of these waterbodies, affecting the ecosystems that rely on them.

Shorelines

Growing recognition of the Potomac and Anacostia waterfronts as an amenity has increased competition for space along the water's edge and in the water itself. Shorelines serve as vital habitat corridors and ecological resources that address water quality and quantity, and provide flood protection, in addition to being important recreation and industrial resources. The region's shorelines are unique because of the many nationally significant cultural and historical resources located on the Potomac and Anacostia Rivers. They are also home to multiple federal facilities with unique missions and needs. The majority of the shorelines along the Potomac and Anacostia Rivers are controlled by the federal government, affording it great influence on how the region's water bodies are accessed and used.

Wetlands

Wetlands are generally defined as lands that are wet for significant periods during the year, including marshes, swamps, and bogs. Wetlands are a significant part of the region's ecosystem, providing fish and wildlife habitats, flood protection, erosion control, and maintenance of water quality. Human development often disturbs wetlands directly (by filling or constructing in wetlands) or indirectly (by altering an area's hydrology). The steady conversion of undeveloped land to impervious surface is an ongoing threat to the region's wetlands, resulting in increased stormwater runoff (causing erosion and pollution) and requires water treatment facilities. Sediments and pollutants enter wetlands and degrade its ability to provide ecological benefits.[40] The federal government protects wetlands through the Clean Water Act and state and local regulations that control activities in wetlands.

In 1791, the L'Enfant City was home to six swampy areas that covered a total area of 100 acres, or two percent of the planned city's total area.[41] Due to urbanization, the six original wetlands identified in 1791 are gone today. The District of Columbia Department of Energy and Environment conducted a field reconnaissance of wetlands in 1996 and identified 48 known wetland areas in the city, not including the Potomac and Anacostia Rivers.[42]

There are important benefits of wetlands in the region and the federal government should enhance the function of existing wetlands and reduce the loss of wetlands in the future. Federal policies, including Executive Order 11990: Protection of Wetlands[43] (1977), discourage disturbances of wetlands and the general pattern of development that alter their function in the natural ecosystem. The federal government is also striving to restore natural streams and to establish planted buffers along waterways. Combined with the policies in Section C, the following policies improve regional water quality and the health of the area's shoreline and wetland ecosystems.

The federal government should:

FE.E.1 Protect the physical and ecological functions of wetlands and riparian areas with priority in the following order:

1. Avoid development of areas that contain wetlands, including isolated wetlands, or on sites that will impact the quality and health of nearby wetlands.
2. Minimize the impacts to wetlands by reducing the area of disturbances. If construction in a wetland is necessary, utilize the highest standard in project development requirements to minimize adverse impacts.
3. Replace wetlands that are lost or degraded as a result of site development.

FE.E.2 Avoid any intensive land uses with high amounts of impervious surface or significant pollution discharges within or adjacent to wetlands and riparian areas.

FE.E.3 Create vegetative and open space buffers around wetlands, waterways, or riparian areas when constructing near wetlands.

FE.E.4 Coordinate wetland activities with federal, state, and local government programs and regulations, including the Chesapeake Bay Program. Support local and regional watershed implementation plans and regulations.

FE.E.5 Design vegetated buffer strips around wetlands and waterbodies to capture and clean stormwater runoff. Encourage restoration of streams and stream banks that have been negatively impacted by runoff.

FE.E.6 Protect wetlands and waterbodies from indirect impacts such as significant adverse hydrological modifications, excessive sedimentation, deposition of toxic substances in toxic amounts, nutrient imbalances, and other adverse anthropogenic impacts.

FE.E.7 Promote improvement of degraded wetlands, especially during significant building or site improvements on federal property.

FE.E.8 Promote shoreline uses that create public access, improve riparian conditions, and enhance water quality.



In 2011, the region experienced the Virginia earthquake, which led to damage to federal buildings and the Washington Monument. This earthquake prompted agencies to consider future seismic risks.

Agencies should consider native vegetation, since once established, native plants do not need fertilizers, herbicides, pesticides, or watering, thus benefiting the environment and reducing maintenance costs.



AleSZV

Native Plant Garden at the Smithsonian Museum of Natural History

SECTION F: Policies Related to Soils

Soils play a critical role in maintaining a healthy and viable ecosystem and can support clean water and air, productive forest, diverse wildlife, beautiful landscapes, as well as contribute to a diverse and productive environment. Healthy soils are defined as those that are able to sustain a living ecosystem, and do so through six essential functions: regulating water flow, nourishing plant and animal life, cycling important nutrients, filtering pollutants, mitigating climate change, and providing physical support to plants and infrastructure.[44]

Soil qualities can vary naturally, including differing degrees of stability and nutrients. Soil quality is not easily altered. However, healthy soils can become compromised due to erosion, pollutants, harmful farming practices, and unprecedented urban growth.[45] Soil degradation then limits or halts the functions of a healthy soil environment causing impacts such as fewer resources for food, or poor water quality.[46] The activities of federal agencies can affect the quality of soil, resulting in impacts on the ecosystem as well as on the ability of the soil to support structures and activities of the federal government. Soils and sediments have an important relationship with the planning of stormwater management. The policies in this element support the enhancement of degraded soils when making significant building or site improvements on federal property.

The federal government should:

FE.F.1 Discourage development in areas of identified high erosion potential, on slopes with a gradient of 15 percent and above, and on severely eroded soils. Avoid development on excessive slopes (25 percent and above).

FE.F.2 Employ best management practices to reduce the potential for soil erosion and the transportation of sediment, consistent with state and local requirements.

FE.F.3 Limit uses on highly unstable soils to passive recreation, conservation areas, and open space.

FE.F.4 Locate and design buildings to be sensitive to natural groundwater flows. Avoid development in areas where mineral resources, such as diabase clay and shale, are located.

FE.F.5 Identify and protect soil protection zones.

FE.F.6 Create and implement an erosion and sedimentation control plan during construction to prevent damage or loss of critical soils.

FE.F.7 Avoid soil compaction in design of landscape plans, during construction, and maintenance.

FE.F.8 Minimize tree cutting and other vegetation removal to support soil structure (slope geometry, location and geologic content), reduce soil disturbance, and limit erosion. When tree removal is necessary, replace trees, shrubs, and other vegetation to prevent a net vegetation loss.

FE.F.9 Encourage remediation and redevelopment of brownfield sites.

FE.F.10 Enhance degraded soils during significant building or site improvements on federal property.

SECTION G: Policies Related to Tree Canopy and Vegetation (updated 2020)

Tree canopy and vegetation provide numerous benefits to the urban framework. While they provide an aesthetic appeal, they also provide cultural value and serve as food and habitat for wildlife, and enhance the well-being of communities and ecosystems, and provide biodiversity, making them an integral part of development and design. Vegetation provides root systems that help maintain soil integrity, function as natural aquifers, and recharge areas. It reduces erosion, particularly on steep slopes and areas adjacent to waterways. Large trees, especially in groupings, are a particularly valuable environmental resource. Urban vegetation can also directly and indirectly affect local and regional air quality by altering the built environment. Urban trees can improve air quality by:

- Reducing temperature and energy costs by providing shade and cover.
- Reducing ozone and other pollutant concentrations.
- Mitigating climate change by storing carbon.
- Enhancing water and soil quality through stormwater retention and reduction of soil erosion.

In addition to these environmental contributions, trees also shade buildings and homes, which reduces energy consumption and provides quality settings for habitation, contributing to the community's overall health. The benefits of tree canopy and vegetation highlight the need to protect and restore urban vegetation, including tree canopy, wherever possible.



Pennsylvania Avenue tree canopy

Trees and Vegetation in the Region

The tree canopy coverage in the Washington, DC region has decreased since 1950. For example, increased urbanization and population growth have reduced tree canopy coverage in the District from 50 percent to 38.7 percent tree canopy coverage.[1] However, the region is working to restore vegetation. In 2014, over 12,000 trees were planted around Washington, and the District adopted the goal of 40 percent tree canopy coverage by 2032 in the District of Columbia Urban Tree Canopy Plan49 (2013). As of 2016, Arlington County, Virginia has a tree canopy of 41 percent (38 percent inclusive of National Airport and Department of Defense properties), and approximately 750,000 trees.[2] As the largest landowner in Washington, and with military installations in region located in Maryland and Virginia, federal agencies play an important role in the conservation and expansion of the National Capital Region's tree canopy coverage.

Applicant agencies are expected to comply with all applicable policies in the Comprehensive Plan's Federal Elements. Nonetheless, some uncertainty is inherent in tree preservation and replacement. Challenges can include a lack of physical space to replant trees or considerations for the historic character of cultural landscapes. For example, in cultural landscapes, treatment to preserve and enhance the historic character of a landscape may include removal of individual trees and stands, as well as forest management. NCPC recognizes these uncertainties and complexities. In rare circumstances where broader goals are more important, deviations from the tree preservation and replacement policies may be appropriate. The criteria to request a deviation for a specific project are detailed in NCPC's Submission Guidelines (https://www.ncpc.gov/review/guidelines/).

1 "Land Cover analysis for Washington, DC examining the period from 2006 to 2015, in 5 year increments," feature layer by Earl Eutsler, December 2016

2 "Urban Tree Canopy Assessment," Arlington County, prepared by Davey Trees, December 2017

The federal government should:

FE.G.1 Preserve and protect existing trees, especially individual trees, stands, and forests of healthy, native or non-invasive species. Account for existing trees early in the planning and design processes when development occurs to maximize preservation and incorporate the natural landscape into the design. In addition:

1. Trees 31.85-inches in diameter (100 inches in circumference) or greater may not be removed, unless:

    a. Removal is critical to accomplishing the mission of the agency and planning/design alternatives that would preserve such tree(s) have been explored and determined incapable of accommodating program requirements, or

    b. The tree(s) are considered invasive, hazardous, or high risk per an Arborist's evaluation.

2. All possible considerations should be taken to preserve and protect trees in areas determined to be critical to the health of tidal waters, tidal wetlands, and tributary streams of the Chesapeake Bay or Potomac River watersheds, and on sites with old growth forests and/or with significant ecosystems.

FE.G.2 Transplant or replace existing tree(s) when they are impacted by development and preservation is not feasible, according to the following procedures:

1. Transplant healthy, native, or non-invasive tree(s) where practicable. Consult an Arborist and consider the following factors when determining if transplanting is appropriate:

    a. Tree species, size, and condition

    b. Historic or cultural significance of the tree (e.g., "legacy tree or legacy vegetation" or those that contribute to historic city plans and cultural landscapes)

    c. Current location of the tree(s) compared with the proposed location of the tree(s) (e.g., urban condition vs. open field; shade vs. sun)

    d. Soil quality at the current and proposed locations (e.g., sandy loam vs. silty clay; availability of organic matter)

    e. Percent of critical root area that can be retained

    f. Maintenance of tree(s) after transplanting

2. Replace tree(s) when they require removal. Replacement tree(s) should increase biodiversity, be native species or non-invasive species,[3] and have a mature canopy spread equivalent to, or greater than, the tree(s) removed. Replacement tree(s) should be planted at a minimum caliper size of 2.5 inches for shade trees, 1.5 inches for ornamental trees, and six-foot height for multi-stem and evergreen trees.

Replace trees according to the following procedures:

    a. Tree(s) less than 10-inches in diameter:
    Replace one tree for every one tree removed (1:1)

    b. Tree(s) 10-inches in diameter or greater:
    Tree Diameter (in inches) x Species Rating (as percentage) x Condition Rating (as percentage) = Score

    Tree(s) are replaced at the following rates, based on the Score:

    - 1-4.9 = one tree
    - 5-9.9 = two trees
    - 10-14.9 = three trees
    - 15-19.9 = four trees
    - 20-24.5 = five trees
    - 25+ = six trees

    Example: The replacement formula and score for a 25-inch diameter tree, with a Species Rating of 60% and Condition Rating of 75% is: 25 x .60 x .75 = 11.25. The resulting score of 11.25 equates to three trees planted to replace the 25-inch tree.

    c. Forests and Stands of Trees: Plant 1 acre minimum for every 1 acre removed. Consult with federal and local stakeholders to determine the appropriate density, mixture, and size of replacement plantings.

3. Locate replacement or transplanted tree(s), in order of preference, on:

    a. The project site (e.g., within or adjacent to the limits of disturbance)

    b. The property where the project site is located

    c. Another site within the agency's jurisdiction (authority) only if the preferred locations cannot accommodate the replacement trees without overcrowding, or

    d. A combination of the above locations.

3 Unless such specifications are inconsistent with the intent of culturally or historically significant landscapes.

4. Ensure the amount of planting soil volume is consistent with current industry best practices. Consult with federal and local stakeholders to determine the appropriate standards based on the type of tree (e.g., shade tree, ornamental, evergreen, etc.) and location (e.g., above structure, on-grade, etc.).

5. Protect tree(s) to be preserved in accordance with the most current edition of ANSI-A300, Part 5. Transplant, install, and maintain trees also in accordance with the most current edition of ANSI-A300, and specify replacement trees in accordance with the most current edition of ANSI-Z60.1 .

FE.G.3 Conserve tree canopy coverage and enhance the environmental quality of the National Capital Region by preserving existing trees, replacing trees where they have died, and transplanting or replacing trees where they require removal due to development. Tree preservation, transplant, and replacement should adhere to the procedures provided herein to prevent a net loss of tree canopy in the development area.

FE.G.4 Incorporate new trees and vegetation into plans and projects to absorb carbon dioxide, moderate temperatures, minimize energy consumption, reduce pollution, and mitigate stormwater runoff. This includes the use of vegetation in the design and development of green roof projects where feasible and consistent with local regulations.

FE.G.5 Conserve plant communities native to the site's ecoregion (as defined by the Council on Environmental Quality).[51] Protect and/or restore areas containing native plant communities, and provide habitat corridors connecting to off-site natural areas or buffers adjacent to off-site natural areas for migrating wildlife.

FE.G.6 Maintain and preserve woodlands adjacent to waterways, especially to aid in the control of erosion, sediment, and thermal pollution.

FE.G.7 Encourage the use of native plant species and remove invasive plants where appropriate.

FE.G.8 Protect and preserve all vegetation designated as special status plants.[52]

FE.G.9 Use vegetation to minimize building heating and cooling requirements.

FE.G.10 Use trees and other vegetation to offset emissions of greenhouse gases from operations. Plant and maintain trees and other vegetation to achieve long-term storage of carbon dioxide following accepted protocols that ensure offsets are permanent and verifiable.

FE.G.11 Support sustainable practices in federal landscape development to include, but not be limited to, the following:

1. Use of sustainable soil amendments.
2. Reduced irrigation runoff.
3. Reduced greenhouse gas emissions.
4. Use of Integrated Pest Management practices.
5. Reduced potable water consumption and recycling of all organic matter.
6. Introduction of plants that support pollinator species.
7. Selection of vegetation in the appropriate U.S. Department of Agriculture Plant Hardiness Zone,[53] while accounting for regional changes in climate.

FE.G.12 Use of grass species as lawn should be limited to recreational areas so that major reductions in water, chemicals, maintenance, energy, air and water pollution, and noise occur. Where turf grass is used, species and cultivar selection should reflect the local climate and growing conditions to minimize the need for irrigation and the use of chemicals for feeding, and controlling insects and disease.



Invasive plant removal at Shepherd Parkway, SE

SECTION H: Policies Related to Wildlife

Wildlife habitats are important to ensure the biodiversity and environmental well-being of the region. They provide the necessities of food, water, and shelter for plants and animals but are also a critical factor in carrying out daily ecosystem functions. Conserving wildlife habitats enables biodiversity to thrive and serves many benefits. A biodiverse wildlife habitat provides an array of resources for food and improves the resiliency of communities and habitats from events such as natural disasters.[54]

The Endangered Species Act of 1973[55] and the Fish and Wildlife Coordination Act of 1934[56] protect endangered animals and plants, their habitats, and wildlife population. Although declining, wildlife habitats and biodiversity prove to be vital to environmental and community well-being.[57] The reduction in natural habitats and biodiversity causes loss in animal and plant life, and a reduction in ecological functions. This can have negative impacts to the natural landscape and built environment. There are many underlying causes of habitat degradation, including deforestation, development, and other activities associated with outward urbanization and sprawl.[58] The District of Columbia, Maryland, and Virginia, each have developed a State Wildlife Action Plan[59] to prevent wildlife from becoming endangered. Together, these action plans reduce the cost of wildlife management in the NCR by decreasing the need for recovery projects for endangered species. Therefore, it is important for federal agencies to use the State Wildlife Action Plans as guides for conservation and preservation of wildlife habitat in future development and actions.

The federal government should:

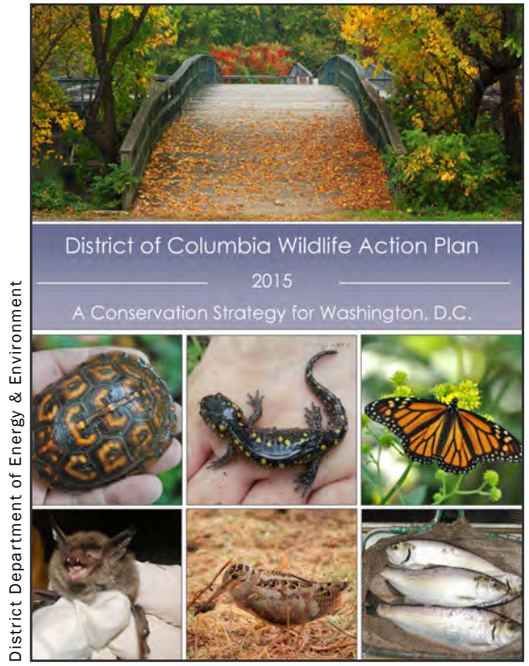
FE.H.1 Encourage facility design and landscaping practices that provide food and cover for native wildlife.

FE.H.2 Discourage development or significant alteration of areas used by wildlife, including migratory wildlife.

FE.H.3 Consider the impacts, including cumulative impacts, of environmental changes on wildlife habitats and the biodiversity of an ecosystem. Consideration should extend to non-protected areas, as well as areas protected by designations such as parks and wetlands.

FE.H.4 Create and maintain inventories of species and natural resources and encourage regional cooperation to protect natural areas and species.

FE.H.5 Avoid actions that could have significant long-term adverse effects on aquatic habitats, such as dredging and filling operations that disrupt and destroy organisms.



District Department of Energy & Environment

According to the District of Columbia's Wildlife Action Plan,[60] there are more than 6,700 acres of land protected as National Parks and 900 additional acres of District-owned park land. The forests, waters, meadows, and wetlands in the city provide habitat for approximately 240 species of birds, 78 fish, 32 mammals, 21 reptiles, 19 amphibians, and thousands of invertebrates.

FE.H.6 When constructing in areas near wildlife habitat, consider the following:

1. Use buffer areas to transition the intensity of uses (active uses, passive uses, and conservation areas) from development to wildlife functions.
2. Design the site to avoid habitat fragmentation.
3. When constructing barriers (such as roadways, railways, bridges, and fences) through areas of significant wildlife habitat, consider design methodologies that allows species movement through barriers.
4. Ensure that lakes, rivers, and streams near the site provide adequate undisturbed habitat for species movement.
5. Link new parks, open spaces, and conservation areas to existing natural vegetated corridors and other wildlife habitat.

Solid Waste

At the regional level, solid waste typically includes two major categories: ordinary trash from households or commercial activities, and sludge from wastewater treatment systems, such as the District of Columbia's Blue Plains Advanced Waste Water Treatment Plant. Solid waste management involves three strategies: 1) reducing the amount of waste generated; 2) recycling waste material; and 3) effectively disposing of waste that cannot be recycled.

The Pollution Prevention Act of 1990 [61] established national policies related to waste: pollution should be prevented, whenever feasible; pollution that cannot be prevented should be recycled; pollution that cannot be prevented or recycled should be treated in an environmentally responsible manner; and disposal should be employed only as a last resort. Under Executive Order 13693: Planning for Federal Sustainability in the Next Decade (2015), the goals were expanded for federal agencies to encourage recycling through the procurement of BioPreferred[62] and recycled products, as well as diverting at least 50 percent of non-hazardous solid waste. Recycling programs should comply with applicable federal, state, and local recycling requirements and should include cooperative programs with other federal facilities, state or local agencies, or non-profit organizations.

For the remaining solid waste, disposal can cause significant environmental problems. Two methods are commonly used: incineration at waste-to-energy facilities, and landfill. Incineration plants, if properly designed with pollution control technology, can be a valuable solution. Landfills must also be carefully designed, to avoid degradation of surface and ground water. The transportation of solid waste also typically requires the use of transfer facilities, to consolidate waste from local trucks into larger shipments. The location of these transfer facilities, as well as incineration and landfill facilities, causes public concern. The emphasis on reduced waste generation is a critical goal.

Hazardous Materials

Some federal facilities such as military bases and research labs handle hazardous materials that could pose risks to humans and to the environment if not managed properly. In some cases, these facilities are located in proximity to residential communities, businesses, and public recreation areas. An increased awareness of the potential for contamination has led to significant improvements in the safe transfer and disposal of hazardous materials, in accordance with local, state, and federal guidelines and procedures.

The proper management of hazardous materials is important to the regional economy and human health. The release of toxic chemicals from damaged or leaking underground storage tanks can lead to contamination of natural aquifers, estuaries, ground water resources, and the regional water supply. Without regular maintenance and monitoring, underground tanks could produce leaching of hazardous products, resulting in soil contamination that could leave federal or nearby land unsuitable for federal, private, or public recreational use. Historic federal buildings may contain potentially hazardous materials, such as asbestos, that must be carefully controlled and or removed.

Entities that generate, treat, store, manage or dispose of hazardous waste are subject to federal regulations including the Resource Conservation and Recovery Act[63] (1976) and the Comprehensive Environmental Response, Compensation, and Liability Act[64] (1980). This act established requirements for closed and abandoned waste sites, and authorized long-term remedial response actions on hazardous waste sites listed on EPA's National Priorities List. As of 2015, the NCR is home to three superfund sites: the Marine Corps Combat Development Command in Quantico, VA; the Beltsville Agricultural Research Center in Maryland; and the Washington Navy Yard.

While agencies have made significant improvements to the procedures supporting the safe transfer and disposal of hazardous materials, the topic remains a concern. In 2007, NCPC and the District Department of Transportation conducted the *Freight Railroad Realignment Feasibility Study*[65] to determine the feasibility of relocating the freight rail line in the monumental core as a long-term solution to address security concerns with the railroad carrying hazardous materials. The management of hazardous materials is particularly important in the region, where federal facilities are often located near highly-populated areas and sensitive habitats.

The federal government should:

FE.I.1 Ensure that development projects reuse or recycle salvaged building and organic materials to conserve resources and divert materials from landfills and incinerators. Encourage procurements that increase the purchase and use of products containing recycled content.

FE.I.2 Implement waste reduction measures that extend the life of waste disposal systems and reduce energy demand, including recycling programs, composting, and utilizing biodegradable products.

FE.I.3 Avoid locating federal facilities that produce or manage hazardous waste and toxic materials in (or upstream or upwind of) heavily populated or environmentally sensitive areas (e.g., unstable ground, high-value groundwater recharge areas, floodplains, and wetlands).

FE.I.4 Monitor and conduct periodic testing to detect and avoid leaks or spills from structures that hold hazardous materials (e.g. underground storage tanks, pipes, and retention areas), and remediate groundwater contaminations.

FE.I.5 Manage and dispose of hazardous wastes and toxic substances in a safe manner in accordance with national, state, and local regulations.

FE.I.6 Encourage federal facilities to develop and maintain an environmental management system to understand and manage the facility's environmental risks and hazards.

SECTION J: Policies Related to Light Pollution

NCPC considers the effects of lighting on existing resources from both an aesthetic and an environmental perspective. For example, NCPC has reviewed several projects within the monumental core to ensure that views to and from important monuments and memorials were not adversely affected by the project's lighting levels.

Light pollution is any adverse effect of artificial lighting including glare, light trespass, skyglow, energy waste, and impacts to the environment. Light pollution first became a concern in the 1970s when astronomers identified the increase in lighting associated with development as a contributing factor in the degradation of the night sky's visibility. Recent studies suggest that lighting associated with air safety and buildings disorient migrating birds. Studies have also linked excessive exterior lighting to air pollution, according to a study by scientists at the National Oceanic and Atmospheric Administration and the Cooperative Institute for Research in Environmental Sciences at the University of Colorado.[66] EPA identified light pollution as a major concern in exterior lighting in its 2008 ENERGY STAR Building Upgrade Manual.[67] EPA recommends that agencies use outdoor lighting codes to encourage better-quality light fixtures that reduce glare, light trespass, and energy waste.

A subsequent EPA report noted these concerns as well as the visibility and safety benefits of artificial night-time lighting, and stated that it is relatively easy to tackle [light pollution] without needing to make significant trade-offs, simply by eliminating upward and horizontal spillage and turning off unnecessary lighting. In response to these environmental concerns, "dark sky" advocates promote changes in lighting design and technology.

This policy area provides guidance for federal agencies to incorporate exterior lighting in a manner that minimizes negative aesthetic and environmental impacts.

The federal government should:

FE.J.1 Reduce levels of light pollution by:

1. Selecting the appropriate level of lighting to meet design needs, while minimizing excess light.
2. Designing light fixtures to eliminate upward and horizontal spillage.
3. Designing and providing appropriate controls to operate lighting only when needed, and at appropriate light levels.
4. Selecting lighting that minimizes maintenance, reduces energy use, and provides better visibility.
5. Selecting appropriate lighting technologies in a historic context.

FE.J.2 Evaluate exterior lights for their effectiveness, maintenance requirements, and energy use.

FE.J.3 Switch off all exterior lighting when not required.



Naval Observatory

In Washington, the Naval Support Facility Naval Observatory is adversely impacted by urban light pollution (specifically sky glow and light trespass), diminishing the Navy astronomer's ability to conduct sensitive data collection of the dark skies. Light pollution is particularly problematic for the Naval Observatory due to its location at the center of a major metropolitan area.

A 2012 Naval Observatory lighting study analyzed the existing lighting conditions at the Naval Observatory and provided recommendations for improvements to enhance dark sky conditions and minimize light trespass from adjacent properties outside the installation.[68] The study recommended lighting design changes on the installation, replacement of light fixtures, and additional vegetation in particular locations, as well as the development of a vegetation plan. The study recommended several operational changes (occupancy sensors) that could be implemented to reduce light pollution.



SECTION K: Policies Related to Noise Pollution

Noise is an invisible pollution that affects general health and welfare. Noise pollution can lead to increased stress, hearing loss, a decline in productivity, higher health care costs, and reduced property values. Common sources of noise pollution include airplanes, automobiles, boats, construction, loading docks, industrial activities, training activities, and outdoor concerts and special events.

One of the most controversial noise issues in the region results from flight operations at military airfields and at commercial airports such as Ronald Reagan Washington National Airport. There are also noise impacts generated from helicopters and aircraft around populated areas. While modern technology has reduced noise levels produced by commercial aircraft, growth in air traffic may have offset some of these improvements. Federal agencies should also consider the accumulation of noise levels generated by mechanical equipment, loading docks, and operational activities. Noise from these types of activities can be mitigated through careful site planning and sound proofing technology.

Noise pollution will continue to be a concern in the absence of policies and technologies that can further mitigate noise levels. The federal government should reduce its contribution to noise pollution and coordinate with local governments to avoid proximity of noise generating activities to sensitive natural resources and land uses.

The federal government should:

FE.K.1 Avoid locating activities that produce excessive noise near sensitive natural resources and land uses such as residential areas, hospitals, schools, and major public and civic destinations.

FE.K.2 Locate, design, and construct improvements to roads, driveways, loading docks, and parking lots for federal facilities in a manner that is sensitive to existing adjacent land uses.

FE.K.3 Ensure that construction activities comply with local noise ordinances, and coordinate with local governments and adjacent communities to establish limits on the intensity and hours of noise generation.

FE.K.4 Use low noise equipment, sound proofing technology, or install noise barriers to reduce the impact of noise from mechanical equipment or from everyday operations and activities.

SECTION L: Policies Related to Energy

The majority of energy consumed in the NCR ultimately comes from nonrenewable fossil fuels such as coal, oil, and gas, which produces GHG emissions. As previously stated in the Climate Change section, the key to minimizing further climate change in the future is to reduce GHG emissions. This policy section considers the future operations of energy facilities, further use of renewable sources, and reduction of the overall energy consumption.

Energy Sources

In 2013, the U.S. Energy Information Administration estimated that nationwide federal facilities accounted for 38 percent of the federal government's energy usage, with vehicles and equipment accounting for the rest. The U.S. Department of Defense and the U.S. Postal Service together account for 94 percent of vehicles and equipment energy usage,[69] of which the vast majority comes from jet fuel.[70]

Given the concentration of federal facilities in the region, energy use in federal buildings is a major contributor to GHG. While some federal buildings receive electricity and heating from federally-owned sources, most facilities are energized with electricity from the grid. According to Pepco, the electricity provider for all of Washington, DC and parts of Montgomery and Prince George's Counties in Maryland, the electricity they distribute comes from 45 percent coal, 16 percent natural gas, 33 percent nuclear, and six percent from renewable sources.[71] Federal facilities can help reduce GHG emissions through energy conservation and by installing or requiring the use of renewable energy sources.



U.S. Department of Energy

Solar panels on top of the U.S. Department of Energy's Forrestal Building.

Renewable Energy

By 2025, 30 percent of all electricity consumed by the federal government will come from renewable resources in accordance with Executive Order 13693. Federal agencies can purchase renewable energy or generate renewable energy on federal sites. EPA defines renewable energy as energy produced from solar, wind, geothermal, biomass, biogas (landfill/wastewater gas), and low-impact hydroelectricity. Many of the federal properties located in Washington, DC are in urban areas, which limits opportunities for large-scale renewable energy generation. There are, however, opportunities for renewable energy generation on federal buildings through geothermal heat pumps and rooftop solar panels. The U.S. Department of Energy installed solar panels on the rooftop of its headquarters building in 2008 to generate 230,000 KWh of electricity per year.[73] In December of 2015, the GSA awarded a contract to design, construct and operate solar energy systems on the rooftop of 18 buildings in Washington, DC area through a power purchase agreement that is projected to save over $5 million in utility costs over the contract.[73]

Energy Conservation

Energy conservation can provide significant cost and GHG savings to the federal government. It supports long-term environmental goals to reduce demand for energy, reduce GHG emissions, and be independent on energy source. Specific energy requirements are outlined in EISA and Executive Order 13693. One important component of Executive Order 13693 is the requirement of federal facilities that begin the design process in 2020 to be designed for net zero energy and achieve net zero energy by 2025. EISA requires agencies to upgrade existing heating, ventilation, and air conditioning systems at federal facilities to make them more energy-efficient. Over the past four decades, energy intensity in federal facilities have declined, a trend that will be further strengthened by recent guidance from executive orders.

Agencies may also explore improving environmental performance through the commissioning and recommissioning process of development. In new design and construction processes, commissioning begins at the onset of development, to ensure the systems under design meet specified performance requirements. Commissioning also ensures that the equipment is installed appropriately. Recommissioning is the process through which buildings are commissioned again after their initial completion, occupancy, and commissioning. Recommissioning is a check to ensure that building systems are still functioning as originally planned.

The federal government should:

FE.L.1 Improve environmental performance and reduce costs in existing federal buildings through targeted energy improvements, such as:

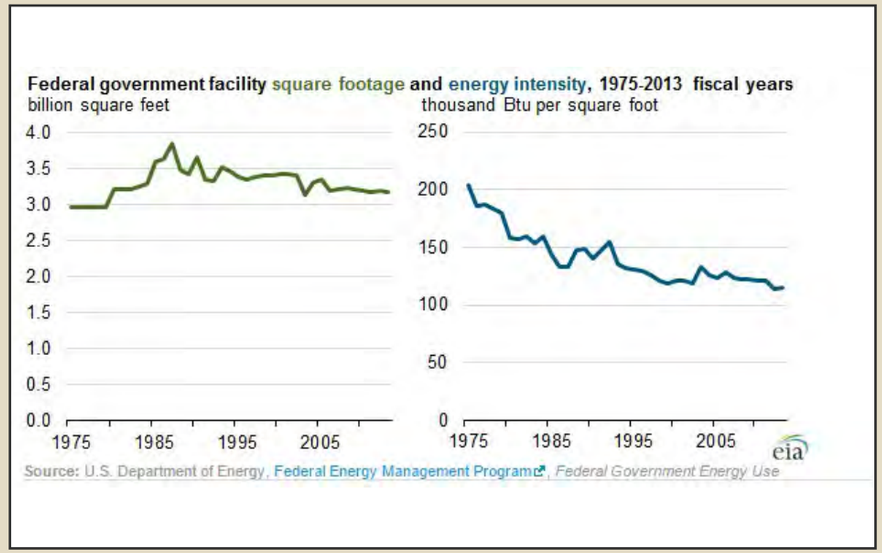
1. Optimizing the efficiency of heating, ventilation, and cooling systems with more efficient boilers, motors, and variable-speed drives.
2. Reducing energy and maintenance costs by installing centralized energy management systems.

FE.L.2 Reduce fossil fuel-generated energy consumption by 55 percent compared to an FY 2003 baseline for new and renovation projects. The required reduction under law is consistent with EISA, with designs for new buildings or major renovations begun in FY 2030.

FE.L.3 At least 30 percent of hot water demand in new or renovated federal buildings should come from solar hot water heating if life-cycle cost-effective. Existing buildings with minor renovations must incorporate the most energy-efficient designs, equipment, and controls.

FE.L.4 Locate and construct federal facilities to minimize energy loss in long-distance energy transmission.

FE.L.5 Pursue energy conservation strategies at a multi-building or district-level.



Energy consumed in federal facilities has generally declined over the past four decades. The reduction stems from both the total square footage occupied by the federal government, which continues to fall from its peak in FY 1987, and from the energy consumed per square foot inside federal buildings, which has been declining since FY 1975.



The Federal Communications Commission authorizes and licenses transmitter and facilities generating radiofrequency and microwave radiation. As a result of NEPA regulations, the Federal Communications Commission must evaluate all transmitters and facilities for potential impacts to the environment, including human exposure to radiofrequency radiation. The Federal Communications Commission issued guidelines for Human Exposure to Radio Frequency Fields to help address this requirement. NCPC issued Guidelines and Submission Requirements for Antennas on Federal Property, last updated in 2000. Additional policies in the Parks & Open Space Element address the siting and design of antennas and towers.

SECTION M: Policies Related To Radiofrequency Radiation and Electromagnetic Fields

The federal government has extensive requirements for antennas, telecommunication equipment, and facilities as part of the communication needs of government operations in the nation's capital. In addition, widespread mobile phone use has resulted in the proliferation of new private-sector antenna and related towers throughout the region, resulting in a surge of requests for antenna and related towers on federal property. The cumulative effect of these antennas significantly impacts the visual quality of the nation's capital and has the potential to impact human health.

While there can be health impacts when exposed to high levels of radiofrequency (RF) radiation, the general public is rarely exposed to these levels of radiation, even when working in a facility with cellular and personal communications service antennas mounted on rooftops.[74] Workers servicing these antennas, or in environments near high-powered RF sources, however, may be affected. In these cases, when humans are immediately adjacent to antennas, tissue damage could occur because of the body's inability to cope with or dissipate the excessive heat, also known as thermal effect.[75] According to the Federal Communications Commission, "Environmental levels of RF energy routinely encountered by the general public are typically far below levels necessary to produce significant heating and increased body temperature."[76]

The steady population growth in the region and related use of wireless communication suggests continued demand for new antennas. Two main goals of the policies in this section are to reduce the visual impacts of antennas and minimize impacts to human health.

The federal government should:

FE.M.1 Consider the joint-use of antennas and collocating antennas to reduce aesthetic impacts and limit the area of radiofrequency exposure. Federal agencies should evaluate the cumulative effect of multiple transmitters at one location to ensure that the combined radiofrequency emissions continue to meet Federal Communications Commission guidelines.

FE.M.2 Follow a practice of "prudent avoidance" of RF exposure. Federal agencies should reduce the exposure of workers and the public to RF fields where they may be prevalent, including those from power lines, antennas, equipment, and other recognized sources of RF and electromagnetic field emissions.

FE.M.3 Incorporate adequate interior building attenuation measures to reduce RF field penetration into the habitable areas of buildings.

FE.M.4 Require adequate communication of potential risks where occupational/controlled exposure may be present.

FE.M.5 Utilize advances in technology, such as fiber optics, cooperative antenna technologies, and teleports; and monitor changes in standards and guidelines for the installation of antennas.

FE.M.6 Minimize visual impacts of telecommunication antennas proposed for the rooftop of a building with historic value by using a variety of tools including, but not limited to, matching building colors and design, incorporating screens, and moving antennas away from the building's edge. All measures should be coordinated with local historic preservation requirements.

SECTION N: Policies Related To Environmental Justice

Environmental Justice

Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Historically, minority and low-income populations have been disproportionately impacted by environmental pollution. The Environmental Protection Agency through Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations[76] (1994), provides guidance on considering environmental justice to ensure that no group of people bears a disproportionate burden of environmental harms and risks resulting from federal activities and operations.

The federal government has a role to identify and address potential environmental justice concerns in the region because of the proximity of federal facilities to residential communities, businesses, public recreation areas, and visitor attractions; the distribution of significant numbers of federal property and facilities throughout the region; and the historic use of select federal facilities for environmentally hazardous operations. Federal agencies can contribute to social equity and environmental stewardship by rehabilitating under-utilized and/or contaminated properties (often called grayfield and brownfield sites), which are often located in minority and low-income areas. Federal agencies have a responsibility to be good neighbors, to promote and support the general public health and welfare of all sectors of society.

The federal government should:

FE.N.1 Identify and address any disproportionately high and adverse health or environmental effects on minority and low-income populations resulting from agencies' programs, policies, and activities. Consider the indirect, multiple, and cumulative effects of actions on the cultural, social, historical, and economic characteristics of an affected community.

FE.N.2 Analyze and consider, as prescribed by NEPA, the demographics of a potentially affected area to determine whether such communities are characterized by low-income levels or high minority populations.

FE.N.3 Establish effective public outreach programs so that affected communities can participate in decisions that will impact its future.

FE.N.4 Prioritize and support the re-use of brownfield sites for federal or private-sector redevelopment.

FE.N.5 Adhere to the federal guidelines of the Department of Housing and Urban Development's *Site and Neighborhood Standards*,[77] which strongly encourage development to be located in areas having access to amenities like transportation, educational, and health facilities.

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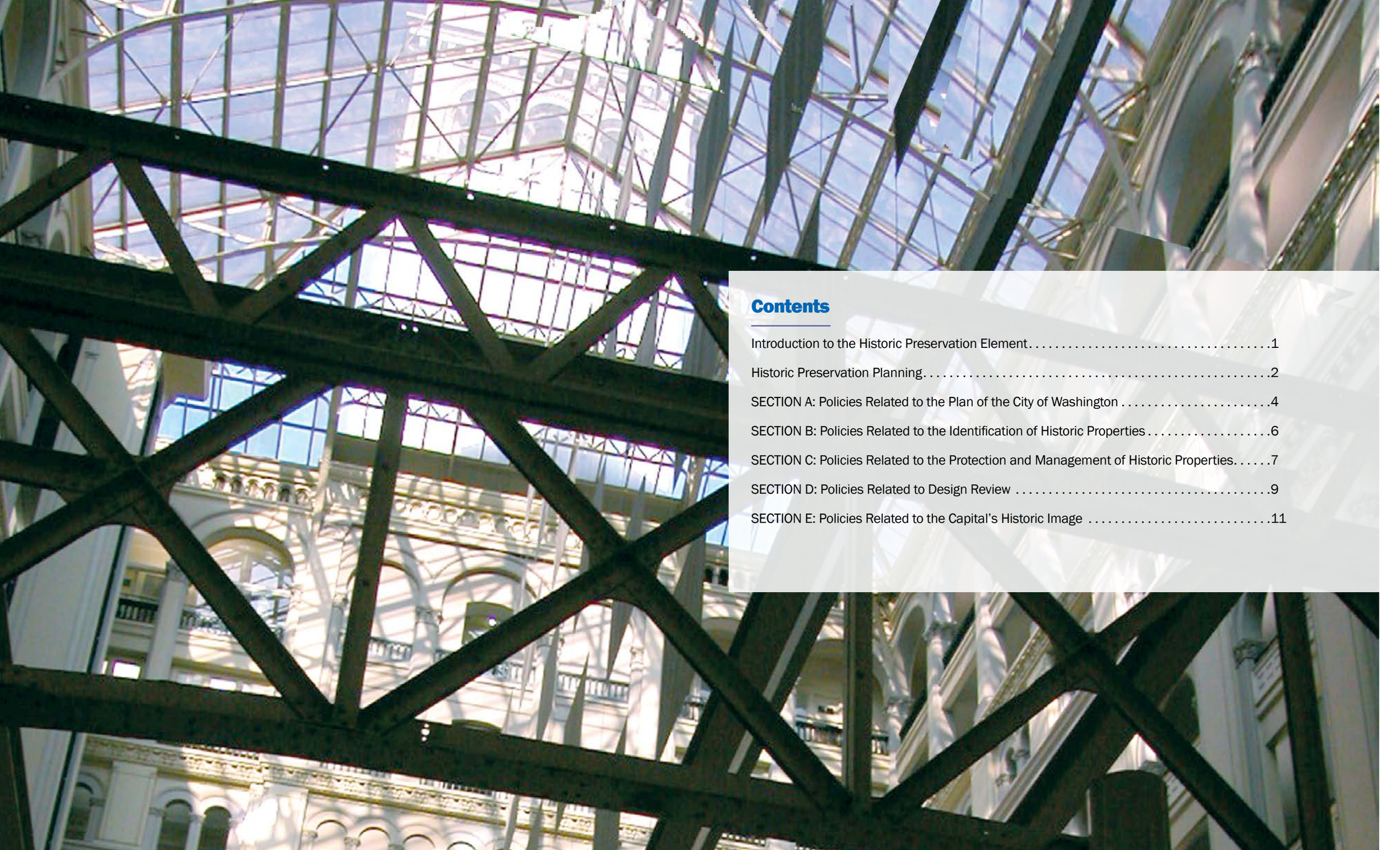
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Historic Preservation Element



2016

National Capital Planning Commission



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Pentagon, Virginia



Dulles Airport, Virginia



Beltsville Agricultural Research Center, Maryland

Introduction to the Historic Preservation Element

The federal government's goal is to preserve, protect, and rehabilitate historic properties in the National Capital Region and promote design and development that is respectful of the guiding principles established by the Plan of the City of Washington and the symbolic character of the capital's setting.

Washington's unique character rests on the foundation of its historic planning, notably the built and open space features of the *Plan of the City of Washington*, which includes both the L'Enfant and McMillan Plans.[1] Both the Baroque influence of the L'Enfant Plan, and the City Beautiful ideals of the McMillan Plan, are responsible for much of the city's physical form. Throughout Washington, the design and location of public and private buildings reinforce the plan's principles. Washington's historic properties typically contribute to, and complement, the visionary long-range plans that provided the basis for the capital's development over the centuries. High urban design and historic preservation standards have played an important role in creating the appearance and character of the admired national capital.

From its inception, the federal government has implemented L'Enfant's bold but flexible vision by constructing great buildings to house the seat of the national government. As the federal government built out the sites identified in the L'Enfant Plan, it added extensive facilities in other parts of the city and the region. Examples of significant factors that spurred growth and change through the centuries include national events such as the Civil War, New Deal, and World War II; planning initiatives such as the McMillan Plan; implementation of urban renewal in the 1950's and 1960's; as well as technological and transportation advances such as Metrorail. Federal buildings and sites illustrate the planning and architectural development of the city and region as well as the history of the federal establishment. Landmarks such as the U.S. Capitol, the White House, the National Mall and its memorials and museums, and Arlington National Cemetery have come to symbolize the nation and its democratic ideals.

Although the predominantly federal and commemorative areas around the National Mall may be Washington's most widely recognized, the capital city is also an active commercial and residential city with neighborhoods and parks. These are important to Washingtonians and their sense of history and community. Even in these non-federal areas, the federal government has played a major role in shaping the historic urban fabric. Much of this rich historical planning record is also evident in the city's architecture. The L'Enfant Plan streets and places—and their extension by the Permanent System of Highways Act[2] (1893)—as well as the McMillan Plan and the Height of Buildings Act[3] (1910), directed the city's character and orderly development. See the Federal Urban Design Element's Technical Addendum for the history of each individual plan and other plans that have shaped the history of Washington.

At a regional scale, the Washington area initially developed with large plantations and small family farms and was dotted with crossroads and market towns. At first, this pattern was little changed by the creation of the capital city. Notable port towns, and later military forts, overlooked the Potomac River and the capital city. Settlements and commercial centers, many quite independent of the national capital, arose along the great variety of transportation routes typical of the mid-Atlantic region.

The nineteenth-century construction of military and naval installations was followed in the twentieth century by the expansion of federal offices and research facilities. The National Institutes of Health, Beltsville Agricultural Research Center, Suitland Federal Center, Pentagon, and Dulles Airport (all of which include or are historic properties) are just a few of these federal facilities. The purchase of parkland in Maryland by the National Capital Planning Commission (NCPC) through the Capper-Cramton Act, and the construction of parkways, are other examples of federal land use decisions that shaped the region.

The National Capital Region's (NCR) variety of historic properties reflects the rich history of the region and its people. The U.S. Congress designated the Georgetown Historic District in the Old Georgetown Act[4] (1950). The Joint Committee on Landmarks published the District's first list of historic properties in 1964. In 1966, Congress passed the National Historic Preservation Act[5] (NHPA), adding to the establishment of national standards and procedures for the protection of historic properties.

However, the federal government is not the only entity protecting historic resources. Municipal and county governments have protected historic resources they deem important for local, state, and national historical significance. In 1946, Alexandria created one of the first historic districts in the nation in order to preserve the port-city colonial and early federal character. Since the District of Columbia Home Rule Act[6] in 1973 and the D.C. Historic Preservation Act[7] (1978), the District of Columbia government has identified and protected private properties and historic districts of local significance throughout the District. Local jurisdictions in Virginia and Maryland also responded to the growing historic preservation interest at the national, state, and local levels by establishing ordinances to protect their historic properties. These ordinances have contributed to the protection of individual buildings and their settings, open space, farms, historic neighborhoods, and commercial centers, even in an era of sustained regional growth.

Historic Preservation Planning

The NHPA established, as principle and law, the preservation of the nation's historical and cultural heritage. This law provides the framework for federal preservation policy, authorizes legislation to fund preservation activities, and establishes State Historic Preservation Offices. While all federal agencies have some degree of responsibility for historic preservation, the National Park Service (NPS) and the Advisory Council on Historic Preservation (ACHP) are the federal agencies charged with the management and oversight of NHPA programs.

NPS is responsible for the administration of the National Register of Historic Places, the nation's inventory of significant historic properties. NPS publishes the Secretary of the Interior's Standards for the Treatment of Historic Properties,[8] the benchmark by which federal and other agencies assess the effects of a proposed project on historic resources. NPS is also responsible for publishing guidance on treatment options for historic properties including preservation, restoration, rehabilitation, and reconstruction.

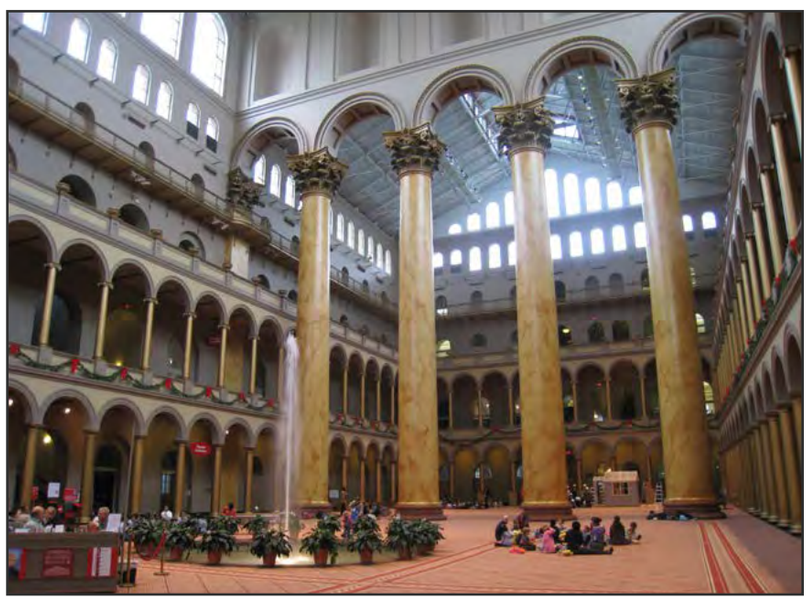
The ACHP is an independent federal agency responsible for advising the President and Congress on historic preservation policy. One of the ACHP's primary responsibilities is overseeing Section 106 of the National Historic Preservation Act review—the process of commenting on federal projects that affect properties listed in, or eligible for, the National Register of Historic Places (for more information, see page 7). The Section 106 process is a federal requirement that takes into account the effects of undertakings by federal agencies on historic properties.

Historic Preservation Challenges for Federal Agencies

- Preserving the significant features and qualities of their historic properties through the proactive maintenance of historic building fabric and designed landscape settings.
- Adapting historic properties for new and additional uses by modernizing building systems and reallocating interior space while retaining significant interior architectural features such as lobbies, elevators, and public rooms and corridors.
- Responding to changes in visitation or use without affecting the property's historic significance.
- Ensuring that historically significant parks and open space retain their integrity through the careful consideration of planning and design of potential facilities in historic landscapes and settings.
- Finding creative, appropriate solutions to changing requirements such as the provision of security measures. The desire for increased security around federal facilities is a challenge for designers, historians, and security experts and is best addressed in a concerted manner that respects each site's historic features.
- Protecting and strengthening historic urban design features of the *Plan of the City of Washington*. In Washington, any proposal to close a portion of a L'Enfant Plan street or to not conform to the right-of-way building line requires the closest scrutiny and consideration of alternatives.
- Protecting the character of the region's natural features, many of which have historical or cultural significance, such as the river shorelines, the ridge of the topographic bowl, agricultural land, parks, and designed landscapes, including areas planned for public access and enjoyment.
- Ensuring that new construction is responsive to the character of well-established built environments and reflects a commensurate level of design excellence.
- Collaborating with state and local governments in the protection and enrichment of the region's cultural and historic heritage.
- Integrating sustainability objectives in the renovation or rehabilitation of existing facilities while also preserving and protecting historic and character defining features.



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The Pension Building (National Building Museum) was listed in the National Register of Historic Places in 1969 and became a National Historic Landmark in 1985. The building is used for exhibits and programs and houses various federal agencies.

The ACHP publishes implementing regulations for Section 106, which describe the process for conducting Section 106 consultation. All federal agencies, have an affirmative responsibility to identify, protect, and manage historic resources under their jurisdiction. Before taking a federal action, federal agencies must consider the impact to historic properties, seeking to avoid or minimize adverse effects to their physical and historical integrity. If adverse effects cannot be avoided or minimized, federal agencies must mitigate these impacts.

The National Capital Planning Commission (NCPC) has a significant and unique role in the NCR. Under the terms of the National Capital Planning Act[9] (1952), NCPC reviews many of the projects undertaken by federal agencies and makes important decisions about the coordination and planning of federal activities, many of which involve historic properties. The Commission also has an independent approval, or licensing, authority for federal projects in Washington, DC and for some District of Columbia government projects. The Commission's open public process and its unique planning perspective and role, underscored by the *Comprehensive Plan for the National Capital: Federal Elements* (Comprehensive Plan) and the Commission's other plans and policies, are the foundations of its decision-making.

NCPC is committed to supporting preservation of historic resources by law and through its policies, review process, and plans. The policies established in the Comprehensive Plan, as well as the Commission's *Extending the Legacy: Planning America's Capital for the 21st Century*[10] (1997), Memorials and Museums Master Plan[11] (2001), and *Monumental Core Framework Plan*[12] (2009) provide a framework for historic preservation planning. The Commission is a leader in the advocacy of coordinated urban and regional planning that accommodates the changing needs of the federal government while preserving the significant historic buildings and places, and the iconic horizontal character, that make the nation's capital uniquely symbolic.

The Commission recognizes that sustained citizen engagement in the public process is fundamental to the broad acceptance of historic preservation decisions. The public dissemination of planning, historic preservation, and zoning information has resulted in a high general knowledge of, and interest in, federal and local decision-making. Federal agencies increasingly consider local planning initiatives and goals in their design and planning, including historic preservation. Factors such as the establishment of Home Rule in Washington, county historic preservation and environmental protection ordinances, landmark designations, zoning overlays, and greater citizen involvement have contributed to increased coordination among federal and local governments. It is important that this coordination continue in order to manage the capital's growth and development.

SECTION A: Policies Related to the Plan of the City of Washington

The Historic Plan of Washington, DC

The L'Enfant and McMillan Plans established an urban design framework for the capital city that remains one of the world's great examples of urban planning. Collectively, these plans are known as the *Plan of the City of Washington*. These planning principles continue to influence the design of public spaces and buildings in Washington today.

Pierre L'Enfant crafted the L'Enfant Plan, which established the basic framework for the city, by creating a regular orthogonal grid divided into four quadrants, with the U.S. Capitol at the center point. L'Enfant superimposed a series of diagonal avenues on the orthogonal grid, creating a system of open space and parks where the two intersected. These open spaces and vistas are as integral to the city's design as the street network. In addition, the width and openness of the L'Enfant Plan's original streets and the extended main axial boulevards established public space that defines the city's character. These include North, East, and South Capitol Streets and major avenues such as Pennsylvania, Connecticut, Massachusetts, Rhode Island, New York, and Wisconsin. Vistas extend outward from vantage points within Washington, and inward from points along the rim of the topographic bowl, and are central to Washington's dramatic character. Examples of these vistas include the St. Elizabeths West Campus and other parts of the Anacostia Ridge, the Arlington Ridge, and the escarpment north of Florida Avenue, NW. Important right-of-ways, vistas, and viewsheds are further discussed in the Federal Urban Design Element.

The L'Enfant Plan's system of streets (for more information see the Federal Urban Design Element), open spaces, public buildings, and developable blocks has largely been maintained over the centuries. Building upon L'Enfant's Plan, the McMillan Plan reinforced the idea of grand public spaces and civic buildings based on the City Beautiful Movement. The McMillan Plan focused on restoring L'Enfant's original vision of the National Mall as an uninterrupted greensward; creating an enclave for government offices in the triangle bound by Pennsylvania Avenue, 15th Street, NW, and the National Mall; and establishing a comprehensive regional park and recreation system by connecting existing parkland and carrying the park system throughout Washington. Together, the *Plan of the City of Washington* has functioned as a framework for the city's growth.



The L'Enfant Plan



The McMillan Plan



The Georgetown neighborhood includes many historic buildings.

The District of Columbia State Historic Preservation Office and the NPS recognize the significance of the *Plan of the City of Washington*, and protect it through local and National Register historic designation. Even as the region has grown and federal facilities have spread throughout the region, the L'Enfant City remains the heart of the nation's capital and is a priceless historical resource—providing an iconic setting for the federal government, commercial enterprises, and residential neighborhoods.

NCPC has a central role in the federal government's interests in protecting the *Plan of the City of Washington's* legacy. In 1997, the Commission conducted a special long-range planning study known as the Legacy Plan, which provided guidance for the protection of the City of Washington's key strengths while accommodating its future growth. NCPC's *Memorials and Museums Master Plan* proposed policies to protect the historic open space on and near the National Mall by creating a reserve and by locating memorials throughout Washington. The *National Capital Urban Design and Security Plan*[13] (2002) established goals for the protection of buildings, settings, streetscapes, and associated open spaces through the coordinated design of security features where required. The Framework Plan, a joint effort of the Commission and the U.S. Commission of Fine Arts, advanced the Legacy Plan's vision, and sought to transform the federal precincts around the National Mall into vibrant destinations while improving the physical and visual connections between the city, the National Mall, and the waterfront. Furthermore, the Federal Urban Design Element provides policy guidance to federal agencies for improving building design and supporting an active public realm in the NCR. As the Commission adopts future plans and looks towards the future, the *Plan of the City of Washington* will continue to provide guidance.

The federal government should:

HP.A.1 Preserve, rehabilitate, enhance, and restore (where applicable) the *Plan of the City of Washington* and the urban design principles established by the Plan including building placement, street layout, vistas, and open spaces.

HP.A.2 Protect the reciprocal views along the rights-of-way established by L'Enfant streets, as well as to and from squares, circles, and reservations.

HP.A.3 Protect, maintain, and restore, where applicable, the L'Enfant street network and rights-of-way.

HP.A.4 Restore or rehabilitate historic streets that were inappropriately disrupted, or closed, to their original right-of-way or configuration, at the earliest opportunity.

HP.A.5 Avoid inappropriate traffic channelization, obtrusive signage and security features, and other physical intrusions that obscure the character of the right-of-way and viewsheds.

HP.A.6 Reinforce the city's historic landscape character and maintain the integrity, form, and design of the L'Enfant street network.

HP.A.7 Protect the historic importance and function of the streets as operational thoroughfares.

HP.A.8 Construct building facades to the street right-of-way lines (building lines) to reinforce the spatial definition of the historic street plan.

HP.A.9 Protect the character and alignment of Washington's gateway and boundary streets as defining features of the capital city.

HP.A.10 Protect, rehabilitate, and restore the public squares, circles, reservations, and the park system that are a legacy of the *Plan of the City of Washington*.

HP.A.11 Protect reservations that contain historic landscapes and features from incompatible changes or intrusions.

HP.A.12 Protect and maintain the historic spatial significance of the L'Enfant reservations when designing and locating physical security measures.

HP.A.13 Protect, rehabilitate, and enhance the extensions of major L'Enfant rights-of-way and associated reservations throughout Washington as part of the national capital's open space framework.

Stewardship of Historic Properties

The federal government is a primary advocate for, and protector of, the image and legacy of the nation's capital. Federal agencies working in concert with local officials and interested citizens must be careful stewards of the historic properties under their care or affected by their decisions. Agencies are responsible for preserving historic properties while also facing the challenge of new and evolving uses and missions. The federal government has many tools for the protection and enhancement of historic properties including laws, regulations, executive orders, federal planning and policy initiatives, the Comprehensive Plan, and individual agency policies. It has an obligation to coordinate with local and private entities and, when appropriate, to encourage partnerships with them. NCPC provides one of several public forums where planning and historic preservation consultation can occur.

The cornerstone of strong historic preservation planning is the identification of historic properties. Many historic resources in the NCR were identified and are widely recognized and acknowledged through federal and local historic designation. Many of Washington's landmarks are well known, and there are hundreds of historic properties and districts in the region. Many of these resources are significant for their local history and their role in the nation's history. Recognizing these properties and educating the public on their historic significance is an important component for their protection and preservation.

At times, the value of historic places or features may not be readily apparent. Therefore, it is important to publicize information on their significance for them to be better understood. This includes resources such as archaeological sites, cultural landscapes,[14] and Modern-era (post World War II) properties.

While many historic properties in Washington date to the 18th or 19th centuries, there are also more recent resources worthy of recognition. The federal government played a critical role in urban renewal and was responsible for the development of many Modern era resources. One of the historic preservation challenges facing the federal government today is the evaluation of these properties.

The federal government should:

HP.B.1 Identify and protect historic properties and disseminate information about their significance to the public.

HP.B.2 Recognize that there may be resources including buildings, structures, and landscapes that are historically significant and reflect design or cultural significance of the recent past. Identify and protect these resources to ensure that properties that have not been evaluated for listing in the National Register of Historic Places are nonetheless noted for their potential future significance and are treated accordingly.

HP.B.3 Coordinate with local agencies, citizen groups, and property owners in the identification, designation, and protection of public and private historic properties. Collectively these resources reflect the image and history of the National Capital Region.

HP.B.4 Conduct archaeological investigations in the earliest phases of master planning or project development in order to avoid the disturbance of archaeological resources.

HP.B.5 Recognize that historic federal properties are sometimes important for local history. Ensure that locally significant characteristics or qualities are maintained.



E.L. Malvaney

The U.S. Tax Court is a modern-era building.

SECTION C: Policies Related to the Protection and Management of Historic Properties



The Renwick Gallery is located in a National Historic Landmark building on Pennsylvania Avenue, adjacent to the White House and the Eisenhower Executive Office Building.

The protection and management of historic properties are critical elements to successful historic preservation planning. The federal government owns and manages many of the nation's most significant historic resources including the National Mall, and these properties should be protected for future generations. Sections 106 and 110 of NHPA provide the foundation for federal preservation policies, stewardship of historic properties, and decision-making. Federal agencies protect their historic resources by listing them, or by determining that they are eligible for listing, in the National Register of Historic Places. This, in turn, provides further regulatory protection during the planning and implementation of rehabilitation and new construction projects. Section 106 provides the framework for the regulatory process by which federal agencies reach decisions about historic properties under their jurisdiction. Federal agencies use the Secretary of the U.S. Department of Interior's established Standards for Preservation in carrying out historic preservation responsibilities. Historic preservation planning occurs during the design of individual projects; during the development of master plans; and through federal agencies' efforts to research, evaluate, protect, and manage historical and cultural resources under their jurisdiction.

Section 106 establishes the process by which federal agencies consider the effects of their proposed actions on historic properties. For many projects, Section 106 requires that federal agencies consult with the State Historic Preservation Offices of Maryland, the District of Columbia, or Virginia, involved Indian tribes, and the ACHP. Relevant federal and county or municipal agencies (including NCPC), as well as interested professional, civic, and community organizations and individuals join public agencies in the consultation process.

Section 110 of the NHPA requires federal agencies to establish their own historic preservation programs and proactively identify, evaluate, designate, and protect historic properties under their jurisdiction. Agencies such as the U.S. General Services Administration, the NPS, and the U.S. Department of Defense have large inventories of historic properties, entailing a significant commitment of resources in all aspects of property stewardship. Smaller agencies with limited land holdings are also required to identify and protect their historic properties, even if property management is not central to their mission.

Along with the requirements of Sections 106 and 110, federal agencies' master plans are primary tools for assessing historic resources, developing long-term goals and plans, coordinating with other public and private entities, and implementing new planning methods and technologies. NCPC reviews these master plans, verifying and participating in consultation with local preservation offices and providing an opportunity for public involvement. For installations with more complex historic preservation challenges, federal agencies may be asked to prepare management plans that provide in-depth procedures for the treatment of their historic properties. Master planning documents are important tools used by the Commission when reviewing individual site and building plans.

The federal government should:

HP.C.1 Sustain exemplary standards of historic property stewardship.

HP.C.2 Integrate the preservation, rehabilitation, and adaptive reuse of historic properties, including buildings and landscapes, into master plans for federal campuses and facilities.

HP.C.3 Maintain a sense of historic continuity and evolution by preserving federal buildings representative of different eras and styles. Include contemporary architectural styles in future federal development as they contribute to, and enhance, the area's urban fabric.

HP.C.4 Preserve, rehabilitate, and protect historic landscapes and open spaces, both natural and designed, which are integral components of federal properties.

HP.C.5 Protect significant archaeological resources by leaving them intact and undisturbed. Maintain an inventory of sites with potential for archaeological discovery and significance.

HP.C.6 Use historic properties for their original purpose or, if no longer feasible, for an adaptive use that is appropriate to their context and is consistent with the property's significance and character.

HP.C.7 Ensure the continued preservation of federal historic properties through ongoing maintenance.

HP.C.8 Plan, where feasible, for federal historic properties to serve as catalysts for local economic development and tourism.

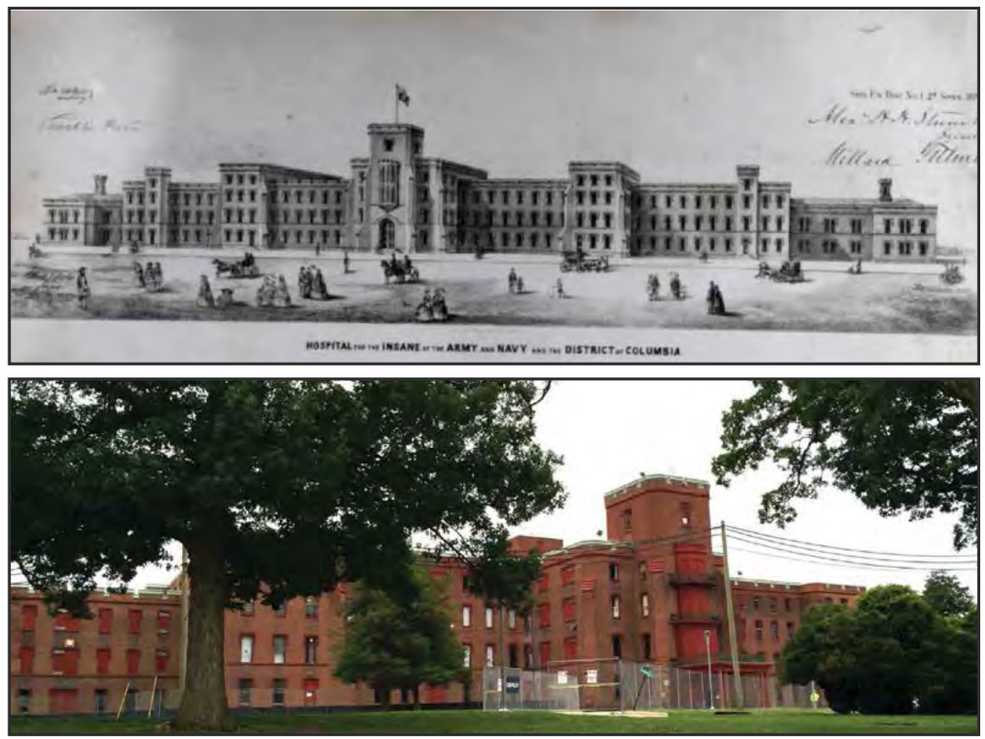
HP.C.9 Promote the integration of sustainability objectives with the preservation, rehabilitation, or restoration of historic properties.

HP.C.10 Protect and rehabilitate the National Mall and its monumental character as a historic open space that functions as the nation's preeminent gathering space.

HP.C.11 Protect, and preserve in place, the extant boundary stones that mark the original survey of the District of Columbia.

HP.C.12 Ensure that sites and settings for federally owned historic assets in the region are preserved and maintained as integral parts of the National Capital Region's historic character.

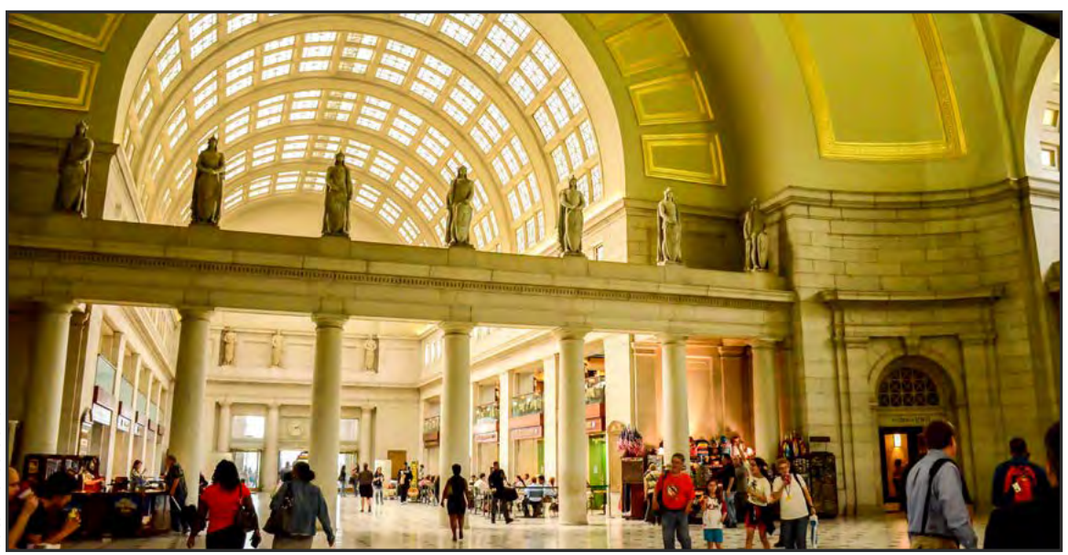
HP.C.13 Identify appropriate historic preservation protections prior to disposal of historic properties.



The rehabilitated and renovated historic Center Building, located on the historic St. Elizabeths West Campus, will house the U.S. Department of Homeland Security Headquarters and the Secretary's office.



Library of Congress



Catalina Calachan

Union Station, designed by Daniel Burnham, is a major transportation hub in Washington.

SECTION D: Policies Related to Design Review

Through the insistence on good design and stewardship of its historic buildings and open spaces, the federal government is a primary advocate for, and protector of, the image and legacy of the nation's capital. The character of adjacent historic properties must be considered when a historic building can no longer be used as originally intended, an addition or modernization is needed, or a new facility must be constructed. Complex planning and design decisions must be made by federal and local planners during the renovation or rehabilitation of historic properties. At times, in partnership with private entities, the federal government will pursue land acquisitions, transfer property, propose the adaptive use of historic buildings, expand federal facilities, or undertake site and campus development.

In all of these cases, the federal government should encourage design based on the premise of compatibility with the surrounding historic context. Rather than imitate historic buildings, a rehabilitation or new construction project should find a balance between contemporary design and the surrounding historic context. While finding a balance can be a challenge, strong contemporary architecture is necessary for the city to continue to evolve and function as the nation's capital.

The policies relate to design review work in concert with those established in the Urban Design Element.

The federal government should:

HP.D.1 Ensure that new construction is compatible with the qualities and character of historic buildings and their settings, in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties* and the *Guidelines for Rehabilitating Historic Buildings*.

HP.D.2 Work cooperatively with local, state, and federal agencies to ensure that development adjacent to historic properties does not detract from their historic character, and is compatible with the surrounding context.

HP.D.3 Protect the settings, including viewsheds, greenspaces, and tree canopies, of historic properties, as integral parts of the property's historic character.



The Secretary of the Interior's Standards

The Secretary of the U.S. Department of Interior has established standards for historic preservation programs, including those advising federal agencies on the treatment of historic properties listed in, or eligible for listing in, the National Register of Historic Places. The Secretary of the Interior's Standards for the Treatment of Historic Properties, with guidelines for preserving, rehabilitating, restoring and reconstructing historic buildings were developed to cover a wide range of preservation activities and historic property types. There are separate standards for preservation, rehabilitation, restoration, and reconstruction, as well as for acquisition. In addition, the National Park Service developed guidelines to assist in applying the Secretary of the Interior's Standards to these different preservation options and to different types of historic properties.

Federal agencies most commonly use *The Secretary of the Interior's Standards for Rehabilitation*[15] in conjunction with the *Guidelines for Rehabilitating Historic Buildings*[16] to carry out their preservation responsibilities for properties in federal ownership or control, and for properties affected by federal projects. The Secretary of the Interior's Standards provide guidance for the preservation of a historic property's significance through the preservation of its historic materials and features. The National Park Service defines rehabilitation as "the act or process of making possible a compatible use for a property through repair, alteration, and additions while preserving those portions or features which convey its historical, cultural, or architectural values."* The Secretary of the Interior's Standards and Guidelines provide guidance on how to achieve these alterations without the loss of historic building fabric and finishes that define the building's historic character.

* Use of the term assumes that some alteration of the historic building is required in order to make the building suitable for a current or new use.

The Secretary of the Interior's Standards for Rehabilitation:

1. A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.

2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.

3. Each property will be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other historic properties will not be undertaken.

4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.

5. Distinctive materials, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.

6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.

7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.

8. Archaeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.

9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.

10. New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

SECTION E: Policies Related to the Capital's Historic Image



Catalina Calachan

As the capital city, Washington represents the nation. The image of Washington is experienced by residents and visitors, and transmitted around the nation and world by the media, arts and literature, historic photographs—even through our currency. This resonating and powerful image is formed by individual buildings and monuments, and by the city's overall urban design—particularly because central Washington's overall form has been explicitly, and very successfully, designed to establish a setting that symbolically expresses the nation's ideals and values.

This image evokes and reinforces our national aspirations, and is the backdrop to the nation's celebration, culture, and political life. Since the federal establishment has grown beyond the original capital city to become a significant presence, the entire region's historic resources have a role in shaping the capital's image.

The following policies recognize and protect the overall character of the capital's image, and improve it, where needed. The guidance helps to ensure that future development contributes to strengthening the significant architectural and planning character, achieved over centuries, that makes the national capital a special and unique place. These policies work hand in hand with the policies in the Federal Urban Design Element to provide goals and guidance to federal agencies to protect historic resources, improve federal building design, and support a high quality public realm in Washington.

The federal government should:

HP.E.1 Plan carefully for appropriate uses and compatible design in and near the monumental core to protect and preserve the nation's key historic properties.

HP.E.2 Ensure that federal facilities and spaces respect and complement the capital's rich design heritage and historic resources.

HP.E.3 Design transportation infrastructure that is consistent with the urban design principles of the *Plan of the City of Washington* and surrounding historic properties.

HP.E.4 Recognize the role historic properties, memorials, and monuments have in defining the national capital and its image.

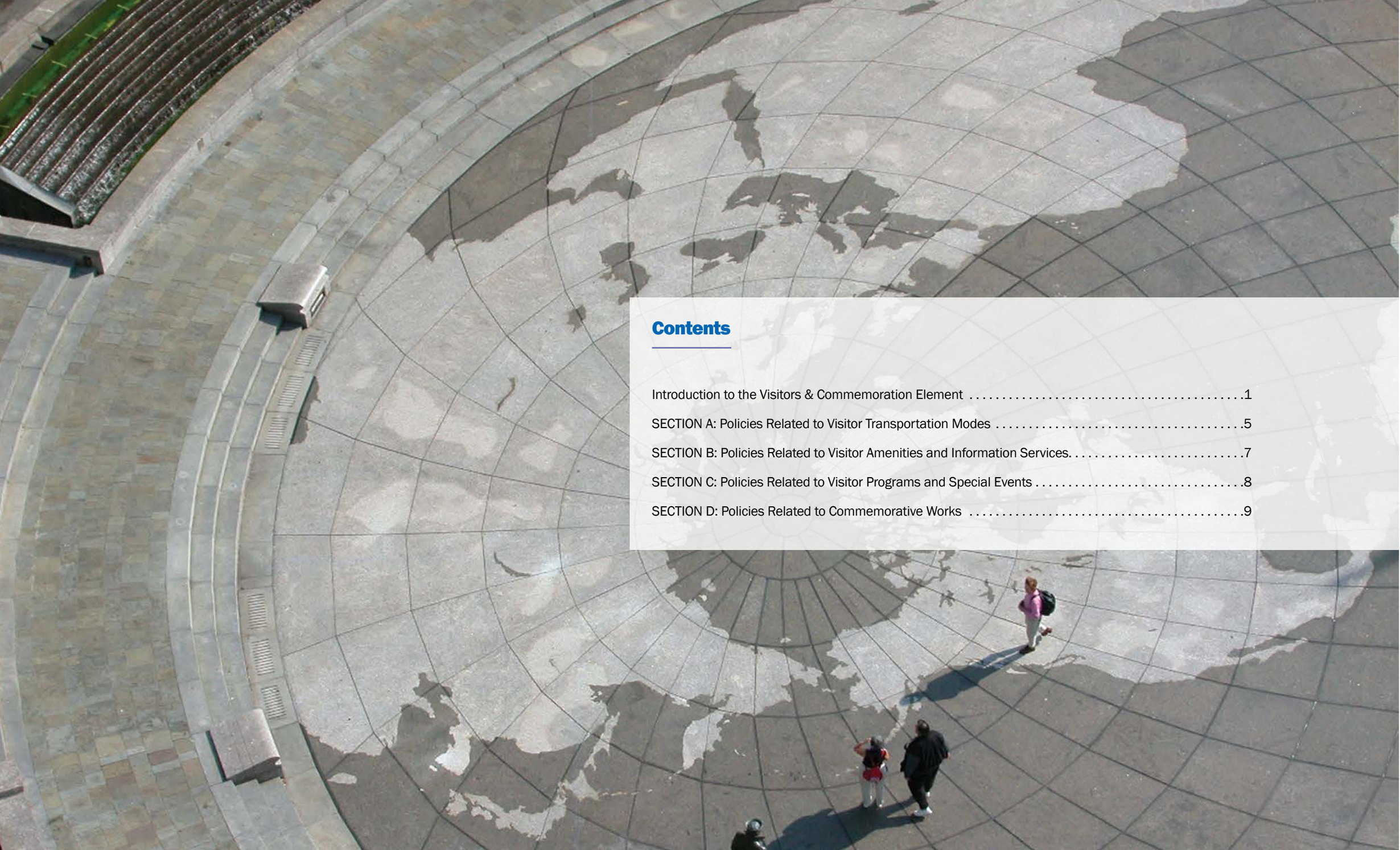
Endnotes

1. **L'Enfant Plan and McMillan Plan:** http://www.ncpc.gov/ncpc/Main(T2)/About_Us(tr2)/About_Us(tr3)/History.html
2. **Permanent System of Highways Act:** http://dcregs.dc.gov/Gateway/RuleHome.aspx?RuleNumber=10-B2709
3. **Height of Buildings Act:** http://www.ncpc.gov/ncpc/Main(T2)/About_Us(tr2)/About_Us(tr3)/HeightofBldgs1910.pdf
4. **Old Georgetown Act:** https://www.cfa.gov/about-cfa/legislative-history/old-georgetown-act-public-law-81-808
5. **National Historic Preservation Act:** http://www.achp.gov/nhpa.html
6. **District of Columbia Home Rule Act:** http://dccouncil.us/pages/dc-home-rule
7. **D.C. Historic Preservation Act of 1978:** http://planning.dc.gov/sites/default/files/dc/sites/op/publication/attachments/DC_Chapter_1_General_Provisions.pdf
8. **The Secretary of the Interior's Standards for the Treatment of Historic Properties:** http://www.nps.gov/tps/standards.htm
9. **National Capital Planning Act:** https://www.law.cornell.edu/uscode/text/40/subtitle-II/part-D/chapter-87
10. **Extending the Legacy: Planning America's Capital for the 21st Century:** http://www.ncpc.gov/ncpc/Main(T2)/Planning(Tr2)/ExtendingtheLegacy.html
11. **Memorials and Museums Master Plan** http://www.ncpc.gov/ncpc/Main(T2)/Planning(Tr2)/2MPlan.html
12. **Monumental Core Framework Plan:** http://www.ncpc.gov/ncpc/Main(T2)/Planning(Tr2)/FrameworkPlan.html
13. **National Capital Urban Design and Security Plan:** https://www.ncpc.gov/DocumentDepot/Publications/SecurityPlans/NCUDSP/NCUDSP_Section1.pdf
14. A geographic area, including both cultural and natural resources and the wildlife or domestic animals therein, associated with a historic event, activity, or person exhibiting other cultural or aesthetic values.
15. **The Secretary of the Interior's Standards for Rehabilitation:** http://www.nps.gov/tps/standards/rehabilitation/rehab/stand.htm
16. **Guidelines for Rehabilitating Historic Buildings:** http://www.nps.gov/tps/standards/rehabilitation/rehab/



2016

National Capital Planning Commission



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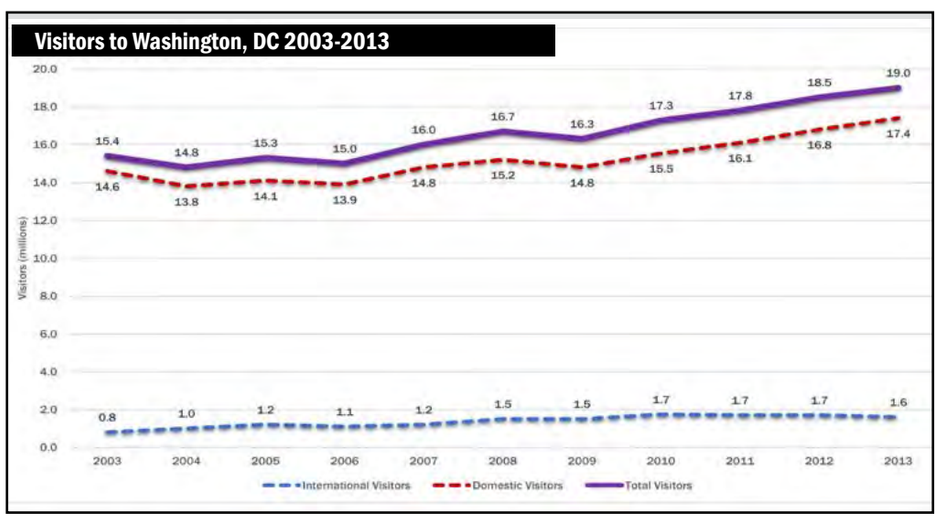
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SECTION D: Policies Related to Commemorative Works 9



The Lincoln Memorial hosted at least seven million visitors in 2014.[1]



The ten year trend shows a continuous increase of visitors to Washington, DC. In 2013, Washington welcomed 17.4 million domestic visitors and 1.6 million international visitors.[2] There was an increase of domestic visitors and decrease of international visitors from 2012. Visitors to Washington, DC spent an estimated $6.7 billion in 2013, an increase of almost eight percent from 2012.[3]

Introduction to the Visitors & Commemoration Element

The federal government's goal is to provide a positive and memorable experience for all visitors to the National Capital Region in a way that showcases the institutions of American culture and democracy, supports planning goals, and enhances activities that are unique to visiting the nation's capital.

Washington, DC is the symbol of the nation. As the seat of the national government, it includes places and activities central to the nation's history, culture, and civic identity. Tourists, schoolchildren, international and local visitors, and business people all need information, transportation, and other services. Some come to Washington because it is the seat of government and a symbol of democracy. They may visit a memorial or participate in a celebration, ceremony, First Amendment activity or other experience unique to the nation's capital. For many others, Washington is considered home to many of their local attractions.

The Visitors & Commemoration Element sets forth the Commission's policies for visitor destinations that include federal and cultural institutions; attractions including memorials, monuments, and national landmarks; as well as spaces for national events and public gatherings. The element takes into account existing federal and local efforts designed to enhance visitor access to these sites, including transportation services and visitor amenities.

National cultural institutions, festivals, and memorials are the leading visitor destinations. For example, in 2013 an estimated 1.6 million tourists attended the Cherry Blossom Festival.[4] In 2013, Washington's Smithsonian Institution museums recorded approximately 30 million visits.[5]

The region's many national parks include many destinations and event spaces, and are major attractions in their own rights. The National Mall—America's front yard—is used by many local residents for active recreation, concerts, and cultural purposes. The National Mall and other nearby national parks are not only recreational and commemorative spaces but are also gathering space for citizens to exercise their First Amendment rights. The National Park Service (NPS) receives 6,000 applications annually for demonstrations, celebrations, and special events to be held on the National Mall.[6]

Since the last update of the *Comprehensive Plan for the National Capital: Federal Elements* (Comprehensive Plan), newly completed memorials include the Martin Luther King, Jr. Memorial, American Veterans Disabled for Life Memorial, and the Memorial to Victims of Ukranian Manmade Famine of 1932-1933. Others still in the planning phase include the President Dwight D. Eisenhower Memorial, Adams Memorial, Peace Corps Memorial, and General Francis Marion Memorial. If past trends continue, there could be more than 30 additional memorials in the nation's capital by 2050.[7]

There is also continued interest in locating new national museums in the region. In 2012, construction began on the National Museum of African American History and Culture on the Washington Monument grounds, which is scheduled to open in 2016. Other examples include the National Museum of the Marine Corps (opened in 2006 near Marine Corps Base Quantico, Virginia) and the National Museum of the United States Army (opened in 2012 at Fort Belvoir, Virginia).

The federal government plays an important role in supporting a memorable visitor experience. The Visitors & Commemoration Element recommends policies that support accessibility and openness for visitors and encourages improvements to visitor amenities, circulation, and information-sharing. Policies respond to the growing number of visitors and the continued demand for new events, commemorative works, museums, and other attractions. The element supports planning for commemorative works in a manner that reflects their role in shaping a visitor's Washington experience, enhancing neighborhoods, and providing quality public spaces. Many local, nonprofit, and private organizations also play an important role in providing a positive visitor experience. The element's strategies should be coordinated with federal and regional agencies, and others including the Washington Metropolitan Area Transit Authority, Destination DC, and the hospitality industry.

Washington, DC is one of the world's great planned capital cities. It has a strong urban design framework that includes many important physical and visual linkages between important places (refer to the Federal Urban Design Element). Many of these sites are significant visitor destinations. From a federal planning perspective, there has been a particular focus on enhancing the linkages between the National Mall and adjacent areas, particularly to the north through the Federal Triangle into downtown and south towards the waterfront. Enhancing these conections to enrich the pedestrian experience and create access to important attractions includes decisions about land use, transportation routes, information services, and programming of the streets and public spaces. These are important parts of any visitor policy framework.

The National Capital Planning Commission (NCPC), in coordination with federal agencies and the District of Columbia government, highlighted near-term and long-term opportunities for enhancing linkages in efforts including the *Monumental Core Framework Plan*[8] (2009) and the *SW Ecodistrict Plan*[9] (2013). These projects propose to knit federal precincts to the surrounding urban fabric.

Since the last Comprehensive Plan update, site-specific projects such as conversion of the Old Post Office into a hotel and construction of the Newseum on Pennsylvania Avenue further strengthened the connection from the monumental core to downtown. There are also further opportunities to improve connections. One area is the connection along E Street, NW beginning west of the White House and running to the John F. Kennedy Center for the Performing Arts. E Street, NW is an important location for future national memorials.



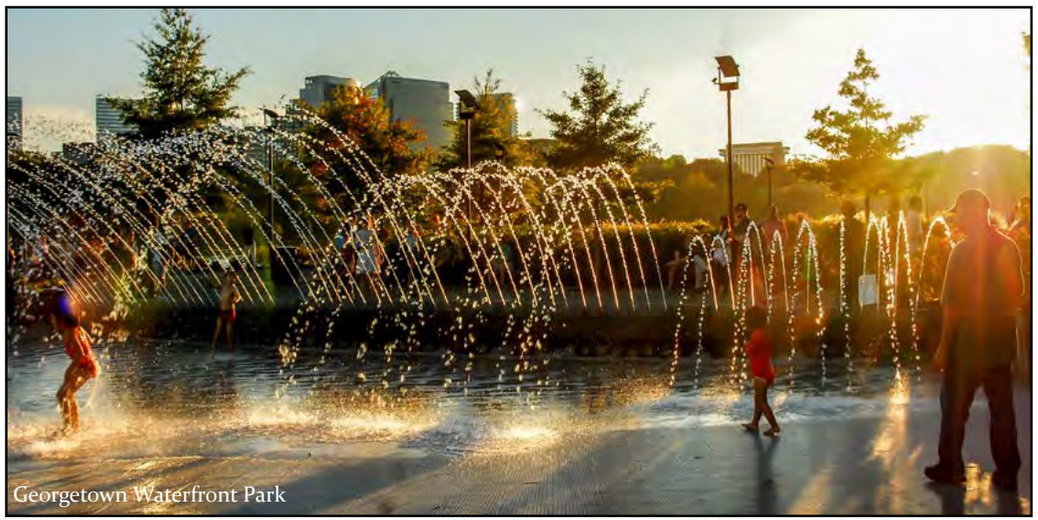
American Veterans Disabled for Life Memorial


The proposed 10th Street, SW corridor in the *SW Ecodistrict Plan* connects the National Mall and Smithsonian Museums to the southwest waterfront.


Tidal Basin


National Cathedral


U.S. Air Force Memorial


Georgetown Waterfront Park

Photos: Catalina Calachan

Visitor Attractions within the Monumental Core and Beyond

As the seat of government and the symbolic center of the nation, Washington, DC is home to some of the nation's most important cultural and historic national resources. The great cross axis of the National Mall is a focal point for the city's original plan and orients visitors to important places such as the U.S. Capitol, the White House, the Washington Monument, the Lincoln Memorial, and the Jefferson Memorial. Smithsonian Institution museums—including the National Museum of African American History and Culture—flank the National Mall and are cultural centers.[10] Beyond the National Mall, visitors can wander north towards the Smithsonian's American Art Museum and National Portrait Gallery, or downtown's many theaters, galleries, parks, memorials, and museums.

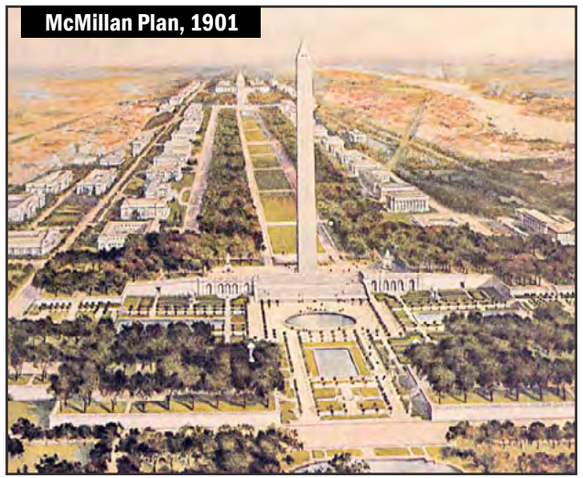
The monumental core is a culturally and architecturally rich setting for many of the nation's most treasured parks and civic institutions. Policies in this element focus on creating a memorable and meaningful experience for visitors that reveal facets of the nation's culture and history through its symbols and institutions.

Although the monumental core is the major focus of the Washington experience (refer to the Federal Urban Design Element for more information on the monumental core), there are important attractions throughout the city and the region. There are opportunities to enhance the visitor experience beyond the traditional hallmarks of a visitor's stay in Washington, and visitor information and services should also orient travelers to them. Within Washington, examples of federal and non-federal attractions include the Smithsonian's National Zoo, U.S. National Arboretum, Kenilworth Park & Aquatic Gardens, Rock Creek Park, Anacostia Park, Anacostia Community Museum, Chesapeake & Ohio Canal National Historic Park, Lincoln Cottage, Civil War Defenses of Washington,[11] Washington National Cathedral, Basilica of the National Shrine of the Immaculate Conception, and Frederick Douglass National Historic Site. Washington's waterfronts, including parks, open spaces, and other recreational activities are important visitor attractions.

Washington, DC has many vibrant and historic neighborhoods, each with a unique character. Neighborhoods such as Dupont Circle, Georgetown, U Street, and Capitol Hill also offer dining, shopping, cultural, and entertainment opportunities. Cultural Tourism DC publishes extensive walking guides to many of Washington's beautiful neighborhoods and hosts the annual Passport DC to highlight Washington's international diplomatic community.

Trends show that many visitor attractions were privately funded including the Newseum, Spy Museum, Museum of the Bible, and recent memorials dedicated by the District of Columbia. Federal and local agencies should continue to find opportunities to co-locate related attractions such as memorials and museums. Important sites outside of Washington include Arlington National Cemetery, the U.S. Marine Corps War Memorial, the U.S. Air Force Memorial, Mount Vernon, and Old Town Alexandria.









Federal Policy Framework

The element's policies are based on federal laws, regulations, guidelines, and plans developed to best accommodate visitors and cultural attractions. They also work in concert with local jurisdictional efforts. The Element's policy framework has a regional focus, but pays particular attention to the area centered on the National Mall, an important symbol of national pride. Many plans emphasize the importance of protecting the National Mall's historic open space and urban design qualities for future generations.

The vision of a symbolic and attractive capital city core is grounded in the L'Enfant Plan[12] (1791). The McMillan Plan[12] (1901) subsequently expanded the L'Enfant Plan's framework. Responding to unplanned intrusions into the National Mall and its surroundings, the McMillan Plan envisioned a combined civic and cultural place that is both a national front lawn and a public forum.

NCPC's *Extending the Legacy: Planning America's Capital for the 21st Century*[13] (1997) placed renewed emphasis on protecting Washington's symbolic core while connecting its adjacent neighborhoods and business districts. The plan also recommended locating memorials, museums, and other federal facilities along key corridors, such as North and South Capitol Streets, 10th Street, SW, and the Potomac and Anacostia riverfronts. By dispersing federal visitor destinations into emerging areas of the city, the plan recognized their role as potential catalysts for development.

Additional plans and regulations guided implementation of the L'Enfant, McMillan, and Legacy Plans. In 2001, NCPC completed the *Memorials and Museums Master Plan*[14] (also known as the 2M Plan) and set forth guidelines for locating future commemorative and cultural attractions in Washington, DC and identified sites for future commemorative development. NCPC's Framework Plan built upon the Legacy Plan's ideas by recommending the addition of enlivening infrastructure and public space improvements in federal precincts around the National Mall. The Framework Plan, together with the *National Mall Plan*,[15] prepared by the NPS, and the District of Columbia's Center City Action Agenda,[16] sought to connect the National Mall with surrounding federal and downtown neighborhoods to improve the visitor experience and provide opportunities for future federal attractions and other development.

Security needs have changed the visitor experience at federal destinations throughout the National Capital Region (NCR). Security measures include permanent or temporary features, restricted access, and alterations to buildings and public spaces. While the federal government has a responsibility to ensure that federal visitor attractions[17] are safe, they also need to remain publicly accessible and aesthetically pleasing. NCPC policies and guidelines that address these issues are included in the Federal Urban Design Element, the *National Capital Urban Design and Security Plan*[18] *(2002, updates in 2004 & 2005)*, and *Designing and Testing of Perimeter Security Elements*[19] (2005).



TravelRoads



Orin Hirsch

In 2015, a new Circulator route began service between Union Station and the National Mall.



DC Pedicab

The region benefits from personalized transportation alternatives, including the expansion of the Capital Bikeshare system, pedicabs, and motorized transport systems like Segway.

SECTION A: Policies Related to Visitor Transportation Modes

As the number of visitors to the region continues to increase, it's important to improve access and mobility to major visitor attractions. Automobiles, Metrorail, and tour buses are the primary transportation modes used to access visitor attractions. The federal government should support transit alternatives such as specialized shuttle service, water transportation, walking, and bicycling, which alleviates demand on the area's road network and limited parking capacity.

Curbing the use of private automobiles as a means of travel for visitors is an important regional goal. In a 2009 NPS survey, 36 percent of respondents indicated that they used a private vehicle for travel to and from the National Mall.[20]

To further reduce traffic, visitors are encouraged to use public transportation and related mobility alternatives. Fortunately the region offers a number of transportation alternatives including Metrorail, the Circulator, commuter rail, tour buses and local buses. Visitors are increasingly using public transportation to experience Washington, with more than 50 percent of National Mall visitors taking transit.[21] Circulators or similar transit alternatives expand travel options and complement existing Metrorail and Metrobus service, providing visitors better access to other destinations in Washington, DC and the region. The element policies encourage development of new modes of transportation, such as shuttle service between transit stations and visitor destinations. The policies also promote improved trails and sidewalks to facilitate visiting attractions by foot or bicycle. Refer to the Transportation Element for more information on federal transportation policies within the NCR.

The federal government should:

VC.A.1 Locate federal visitor attractions within walking distance of public transportation stops. Ensure the path between attraction and the stop are ADA, pedestrian, and bicycle accessible.

VC.A.2 Support increased access to visitor attractions through improvement or expansion of Metrorail, premium bus service, pedestrian and biking improvements, or other affordable, efficient, and effective transportation alternatives.

VC.A.3 Encourage increased use of public transit and other sustainable transportation alternatives (car sharing, bicycles, and organized tours) to access regional attractions.

VC.A.4 Major new attractions should address the transportation needs of visitors for an average day demand and provide transportation alternatives to reduce parking demand.

VC.A.5 Work with federal, state, and local agencies and other organizations to provide appropriate sites for effective and coordinated satellite parking facilities for tour and commuter buses.

VC.A.6 Develop tour and commuter bus management strategies to reduce traffic congestion in and around visitor attractions throughout the National Capital Region.

VC.A.7 Improve distribution of information to visitors about long-term parking facilities and transportation alternatives.

VC.A.8 Work with local governments to promote water transportation, such as water taxis, as a way of accessing and viewing attractions from the water.

VC.A.9 Support public art and commemorative works at transportation facilities, where appropriate.



Tour buses are an important means to access the area's attractions and are estimated to serve as many as one-third of the visitors.[22] During the spring-summer peak season, up to 1,200 tour buses are in the District of Columbia every day. While tour buses are a desirable alternative to the private automobile, they often idle on already congested city roadways and impact scenic areas and viewsheds. The operational challenges associated with tour buses include negative impacts on local infrastructure from traffic congestion; residential neighborhood disruption; and obstruction of view corridors and major landmarks.

A U.S. Department of Transportation study developed in partnership with NCPC and several other agencies determined that a tour bus parking management system for Washington should be developed.[23] In 2015, NPS's National Mall and Memorial Parks Unit completed the *National Mall and Memorial Parks Tour Bus Study*,[24] which looked at existing conditions of tour bus operations and provided short- and long-term recommendations to improve those operations. In 2015 the Metropolitan Washington Council of Governments completed the Regional Bus Staging, Layover, and Parking Location Study[25] to analyze the need for tour and commuter bus staging, layover, and parking locations in Washington, DC and Arlington County.



TravelRoads

Indoor and outdoor food service facilities are located throughout the National Mall.



Hunt Design

Maps, signage, and other information resources enhance visual and functional connections to visitor attractions.

SECTION B: Policies Related to Visitor Amenities and Information Services

The nation's capital is a major destination for domestic and international visitors; a center of civic, historic, and cultural attractions; as well as sites for special events and activities. Amenities such as information, restrooms, seating, food services, signage, and wayfinding are services to assist visitors, help activate public spaces, and increase pedestrian activity.

The growth of visitors in Washington has resulted in additional new attractions. As a result, it is important to provide coordinated information to new attractions through signage, kiosks, and multi-media platforms. These platforms could also provide digital and web-based content and applications. Coordinated and comprehensive visitor services, providing information about events, activities, shopping, transportation, and parking would help orient visitors and enhance their travel experience. One key challenge with developing such a service is that many different entities (federal, local, private, and nonprofit) manage their own major visitor attractions. Each has unique visitor information and service platforms.

Meeting the needs of those looking to experience Washington begins with development of information centers placed at key locations—both in Washington and the region—to orient, inform, and educate visitors about special features, activities, locations, and events at attractions. Large, comprehensive orientation centers, small kiosks, and mobile visitors centers can be developed to provide essential visitor information. Spread throughout the region, these facilities can further educate visitors about the wide variety of activities.

Visitor information can include a wide variety of dining and lodging options, arts and entertainment, sports schedules, and special events. Programs and services should respond to, and accommodate, the wide variety of facilities located throughout the region. Maps, signage, and other information resources should be accessible to visitors with special needs, such as non-English speakers. Web-based information should comply with Section 508 of the Rehabilitation Act of 1973,[26] which requires federal agencies to provide website accessibility to people with disabilities.

Indoor and outdoor food service facilities are located throughout the National Mall and areas in the monumental core to handle anticipated demand. However, there are areas that lack adequate food services. Vendors selling food, including food trucks and other tourist-related items, can help fill the gap, although they should be carefully located and designed so they do not impede pedestrian and vehicular circulation and adversely affect the monumental core's visual and physical qualities.

Reasonable restroom accommodations should be provided at federal employment centers, heritage sites, and other publicly accessible federal facilities. Popular attractions, including parks, should respond to visitation levels by planning for adequate numbers and varieties of food and beverage outlets. Visitors could also benefit from improved access to the riverfront and boat slips.

The federal government should:

VC.B.1 Support the dissemination of information at regional locations frequented by visitors (e.g., hotels, restaurants, Metrorail stations, and major transportation centers). Information should include federal and local visitor attractions, events, tours, stores, shops, and restaurants nearby.

VC.B.2 Encourage visitor interest in attractions, including less frequently visited regional attractions, by using brochures, multi-media, digital, and web-based materials.

VC.B.3 Encourage multilingual information services in the vicinity of visitor centers and at key transportation centers.

VC.B.4 Explore the feasibility of creating a central visitor information center and/or multi-media platform that includes information about both public and private visitor attractions.

VC.B.5 Develop information visitor centers, kiosks, exhibits, and other educational programming in public areas of government facilities and other appropriate locations in the National Capital Region to inspire and educate visitors about the role of government and national attractions.

VC.B.6 Conserve, enhance, communicate, and promote an understanding of the significance of heritage features, landmarks and the National Capital Region's natural environment.

VC.B.7 Support the location of information kiosks and visitor centers at federal facilities throughout the National Capital Region.

VC.B.8 Enhance visual and functional connections to visitor attractions through well-designed and coordinated signage, pathways, parkways, streetscaping, wayfinding tools, and programming.

VC.B.9 Develop and maintain a safe, comfortable and pleasant environment that offers a range and distribution of amenities, services, and access throughout the area (e.g. lighting, accessible restrooms, concessions, and information).

VC.B.10 Ensure that any supporting facilities such as restrooms or concessions stands do not detract from the aesthetics or accessibility of the commemorative element and its grounds.

VC.B.11 Support a variety of food, retail, and supporting services on federal lands or in adjacent buildings, where high levels of pedestrian activity exist or are encouraged.

SECTION C: Policies Related to Visitor Programs and Special Events

The federal government, in coordination with the District of Columbia and other local jurisdictions, has a role in supporting special programs, festivals, parades, concerts, fine arts presentations, and other events that entertain and educate visitors and contribute to an enjoyable visit to the NCR.

Many of these special programs and events are located in downtown Washington. Special events that take place at central downtown locations including Freedom Plaza, the U.S. Navy Memorial, and nearby activity nodes (e.g., Washington Convention Center, Verizon Center), are ideally located to allow visitors and residents to enjoy special programs and events. However, special events require adequate support services, such as restrooms, safety services, and accessible public transportation.

The federal government should continue to be an active participant with local governments in supporting events and activities at traditional gathering places and on federal property, such as parkland and urban plazas. Special events related to the federal government, such as the inaugural parade, should be adequately supported by the federal government. In addition, NCPC and other federal agencies should continue to look at how visitor programs and special events can be used to further strengthen linkages between the monumental core and adjacent areas. The Visitors & Commemoration Element provides policies that reflect the benefits to the federal government of having special events and programs in the capital city and the need to adequately support them.

The federal government should:

VC.C.1 Actively partner with public and non-profit entities on programs which can enrich the visitor experience and provide educational services related to the capital city's history and role.

VC.C.2 Regularly sponsor displays, special events, and arts, cultural, and recreational activities in, on, and around federal facilities throughout the National Capital Region.

VC.C.3 Design and program events in a manner that respects and minimizes impacts on the location and vicinity.

VC.C.4 Assist in providing support services for special events and programs, where appropriate.



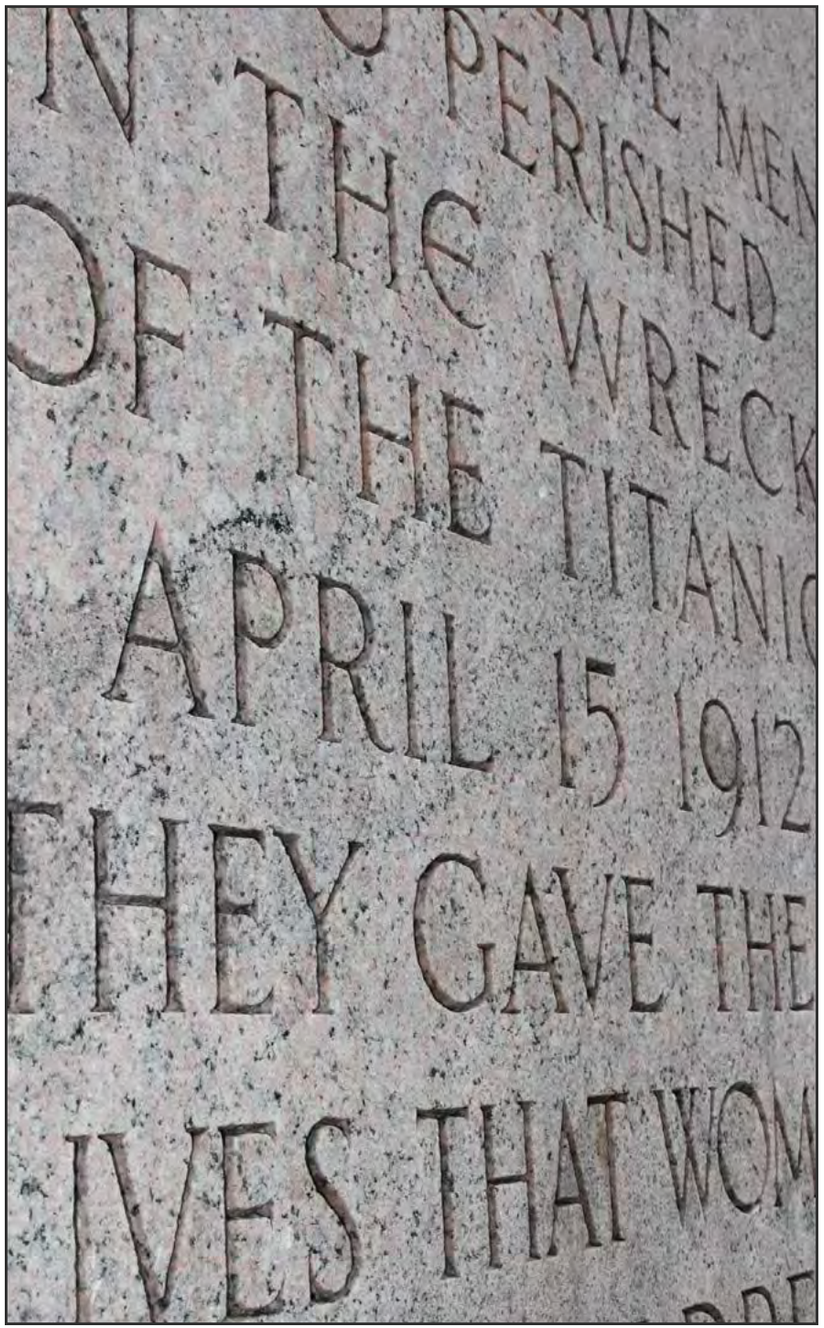
National Mall

Catalina Calachan



U.S. Navy Memorial

U.S. Navy, Shawn P. Eklund



SECTION D: Policies Related to Commemorative Works

Commemorative works, including monuments, memorials, ceremonial gardens, and plaques are often located among Washington's high-profile structures, viewsheds, and promontories. This civic art form preserves and celebrates many important aspects of American history and culture. When designed well, memorials can inspire and broaden civic engagement, enhance their surroundings, and introduce cultural resources to neighborhood parks.

The Visitors & Commemoration Element guides the federal government's goals regarding memorials and other cultural resources. For each memorial project, NCPC and other agencies involved in the process strive to ensure that the process is responsive and transparent. Using the Commemorative Works Act (CWA) as a guide, the agency's goal is three-fold: ensure that Washington's commemorative works explore the diverse, rich stories of American history; meet the expectations of millions of Americans who visit the nation's capital; and plan so that future memorials have excellent locations.

Under the CWA, the Secretary of the U.S. Department of Interior (DOI) or the Administrator of the U.S. General Services Administration (GSA), along with the U.S. Commission of Fine Arts (CFA) and NCPC must approve the site and design for each new commemorative work that Congress authorizes on federal land. NCPC works with memorial sponsors and the DOI Secretary or the GSA Administrator, along with other review bodies, including the National Capital Memorial Advisory Commission and the CFA, to ensure that each memorial is located and designed in a manner that supports its commemorative purpose and enhances its surroundings.

In addition to NCPC's project-specific work, the agency works with federal and local partners to develop studies designed to support the memorial process and plan for the next generation of memorials. In recent years, one of the central themes of NCPC's work has been to protect the National Mall from overbuilding, which may diminish the distinctive openness of this symbolic place.

Most sponsors envision their memorial being located on the National Mall, the symbolic heart of the capital. In the past, many memorial projects have been sited on or adjacent to the National Mall.

As a way to relieve pressure for new memorials on the National Mall, NCPC and CFA published the Framework Plan in 2009 to identify strategies to extend the civic qualities of the National Mall and the vitality of the city into adjacent federally dominated precincts.

The Framework Plan identified several potential locations for new cultural destinations located off the National Mall, that can be attractive to museum and memorial sponsors. Examples include the precinct south of Independence Avenue, including 10th Street, SW and its terminus at Banneker Overlook. New cultural projects in these areas can serve as anchors that spark investment; add high-quality public spaces and buildings; and provide destinations that introduce visitors to new parts of the city. Museums and memorials have the opportunity to strengthen community linkages, as well as cultural and historic associations, between commemorative resources and neighborhoods. Commemorative works can provide additional benefits and amenities to neighborhoods. NCPC coordinated closely with the NPS to ensure that the plan's goals and recommendations were consistent with the *National Mall Plan*. These collective plans provide the long-range vision memorial sponsors need to consider areas beyond the National Mall.

Commemorative Works Act

Created in 1986, the Commemorative Works Act[27] guides the process for development, approval, and location of new memorials on federal lands administered by the National Park Service (NPS) and U.S. General Services Administration (GSA) in the District of Columbia and its environs. Congress authorizes each new memorial by separate law. Site selection and design are delegated to federal agencies, including NPS on behalf of the Secretary of the Interior, GSA, U.S. Commission of Fine Arts, and NCPC.

The Act established the National Capital Memorial Advisory Commission, which advises the Secretary of Interior, the Administrator of GSA, Congress, and sponsors on topics related to commemoration and consults on matters relating to the siting and design of new memorials. Memorials located on other lands, such as the U.S. Department of Defense, follow a separate process.

As amended in 2003, the Act designates a "Reserve" area within the core of the great cross-axis of the Mall where the siting of new commemorative works is prohibited. The Reserve generally extends from the U.S. Capitol to the Lincoln Memorial and from the White House to the Jefferson Memorial. To protect the historic and cultural integrity of memorials, the act also includes restrictions related to the acknowledgment of donors. The following figure reflects the Reserve and other designated areas:



Reserve | Area I | Jurisdiction of the Architect of the Capitol

Responsibilities of Federal Agencies as Outlined by the Commemorative Works Act

National Capital Memorial Advisory Commission

The National Capital Memorial Advisory Commission (NCMAC) serves as a consultation focal point for those seeking to establish memorials on federal land that is subject to the Commemorative Works Act in the nation's capital. NCMAC was originally established as a federal advisory committee of the U.S. Department of Interior. The CWA reestablished the committee as the NCMAC and directed it to report to Congress, the Secretary of the U.S. Department of the Interior, and the U.S. General Services Administration (GSA) on matters relating to commemoration in the District of Columbia and its environs when federal property administered by the Secretary of the Interior or GSA is used. NCMAC:

- Prepares and recommends to the Secretary or the Administrator criteria, guidelines, policies, and procedures for memorializing persons and events.
- Examines each memorial proposal for adequacy and appropriateness.
- Makes recommendations to Congress in conformance with the CWA.
- Makes recommendations to the Secretary or the Administrator with respect to site locations on federal land in the District of Columbia and its environs that are under the provisions of the CWA.
- Considers each memorial proposal seeking a site within Area I for appropriateness, and make recommendations to the Secretary or the Administrator with respect to preeminent and lasting historical significance to the nation.

Membership of NCMAC is designated within the CWA and is composed of eight ex-officio members. The chairman is the Director of the National Park Service (or his/her appointee).

U.S. Department of the Interior (Through the National Park Service)

Washington, DC memorials are typically proposed and paid for by private groups. However, once built, memorial sites are generally maintained and interpreted in perpetuity by the National Park Service when located on NPS land. NPS coordinates and assists with memorial proposals in Washington and its environs. NPS, on behalf of the Secretary of the Interior, reviews and approves sites and designs and issues construction permits.

U.S. General Services Administration

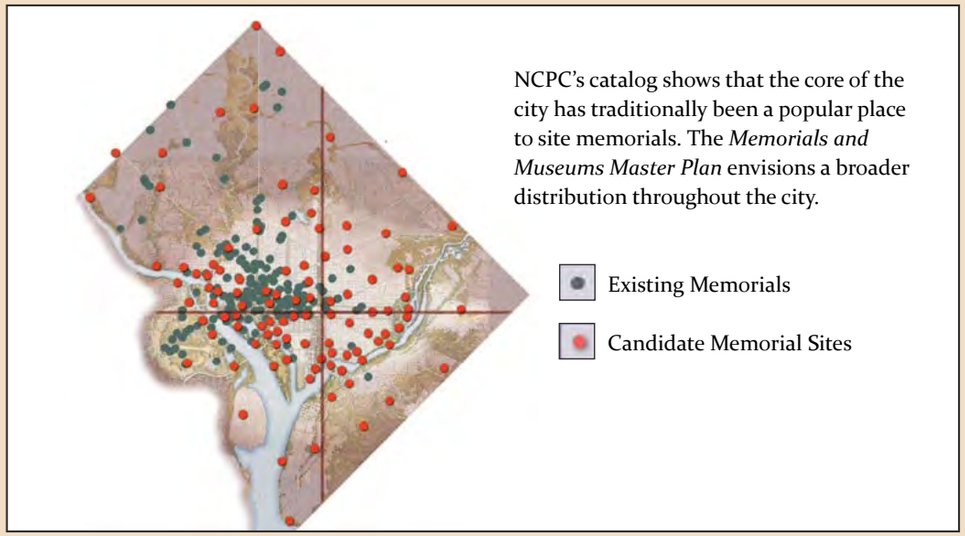
The landlord for the civilian federal government. It provides leadership, policy direction, and standards in the areas of architecture, engineering, fine arts, historic preservation, construction services, and project management. The Commissioner of the Public Building Service serves on NCMAC. In Washington, DC, GSA lands may be considered for commemorative works under the CWA.

U.S. Commission of Fine Arts

Established to advise the government on matters of aesthetics and design, including the location and design of statues, memorials, and public buildings erected by the federal and District governments in the nation's capital. The President appoints seven members to serve four-year terms on the commission. Authorized to approve sites and designs for new commemorative works and is represented on NCMAC.

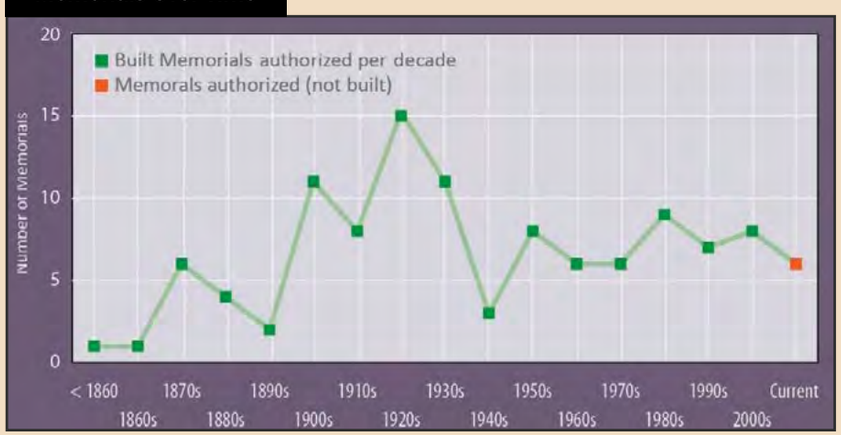
National Capital Planning Commission

Provides planning guidance for federal land and buildings in the National Capital Region, which includes Washington, DC. The 12-member Commission includes three Presidential appointees, and representatives from Congress, federal agencies, and the District of Columbia. With respect to commemorative works, NCPC is authorized to approve sites and designs for new memorial projects and is represented on NCMAC.



Americans have long established memorials in our nation's capital. The peak decade for memorials was the 1920's, with 15 work authorized by Congress. Since the 1980's, the number has remained fairly consistent.

Memorials Over Time



Note: This chart does not include works located on NPS lands but not authorized by Congress. These include: the Temperance Fountain, President Franklin Delano Roosevelt (located at the National Archives), the First Airmail Flight Marker, and the Fort Stevens Markers.

Memorials and Museums Master Plan

In 2001, NCPC, in cooperation with the Joint Memorial Task Force, published the *Memorials and Museums Master Plan*. The 2M Plan achieved two important goals. First, it identified a Reserve, which includes the great cross-axis of the National Mall, where no new memorials may be built. Congress subsequently enlarged and codified the Reserve in the 2003 Commemorative Works Clarification and Revision Act. The Reserve maintains the Mall's open spaces and existing memorial landscapes that are greatly admired and enjoyed.

The plan also helps sponsors visualize opportunities for their projects and disperses cultural destinations to neighborhoods in all four quadrants of the city. The 2M Plan identified 100 potential sites for future memorials and museums throughout Washington, DC and Virginia. Each location is evaluated and includes information on scale of site, transit connections, cultural and historic resources, and neighborhood setting. This helps sponsors and review agencies evaluate whether a given project is suitable for a particular location. The plan identified developing areas such as the South Capitol Street corridor as a potential location for new museums or memorials.

The 2M Plan successfully guided six projects to locations off the Mall, including the President Dwight D. Eisenhower Memorial; U.S. Air Force Memorial; Thomas Masaryk Memorial; Victims of Communism Memorial; Memorial to Victims of Ukrainian Man-Made Famine of 1932-1933; and the American Veterans Disabled for Life Memorial.

NCPC's *Memorial Trends and Practice Study*[28] (2012) found that memorials are still concentrated in the western quadrants of the city, with only four percent of federal memorials are located in the eastern quadrants. While the 2M Plan provides strong policy direction for distributing memorials throughout the city, additional work remains to achieve this goal.

Memorials Themes and Trends

One of the most striking trends over time is the addition of memorials that honor groups, as opposed to honoring individuals or events. For example, there are 14 total memorials to individuals associated with the Civil War. Later war memorials are more inclusive; the DC World War Memorial lists the names of residents who died during World War I and honors all District residents who served. In terms of themes, memorials have also traditionally focused on military related events. However, commemorative themes have begun diversifying with issues related to society, culture, and international themes have become regularly commemorated.

NCPC and its partners continue to refine the approach for designing and building commemorative works in Washington. In 2012, NCPC completed *Memorial Trends and Practice in Washington, DC*, which includes a publicly accessible catalog and online map of existing memorials on NPS land in Washington. It also includes analyses of how other capital cities in the United States and abroad plan for memorials. This information is designed to better equip agencies and the public to consider the critical policy and planning decisions associated with memorial development. Study recommendations include developing siting guidance for international gifts and identifying commemorative opportunities for sponsors other than permanent commemoration. In addition to nontraditional works and temporary displays, sponsors can explore commemorative activities such as solemn gatherings and community festivals, with opportunities to encourage placemaking through location and design.

The Visitors & Commemoration Element policies establish guidelines to sensitively locate and design commemorative works while respecting the limited land resources in the nation's capital. Specific policies address pre-existing uses, context, viewsheds, sustainability, and accessibility.

The federal government should:

VC.D.1 Protect open spaces, existing public uses, and cultural and natural resources when locating and designing new commemorative works, to the maximum extent practicable.

VC.D.2 Locate new commemorative works in accordance with the Commemorative Works Act, in consideration of sites identified in the *Memorials and Museums Master Plan*.

VC.D.3 In addition to Area I criteria, reserve visually or culturally prominent sites, including the Prime Sites of the *Memorials and Museums Master Plan* and sites along Pennsylvania Avenue, for significant memorials of American history and culture.

VC.D.4 During site evaluation for international gifts, consider locations in and around related embassies or other cultural institutions and the associated maintenance with each site.

VC.D.5 Ensure that new memorials located in neighborhood settings are sited and designed in a manner that is consistent, with local land uses, activities, and objectives.

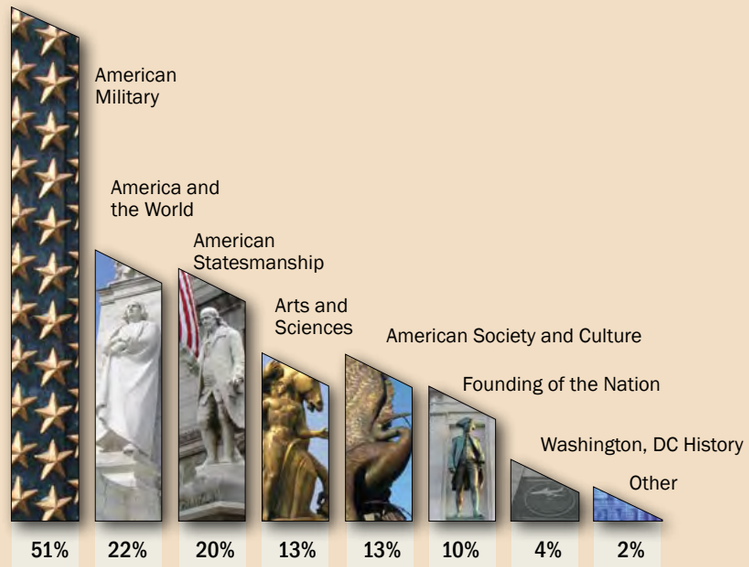
VC.D.6 Design commemorative works with durable materials and sustainable landscape features.

VC.D.7 Minimize on-site donor recognition and ensure that it does not detract from the visitor experience. Donor recognition should not diminish the integrity of the memorial design, including historic features.

VC.D.8 If a supporting structure is contemplated, use surrounding amenities rather than construct additional buildings, where possible. Build new structures in a manner that is not visually or functionally obtrusive.

VC.D.9 Accommodate visitor access by modes other than single-occupant vehicle.

Memorials by Broadest Theme on NPS land in Washington, DC



Note: On GSA and NPS property only; some works fall under more than one theme. (2010)

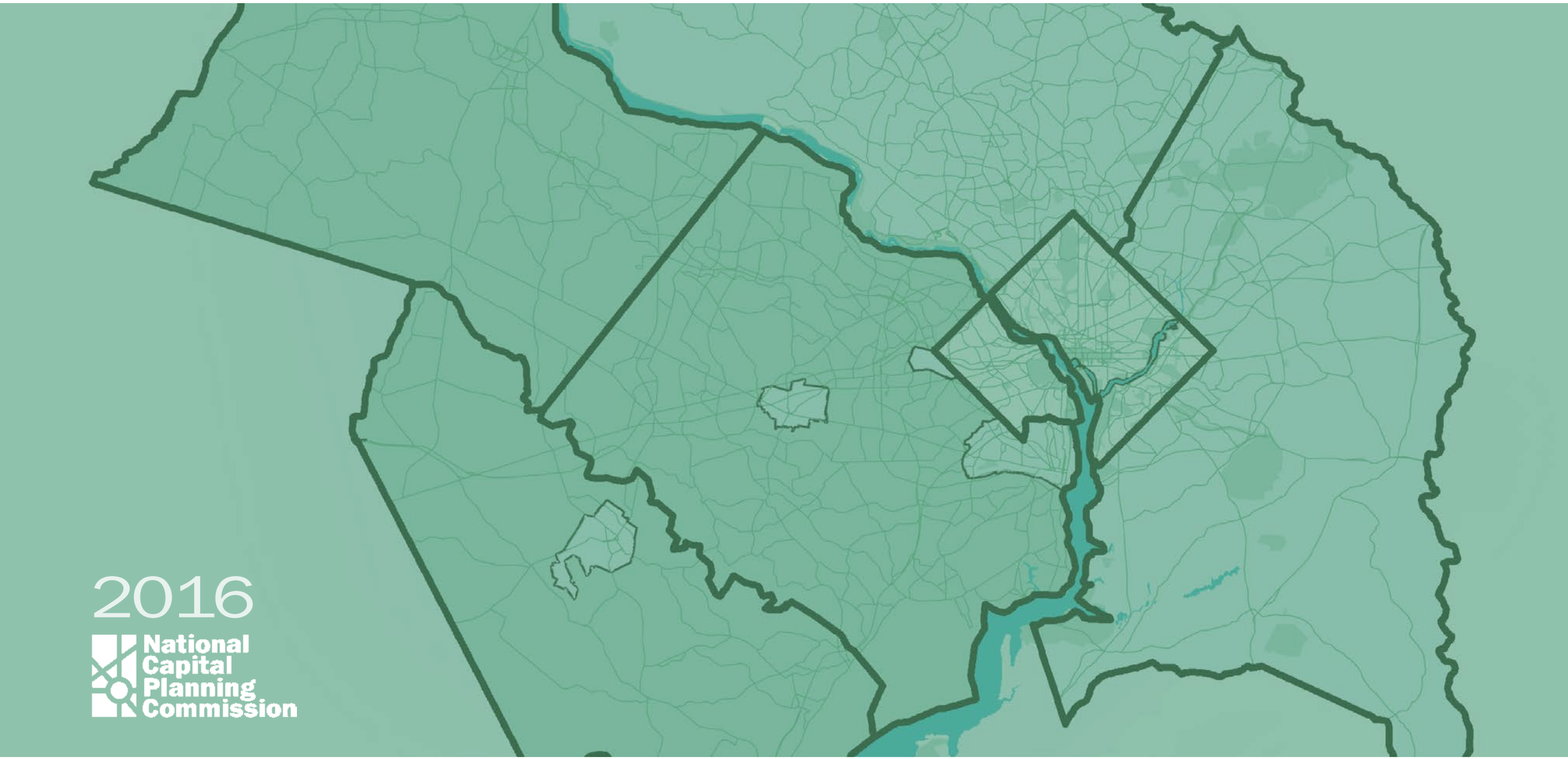


The National Memorial AIDS Quilt, returned to Washington in 2012 for the 25th Anniversary of its display on the National Mall. This poignant living memorial evolves over time and includes programming, events, and a digital application. The quilt is a powerful reminder that there are opportunities to explore topics worthy of commemoration outside of the traditional permanent commemorative works process.

Endnotes

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3. Destination DC, "DC Tourism Community Rally Shows Impact of Hospitality Industry Visitors to Washington, DC Spent $6.7 Billion in 2013," May 6, 2014.
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6. National Park Service, "National Mall Plan: Summary," Fall 2010.
7. NCPC, Memorials and Museums Master Plan, 2001.
8. **Monumental Core Framework Plan**: http://www.ncpc.gov/ncpc/Main(T2)/Planning(Tr2)/FrameworkPlan.html
9. **SW Ecodistrict Plan:** http://www.ncpc.gov/swecodistrict/
10. In 2016, the Smithsonian will evaluate a South Mall Campus Master Plan.
11. **Civil War Defenses of Washington:** A major component of the Park System of Washington recommended by the McMillan Plan and commonly referred as Fort Circle Parks. Now managed by the NPS, this ring of Civil War defenses are interconnected by a ribbon of parks that protect scenic hills and landscaped and natural area corridors that circle Washington, DC. http://www.ncpc.gov/DocumentDepot/Publications/CapitalSpace/FCP_recommendation_summary05072008%20_2_.pdf
12. **L'Enfant Plan and McMillan Plan:** http://www.ncpc.gov/ncpc/Main(T2)/About_Us(tr2)/About_Us(tr3)/History.html
13. **Extending the Legacy: Planning America's Capital for the 21st Century:** http://www.ncpc.gov/ncpc/Main(T2)/Planning(Tr2)/ExtendingtheLegacy.html
14. **Memorial and Museums Master Plan:** http://www.ncpc.gov/ncpc/Main(T2)/Planning(Tr2)/2MPlan.html
15. **National Mall Plan:** http://www.nps.gov/nationalmallplan/National%20Mall%20Plan.html
16. **District of Columbia's Center City Action Agenda:** http://planning.dc.gov/page/center-city-action-agenda-2008
17. A memorial, museum, parkland, natural feature, or commemorative work—under the jurisdiction of the federal government—that is of important national, historic, symbolic, cultural, or educational value of the general public.
18. **National Capital Urban Design and Security Plan**: https://www.ncpc.gov/DocumentDepot/Publications/SecurityPlans/NCUDSP/NCUDSP_Section1.pdf
19. **Designing and Testing of Perimeter Security Elements:** https://www.ncpc.gov/DocumentDepot/Publications/SecurityPlans/DesignTestPerimSecurity.pdf
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24. **National Mall and Memorial Parks Tour Bus Study**: http://www.nps.gov/nationalmallplan/Documents/Trans/NationalMall_TourBusStudy_FinalReport_June%202015.pdf
25. **Regional Bus Staging, Layover, and Parking Location Study.** https://www.mwcog.org/uploads/committee-documents/aV1WX11X20150310134147.pdf
26. **Section 508 of the Rehabilitation Act of 1973**: http://www.section508.gov/
27. **Commemorative Works Act**: https://www.law.cornell.edu/uscode/text/40/subtitle-II/part-D/chapter-89
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Action Plan



2016

National Capital Planning Commission

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The Plan in Action

The *Comprehensive Plan for the National Capital: Federal Elements* (Comprehensive Plan) guides growth and development of federal activities in the National Capital Region (NCR). The Comprehensive Plan drives the National Capital Planning Commission's (NCPC) mission and work program, and forms the basis for the decisions it makes on projects and plans it reviews. Implementing the policies outlined in the Federal Elements is an important feature of the Comprehensive Plan.

The Comprehensive Plan's Action Plan contains specific projects to advance the Commission's vision and set in motion the necessary steps to activate the plan's goals and policies. The projects advance the policies in the Comprehensive Plan; the objectives of the Commission's Strategic Plan and annual work program; and the recommendations from NCPC's past planning initiatives such as the Legacy Plan. The Federal Capital Improvements Program plays a prominent role in the Action Plan as the Commission encourages federal agencies to use the Comprehensive Plan as a policy guide in preparing their capital improvement project's submissions.

The projects in the Action Plan include a reference to the relevant plan elements, provide a brief description, outline accompanying implementation strategies, identify action partners, and offer a timeframe. While the project itself may be long-term, the timeframe reflects the short- or long-term nature of the project's implementation strategies. Short-term strategies are usually achievable within five years. Long-range strategies may also be achievable within five years, but are typically of a scope that require five to twenty years or more. It is important to note that not all projects are currently funded. The Action Plan will be evaluated periodically to update projects as they progress and to add new projects as they are identified and developed to continue fulfill the Comprehensive Plan's vision and goals.

NCPC is committed to implementing the vision and goals of the Comprehensive Plan in coordination with federal and non-federal regional stakeholders. In addition to partnering with other federal and non-federal government agencies and private organizations, the Commission advances Comprehensive Plan goals and policies through its regulatory responsibilities and day-to-day activities, such as:

- Reviewing development plans and proposals to ensure conformance with the highest planning and urban design standards, and for consistency with the symbolic role and function of the nation's capital.
- Developing specialized plans for the NCR.
- Recommending projects in the Federal Capital Improvements Program—a six-year program of public works projects for the federal government.
- Incorporating special initiatives in its annual performance plan.

The projects in the Action Plan are organized by themes, which are closely tied to the Comprehensive Plan's guiding principles.

Image of the National Capital Region

As the capital of the United States, Washington is a unique place with its own authentic character and identity. Since the city's founding, the image and experience of Washington has been carefully planned to reflect the preeminence of the nation's democratic institutions. The built and natural features contribute to the distinctive image of our nation's capital, including its iconic skyline, vistas, major streets, and public spaces, and the ridges and waters that frame the monumental core. The Commission's work on the Height Master Plan and the Urban Design Element reflect its commitment to preserve and enhance the form, character, and experience of the nation's capital. A number of projects were identified as part of the Comprehensive Plan's implementation strategy to contend with the issues affecting the region's image.

The Action Plan includes ideas to actively promote future memorial sites away from the National Mall; analyze and evaluate important viewsheds and vistas; prepare urban design strategies related to topography; prepare a public realm and design standards study; prepare study to assess massing and scale transition around the White House; and work with local jurisdictions to protect linear views. In addition, the Action Plan includes study to Pennsylvania Avenue between the White House and the U.S. Capitol—one of the most important settings of national significance in the country—and address issues related to transportation, security and open space, urban design, and land use management with other federal agencies and public stakeholders; and improve regional gateways and identify responsible implementation agencies to carry out components of the Anacostia Waterfront Initiative, to transform the waterfront into a new vibrant corridor befitting the nation's capital.



#	Relevant Plan Elements	Projects/ Programs	Description	Implementation Strategies	Action Partners	Time-frame
1	VISITORS & COMMEMORATION	Memorial and Museum Sites	For sites identified in the *Memorials and Museums Master Plan* that are not already in federal ownership, assess the appropriateness of various methods (e.g., purchase, agreement, easement, PUD) for assuring the future availability of these sites. For federally owned sites, determine if major action is needed to assure future availability (e.g., relocation of major roadways). Utilize information from the NPS/NCPC Small Parks Study to identify potential new memorial sites.	• Prepare a study of methods, preferred strategies, and priorities for memorials, in consultation with affected agencies and private parties. • Use the study to identify strategies to enhance memorial and museums sites. • Develop cooperative agreements to manage potential 2M sites. • Create an interactive website.	NCPC, NPS, USDOT, DDOT, and DCOP	Short-term
2	FEDERAL ENVIRONMENT FEDERAL WORKPLACE PARKS & OPEN SPACE	Anacostia Waterfront Initiative (AWI) Implementation	Develop public and private properties along the Anacostia River for park- and water-related uses, and develop nearby areas with federal and non-federal facilities as proposed in the AWI.	• Identify specific AWI components requiring federal involvement; prioritize these items and identify responsible implementation agencies; and assist agencies in obtaining authorization and funding.	NCPC, NPS, GSA, DOD/Navy, USACE, D.C. government, and other AWI partners	Long-term
3	URBAN DESIGN	Topographic Ridge and Urban Form Design Study	Prepare and study urban design strategies that distinguish between densities along the escarpment from downtown's greater building heights. Link information about topography with Comprehensive Plan land use and density maps. Within the western portion of the topographic bowl, prepare urban design strategies that relate building heights to the natural slope and rim areas of Arlington Ridge as viewed from the U.S. Capitol, the National Mall, and riverside outlooks.	• In coordination with federal and local partners, study the future land use, allowable density, building height, and form, in conjunction with the topopgraphy along the escarpment. • Prepare urban design strategies that relate building heights to the natural slope.	NCPC and DCOP	Short-term
4	URBAN DESIGN	Vista and Viewshed Study	Create an inventory and analyze important scenic panaramic viewsheds from major federal sites throughout the city. Prepare urban design studies to assess the visual quality of the viewsheds that extend outward from the primary vistas along the western and southern axes of the National Mall. The east-west axis terminates on Arlington County, particularly Courthouse. The north-south axis terminates on Crystal City. Encourage local jurisdictions to prepare urban design strategies to protect the visual quality of viewsheds from the National Mall, in consideration of both built and natural elements, such as material, lighting, and building mass.	• Document and analyze existing scenic panoramic viewsheds from federal sites. • Develop measures to protect the viewshed's visual quality from future federal actions. • Continue to work with local jurisdictions (Arlington County) to study the impacts of future development within the primary vistas on the character and setting of the monumental core and the National Capital Region. • Develop future development strategies to retain the character of the primary vistas. • Study the parameters of the vistas (defined outer edges).	NCPC, NPS, GSA, DCOP, Arlington County CPHD and other federal and local agencies	Short-term

While the projects may be long-term, the timeframe reflects the short- or long-term nature of the project's implementation strategies. Short-term strategies are usually achievable within five years. Long-range strategies may also be achievable within five years, but are typically of a scope that may require five to twenty years or more. Note: Not all projects are currently funded.

Action Plan: **Image of the National Capital Region**

#	Relevant Plan Elements	Projects/ Programs	Description	Implementation Strategies	Action Partners	Timeframe
5	URBAN DESIGN	Public Realm and Design Standards for Street Sections Study	Study the potential for baseline design and/or planning criteria that reinforces the coherence and continuity of reservations that are identified as contributing elements of the L'Enfant Plan within the National Register. Collaborate with federal and local stakeholders to prepare an Urban Design and Public Realm Guide for special streets and federally owned parks, plazas, open spaces and areas around federal facilities in the monumental core and L'Enfant City. The guide will provide a framework to strengthen linkages and the character defining elements that frame or punctuate these public spaces to elevate human experience and enjoyment.	• Facilitate partnerships with federal and local agencies to implement urban design and security through comprehensive streetscape strategies, independent of funding. • Continue to pursue partnerships and funding opportunities with federal agencies to implement perimeter security through comprehensive streetscape projects. • Continue to work with federal agencies throughout design development in the project and plan review process. • Develop street section standards.	NCPC, DCOP, NPS, and other federal and local agencies	Short-term
6	URBAN DESIGN	Improve Regional Gateways and Reinforce the Preeminence of the Monumental Core	Prepare urban design studies to assess land use transitions along North Capitol Street with respect to topography. Utilize the South Capitol Street Urban Design Study (2003) to identify opportunities to enhance the street. Prepare urban design studies that consider westward views along East Capitol Street at points east of RFK Stadium. Incorporate the RFK Stadium alternatives.	• Study and analyze land use transition along North Capitol Street. • Design and develop the stretch of South Capitol Street in Washington between the U.S. Capitol and the Anacostia River into an urban boulevard that can accommodate new federal office space and a mix of uses that further serve the operations of the federal government, the city, and the surrounding neighborhoods. • Renew partnership with the District Government to advance the *South Capitol Street Corridor Plan*. • Study and analyze land use transition along East Capitol Street.	NCPC, NPS, GSA, USDOT, DCOP, and DDOT	Short-term
7	URBAN DESIGN	Pennsylvania Avenue Initiative	Evaluate the *Pennsylvania Avenue Development Corporation Plan*, as well as current and projected economic, physical, and operational conditions to determine how to update the plan, including strategies for the physical, programmatic, operational and maintenance improvements that will address 21st century needs.	• Partner with GSA and NPS in coordination with other federal and District agencies with interests in the avenue. • Study the near- and long-term needs of the avenue and surrounding neighborhoods, including Federal Triangle. • Develop a vision for how the avenue can meet local and national needs in a 21st century capital city. • Identify a governance framework. • Develop strategies for the physical, programmatic, operational and maintenance improvements. • Work with stakeholder groups in the planning, preservation, and development of the avenue.	NCPC, NPS, GSA, and other federal and local agencies	Long-term

While the projects may be long-term, the timeframe reflects the short- or long-term nature of the project's implementation strategies. Short-term strategies are usually achievable within five years. Long-range strategies may also be achievable within five years, but are typically of a scope that may require five to twenty years or more. Note: Not all projects are currently funded.

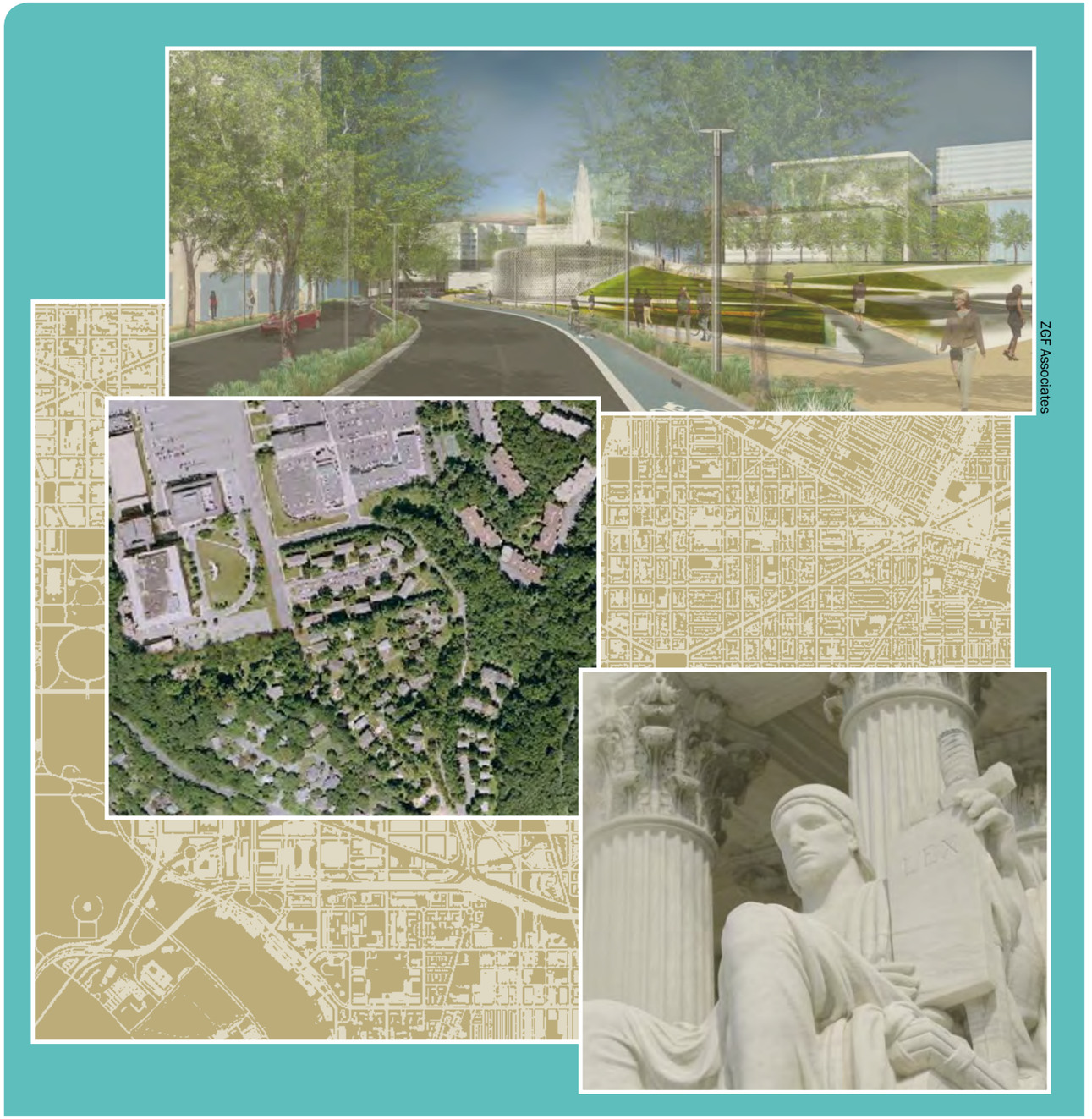
#	Relevant Plan Elements	Projects/ Programs	Description	Implementation Strategies	Action Partners	Timeframe
8	URBAN DESIGN	Massing/Scale Study	Prepare urban design studies to assess massing and scale transitions around the White House precinct. Prepare preeminent viewshed and view corridor future work and assess existing conditions and opportunities to reinforce the visual quality of several view corridors. While these view corridors are significant, each should be individually assessed. Study of scenic panoramic viewsheds from publicly accessible federal lands.	• Study the impacts of future development on preeminent view corridors. • Develop strategies in coordination with federal and local agencies for the massing and scaling of new development along preeminent view corridors.	NCPC, GSA, and USSS	Short-term
9	URBAN DESIGN	Linear View Corridor Study	Encourage local jurisdictions to prepare and study urban design strategies to protect the visual quality of linear view corridors in consideration of both built and natural elements, such as material, lighting, and building mass. This should be done on the following streets and geographic areas: East Capitol Street; Pennsylvania Avenue, SE; New Jersey Avenue, NW; New Jersey Avenue, SE; and Maryland Avenue, NE.	• Work with local jurisdictions to develop urban design strategies to protect the visual quality of linear view corridors.	NCPC and local jurisdictions	Short-term

While the projects may be long-term, the timeframe reflects the short- or long-term nature of the project's implementation strategies. Short-term strategies are usually achievable within five years. Long-range strategies may also be achievable within five years, but are typically of a scope that may require five to twenty years or more. Note: Not all projects are currently funded.

Operational Efficiency of the Federal Government

Enhancing the operational efficiency of the federal government is a primary concern of the Comprehensive Plan. Several projects identified in the Action Plan are designed to analyze the current conditions of federal activities and the future needs of federal employees, which are paramount to improving efficiency. Projects such as developing and maintaining a database of key federal indicators (including such information as federal demographics), analyzing federal procurement activities, and studying employee commuting patterns will provide a means to better monitor the federal presence and impact in the region.

As the major employer, occupier of buildings, and purchaser of goods and services within the region, the federal government is dependent on a strong and economically vibrant region to maintain and enhance its operational efficiency and productivity. Decisions on where federal activities locate foreign missions and visitor amenities—can result in significant efficiencies. Identifying locations in Washington and throughout the region to accommodate these activities is an important component of the Comprehensive Plan's implementation strategy and one where federal and local collaboration to identify mutually desirable locations can benefit both federal and local interests. Projects in the Action Plan call for updating the NCPC project submission guidelines; analyzing the Central Employment Area boundaries; accommodating the federal government's office space needs; identifying sites for foreign missions; and researching potential sites for new visitor centers/kiosks.



ZGF Associates

#	Relevant Plan Elements	Projects/ Programs	Description	Implementation Strategies	Action Partners	Timeframe
10	FEDERAL WORKPLACE	Changing Federal Footprint	Study and assess the impact of the changing federal footprint in the NCR. Monitor and report on the changing footprint's impact on federal procurement, the economy, and its changing patterns across jurisdictions. Report on economic and demographic indicators related to the federal presence in the NCR. Other strategies such as GSA's research on hoteling, desk-sharing, and other regional real estate approaches will be analyzed. The study will evaluate case studies of recent consolidation efforts in the NCR.	• Study and evaluate policies that reduce the federal footprint. • Evaluate case studies of recent consolidation efforts in the NCR to identify potential planning trends and implications. • Conduct a survey and compile data on federal agency demographics (e.g., types of jobs held by federal employees, spending patterns of federal agencies and employees, induced economic activity due to federal presence, and federal employee commuting patterns). Develop and publish a report of findings. • Monitor and publicly report on federal procurement and spending activities in the NCR. • Meet with regional stakeholders in federal procurement activities (federal agencies; regional, state, and local economic/business development organizations) and develop policy actions and strategies (federal and other).	NCPC, GSA, DCOP, federal agencies, regional Congressional representatives, OMB, SBA, BOT, MWCOG, and state/district and local economic/ business development organizations	Short-term
11	FOREIGN MISSIONS & INTERNATIONAL ORGANIZATIONS	Foreign Missions Processes	In 1987, the Foreign Missions & International Organizations Real Property Manual was prepared jointly by the U.S. Department of State, NCPC, and the District of Columbia government as a guide for foreign missions and others interested or involved in the chancery development process. This manual describes the step-by-step process and procedures for a foreign mission, and under certain circumstances an international organization, to acquire, locate, relocate, replace, expand, and improve embassies, chanceries, and office space in the District of Columbia. The process is based on the Foreign Missions Act and other federal and District of Columbia laws and regulations. The District of Columbia government recently updated the zoning regulations update to remove Diplomatic Overlays (as implemented by zoning text and map amendments) and changes to the location of chanceries. A new resource toolbox should be developed to reflect changes to the foreign missions process and new zoning regulations.	• Develop a new resource toolbox in conjunction with the U.S. Department of State and the District of Columbia government. • Develop a process to assist foreign missions to find suitable locations.	DOS (lead), NCPC, DCOP, and DCOZ	Short-term

While the projects may be long-term, the timeframe reflects the short- or long-term nature of the project's implementation strategies. Short-term strategies are usually achievable within five years. Long-range strategies may also be achievable within five years, but are typically of a scope that may require five to twenty years or more. Note: Not all projects are currently funded.

Action Plan: **Operational Efficiency of the Federal Government**

#	Relevant Plan Elements	Projects/ Programs	Description	Implementation Strategies	Action Partners	Timeframe
12	FOREIGN MISSIONS & INTERNATIONAL ORGANIZATIONS	Revise District of Columbia Zoning Regulations and Identify Foreign Missions Center Sites.	Background information prepared for the Foreign Missions & International Organizations Element reinterpreted the Foreign Missions Act of 1982, which established the procedures and criteria governing the location of foreign missions in the District of Columbia. The criteria are codified through the zoning regulations of the District. Identify potential specific sites for the development of one or more new foreign missions centers. General development areas have already been identified in Comprehensive Plan policies.	• In conjunction with the District of Columbia government, prepare zoning revisions for the future location of foreign missions in the District of Columbia. Zoning text revisions are requested to facilitate the siting and expansion of foreign missions in the District of Columbia. All zoning text and map revisions require adoption by the Zoning Commission. • Analyze specific sites, identify development scenarios and strategies, develop cost estimates, and identify funding sources, including partnerships with other public agencies and the possibility of public/private partnering. Draft legislation for a new Foreign Missions Center Act, as appropriate.	NCPC, DCOZ, DCOP, and DOS	Short-term
13	VISITORS & COMMEMORATION	Visitor Center Sites	Identify different alternatives to provide visitor's information including locations for new visitors centers, smaller information kiosks, and digital opportunities. Determine where centers can be located that can contribute to a more informative, interesting, educational, comfortable, and convenient visit, and determine if, outside the monumental core, these facilities can further educate the visitor about visitor activities that can be found throughout Washington and the region.	• Prepare a study to evaluate the operational/locational consideration of visitor information related to advances in technology. • Analyze specific sites; identify development scenarios and strategies; develop cost estimates; and identify funding sources, including partnerships with other public agencies and the possibility of public/private partnering. • Determine how both large, comprehensive visitor orientation centers and small kiosks can be developed to provide essential information to visitors.	NCPC (lead), NPS, SI, DCOP, and tour industry stakeholders	Short-term

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#	Relevant Plan Elements	Projects/ Programs	Description	Implementation Strategies	Action Partners	Timeframe
14	ALL ELEMENTS	Project Submission and Review Guidelines and Transportation Management Plan (TMP) Submission Guidelines.	Re-engineer and streamline NCPC's project submission process to ensure that its review is consistently applied, is efficient, and is responsive to the needs of federal agencies. Develop new guidelines for TMP submissions by federal agencies to encourage alternative means of commuting to minimize impact of federal employees driving alone during periods of congestion.	**Project Submission and Review Guidelines:** • Review and revise NEPA/106 submission guidelines. • Review and revise current submission guidelines. • Develop an electronic submissions form in support of E-gov. • Review the federal leasing process with GSA and negotiate an appropriate and constructive role for NCPC. **TMP Submission Guidelines:** • Review TMP submissions. • Review Commission actions on TMPs. • Interview NCPC Project Review staff and federal agency representatives. • Draft specific content requirements.	NCPC, GSA, and federal agencies	Short-term
15	TRANSPORTATION FEDERAL WORKPLACE	Central Employment Area (CEA) boundaries	Reexamine the CEA boundaries within Washington where existing federal facilities and high density development contribute to the employment population, economic diversification, and mixed-use nature of the core, and where higher-density mixed land uses are encouraged for economic development within an active planning initiative.	• Research past Commission and District Council decisions on CEA boundary updates. • Identify a process for updating and changing the CEA boundary. • Identify existing federal facilities within the core area. • Research adopted land use plans and current planning initiatives in the core area and identify sites with existing and planned high-density development. • Develop proposed boundaries in conjunction with the update of the District Elements of the Comprehensive Plan. • Adopt and map new boundaries, and then update the Comprehensive Plan's Federal Elements with the new boundaries.	NCPC, other federal agencies, DCOP, DCOZ, and local business organizations	Short-term

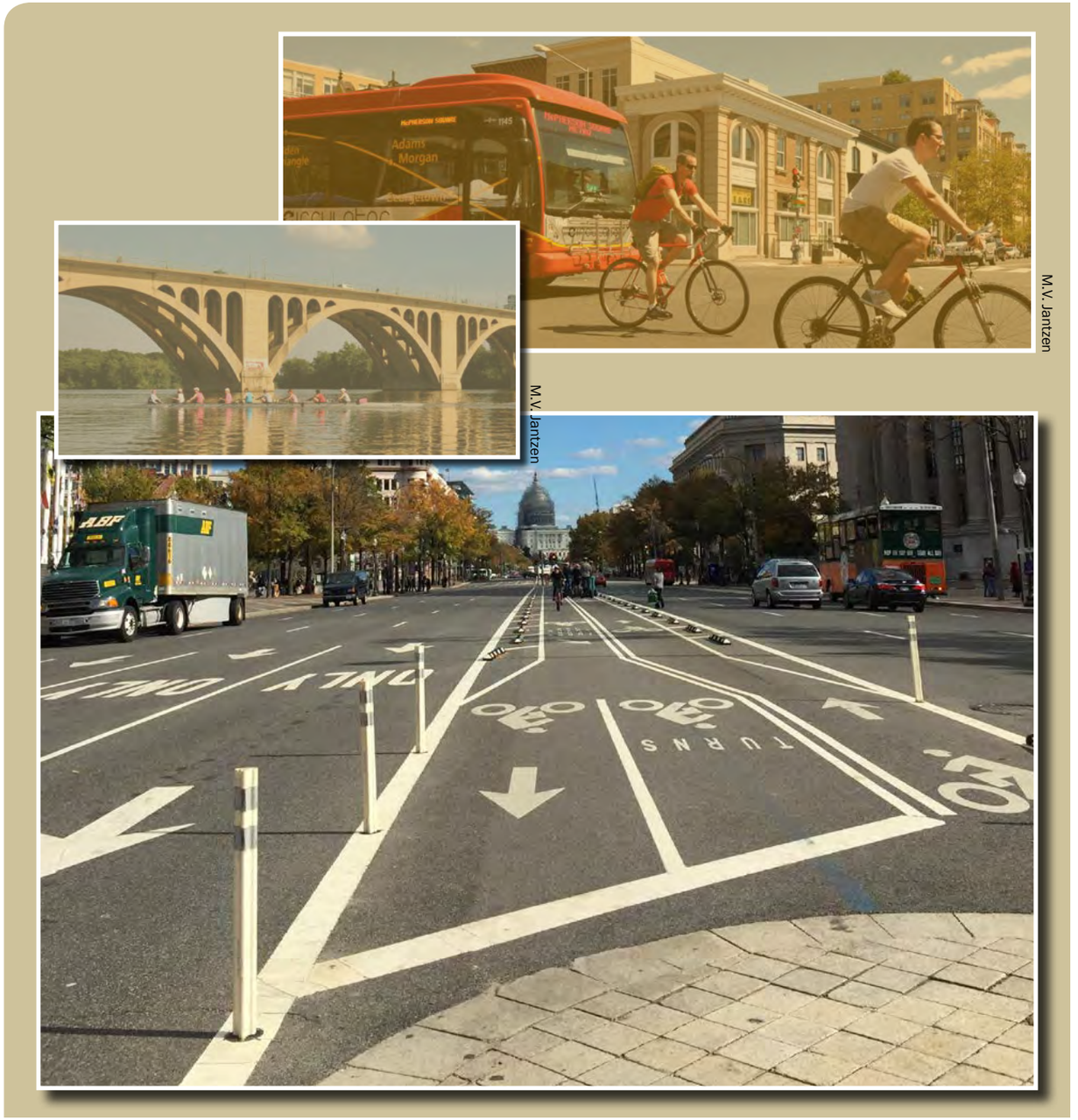
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Transportation Mobility and Accessibility

Closely linked to federal operational efficiency is the mobility of the federal workforce. Improving mobility and accessibility provides advantages to federal workers, to the federal government in general, and to all who reside in or visit the region. Mobility doesn't only translate into putting more cars on already overflowing roads.

The Commission is committed to working with regional entities toward reducing the transportation gridlock that threatens commuters and travelers to and through the region daily. Promoting alternative modes of transportation and innovative transportation management programs are key components of the Comprehensive Plan.

The Action Plan reflects the importance placed on developing a number of multi-pronged solutions to one of the most pressing issues in the NCR. Improved biking access to and around federal facilities are reflected in projects calling for construction of bicycle paths and lanes. The plan promotes studying the viability of water taxis to move residents and visitors and the accommodation of tour buses to facilitate visitor needs. One Action Plan project will study new trends in office mobility and evaluate the designated employee count in the existing parking ratios.



M.V. Jantzen

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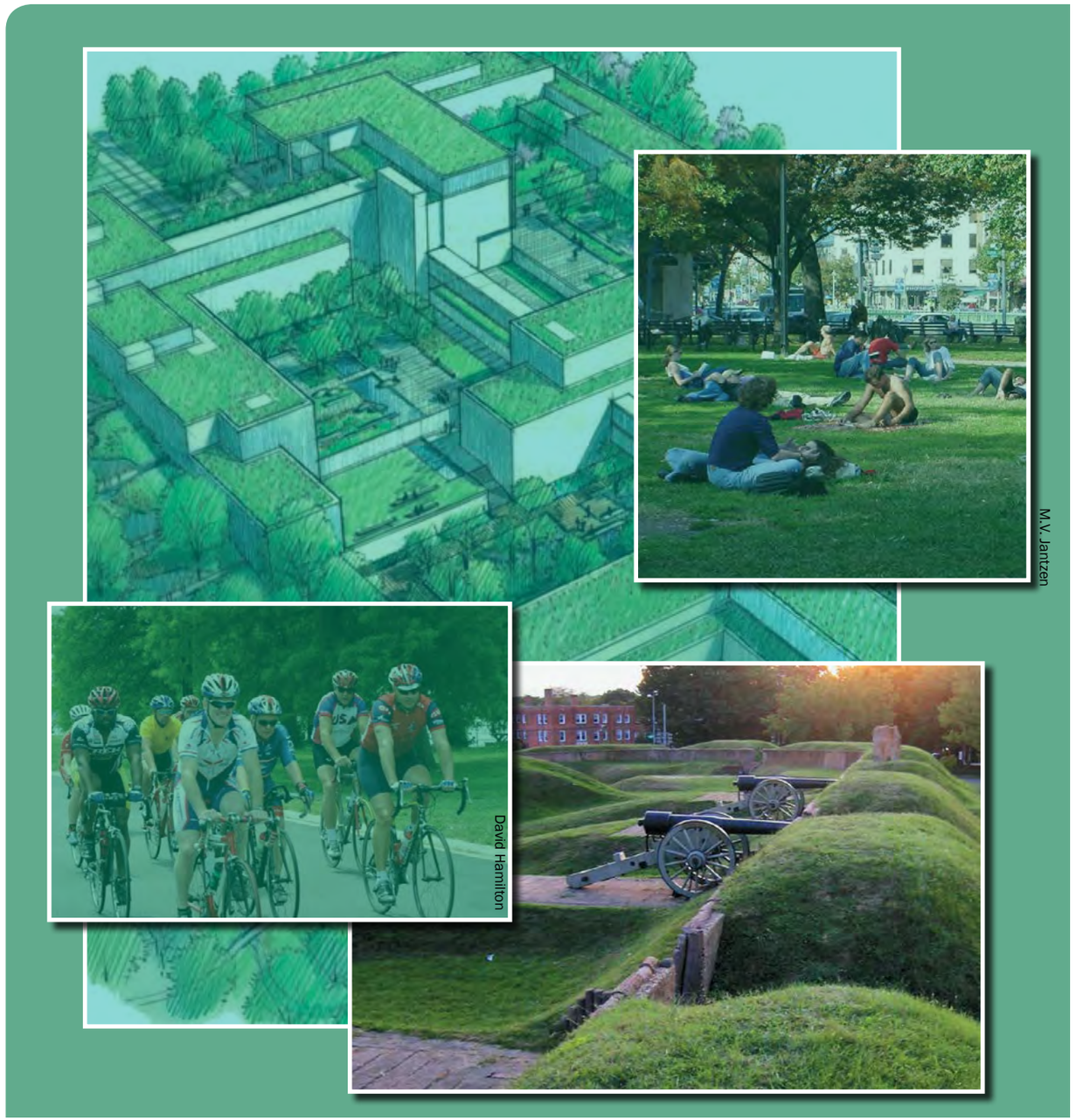
#	Relevant Plan Elements	Projects/ Programs	Description	Implementation Strategies	Action Partners	Timeframe
16	TRANSPORTATION VISITORS & COMMEMORATION	Tour Bus and Commuter Bus Operations and Parking Management	Partner with federal and local agencies to address tour bus and commuter bus parking and loading operations.	• Improve tour and commuter bus operations management, parking infrastructure, and information systems. Note: DDOT and the Union Station Redevelopment Corporation are planning to expand tour bus parking in the near future. • Provide a foundation for the evaluation of future policies.	DDOT (lead), NCPC, Downtown BID, DC Council, NPS, and WMATA	Short-term
17	FEDERAL WORKPLACE TRANSPORTATION FEDERAL ENVIRONMENT	Bicycle Paths/ Lanes on Federal Installations	Support bicycle commuting by constructing bicycle travel lanes connecting the various buildings on federal installations and connecting to nearby off-installation bicycle paths, lanes, and trails, as well as nearby Metrorail stations.	• Study bicycle trail connections in master plans. • Work with and support local jurisdictions' efforts to build regional and local bicycle infrastructure that serves and provides access to federal properties.	NCPC, NIH, NPS, MCPD, MNCPPC, WABA, and local jurisdictions	Short-term
18	TRANSPORTATION VISITORS & COMMEMORATION	Water Taxi Study	Plan for future water taxi service.	• Develop a comprehensive picture of Washington's waterfront improvements. • Partner with stakeholders to develop water taxi use for federal workers and visitors.	NCPC, DDOT, DCOP, DOD, and NPS	Short-term
19	FEDERAL WORKPLACE TRANSPORTATION	Parking Study	The parking ratio goals outlined in the Transportation Element were developed using a ratio of the number of employees for each employee parking space. The current trends are that the number of employees to a building are increasing due to office mobility, major federal consolidation efforts, and reduction in the overall space allocated to individuals and agencies. NCPC, in coordination with other federal agencies, will develop a parking study that will evaluate the designation of employee count for the parking ratios, and new trends in office mobility.	• Study new trends in office mobility and develop case studies with large consolidation efforts. • Reevaluate the existing methodology used to designate employee counts in the parking ratios. • Participate in a study that models parking ratio goals for federal installations in the region. • Consider parking for housing on federal facilities.	NCPC and federal agencies	Short-term

While the projects may be long-term, the timeframe reflects the short- or long-term nature of the project's implementation strategies. Short-term strategies are usually achievable within five years. Long-range strategies may also be achievable within five years, but are typically of a scope that may require five to twenty years or more. Note: Not all projects are currently funded.

Stewardship of Natural Resources

The region's beauty is exemplified not only in the stone, marble, and granite found in its manmade structures, but also in the natural beauty evident in its open spaces and parks, forests, waterways, topography, and views and vistas. The federal government has been a vigilant steward in the preservation and enhancement of these natural resources. There are also a number of other public and private groups dedicated to preserving and enhancing natural resources in the region. NCPC will play a pivotal role in establishing a unified strategy for addressing natural resource issues in the region by providing leadership, coordination, and technical ability, as well as partnering with others.

A first step in ensuring that these resources are protected, maintained, and enhanced is analyzing the current inventory of parks and open spaces and ascertain the deficiencies and gaps. By conducting a survey of existing parks and open spaces and analyzing their condition, the Commission and its partners can assess what will be required to protect and maintain the current inventory, determine where new parks and open spaces are needed to accommodate future generations, and develop innovative solutions to effectively manage and maintain these resources throughout the region. In addition, partnering with multi-agency groups addressing flooding, climate change, and ecosystem services will allow federal and community agencies to work together on climate preparedness and resilience, based on informed planning and decision-making.



#	Relevant Plan Elements	Projects/ Programs	Description	Implementation Strategies	Action Partners	Timeframe
20	ENVIRONMENT	Floodplain Standard	The science, understanding, and application of information about projected flooding conditions resulting from climate change are constantly evolving. NCPC will stay informed with future revisions to the Federal Flood Risk Management Standard. In addition, in coordination with other federal agencies, NCPC will review best available climate/flooding data for the NCR and strive for agreement with other federal agencies on a single set of data to be used by all agencies in the climate-informed scientific approach.	• Develop a NCR standard for floodplains. • Work with federal agencies to establish a uniform set of data to be used with the climate informed scientific approach in the NCR. • Participate in a multi-agency group to annually review best available climate data in the region.	NCPC and federal agencies	Short-term
21	ENVIRONMENT	Ecosystem Services	Participate in and encourage regional and/or federal efforts to incorporate ecosystem services in federal planning and decision-making. This will enhance our ability to recognize and leverage the benefits of natural systems, protect against natural hazards, and support social and economic development.	• Research future opportunities to incorporate ecosystem services in the NCR to inform future planning and decision-making processes. • Develop policies to promote the consideration of ecosystem services—where appropriate and practicable—in planning, investments, and regulatory contexts. • Work with CEQ and other federal agencies to develop guidance on implementing environmental systems in the decision-making process.	NCPC, CEQ, and federal agencies	Long-term

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Action Plan: **Stewardship of Natural Resources**

#	Relevant Plan Elements	Projects/ Programs	Description	Implementation Strategies	Action Partners	Timeframe
22	ENVIRONMENT PARKS & OPEN SPACE	Parks and Open Space Assessment and Management	Establish and maintain a central database for collecting and analyzing data about parks and open spaces. Establish partnerships to enhance and manage regional parks and open space resources. Enhance the Civil War Defenses of Washington system in accordance with the current NPS General Management Plan, which proposes several alternatives. This system was proposed in the McMillan Plan as a connected ring of parks and parkways incorporating Civil War fort sites; and was later refined and partially implemented. Current proposals include adding trails and emphasizing several key fort locations.	• In conjunction with other stakeholders, coordinate regional parks and open space data collection and analyses. Develop strategies to protect, develop, enhance and manage parks and open space resources to meet all user needs. • Create federal/local and public/private partnerships to protect, develop, enhance, and manage parks and open space. • Work with stakeholders to develop a methodology for defining and assessing parks and open spaces. • Develop an inventory of federal, state, local, and other parks and open space, considering both in the NCR and preparing more detailed work within Washington. Maintain the inventory as a detailed GIS database. • Produce two reports assessing needs and opportunities for parks and open space. One report will be prepared at the regional level, and the other report will be developed for the area within the historic boundaries of the District of Columbia. Include analyses of future needs for both federal and local interests, and identify strategies to coordinate and optimize federal and local resources. • Sponsor a Green Infrastructure Symposium. • Prepare a property acquisition, transfer, and management analysis. • Work with NPS on action items identified in its General Management Plan, focusing on small parks.	NCPC, NPS, DOD, USDA, GSA, DDOT, DCOP, other federal agencies, and local jurisdictions	Short-term

While the projects may be long-term, the timeframe reflects the short- or long-term nature of the project's implementation strategies. Short-term strategies are usually achievable within five years. Long-range strategies may also be achievable within five years, but are typically of a scope that may require five to twenty years or more. Note: Not all projects are currently funded.

Action Partners List

AWI	Anacostia Waterfront Initiative
BID	Business Improvement District
BOT	Washington Board of Trade
CEQ	Council on Environmental Quality
CPHD	Arlington County community Planning, Housing, and Development
DCCouncil	Council of the District of Columbia
DCOP	DC Office of Planning
DCOZ	DC Office of Zoning
DDOT	DC Department of Transportation
DOD	U.S. Department of Defense
DOS	U.S. Department of State
GSA	U.S. General Services Administration
MCPD	Montgomery County Planning Department
MNCPPC	Maryland National Capital Park and Planning Commission
MWCOG	Metropolitan Washington Council of Governments
NCPC	National Capital Planning Commission
NIH	National Institutes of Health
NPS	National Park Service
OMB	Office of Management and Budget
SBA	Small Business Association
SI	Smithsonian Institution
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USDOT	U.S. Department of Transportation
USSS	U.S. Secret Service
WABA	Washington Area Bicyclist Association
WMATA	Washington Metropolitan Area Transit Authority