National Park Service
U.S. Department of the Interior

National Mall and Memorial Parks • Washington, D.C.



WASHINGTON MONUMENT



LINCOLN MEMORIAL



THOMAS JEFFERSON MEMORIAL



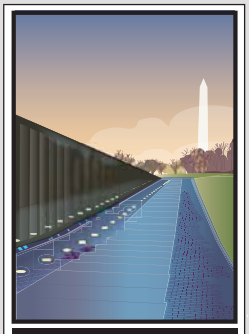
WORLD WAR II MEMORIAL



KOREAN WAR VETERANS MEMORIAL



THE MALL



VIETNAM VETERANS MEMORIAL



ULYSSES S. GRANT MEMORIAL



CONSTITUTION GARDENS



FRANKLIN DELANO ROOSEVELT MEMORIAL



GEORGE MASON MEMORIAL



D.C. WAR MEMORIAL

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FINAL
NATIONAL MALL PLAN / ENVIRONMENTAL IMPACT STATEMENT
VOLUME 1

THE NATIONAL MALL
Washington, D.C.

Thank You

The National Park Service is deeply grateful for the level of interest in planning for the National Mall. Before the *Draft National Mall Plan / Environmental Impact Statement* was released for public review, nearly 30,000 Americans and others had provided ideas, statements of concern, and helpful comments. We appreciate your comments and have considered them in the development of the alternatives presented in this document.

Cooperating Agencies and Participants

The following governmental entities were cooperating agencies or otherwise participated in the planning process:

Advisory Council on Historic Preservation
Architect of the Capitol
D.C. Department of Transportation
D.C. Historic Preservation Office
D.C. Office of Planning
Federal Reserve Board
Military District of Washington
National Archives and Records Administration
National Capital Planning Commission
National Gallery of Art
Smithsonian Institution
United States Park Police
U.S. Bureau of Engraving and Printing
U.S. Commission of Fine Arts
U.S. Department of Agriculture
U.S. Department of Defense, Arlington National Cemetery
U.S. Environmental Protection Agency
U.S. General Services Administration
U. S Holocaust Memorial Museum
U.S. Secret Service
Washington Metropolitan Area Transit Authority

Final
National Mall Plan / Environmental Impact Statement
Volume 1

The National Mall • Washington, D.C.

Abstract

This *Final Management Plan / Environmental Impact Statement* presents five alternatives for the management of the National Mall in Washington, D.C. The no-action alternative would continue current conditions, and the preferred alternative is the National Park Service's proposed approach for meeting the plan's purpose and need. Under all alternatives cultural resources would be preserved and protected, and citizens would continue to be able to express their First Amendment rights on the National Mall. Under the preferred alternative the National Mall, as the premier civic and symbolic space for our nation, would be respectfully rehabilitated and refurbished so that very high levels of use could be perpetuated and the needs of all visitors and users could be met in an attractive, high-quality, energy-efficient, and sustainable manner. Alternatives A, B, and C each focus on one primary aspect of the park's purpose and significance — alternative A would focus on the historic landscape with its memorials and planned vistas; alternative B on creating a welcoming national civic space for public gatherings, events, and high-use levels; and alternative C on urban recreation and use plus a sustainable urban ecology. The preferred alternative combines ideas from all of the other alternatives considered.

Impacts were analyzed for cultural resources (including impacts on memorials and cultural landscapes); natural resources (impacts on water resources, soils, vegetation, and fish and wildlife); demonstrations, permitted events, and national celebrations (impacts on participants and organizers); access and circulation (impacts on visitor access, the pedestrian environment, bicycle users, and motorists); visitor experience (impacts on a quality visitor experience; opportunities for information, education, enjoyment, recreation; visitor facilities and amenities; public health and safety; and user capacity); socioeconomic environment (impacts of increased visitation, impacts on commercial business and construction opportunities); and park operations (impacts on park conditions, safe and efficient operations, and sustainability). Continuing existing conditions under the no-action alternative would generally result in the greatest level of adverse impacts on cultural resources, natural resources, national celebrations and special events, access and circulation, the visitor experience, and park operations. Continued impacts on soils and vegetation could become unacceptable as a result of long-term, major, adverse impacts on the American elm trees on the Mall. Actions under the preferred alternative and alternatives A, B, and C would all address adverse impacts to varying degrees, with the most beneficial impacts under the preferred alternative and alternative B for all categories. Venues and amenities for participants in demonstrations would be improved under the preferred alternative and alternatives B and C. The preferred alternative is the environmentally preferred alternative in terms of satisfying the goals of the National Environmental Policy Act.

The *Draft Management Plan / Environmental Impact Statement* was on review from December 18, 2009, to March 18, 2010. A total of 401 separate comments from 11 cooperating agencies, 12 consulting parties, 3 regional governments, 9 organizations, and 47 individuals, plus 41 individuals who wished to remain anonymous, were received. Substantive comments have been responded to in volume 2 of this *Final Environmental Impact Statement.* Changes and clarifications to this *Final Environmental Impact Statement* as a result of comments are highlighted with a tan background. Comments during the 30-day no-action period may be submitted through the Internet at www.nps.gov/nationalmallplan or by mail to

National Mall and Memorial Parks
ATTN: National Mall Plan
900 Ohio Dr. SW
Washington, DC 20024

National Park Service • U.S. Department of the Interior

The National Mall in Washington, D.C.

This *Final Environmental Impact Statement* presents a vision about the kinds of resource conditions, visitor experiences, and facilities that would best fulfill the purposes of the National Mall. The National Mall stretches west from the U.S. Capitol to the Potomac River, and north from the Thomas Jefferson Memorial to Constitution Avenue. (The White House and President's Park, which are north of Constitution Avenue, are managed by the National Park Service as a separate unit of the national park system.) While the National Mall is under the jurisdiction of the National Park Service, multiple governmental agencies and organizations have jurisdiction over lands and roads within and adjacent to the National Mall, including the Architect of the Capitol, the National Gallery of Art, the Smithsonian Institution, the Department of Agriculture, the General Services Administration, the District of Columbia, and the Washington Metropolitan Area Transit Authority. In addition, the U.S. Commission of Fine Arts, the National Capital Planning Commission, the Advisory Council for Historic Preservation, and the D.C. Historic Preservation Office have consultation, planning, review, and in some cases approval authority for issues related to planning, historic preservation, commemorative works, and design.

All of these agencies and organizations and others have cooperated with the National Park Service in the development of this plan for the National Mall. There has been an ongoing exchange of ideas, goals, best practices, advice, and concerns as alternatives were developed. Once a plan has been approved, future implementation plans will generally include standard procedures for site-specific design, commission reviews, public engagement, and historic preservation consultation.

A Guide to this Document

This *Final Environmental Impact Statement* is organized in accordance with the Council on Environmental Quality's "Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act" and *NPS Director's Order #12: Conservation Planning, Environmental Impact Analysis, and Decision-making.* Because of the complexity of the issues addressed and the number of alternatives considered, this statement is longer than what is recommended in the CEQ regulations.

Volume 1 includes the following:

- The **Summary,** beginning on the next page, highlights the purpose of and need for a plan, the alternatives being considered, the environmental impacts of the alternatives, and the next steps in the planning process.
- The **Purpose of and Need for Action** (beginning on page 3) describes the context for the plan, including the National Mall's purpose and significance; opportunities, problems, and challenges addressed in the plan; environmental impact topics that are being considered, as well as those that have been dismissed; and interrelationships with other plans and projects.
- The **Alternatives** section (page 51) describes the five alternatives that are being considered, as well as actions that were considered but dismissed. This section concludes with a discussion of the environmentally preferred alternative, a table showing how well each alternative meets plan objectives, a detailed table showing all actions considered in the alternatives, and a summary of environmental consequences.
- The **Affected Environment** (page 255) describes existing conditions for all impact topics that are being analyzed.
- The **Environmental Consequences** (page 369) analyze the effects that each alternative would have on cultural resources; natural resources; demonstrations, events, and national celebrations; access and circulation; visitor experiences; the socioeconomic environment; and park operations.
- The **Consultation and Coordination** section (page 557) describes the process that has been used to involve the public, as well as agencies and organizations, throughout the planning process. Cultural resource consultation and stakeholder and informational briefings are also listed, along with agencies and organizations who reviewed the *Draft Environmental Impact Statement*.
- The **Appendixes, Glossary, Selected Bibliography,** and **Index** (page 569) provide supporting information.

Volume 2 includes a summary of public comments and responses, followed by copies of comments received by letter, e-mail, fax, and online at www.nps.gov/nationalmallplan, along with responses to substantive comments.

CONTENTS

Final National Mall Plan / Environmental Impact Statement

Volume 1

This version of the *Final National Mall Plan / Environmental Impact Statement* is the same as the printed copy. It has been broken into files for easier browsing. Each part name below is hyperlinked to that part of the document. Each part is fully bookmarked and is also linked back to this contents page and to the next part. Map titles are highlighted by a red box and are hyperlinked to the source file; the link will open in a new window when the box is clicked. Text highlighted with a tan background indicates a change from the *Draft Environmental Impact Statement*.

Cover / Abstract / Summary

Purpose of and Need for the Plan

Alternatives

The Affected Environment

Environmental Consequences

Consultation and Coordination

Appendixes / Glossary / Selected Bibliography / Index

ACRONYMS AND ABBREVIATIONS

ACHP	Advisory Council on Historic Preservation
ADAAG	Americans with Disabilities Act Accessibility Guidelines
AIA	American Institute of Architects
AOC	Architect of the Capitol
ASLA	American Society of Landscape Architects
CEQ	Council on Environmental Quality
CFA	U.S. Commission of Fine Arts
CUE	Center for Urban Ecology (NPS)
CFR	Code of Federal Regulations
DBID	Downtown Business Improvement District
DDOT	D.C. Department of Transportation
FHWA	Federal Highway Administration
GAO	Governmental Accounting Office
GSA	General Services Administration
LCS	List of Classified Structures
LEED	Leadership in Energy and Environmental Design
MWCOG	Metropolitan Washington Council of Governments
NAMA	National Mall and Memorial Parks
NCPC	National Capital Planning Commission
NCR	National Capital Region (NPS)
NHPA	National Historic Preservation Act
NEPA	National Environmental Policy Act
NPS	National Park Service
PMIS	project management information system (NPS)
SCS	Soil Conservation Service
USACE	U.S. Army Corps of Engineers
USC	United States Code
USDI	U.S. Department of the Interior
US EPA	U.S. Environmental Protection Agency
USFS	U.S. Forest Service
USGS	U.S. Geological Survey
USPP	United States Park Police
WABA	Washington Area Bicyclist Association
WMATA	Washington Metropolitan Area Transit Authority
WMATC	Washington Metropolitan Area Transit Commission

SUMMARY

The National Mall in Washington, D.C., stretches west from the U.S. Capitol to the Potomac River, and north from the Thomas Jefferson Memorial to Constitution Avenue. This highly recognizable space, which is managed by the National Park Service, is the home to the Washington Monument, the Lincoln and Thomas Jefferson memorials, and numerous other memorials that commemorate great Americans and significant events in our nation's history. Adjacent to the National Mall are national museums and galleries that form the country's cultural center. In 2003 Congress stated that the National Mall is a "substantially completed work of civic art" and that no new or unapproved memorials or visitor centers would be added. Congress also directed the National Park Service, as the responsible federal agency, to begin planning for the future of the National Mall to protect its character.

Purpose of and Need for the Plan

Plan Purpose

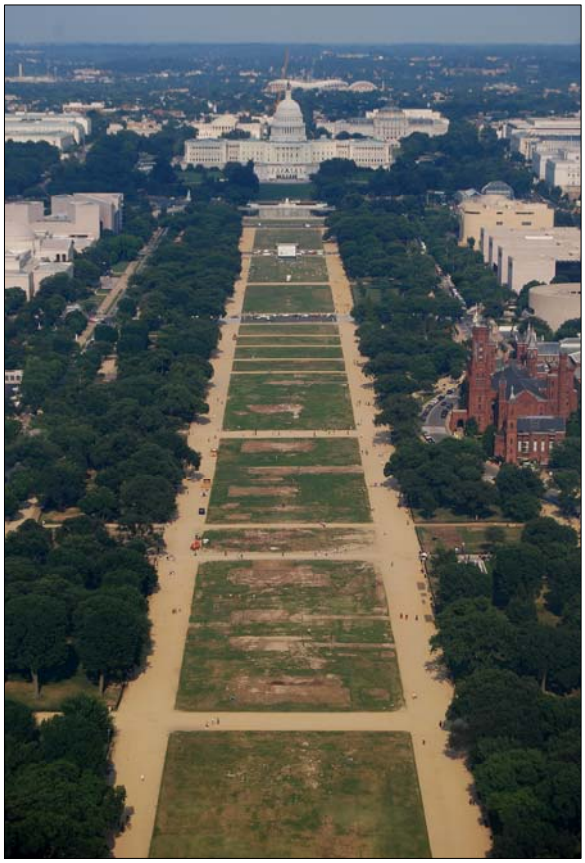
The purpose of this planning effort is to prepare a long-term plan that will restore the National Mall so that it may continue to symbolize the ideals and greatness envisioned for the United States of America. The approved plan will be followed by site-specific design and construction documents that will detail how to achieve the plan objectives. Additional compliance with the National Environmental Policy Act and the National Historic Preservation Act will be completed as needed. As a result, this will be a multiyear and multidisciplinary planning effort. Certain actions may require congressional authorization or revision of federal or park regulations.

Need for the Plan

The National Mall covers approximately 684 acres, but in 2008 it received approximately 22.3 million visits. This is more than twice the number of annual visits reported for large national parks such as Yellowstone, Yosemite, and Grand Canyon combined. Accommodating this level of use and balancing all types of activities within this limited area present enormous challenges.

The National Mall must function efficiently and flexibly at many levels — as the highly symbolic visual setting for our government; as part of the city's circulation and transportation network; as the location of the nation's primary memorials and museums; and as the stage for First Amendment demonstrations, national celebrations, and regional and local special events. The demands on the National Mall are constant and wide-ranging. Each year the National Park Service receives over 6,000 applications for permits, resulting in around 3,000 permitted activities. In 2008 and 2009 between 1,100 and 1,200 permits were issued for special events on the National Mall, including First Amendment gatherings and national celebrations. Additional permits were issued for commercial filming and recreation

THE MALL — JULY 2009



The Mall looking east from the Washington Monument.

field use, as well as for other national park system units in Washington, D.C.

The wear and tear of concentrated activity affects the landscape and visitor experiences. Facilities can be overwhelmed with use. Vegetation cannot easily recover, and lawns may be worn to the ground and soils heavily compacted, which in turn adversely affects the vigor of trees and other vegetation. Many walks are not wide enough for current levels of use, and adjacent areas may be damaged when use spills off walks or when people choose a more direct route. The combined effects generate heartfelt complaints by visitors about the deteriorated appearance of the National Mall.

The National Mall must be refurbished so that (1) its treasured memorials and historic landscapes can be preserved, (2) very high levels of use can be sustained, and (3) the needs of visitors can be met. The National Mall plan must determine how to

- improve resource conditions; establish a standard of quality that invites respect and generates stewardship; and raise the standard of care and maintenance
- prepare for intensive levels of use for First Amendment demonstrations, national celebrations, and special events
- provide desired experiences, such as opportunities for education, contemplation, rest, relaxation, recreation, entertainment, and social experiences
- address user capacity, which for this plan is defined as the type and level of visitor use that can be accommodated while sustaining desired resource conditions and visitor experiences on the National Mall
- provide for the physical needs, enjoyment, and convenience of visitors and park users, including information, restrooms, food, retail, drinking water, and access

THE WASHINGTON MONUMENT AND THE TIDAL BASIN



The Washington Monument is a focal point at night, as well as during the day.

Foundation for the Plan

Planning and management for the National Mall are based on the legal purposes of the area, its significance, its fundamental resources and values, and its primary interpretive themes. These elements establish a foundation for planning and management so that everyone has a shared understanding of what is most important about the National Mall, as well as the constraints of special mandates on planning and management. All alternatives must be consistent with and contribute to fulfilling the park's purpose, significance, and mandates. The park purpose, as defined through historic plans, legislation, judicial cases, and NPS policy, is discussed on page 9 of the main document, and park significance on page 10. The plan objectives (see page 4 of the document) take into account the National Mall's purpose and significance, as well as legislative requirements, NPS management policies, best management practices, and planning principles developed in cooperation with other federal and city agencies.

Legal Considerations

Laws, regulations, and authorities that govern the management of the National Mall include those that are applicable to all national park system areas and to the National Park Service as a federal agency.

First Amendment Jurisprudence. Governmental regulation of demonstrations and related sales activities is subject to First Amendment jurisprudence. Demonstrations are legally consistent with the special nature and sanctity of the National Mall, and they will continue under all alternatives.

Regulating Public Use. The *Code of Federal Regulations* addresses public use limits, which the park superintendent may establish based on a determination that limits are "necessary for the

A FIRST AMENDMENT DEMONSTRATION AT UNION SQUARE



Demonstrations are legally consistent with the special nature and sanctity of the National Mall, and they will continue under all alternatives.

maintenance of public health and safety, protection of environmental and scenic values, protection of natural and cultural resources, . . . or implementation of management responsibilities, equitable allocation and use of facilities, or the avoidance of conflict among visitor use activities" (36 CFR 1.5). Regulations at 36 CFR 7.96 contain provisions specific to the greater Washington, D.C., area and figure prominently in the administration of the National Mall.

Demonstrations and Special Events. Public gatherings or demonstrations on the National Mall involving more than 25 people generally require a permit issued by the National Park Service. To preserve an atmosphere of calm, tranquility, and reverence, demonstrations or special events are not allowed in certain memorial areas. These areas include specific portions of the Washington Monument, the Lincoln Memorial, the Thomas Jefferson Memorial, and the Vietnam Veterans Memorial (36 CFR 7.96(g)(3)(ii)). Other regulations pertaining to demonstrations and special events, along with recreational activities, soliciting, and sales, are discussed in the *Code of Federal Regulations* (36 CFR 7.96).

Planning and Development

Unlike the planning and development of most areas of the national park system, other federal entities have review and in some cases approval authority for areas in Washington, D.C., including the National Mall. These entities are the National Capital Planning Commission and the U.S. Commission of Fine Arts. In addition to their authorities under the laws that established them, these commissions also have certain authorities under other laws, such as the Commemorative Works Act. Since 2003 this act has prohibited the addition of new memorials and visitor centers on the National Mall unless Congress had already approved them. Moreover, Congress has generally reserved to itself certain authorities for the placement of structures on the National Mall and other federal lands in the District of Columbia.

ALTERNATIVES

Before work was begun to develop the alternatives presented in this *Final Environmental Impact Statement,* best management practices used by other organizations at comparable sites were researched to help determine how maintenance and operations for the National Mall could be improved. The review of best practices has been an ongoing process as alternatives were developed, and the most applicable practices have been included in the action alternatives.

Public Involvement

During this planning process nearly 30,000 Americans have shared their visions for the National Mall. They have said that America's front yard is important for commemoration and celebration and as a gathering place for the expression of democratic rights. They have emphasized the importance of the First Amendment of the U.S. Constitution; told us that the National Mall did not look good enough for what it means to our nation; reiterated its high significance and value to our country; proposed that the National Mall should be a role model for a green, sustainable, and high-quality public civic space; commented on what changes they would like to see and what should not be changed; told us what they liked and did not like about the alternatives; suggested a great many alternative ideas; offered their support and wanted to know how they could help; and reminded us that the National Mall belongs to us all. All of these comments helped guide the development of alternatives.

The various areas of the National Mall are described from east to west and from north to south. The major divisions are

- the Mall, which consists of Union Square (between 1st and 3rd streets) and the Mall (between 3rd and 14th streets)
- the Washington Monument and its grounds
- West Potomac Park

Because of its size, West Potomac Park is further divided into areas north and south of Independence Avenue. North of Independence Avenue are the World War II Memorial, Constitution Gardens, the Vietnam Veterans Memorial, the Lincoln Memorial and grounds, the Korean War Veterans Memorial, the D.C. War Memorial, and Ash Woods. South of Independence Avenue are the Tidal Basin area, the Franklin Delano Roosevelt Memorial, the West Potomac Park riverfront, the George Mason Memorial, and the Thomas Jefferson Memorial and grounds. Actions are not proposed for all of the individual areas.

Five alternatives for the management of the National Mall are considered. The no-action alternative would continue current conditions, and the preferred alternative is the National Park Service's proposed approach for meeting the plan's purpose and need. Alternatives A, B, and C each focus on one primary aspect of the park's purpose and significance — alternative A would focus on the historic landscape with its memorials and planned vistas; alternative B on creating a welcoming national civic space for public gatherings, events, and high-use levels; and alternative C on urban recreation and use plus a sustainable urban ecology. The preferred alternative combines ideas from all of the other alternatives considered.

Actions Common to All Alternatives

Actions that would be taken under all alternatives include the following:

- ***Cultural Resources*** — Historic properties and memorials would be preserved and protected. The D.C. Historic Preservation Office, along with other interested agencies, organizations, and groups, would be consulted in the preservation, restoration, adaptive reuse, or rehabilitation of any cultural resources. Historic landscapes, such as those at the Lincoln Memorial and the Thomas Jefferson Memorial, would be preserved and protected.
- ***Natural Resources*** — Water quality problems in designed water features would continue to be addressed, soil and vegetation health would be managed to improve appearance, and any threatened or endangered species would be protected. Cooperation with the Army Corps of Engineers would be continued to comprehensively examine and address permanent solutions to hydrology and flood control.
- ***First Amendment Demonstrations, National Celebrations, and Special Events*** — The National Mall is the most prominent space in our country for the demonstration of First Amendment rights, and that is an essential purpose of the National Mall. Consistent with the First Amendment and federal regulations, demonstrations will

Other Actions Common to All Alternatives

Actions already authorized by Congress for the National Mall will continue, including construction of the Vietnam Veterans Memorial Center, the Martin Luther King, Jr. Memorial, and the National Museum of African American History and Culture. In the future memorials will be accommodated outside the Reserve, an area set aside by Congress that includes the National Mall, where generally no new memorials or visitor centers will be sited. New memorials will instead by considered for sites identified in the 2001 *Memorials and Museums Master Plan,* which was produced by the National Capital Planning Commission working with the U.S. Commission of Fine Arts and the National Capital Memorial Commission, which includes the National Park Service.

Five deferred maintenance projects have been funded through the American Recovery and Reinvestment Act of 2009. They include the Lincoln Reflecting Pool area (lower approachway, pool, and the north and south elm walks), the D.C. War Memorial, the Thomas Jefferson Memorial plaza seawall, Ohio Drive, and Madison Drive.

Other projects are continuing. Construction documents for additions to the Potomac Park levee have been completed. Recommendations from the NPS 2006 *Visitor Transportation Study* will be implemented separately. Permanent security screening will be provided at the Washington Monument, and perimeter security will be developed for the Thomas Jefferson Memorial. These projects are no longer considered in the alternatives; instead they are discussed as present or reasonably foreseeable projects under cumulative impacts.

continue to be fully accommodated on a first-come, first-served basis throughout the National Mall. Union Square, the Mall, the Washington Monument grounds, the Lincoln Memorial, and the Thomas Jefferson Memorial would all continue to be popular areas for demonstrations and special events. Permit procedures would be improved, and monitoring procedures would be enhanced to ensure that resources are better protected and to reduce impacts to soil, turf, and vegetation.

- *Access and Circulation* — Pedestrian conditions would be improved, as well as links with public transit. Bicycle access and facilities would be improved in conjunction with the city's *Bicycle Master Plan* and bike-sharing program; bicycle racks would continue to be added throughout the National Mall. Existing tour bus drop-off and pickup locations would be improved where possible. Tour bus parking would be addressed in cooperation with the D.C. Department of Transportation and other city agencies. The National Park Service would work with the Washington Metropolitan Area Transit Authority to add National Mall to the name of the Smithsonian Metro station on the Mall.
- *Visitor Information, Orientation, and Enjoyment* — Current visitor information and educational programs would be continued, including guided walking and bicycle tours. Brochures, maps, and the park website would be improved. Opportunities for entertainment and recreation would also be continued. Hours at the Washington Monument would be extended to 10 p.m. to allow more people to visit.
- *Visitor Amenities* — Visitor facilities, such as restrooms, food service, bookstores, seating, and lighting, would continue to be provided. Park staff would continue to assess the need for and variety of appropriate commercial services, such as food service, retail, transportation, and recreation equipment rentals.
- *Health, Public Safety, and Security* — Park staff would continue to provide emergency medical services, as well as plan for the safety and security of visitors. The U.S. Park Police would continue to provide law enforcement services.
- *Park Operations* — Projects would be undertaken to reduce the deferred maintenance backlog. A visual quality team would continue to identify high-profile problems and concerns that would be promptly addressed by a quick response team. In-park communication systems would be upgraded. A solid waste and recycling plan would be developed, incorporating best practices for collection, retrieval, storage, and hauling. Actions would be taken to help meet NPS energy goals, including energy-efficient light bulbs, sustainable forms of transportation (such as electric cars), and retrofitting water features to be sustainable. Partnerships and agreements to facilitate park management would be continued.

No-Action Alternative

The no-action alternative describes existing conditions and the continuation of current management. It establishes the baseline to compare all the other alternatives.

The Mall

Union Square (1st to 3rd Streets). The Ulysses S. Grant Memorial would be maintained, along with the historic features of the landscape. No facilities (such as seating, restrooms, or food service), infrastructure for demonstrations or special events, or information would be provided.

The Mall (3rd to 14th Streets). Compacted soils would remain, and half of the Mall would be rested every other winter for restoration. American elm trees would be protected as much as possible and replaced as needed. Gravel walkways would remain. A temporary visitor contact station at the Smithsonian Metro station would remain, as would four refreshments stands around the Mall.

Washington Monument and Grounds

Food and retail services would be moved to a permanent location. The circular restroom near 15th Street and Independence Avenue SW, the

newly renovated Monument Lodge (bookstore, ticketing, and restrooms), the Sylvan Theater, and Survey Lodge (visitor contact station) would all remain.

West Potomac Park (North of Independence Avenue)

No changes would be made at the World War II Memorial, Constitution Gardens, the Vietnam Veterans Memorial, or Ash Woods (restroom and U.S. Park Police facilities).

Lincoln Memorial and Grounds. Visitor restrooms inside the Lincoln Memorial would be expanded within the building footprint. No additional restrooms would be provided.

West Potomac Park (South of Independence Avenue)

No changes would be made at the Franklin Delano Roosevelt Memorial, the George Mason Memorial, or the Thomas Jefferson Memorial.

Tidal Basin Area. The Tidal Basin area would continue to offer a pleasant strolling and viewing experience, and historic features would be maintained. Engineering studies would be undertaken to improve Tidal Basin flushing and to ensure seawall stability.

West Potomac Park Riverfront. The dry-laid stone river walls south of Memorial Bridge would be stabilized as needed with riprap.

The Preferred Alternative

Under the preferred alternative the National Mall, as the premier civic and symbolic space for our nation, would be respectfully rehabilitated and refurbished so that very high levels of use could be perpetuated and the needs of all visitors and users could be met in an attractive, high quality, energy-efficient, and sustainable manner. Its memorials and landscapes would be protected, with large areas of open space as defining features of the historic landscape. The designed historic landscape would evolve, and its value over time would change, reflecting significant national events. Contemporary uses would be accommodated while respecting the planned historic character and visions of the L'Enfant and McMillan plans. The intent would be to establish a sense of place and an overall identity for the National Mall, creating a rich, coherent pedestrian environment that would complement and balance the natural environment, the combination of formal and informal features, and national commemorative works. The National Mall would be emphasized as a year-round destination where the beauty and variety of every season would enhance visitor experiences.

Uses for First Amendment demonstrations, commemorations, and national ceremonies and celebrations would be emphasized. All visitors would be made to feel welcome through helpful wayfinding signs, knowledgeable staff, and high-quality and accessible facilities. Diverse opportunities would be offered for public enjoyment, including educational, cultural, and musical programs, as well as active and passive recreational activities.

Professionals would be engaged to design high-quality solutions to unify the National Mall and to articulate the visions for specific sites.

The Mall

Union Square. Some of the most important changes would be made at Union Square. A restored Ulysses S. Grant Memorial would be the focal point of a symmetrical and formally laid out civic square based on historical precedents. It would be a popular, active, and digni-

A Vision for the National Mall — Enriching Your American Experience

The National Mall — the great swath of green in the middle of our capital city and stretching from the foot of the United States Capitol to the Potomac River — is America's civic stage. This historic open space with its planned vistas provides an inspiring setting for national memorials, many of them symbols of our democracy. It also provides a visual connection between the branches of government, and a backdrop for government buildings and the great cultural institutions of our nation. For more than 200 years it has symbolized our nation and its democratic values, which have inspired the world. "We the People" come here to demonstrate our rights and celebrate our freedoms, our history and culture, our unity and diversity, and our way of life.

UNION SQUARE AND THE CAPITOL REFLECTING POOL



A smaller reflecting pool at Union Square would be considered under some alternatives to make the space more suited to various uses and to improve pedestrian circulation.

fied day and evening destination, and it could be easily transformed into a larger venue for First Amendment demonstrations and events. The historic east-west vista between the U.S. Capitol and the Washington Monument would be improved and perpetuated.

Design development would determine the size and character of visitor facilities and amenities. Infrastructure for events would be provided. A smaller reflecting pool could be considered to make the space more suited to various uses and reduce water use. Shade structures would provide for visitor comfort and create pleasant places for rest and relaxation. Facilities (located outside view corridors) could include a flexible, indoor / outdoor, multipurpose destination, where people could enjoy views of the Grant Memorial and the Capitol. Restrooms would be provided, along with drinking water and recreation equipment rentals.

The Mall. Lawns and elm trees would be improved and protected. Compacted soils would be removed and replaced with engineered soils capable of better withstanding intensive use. Additional scientific study would be undertaken to examine the health of the elm trees and soil conditions on the Mall, and to identify appropriate levels of use and protection. The elm tree panels would no longer be available for temporary event facilities, such as tents, facilities, and vehicles. An area south of the National Gallery of Art Sculpture Garden and north of the center grass panels, as well as the 12th Street axis, would be redesigned for high levels of use and to support event logistical, operational, and temporary facilities.

A paved welcome plaza at 12th Street and Jefferson Drive SW would include a visitor contact station, high-capacity public restrooms, multiple orientation maps, and a large tactile model or pavement map of the National Mall, along with shaded and group seating.

As part of a coordinated paving plan for the National Mall, gravel pathways would be paved with a low-maintenance, sustainable, and universally accessible material to improve circulation, facilitate events, and maintain improved landscape conditions. Some north-south walks would be modified to accommodate demonstrations and special events, visitor amenities, or recreation. Subtle grading would maintain the appearance of continuous turf.

Washington Monument and Grounds

A new multipurpose facility on the Washington Monument grounds on the northwest corner of 15th Street and Independence Avenue would offer food service, retail, information, education, integrated exhibits, restrooms, and performance

GRAVEL WALKS ON THE MALL



Gravel pathways would be paved under the preferred alternative with a low-maintenance, sustainable, and universally accessible material.

space. This pleasant location below the level of roads would allow a facility to be oriented to views of the monument and would help muffle traffic noise.

The landscaping plan for the Washington Monument Grounds approved in 2003 would be updated and implemented. Views of the monument and the north-south vista between the Thomas Jefferson Memorial and the White House would be protected and improved.

Utility infrastructure would be provided on the grounds for demonstrations and special events. The areas north and south of Independence Avenue would be better connected through improved pedestrian circulation, including access to the southwest waterfront and East Potomac Park. A system of separate dedicated bike trails would be constructed.

Survey Lodge would be adaptively reused for services and parking for visitors with disabilities, information, exhibits about the building's history, and possibly recreation equipment rentals (such as bicycles and kites). Monument Lodge would continue to provide visitor services and restrooms.

West Potomac Park (North of Independence Avenue)

Constitution Gardens. Constitution Gardens would be a restful, high-quality, multipurpose visitor destination that would provide food service and opportunities for entertainment and enjoyment, as well as a place to relax as visitors tour the National Mall. The lake would be rebuilt to be self-sustainable, with potentially a nonpotable, sustainable water source. Urban recreational activities, such as fishing or model boating, would be offered.

A multipurpose facility would be located in the paved asphalt area at the east end of the lake. Food service, restrooms, education, exhibits, information, a bookstore, retail, recreation equipment rentals (model boats, portable lawn chairs), and space for partner activities would be provided. A flexible performance space, stage, or gazebo would be located in or near the east end of the lake and would take advantage of the nearby rolling terrain to accommodate an audience of several thousand. The historic canal

EAST PLAZA AT CONSTITUTION GARDENS



A large paved area at the east end of Constitution Gardens could accommodate a multipurpose visitor service facility.

Lockkeeper's House could be relocated away from the corner of 17th and Constitution Avenue NW and adaptively reused.

Vietnam Veterans Memorial. Additional seating would be provided in the vicinity of the memorial for contemplation and rest.

Lincoln Memorial and Grounds. Restrooms within the Lincoln Memorial would be expanded within the building footprint. A ceremonial use would be developed for the Watergate steps. An architecturally compatible restroom would be added in the vicinity of the south refreshment stand.

Korean War Veterans Memorial. On the west side of the memorial the walks would be widened to accommodate changing circulation patterns and group visitation.

Ash Woods. The U.S. Park Police stables would be rebuilt and the area redesigned to be compatible with the historic character and quality of the National Mall. The paddocks would be made part of the visitor experience, with educational exhibits about the Park Police and horse patrols.

The Ash Woods restrooms would be replaced by a new restroom nearer the stables. Food service could be provided near the new restroom if warranted by increased visitation.

West Potomac Park (South of Independence Avenue)

Tidal Basin Area. A sense of arrival at the Tidal Basin would be created by redesigning pedestrian circulation and parking. Around the Tidal

Basin high-quality recreational experiences would be provided for strolling, sightseeing, bicycling, and boating. Pedestrian lighting would be installed in a manner that would not impact the evening lighting ambience of memorials.

Based on engineering recommendations, the Tidal Basin seawalls would be rebuilt above tidewater. The historic appearance would be retained while accommodating wider walks and improving bicycling/vehicular circulation and safety. The Tidal Basin would be slightly smaller, primarily on the southeast side of the basin, to improve pedestrian, bicycle, and vehicular circulation.

A system of separate bicycle lanes or trails would be developed. Walks for pedestrians and bicyclists would be widened and separated near Inlet, Outlet, and Kutz bridges.

The recreation equipment rental facility and refreshment stand on the northeast side of the basin would be replaced. These functions, along with restrooms and seating, would be provided in new structures in the same general location.

Franklin Delano Roosevelt Memorial. New visitor use patterns would be assessed, particularly after the new Martin Luther King, Jr. Memorial opens. A small food service and restroom facility could be provided near Ohio Drive, if warranted by demand.

West Potomac Park Riverfront. Where feasible, a sustainable, vegetated shoreline would be established along the Potomac River. In other areas stone-faced walls would provide space for seating, fishing, and enjoyment of the river or perhaps nodes for water taxi service or for launching small, hand-carried watercraft (such as canoes or kayaks). Walks would be improved and additional seating provided. Bicycle lanes or trails would be developed along Ohio Drive.

AREA SOUTH OF THE THOMAS JEFFERSON MEMORIAL



The former parking area south of the Thomas Jefferson Memorial could be redesigned to accommodate a security perimeter, as well as demonstrations and special events.

Thomas Jefferson Memorial and Grounds. The adjacent seawalls would be restored or rehabilitated, as recommended by engineering studies. No special event stage, roof, or walls would be allowed to obstruct the view to the White House from the north plaza. The parking area south of the memorial would be redesigned to accommodate demonstrations and special events. Utilities would be provided.

Bicycle lanes or trails would be provided for safer or improved access near the memorial and to the I-395 bridges. Perimeter security and vehicular access would be completed. The refreshment stand would be rebuilt, and restrooms, seating, and tables would be provided.

Alternative A — Focus on the Historic Landscape and Education

Alternative A would restore and maintain the resources of the National Mall as a historic landscape. Under this concept the designed historic landscape would evolve and its value over time would change, reflecting significant national events. Contemporary uses would be accommodated while respecting the planned historic character and visions of the L'Enfant and McMillan plans.

The Mall

Union Square. The Ulysses S. Grant Memorial would be restored and would be the focal point of a redesigned civic square that would incorporate rehabilitated historic landscape components. A redesigned reflecting pool would offer opportunities to interpret the former Washington City Canal and the history of the U.S. Botanic Garden site. Walks would be widened to facilitate public access and maintenance. Seating would be added.

The Mall. The Mall would be rehabilitated to improve conditions, with soils being augmented or replaced for better turf and tree growing conditions. Gravel walks would be retained and

ULYSSES S. GRANT MEMORIAL



The memorial would be restored under the preferred alternative and alternatives A, B, and C.

refurbished. Edging or curbs would be installed to limit gravel migration, along with post-and-chain fencing to prevent social trails.

Infrastructure would be provided for demonstrations and events. No temporary event facilities, tents, stages, or vehicles would be allowed in the elm tree panels. Event organizers would be encouraged not to install temporary event facilities, such as tents, directly in the center of the major view corridor between the U.S. Capitol and the Washington Monument. Efforts would be made to remove vehicle parking on the north-south cross streets within the east-west viewshed.

A visitor contact station would continue to be provided near the Smithsonian Metro station. To restore the historic scene, the carousel would be removed. Small restroom facilities would be constructed near existing refreshment stands and would have a similar architectural style.

Washington Monument and Grounds

A high-quality indoor facility for visitor services would be provided on the monument grounds between 14th and 15th streets. This facility would be partially underground and would have a grass roof so as to blend into the landscape.

West Potomac Park (North of Independence Avenue)

Constitution Gardens. The lake would be reconstructed to be self-sustaining for plants, but fish would be removed. Walks would be repaved, and the refreshment stand and restrooms would be replaced. The visibility and appearance of the Lockkeeper's House, which would remain in its current location, would be improved.

Lincoln Memorial and Grounds. The restrooms inside the Lincoln Memorial would be expanded within the building footprint. To help restore a more historic scene, the south ramp cloverleaf from Memorial Bridge to Rock Creek Parkway would be removed, and traffic would be redirected to 23rd Street SW.

Ash Woods. The Ash Woods restroom would be replaced, and the U.S. Park Police stables would be renovated.

West Potomac Park (South of Independence Avenue)

Tidal Basin Area. The Tidal Basin area would be upgraded with paved walks and facilities to enhance strolling and viewing experiences. The basin walls would be rebuilt in their current location to be above tidewater. Soil conditions would be improved, social trail development thwarted, and erosion and soil compaction under trees addressed. Traffic lanes on the historic Kutz Bridge would be reconfigured to widen pedestrian walks on the south side.

Visitor facilities would be redesigned to reduce congestion and to blend with the historic character of the National Mall. New recreation equipment rental and refreshment facilities would be provided, and restrooms would be added.

Franklin Delano Roosevelt Memorial. Periodic comprehensive condition assessments would be completed.

West Potomac Park Riverfront. The dry-laid stone river walls would be restored.

Thomas Jefferson Memorial and Grounds. No additional actions would be undertaken.

Alternative B — Focus on a Welcoming National Civic Space for Public Gatherings, Events, and High-Use Levels

Alternative B would improve the National Mall as the premier civic space for our nation and would support very high use levels. The evolving ceremonial, celebratory, cultural, and visitor uses at this national civic space would be emphasized. Diverse peoples would be welcomed through multilingual educational opportunities, and the needs of large groups (including those arriving by tour bus), demonstrators, and event participants would be met.

Some areas would be redesigned to provide a more sustainable civic forum and stage for First Amendment demonstrations and other events.

The Mall

Union Square. A restored Ulysses S. Grant Memorial would be the focal point of a dignified, paved urban civic square that would be redesigned to highlight vistas, meet event needs, be a visitor destination, and offer comfort, convenience, and entertainment. The reflecting pool would be removed, and the square would be redesigned to increase space for demonstrations and special events, including utility infrastructure. A multipurpose visitor destination facility with food service, restrooms, retail, and performance space would be developed.

WASHINGTON MONUMENT SECURITY BUILDING



An ongoing project is the removal of the temporary security screening building on the east side of the Washington Monument.

The Mall. The Mall would be rehabilitated and redesigned as a highly visible, sustainable venue with more hard surfaces for very high levels of use (demonstrations, public gatherings, cultural programs, and other civic events). Its critical historic features would be maintained.

A decorative and interactive water feature would be added at the 8th Street cross axis, a site identified in the McMillan plan. Some temporary event facilities, such as tents, stages, and vehicles, could be located in the elm tree panels if turf/root zones and soils could be protected through an acceptable and authorized method. If determined feasible by engineering, security, geotechnical, and economic studies, an underground facility for paid visitor parking would be constructed between 12th and 15th streets, which would be entered from 15th Street.

Gravel walkways would be repaved with a universally accessible surface as part of a coordinated Mall paving plan. Surfaces would be provided in other areas to facilitate events and to maintain improved landscape conditions. Some walks would be widened, and some turf areas would be paved to create event venues.

A visitor contact station would continue to be provided near the Smithsonian Metro stop, where a custom-designed, covered entry would be constructed. A large tactile model of the National Mall would be developed, and a restroom would also be provided. Interactive water features would be installed in some locations. Small restroom facilities near existing refreshment stands would be constructed in a similar architectural style.

Washington Monument and Grounds

A new multipurpose visitor services facility on the northwest corner of 15th Street and Independence Avenue would be capable of meeting the needs of early morning ticket queues, food and retail, educational programs, and entertainment (events, performances, and evening entertainment), as well as office space. This facility

would replace the Sylvan Theater and the circular restroom.

Utility connections and space for portable restrooms would be developed to support demonstrations, special events, and performances.

If determined feasible by engineering, security, geotechnical, and economic studies, an underground visitor parking facility would be built below the multipurpose recreation fields on the south grounds, with pedestrian access under Independence Avenue to the monument's visitor service areas. A turfed surface would be provided over Maine Avenue to connect the monument grounds with the Tidal Basin.

Tickets would continue to be distributed at Monument Lodge. Survey Lodge would be rehabilitated to provide services for people with disabilities.

West Potomac Park (North of Independence Avenue)

Constitution Gardens. Constitution Gardens would be a restful, high-quality visitor destination, with food service and opportunities for entertainment and enjoyment. Soils and vegetation would be rejuvenated. The lake would be reconstructed as a very shallow pool that could be drained for demonstrations and special events. Walks would be repaved, and some walkways would be widened to create venues for smaller events (exhibits, tents, and performances). Utilities and communication systems would be provided.

A multipurpose facility would be developed in the paved asphalt area at the east end of the lake. A flexible, multi-use outdoor stage would be provided in the lake near this facility, with informal seating around the lake for several thousand people. Performances of thematic entertainment could be offered (e.g., World War II era music, Latin American music). The existing restrooms would be replaced.

The Lockkeeper's House would be preserved in an adjacent location, slightly away from the intersection for safety reasons. The interior would be rehabilitated, and the building would be staffed for visitor information.

Vietnam Veterans Memorial. Additional seating would be provided near the memorial for contemplation.

Lincoln Memorial and Grounds. Restrooms inside the Lincoln Memorial would be expanded within the building footprint. Additional restrooms would be provided in the vicinity. A ceremonial use would be developed for the Watergate steps. Also, pedestrian crossings and access to Arlington Memorial Bridge would be improved.

Korean War Veterans Memorial. East-side entry walks would be provided to accommodate changing circulation patterns.

Ash Woods. Ash Road would become primarily a pedestrian walk and secondarily an access road. The restroom would be replaced with a new facility between the World War II and Lincoln memorials. The U.S. Park Police stables would be screened from view. A new parking area and vehicle access would be provided from Independence Avenue.

West Potomac Park (South of Independence Avenue)

Tidal Basin Area. The Tidal Basin area would be upgraded with high-quality paved walks, improved circulation, furniture, facilities, and services to enhance strolling and viewing experiences. The basin walls would be rebuilt to allow wider walkways so as to protect the cherry trees. Three pedestrian bridges near Inlet, Outlet, and Kutz bridges would be added to reduce congestion, along with pedestrian lighting for visitor safety and enjoyment.

Seating would be added, and facilities would be redesigned to reduce congestion and to complement the historic character of the National Mall. A small-scale, year-round, multipurpose facility would replace the refreshment stand. Restrooms would be provided, and the recreation equipment rental facility would be upgraded.

The parking lot would be removed if and when a new underground garage was provided on the south grounds of the Washington Monument.

Franklin Delano Roosevelt Memorial. Under alternative B food service would be provided in a location that would also be convenient to the

USE IMPACTS AT THE FRANKLIN DELANO ROOSEVELT MEMORIAL



Visitor use patterns would be assessed in areas where vegetation is being trampled.

future Martin Luther King, Jr. Memorial. Visitor use patterns would be assessed to determine how to protect vegetation in areas where it is being trampled.

West Potomac Riverfront Park. The West Potomac Park river walls would be reconstructed as higher, stone-faced structural walls so they would not be overtopped by water and floating debris. A small staging area for demonstrations and events would be developed south of 23rd Street and Independence Avenue SW.

Thomas Jefferson Memorial and Grounds. Utilities and infrastructure would be installed on the plaza for demonstrations and special events. The refreshment stand would be replaced.

Alternative C — Focus on Urban Open Space, Urban Ecology, Recreation, and Healthy Lifestyles

Alternative C would meet evolving recreational needs in the nation's capital by providing beautiful, enjoyable, and ecologically sustainable open spaces that could be adapted to changing recreational patterns of diverse local and national users. This concept would contribute to healthy lifestyles, healthy parks, and healthy, more sustainable cities.

Recreational activities would be expanded by redesigning some areas, increasing recreation equipment rentals (such as boats, skates, and bicycles), adding playgrounds, and emphasizing connections to the recreational and enjoyment opportunities in East Potomac Park, the Georgetown Waterfront, and Rock Creek Park, as well as the southwest waterfront.

The Mall

Union Square. The Ulysses S. Grant Memorial would be the focal point of an active, paved urban civic square that would be a visitor destination and that would showcase reflective and interactive water features with an environmentally friendly design to highlight sustainable water management practices.

The Capitol Reflecting Pool would be redesigned as a shallow pool that could be drained for demonstrations and events or frozen for ice skating. Infrastructure would be provided for demonstrations and events. Food and retail sales would be provided, plus automated, self-cleaning public restrooms.

The Mall. The Mall would be redesigned to better accommodate high levels of use for demonstrations and special events. It would provide additional, sustainable areas for recreational enjoyment (gardens, fountains) and improved lawn conditions (for informal pickup games and play). A children's play area would be provided, as well as interactive water features at some locations. The center grass panels would be reconfigured by removing crosswalks to provide larger spaces for informal recreation.

Soil, turf, and tree-growing conditions would be improved. No temporary event facilities, such as tents, stages, or vehicles, would be allowed in the elm tree panels. Gravel walkways would be replaced with sustainable, universally accessible surface materials.

A visitor contact station would continue to be provided near the Smithsonian Metro stop. The Mall would be enhanced with additional lighting and floral displays. Small restroom facilities would be provided near the refreshment stands.

The Washington Monument and Grounds

High-quality indoor/outdoor visitor services (food service, retail, restrooms) would be provided between 14th and 15th streets. The circular restroom would be replaced, and automated, self-cleaning restrooms would be installed near Constitution Avenue. The Sylvan Theater would

be reconstructed and reoriented to provide a new entertainment venue with improved viewing.

A 14th Street vehicular tunnel would be built to improve pedestrian movement and safety. Pedestrian crosswalks would be enhanced to increase their visibility to drivers, pedestrian waiting areas would be widened, and crossing times on 15th Street would be extended. Roads, parking, bicycle, and pedestrian circulation would be redesigned to better connect park areas, to improve safety and recreational opportunities, and to connect to the southwest waterfront and East Potomac Park. A separate dedicated bike trail would be constructed.

West Potomac Park (North of Independence Avenue)

Constitution Gardens. Constitution Gardens would be a restful, quality visitor destination, with a garden café. Soils and vegetation would be rejuvenated. The lake would be reconstructed to be self-sustaining for fish and plants, and it would be incorporated into the urban stormwater retention systems to control flooding. A nonpotable water source would be found. Recreation equipment rentals, such as model boats and lawn chairs, would be provided for visitor enjoyment. A children's play area would be added, along with an informal interactive water feature. Walks would be repaved and widened in some areas to create venues for small events (exhibits, tents, performances), with some mobile refreshment carts.

The Lockkeeper's House would be preserved and moved slightly away from the intersection for safety reasons. After rehabilitating the interior, the building would be staffed for visitor information. Vehicular and pedestrian movements would be improved at the intersection.

Lincoln Memorial and Grounds. Restrooms would be expanded inside the memorial, and additional restrooms would be provided near the south refreshment stand.

Water taxi stops could be accommodated at the Watergate steps, with a redesign of Ohio Drive for safe pedestrian access.

Korean War Veterans Memorial. Visitor use patterns would be assessed, and additional entry walks would be provided.

Ash Woods. The U.S. Park Police stables would be reconstructed, and information about the U.S. Park Police and horse patrols would be provided. The restroom would be replaced with a new facility between the World War II and Lincoln memorials. Recreation fields in the area would be upgraded with backstops and other facilities to avoid the practice of leagues leaving their equipment on the fields. Vehicular access would be provided to the fields.

West Potomac Park (South of Independence Avenue)

Tidal Basin Area. The Tidal Basin area would be upgraded with high-quality paved walks, improved circulation, and facilities, as well as additional recreational opportunities. Soil and vegetation conditions would be improved. The basin walls would be rebuilt to allow wider walkways, and pedestrian bridges would be added to reduce congestion. Pedestrian lighting would be installed in a manner that would not affect the evening lighting ambience of memorials.

Visitor amenities, including the refreshment stand and recreation equipment rental facilities, would be replaced. Recreation rentals would be expanded to include kayaks and rowboats. The bay north of Kutz Bridge would be filled to provide additional recreation fields.

Franklin Delano Roosevelt Memorial. A refreshment stand without restrooms would be

U.S. PARK POLICE STABLES IN ASH WOODS



The U.S. Park Police area is visible from the JFK Hockey Fields to the north.

built at a site that would also be convenient to the future Martin Luther King, Jr. Memorial.

West Potomac Park Riverfront. Where feasible, a sustainable, vegetated shoreline would be developed. The river walls would be reconstructed where necessary. Trees would be added, and river views would be emphasized.

Separate bike and walking trails would be provided, with an emphasis on trail connections to East Potomac Park and Rock Creek Park, as well as to the southwest waterfront. Roads and parking areas would be redesigned as needed to accommodate bike lanes.

Thomas Jefferson Memorial and Grounds. Utilities and infrastructure would be installed on the plaza for demonstrations and special events. The refreshment stand would be relocated to be more convenient to bicycle and pedestrian walkways, as well as the tour bus drop-off.

ENVIRONMENTAL CONSEQUENCES

This management plan develops a vision, or a shared understanding between NPS managers and the public, about the kinds of resource conditions, visitor experiences, and facilities that would best fulfill the purposes of the National Mall. Part of this process is the analysis of environmental impacts. This document identifies the types of impacts that would occur and where.

Impact topics were identified in accordance with federal laws, regulations, and executive orders; NPS *Management Policies 2006*; and NPS knowledge of limited or easily affected resources. Public input during the scoping process was also used to determine impact topics.

Impact topics that are analyzed include cultural resources (including historic properties and cultural landscapes); natural resources (water resources, soils, vegetation, and fish and wildlife); demonstrations, special events, and national celebrations; access and circulation; visitor experience; the socioeconomic environment; and park operations. Topics that were dismissed from further detailed analysis are discussed beginning on page 32 in the main document.

Impact intensity levels or thresholds were defined for each impact topic. The following definitions generally apply to all topics; however, the analysis of cultural resources has additional requirements in accordance with the National Historic Preservation Act (see page 382).

- ***Negligible*** — The impact would be barely detectable.
- ***Minor*** — The impact would be detectable, or it would have a limited effect, either adverse or beneficial.
- ***Moderate*** — The impact would be readily apparent, and it would have an appreciable impact, either adverse or beneficial.
- ***Major*** — The impact would be readily apparent, and it would be severely adverse or exceptionally beneficial.

Impacts could be beneficial or adverse. The duration of impacts would be temporary (a few hours up to two days), short term (up to one year or the length of a construction project), long-term (up to the life of the plan or 50 years), or permanent (longer than 50 years).

Impacts Common to All Alternatives

Direct and indirect impacts of the alternatives are summarized below. Cumulative impacts of past, present, reasonably foreseeable projects are discussed in the main impact analysis. The analysis compares the impacts of the alternatives to existing conditions (the no-action alternative).

Cultural Resource Impacts. The impacts of preserving and protecting memorials under all alternatives would be long-term and beneficial, but only negligible to minor in intensity because perceived differences would be limited.

Actions proposed in the plan are conceptual, and their actual impact on cultural resources cannot be determined at this time, so potential impacts are described. A park-specific programmatic agreement with the D.C. Historic Preservation Office and the Advisory Council on Historic Preservation would be developed as part of this planning process.

Natural Resource Impacts. Water quality problems in designed water features would

continue to be addressed, and alternative management methods, such as addressing algae growth in designed water features, would help improve water quality, with long-term, negligible, beneficial impacts. No proposals would affect natural floodplains or cause a meaningful change in the development or use of floodplains. Soils would be managed to restore natural processes and functions, resulting in long-term, moderate, beneficial impacts. Vegetation would be managed to improve the appearance of turf, plants, and trees, resulting in long-term, moderate, beneficial impacts.

Impacts on Demonstrations, Special Events, and National Celebrations. There would be no change in permit regulations under any alternative. Impacts on event organizers from periodic closings of areas for construction, restoration, or maintenance would be short- to long-term, minor, and adverse. If some events were relocated from the National Mall to other venues, impacts would be long-term, major, and beneficial because of reduced resource impacts on the National Mall.

Access and Circulation Impacts. Adding the National Mall name to the Smithsonian Metro station, continuing to redesign tour bus drop-offs and pickups, and working with the city and local businesses to provide an appropriate amount of convenient parking for tour buses and visitors would result in long-term, moderate to major, beneficial impacts.

Visitor Experience Impacts. Continuing to work with local tourist organizations and the tour bus industry to ensure that they have accurate information for visitors would have long-term, moderate to major, beneficial impacts. Other beneficial actions would make access to areas on the National Mall easier (affecting 20%–30% of visitors), as well as other nearby destinations (such as the U.S. Capitol and the White House).

Socioeconomic Impacts. Impacts on the local and regional economy would be long-term, minor, and beneficial as a result of visitation to existing monuments and memorials on the National Mall. Impacts on commercial business opportunities in and around the National Mall, as well as in the metropolitan area, would be long-term, minor, and beneficial as a result of new business opportunities for retail and food service near the National Mall and ongoing use of businesses in nearby areas.

Impacts on Park Operations. Overall impacts on park operations would be long-term, moderate to major, and beneficial because of more efficient custodial and trash collection, less intrusive temporary fencing, and a solid waste and recycling plan. Short-term, moderate, beneficial impacts would result from continuing to use a visual quality team to identify high-profile problems and concerns that would be addressed promptly by a quick response team.

Impacts of the No-Action Alternative

Cultural Resource Impacts. The no-action alternative would result in long-term, negligible to minor impacts on cultural resources that would either be adverse or beneficial. Maintaining park areas in their present condition would result in the continued deterioration of features such as the Capitol Reflecting Pool and vegetation on the Mall. Replacing the temporary visitor service tent at the Washington Monument could potentially affect components of the cultural landscape, such as views and vistas. The dry-laid seawalls along the West Potomac Park riverfront would continue to deteriorate because of erosion from wave action and periodic flooding.

Natural Resource Impacts. Impacts on groundwater and surface water resources, including potable water use, would continue to be short- and long-term, minor to moderate, and adverse. Soil impacts would continue to be short- and long-term, minor to major, and adverse; impacts would be considered unacceptable because compacted soils would impede the attainment of the park's desired future conditions for natural and cultural resources, but no key park resource would be impaired. Vegetation impacts would continue to be short- and long-term, major, and adverse. Impacts especially on the elm trees on the Mall could be severe enough to be unacceptable because of continued impedance to the attainment of desired future resource conditions and diminished opportunities for current or future generations to enjoy or be inspired by park resources. The impacts on vegetation could lead to impairment of a key park resource unless

successful mitigating measures were employed. Impacts on native and naturalized fish and wildlife populations would continue to be long-term, moderate, and adverse.

Impacts on Demonstrations, Special Events, and National Celebrations. Present impacts on participants and organizers of demonstrations, special events, and national celebrations would continue, with the National Mall hosting a large number of events and demonstrations at current venues, including the Mall elm tree panels, with growing demand for space (particularly on the Mall and the Washington Monument grounds, and at the Lincoln Memorial). Over the life of this plan impacts would likely become moderate to major and adverse because of inadequate venues and the lack of visitor facilities and amenities.

Access and Circulation Impacts. There would be no change to access and circulation under the no-action alternative, but over the long-term impacts would be moderate to major and adverse because visitor access would become more difficult as use increased. The pedestrian environment would become less desirable, with inadequate walkway surfaces and amenities and more impacts from vehicle traffic. Facilities would not be improved for bicyclists, and increased traffic congestion would affect both motorists and visitors.

Visitor Experience Impacts. The impacts of the no-action alternative on visitor experiences would be long-term, moderate to major, and adverse despite the fact that visitors would continue to be inspired by the National Mall and its memorials. Visitor expectations for quality experiences would not be met because of the degraded condition of natural resources, inadequate information and education about park resources and opportunities, insufficient facilities (such as restrooms and food service) for present user volumes, and continued public health and safety challenges.

Socioeconomic Impacts. Impacts on the local and regional economy under the no-action alternative would be long-term, negligible, and beneficial because of slightly increased visitation levels to the National Mall and related visitor expenditures at commercial businesses.

Impacts on Park Operations. Impacts on park operations under the no-action alternative would continue to be long-term, moderate to major, and adverse because of not meeting desired standards (including a deferred maintenance backlog; difficult-to-maintain systems and infrastructure; and lack of venues designed to accommodate intensive levels of use), inefficient operations, and unsustainable practices. The gap in funding between what is required and the current park budget would continue to leave the entire park funded at about 54% of need. Despite the long-term, moderate to major, beneficial impacts of actions common to all alternatives, the no-action alternative would continue to cause ongoing operational challenges.

Impacts of the Preferred Alternative

Cultural Resource Impacts. Long-term, minor to moderate, beneficial impacts on cultural resources would result from restoring the Ulysses S. Grant Memorial; replacing compacted soils and installing irrigation systems and underground utility infrastructure for demonstrations and special events on the Mall; constructing a new multipurpose visitor service facility for the Washington Monument; moving the Lockkeeper's House to a safer location and adaptively rehabilitating it; rehabilitating landscape features at Constitution Gardens, including the lake; and stabilizing dry-laid stone seawalls along the West Potomac Park riverfront. Redesigning Union Square would change its appearance, resulting in long-term, major, adverse impacts. Long-term, minor to moderate, adverse impacts would result from widening some walkways, paving gravel walkways, providing additional seating and interactive water features, and developing a welcome plaza near the Metro station on the Mall; providing a new multipurpose facility at the east end of Constitution Gardens; adding a restroom near the south Lincoln Memorial refreshment stand; rebuilding the Tidal Basin seawalls and widening walks; constructing separate bicycle and pedestrian trails; and redesigning the tour bus drop-off area and replacing the refreshment stand at the Thomas Jefferson Memorial. The impacts of other actions would be negligible. There would be no impairment of cultural resources.

Natural Resource Impacts. There would be no unacceptable impacts on natural resources under the preferred alternative and no impairment of key park resources. Impacts on potable water use, as well as on groundwater and surface water resources, would be short-term, moderate, and adverse during construction at the Tidal Basin and along the Potomac River. Long-term impacts would be minor and beneficial. Impacts on soils during construction would be short-term, minor, and adverse. Long-term impacts would be moderate and beneficial due to soil augmentation or replacement. New or widened sidewalks would result in long-term, minor, adverse impacts on vegetation, but other actions to improve growing conditions for park vegetation would result in long-term, moderate, beneficial impacts. Impacts on fish and wildlife would be long-term, minor, and beneficial because of stewardship messages to visitors, a self-sustaining pond/wetland ecosystem at Constitution Gardens Lake, higher seawalls along the Tidal Basin, and a naturalized Potomac River shoreline. Short- and long-term, negligible to moderate, adverse impacts on fish and wildlife would result from various construction projects throughout the National Mall.

Impacts on Demonstrations, Special Events, and National Celebrations. The impacts of the preferred alternative on participants and organizers for demonstrations, national celebrations, and special events would be long-term, major, and beneficial because of changes in the permitting, scheduling, and management process; additional and more sustainable venues in highly desirable locations; conveniently located civic infrastructure to facilitate event operations; permanent visitor facilities such as restrooms; a redesigned Union Square that could accommodate larger crowds; a new Sylvan Theater with a flexible multipurpose space; and a new venue at Constitution Gardens. However, impacts on the few organizers who could no longer use the elm tree panels on the Mall for temporary event facilities (such as tents and stages) would be long-term, major, and adverse.

Access and Circulation Impacts. The preferred alternative would result in long-term, major, beneficial impacts on access and circulation because of a greater emphasis on a pedestrian-oriented environment; improved, safer, and more comfortable walking and bicycle environments; separate bicycle routes or lanes; improved roadway access in the southeast area of the Tidal Basin; and more options and access for people with disabilities.

Visitor Experience Impacts. Compared to the no-action alternative, the impacts of the preferred alternative on visitor experiences would be long-term, major, and beneficial because of well-maintained areas that would meet desired conditions, enhanced website information, a more welcoming atmosphere (including a welcome plaza on the Mall and daily interpretive program listings), more opportunities to understand core American values through expanded educational themes, well-dispersed and pleasant visitor facilities that were adequately sized to meet user needs, more food service choice, an improved pedestrian and bicycling environment, increased opportunities for informal enjoyment, additional recreational opportunities and improved playing fields, more shaded seating, additional pedestrian lighting, and an emergency notification system.

Socioeconomic Impacts. The preferred alternative would result in long-term, minor, beneficial impacts on the local and regional economy because of longer visitor stays due to better resource conditions and new and improved visitor services and facilities, increased and diversified commercial business opportunities that would meet visitor needs on the National Mall and in surrounding areas, and minor increases in construction-related expenditures.

Impacts on Park Operations. Compared to the no-action alternative, the overall impacts of the preferred alternative on park operations would be long-term, major, and beneficial as a result of improved park conditions, a reduced deferred maintenance backlog, increased maintainability of mechanical systems and infrastructure, improved operational access, a streamlined permitting process for demonstrations and special events, a reduced funding gap between desired conditions and park budgets, and exceedance of sustainability standards for development, renewable energy, and water use.

Impacts of Alternative A

Cultural Resource Impacts. Negligible to minor, beneficial impacts on cultural resources would result from restoring the Grant Memorial, replacing soils and installing irrigation systems on the Mall, and removing vehicle parking along north-south streets (3rd, 4th, and 7th streets). Redesigning Union Square, including the Capitol Reflecting Pool, would be a major, adverse, impact. Minor to moderate, adverse impacts would result from developing a visitor service facility for the Washington Monument between 14th and 15th streets; altering circulation patterns from Arlington Memorial Bridge to Rock Creek Parkway; not addressing impacts of high use on the designed landscape at the Korean War Veterans Memorial; widening Tidal Basin walks and raising the height of the seawall; and replacing visitor facilities on the northeast side of the Tidal Basin. The impacts of other actions would be negligible. There would be no impairment of cultural resources.

Natural Resource Impacts. There would be no unacceptable impacts on natural resources under alternative A and no impairment of key park resources. Short-term impacts on water resources would be negligible and adverse during construction of new Tidal Basin seawalls; long-term impacts would be negligible to minor and beneficial. Soil impacts would be short-term, negligible, and adverse from construction and long-term, moderate, and beneficial from soil augmentation or replacement. Park vegetation would be affected by new construction, which would result in long-term, negligible, adverse impacts and long-term, moderate, beneficial impacts. There would be long-term, negligible to minor, beneficial impacts on fish and wildlife from actions at Constitution Gardens Lake and the Tidal Basin. Construction projects at other sites would result in short- and long-term, negligible to minor, adverse impacts.

Impacts on Demonstrations, Special Events, and National Celebrations. The overall impacts of alternative A on demonstrations, national celebrations, and special events would be long-term, minor, and beneficial because of changes in the permitting, scheduling, and management process; somewhat improved venue conditions; and permanent small visitor facilities such as restrooms. However, the user capacity of desirable venues would remain the same, and mandated recovery time between events would mean fewer events could take place in high visibility venues such as the Mall and the Washington Monument grounds. Impacts on the few organizers who could no longer use the elm tree panels on the Mall for temporary event facilities (such as tents and stages) would be long-term, major, and adverse.

Access and Circulation Impacts. Alternative A would have long-term, moderate, beneficial impacts on visitor access to the Mall and the pedestrian environment due to increased crosswalk timing and additional pedestrian amenities. Impacts on bicycle users would be long-term, moderate, and adverse because unsafe riding conditions would continue.

Visitor Experience Impacts. Alternative A would have long-term, moderate, beneficial impacts on visitor experiences because of substantially improved resource conditions and the appearance of the National Mall, better website information, educational themes focused on memorials and the development of the capital city, improved visitor facilities supplemented by small visitor facilities and food service at refreshment stands, a better pedestrian environment, improved playing field conditions, and an emergency notification system. However, needs related to high use would not be met.

Socioeconomic Impacts. Actions under alternative A would result in long-term, minor, beneficial impacts on the local and regional economy. Visitor experiences would be enhanced due to improved conditions of the historic landscape and vistas, but visitation levels would likely increase only slightly. Commercial business opportunities on the National Mall would increase slightly with improved food service facilities. There would be a minor increase in construction-related expenditures.

Impacts on Park Operations. Impacts on park operations under alternative A would be long-term, moderate, and adverse because the effects of high use would not be fully addressed, such as developing more sustainable venues for demonstrations, special events, and national celebrations or seeking sustainable water sources for large water features.

Impacts of Alternative B

Cultural Resource Impacts. Minor to moderate, beneficial impacts on cultural resources would result from restoring the Grant Memorial; replacing compacted soils and installing irrigation systems and underground event utility infrastructure on the Mall; constructing a new multipurpose visitor facility to replace the Sylvan Theater at the Washington Monument; and moving the Lockkeeper's House to a safer location and adaptively rehabilitating it. Long-term, major, adverse impacts would result from redesigning Union Square, including removing the Capitol Reflecting Pool to create a paved civic square, and from constructing an underground parking garage between 12th and 15 streets with portals on 15th Street. Minor to moderate, adverse impacts would result from installing an interactive water feature at the 8th Street cross axis, constructing a visitor contact station and restroom facilities on the Mall, along with enlarging and paving walkways and providing additional paved areas for demonstrations and special events; providing pedestrian bridges or underpasses and underground parking below the south grounds of the Washington Monument; redesigning Constitution Gardens Lake to be drainable for demonstrations and special events; installing additional restroom facilities near the north and south refreshment stands near the Lincoln Memorial; widening Tidal Basin walkways, constructing three pedestrian bridges, and replacing the refreshment stand and restrooms; constructing higher stone-faced walls along the Potomac River; and replacing the refreshment stand at the Thomas Jefferson Memorial. The impacts of other actions would be negligible. There would be no impairment of cultural resources.

Natural Resource Impacts. There would be no unacceptable impacts on natural resources under alternative B and no impairment of key park resources. Impacts on water resources would be short-term, moderate, and adverse during construction at the Tidal Basin and along the Potomac River. Over the long-term there would be both adverse and beneficial impacts on groundwater and surface water resources, with combined impacts being neutral. Impacts on soils would be short-term, negligible, and adverse from construction and long-term, moderate, and beneficial from soil augmentation or replacement. Vegetation impacts would be long-term, negligible, and adverse because of new and widened sidewalks. Overall, long-term impacts would be moderate and beneficial because of improved growing conditions for park vegetation. The continued use of the Mall elm tree panels, however, could result in long-term, major, adverse impacts if turf/root zones and soils were not properly protected through an acceptable and authorized method. There would be short- and long-term, negligible to minor, adverse impacts on fish and wildlife from a drainable lake at Constitution Gardens, modifications of the Tidal Basin, and various construction projects. A more natural Potomac River shoreline in some areas would result in long-term, minor, beneficial impacts.

Impacts on Demonstrations, Special Events, and National Celebrations. Taken as a whole, alternative B would result in long-term, major, beneficial impacts on demonstrations, national celebrations, and special events because of changes in the permitting, scheduling, and management process; more sustainable venues in highly desirable locations; conveniently located civic infrastructure to facilitate event operations; permanent visitor facilities such as restrooms; a redesigned Union Square that could accommodate larger crowds; a new Sylvan Theater with a flexible multipurpose space; and a new venue at Constitution Gardens.

Access and Circulation Impacts. For access and circulation, alternative B would result in long-term, major, beneficial impacts because of improved access, underground parking garages, a safer pedestrian environment (including safer crosswalks), and reduced conflicts with traffic. Impacts on bicycle users would be long-term, moderate, and adverse because neither the needs of bicyclists nor local planning goals relating to bicycling would be met.

Visitor Experience Impacts. Compared to the no-action alternative, the impacts of alternative B on visitor experiences would be long-term, major, and beneficial because of well-maintained areas that would meet desired conditions for the National Mall, better website information, educational themes focused on the memorials and the civic function of the National Mall, well-dispersed and pleasant visitor facilities that

were adequately sized to meet user needs, more food service choice, an improved pedestrian environment, increased opportunities for informal enjoyment as well as additional recreational opportunities and improved playing fields, more shaded seating, additional pedestrian lighting, and an emergency notification system.

Socioeconomic Impacts. Impacts on the local and regional economy under alternative B would be long-term, minor, and beneficial because of longer visitor stays due to better resource conditions and improved services and facilities, increased and diversified commercial business opportunities that would meet visitor needs, and minor increases in construction-related expenses. Parking costs for underground garages (if determined feasible) would result in long-term, minor, adverse impacts on visitor costs.

Impacts on Park Operations. The overall impacts of alternative B on park operations would be long-term, major, and beneficial as a result of improved park conditions, a reduced deferred maintenance backlog, increased maintainability of mechanical systems and infrastructure, improved operational access, a streamlined permitting process for demonstrations and special events, a reduced funding gap between desired conditions and park budgets, and greater reliance on renewable energy sources. However, unlike the preferred alternative and alternative C, no measures would be taken to make water use more sustainable or to support local goals to encourage greater use of alternative modes of access.

Impacts of Alternative C

Cultural Resource Impacts. Minor to moderate, beneficial impacts on cultural resources would result from restoring the Grant Memorial; removing compacted soils and installing irrigation systems and underground event utility infrastructure on the Mall; replacing the Sylvan Theater with new facilities; moving the Lockkeeper's House to a safer location and adaptively rehabilitating it; rehabilitating Constitution Gardens Lake; rehabilitating the Tidal Basin seawalls; and stabilizing the dry-laid stone seawall along the Potomac River. Redesigning Union Square would result in long-term, minor to major, adverse impacts. Filling in the north bay of the Tidal Basin to provide additional athletic fields would be a permanent, major, adverse effect, which would also alter the setting of the John Paul Jones Memorial. Minor to moderate, adverse impacts would result from removing some north-south walks near 8th Street, adding interactive water features, paving walkways, and adding restrooms and refreshment stands on the Mall; constructing a new visitor service facility at the Washington Monument between 14th and 15th streets, and decking over Maine Avenue to connect to the Tidal Basin area; adding a new restroom near the south refreshment stand at the Lincoln Memorial; widening walks around the Tidal Basin, redesigning roads and parking, and constructing new pedestrian bridges; and providing separate bicycle and pedestrian lanes. The impacts of other actions would be negligible. However, under this alternative several actions could affect character-defining features. There would be no impairment of cultural resources.

Natural Resource Impacts. There would be no unacceptable impacts on natural resources under alternative C and no impairment of key park resources. Impacts on water resources would be short-term, moderate, and adverse during construction at the Tidal Basin and along the Potomac River. Long-term impacts on potable water use, and on groundwater and surface water resources, would be negligible to minor and beneficial. Soil impacts would be short-term, negligible, and adverse from construction and long-term, moderate, and beneficial from soil augmentation or replacement. There would be long-term, negligible, adverse impacts on park vegetation from new and widened sidewalks. Improved growing conditions for park vegetation would result in long-term, moderate, beneficial impacts. Impacts on fish and wildlife would be long-term, negligible to minor, and beneficial from stewardship messages to visitors, a self-sustaining pond/wetland ecosystem at Constitution Gardens Lake, and higher seawalls around the Tidal Basin. Various other construction projects throughout the National Mall would result in short- and long-term, negligible to moderate, adverse impacts.

Impacts on Demonstrations, Special Events, and National Celebrations. The overall impacts of alternative C on participants and organ-

izers for demonstrations, national celebrations, and special events would be long-term, major, and beneficial because of changes in the permitting, scheduling, and management process; additional and more sustainable venues in highly desirable locations; conveniently located civic infrastructure to facilitate event operations; permanent visitor facilities such as restrooms; a redesigned Union Square that could accommodate larger crowds; a reoriented Sylvan Theater to improve viewing from the hillside; and a new venue at Constitution Gardens. However, impacts on the few organizers who could no longer use the elm tree panels on the Mall for temporary event facilities (such as tents and stages) would be long-term, major, and adverse.

Access and Circulation Impacts. Impacts on access and circulation under alternative C would be long-term, major, and beneficial because of improved access and parking, a greater emphasis on safer and pleasanter pedestrian and bicycling environments, and more options for families and people with disabilities.

Visitor Experience Impacts. Alternative C would have long-term, major, beneficial impacts on visitor experiences because of improved conditions on the National Mall, better website information, educational themes focused on memorials along with stewardship and healthy lifestyles, well-dispersed and pleasant facilities adequately sized to meet user needs, more food service choice, an improved pedestrian and bicycling environment, more opportunities for informal enjoyment, additional recreational opportunities and improved playing fields, more shaded seating, additional pedestrian lighting, and an emergency notification system.

Socioeconomic Impacts. Impacts on the local and regional economy would be long-term, minor, and beneficial because of longer visitor stays due to better resource conditions, improved services and facilities, and more year-round recreational opportunities; diversified commercial business opportunities that would meet visitor needs; and minor increases in construction-related expenses.

Impacts on Park Operations. The overall impacts of alternative C on park operations would be long-term, major, and beneficial as a result of improved park conditions, a reduced deferred maintenance backlog, increased maintainability of mechanical systems and infrastructure, improved operational access, a streamlined permitting process for demonstrations and special events, a reduced funding gap between desired conditions and park budgets, and exceedance of sustainability standards for development, renewable energy, and water use.

THE NEXT STEPS

The *Draft National Mall Plan / Environmental Impact Statement* was on public review from December 18, 2009, to March 18, 2010. The NPS planning team evaluated comments from other federal agencies, organizations, businesses, and individuals, and appropriate changes were incorporated into the *Final National Mall Plan / Environmental Impact Statement*. Volume 2 of the final document includes letters received from cooperating agencies, consulting parties, regional governments, organizations, and individuals, along with responses to substantive comments. Following distribution of the final plan and a 30-day no-action period, a record of decision approving a final plan will be signed by the NPS National Capital regional director. The record of decision will document the NPS selection of an alternative for implementation. Once it is signed, the plan can then be implemented.

The approved National Mall plan will provide a comprehensive vision and framework to protect the historic character of the National Mall, to restore its health and beauty, to help it function better as America's civic space, and to meet the needs of local, national, and international visitors today and tomorrow for enjoyment, education, and recreation. However, completing the plan does not ensure that all actions will take place or that funding will be forthcoming. As the plan is implemented, many projects would provide additional opportunities for public involvement. They would also undergo reviews by and consultation with the U.S. Commission of Fine Arts, the National Capital Planning Commission, the Advisory Council on Historic Preservation, and the D.C. Historic Preservation Office. Some projects might require congressional action or changes in federal or park regulations.

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ACRONYMS AND ABBREVIATIONS

ACHP	Advisory Council on Historic Preservation
ADAAG	Americans with Disabilities Act Accessibility Guidelines
AIA	American Institute of Architects
AOC	Architect of the Capitol
ASLA	American Society of Landscape Architects
CEQ	Council on Environmental Quality
CFA	U.S. Commission of Fine Arts
CUE	Center for Urban Ecology (NPS)
CFR	Code of Federal Regulations
DBID	Downtown Business Improvement District
DDOT	D.C. Department of Transportation
FHWA	Federal Highway Administration
GAO	Governmental Accounting Office
GSA	General Services Administration
LCS	List of Classified Structures
LEED	Leadership in Energy and Environmental Design
MWCOG	Metropolitan Washington Council of Governments
NAMA	National Mall and Memorial Parks
NCPC	National Capital Planning Commission
NCR	National Capital Region (NPS)
NHPA	National Historic Preservation Act
NEPA	National Environmental Policy Act
NPCA	National Parks Conservation Association
NPS	National Park Service
PMIS	project management information system (NPS)
SCS	Soil Conservation Service
USACE	U.S. Army Corps of Engineers
USC	United States Code
USDI	U.S. Department of the Interior
US EPA	U.S. Environmental Protection Agency
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
USPP	United States Park Police
WABA	Washington Area Bicyclist Association
WMATA	Washington Metropolitan Area Transit Authority
WMATC	Washington Metropolitan Area Transit Commission

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PURPOSE OF AND NEED FOR THE PLAN

DRAFT
NATIONAL MALL PLAN /
ENVIRONMENTAL IMPACT STATEMENT

THE NATIONAL MALL



WASHINGTON MONUMENT

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INTRODUCTION

The National Mall stretches west from the U.S. Capitol to the Potomac River, and north from the Thomas Jefferson Memorial to Constitution Avenue (see the National Mall Plan Area map). This highly recognizable space, perhaps the most significant historic landscape in the United States, needs a comprehensive plan to address a number of issues. In 2003 Congress stated that the National Mall is a "substantially completed work of civic art" and that no new or unapproved memorials or visitor centers could be added within the area labeled as the Reserve (40 USC 8901 et seq.). Congress also directed the National Park Service (NPS), as the responsible federal agency, to begin planning for the future of the National Mall. The mandate of the National Park Service is to protect resources and provide for visitor enjoyment.

The National Mall is managed as a unit of the national park system by the National Park Service through the National Mall and Memorial Parks (NAMA); many park areas in central Washington, D.C., are managed by the National Mall and Memorial Parks. The National Mall, which is about 684 acres, received more than 22 million visits in 2008, more than twice the number of annual visits reported for Yellowstone, Yosemite, and Grand Canyon national parks combined (10.9 million visits in 2008). Accommodating this level of use and balancing all types of activities within this limited area present enormous challenges.

The National Mall must function efficiently and flexibly at many levels — as the highly symbolic visual setting for our government; as part of the city's circulation and transportation network; as the location of the nation's primary memorials and museums; and as the stage for First Amendment demonstrations, national celebrations, and regional and local special events and activities. The demands on the National Mall are constant and wide-ranging. Every year the National Park Service receives over 6,000 applications for permits, resulting in around 3,000 permitted activities. In 2008 and 2009 between 1,100 and 1,200 permits were issued for events on the National Mall, including First Amendment gatherings and national celebrations. Additional permits were issued for commercial filming and recreation field use, as well as for other national park system units in Washington, D.C.

The wear and tear of concentrated activity affects the landscape and visitor experiences. Facilities can be overwhelmed with use, vegetation cannot easily recover, and turf may be worn to the ground and soils heavily compacted, which in turn adversely affects the vigor of trees and other vegetation. Walks are not wide enough for current levels of use, and adjacent areas may be damaged when use spills off walks or when people choose a more direct route. The combined effects generate heartfelt complaints by visitors about the deteriorated appearance of the National Mall.

Planning must take into consideration the unique urban planning environment of Washington, D.C. Multiple agencies have jurisdiction over lands and roads within and adjacent to the plan area. These agencies include the National Park Service, the Architect of the Capitol, the National Gallery of Art, the Smithsonian Institution, and the Department of Agriculture. Other governmental entities with some level of responsibility within or near the National Mall include the General Services Administration (GSA), the District of Columbia, and the Washington Metropolitan Area Transit Authority (WMATA). In addition, governmental organizations such as the U.S. Commission of Fine Arts, the National Capital Planning Commission (NCPC), and the D.C. Historic Preservation Office have consultation, planning, review, and in some cases approval authority for issues related to planning, historic preservation, commemorative works, and design.

Civic engagement with the public, a vital component of the planning process, has been and will continue to be an open and inclusive process.

PURPOSE OF THE PLAN

The purpose of this planning effort is to prepare a long-term plan that will restore the National Mall so that it may continue to symbolize the ideals and greatness envisioned for the United States of America. The approved plan will serve

as an overarching organizational document for subsequent project implementation. Future implementation plans will generally include standard procedures for site-specific design, commission reviews, public engagement, and historic preservation consultation. As a result, this will be a multiyear and multidisciplinary planning effort. Certain actions may require congressional authorization or revision of federal or park regulations.

Critical to this planning effort is the establishment of a common public understanding of the extent and identity of the National Mall. The National Park Service uses the term National Mall to encompass three specific areas:

- the Mall, which extends from the grounds of the U.S. Capitol to the Washington Monument and includes Union Square
- the Washington Monument and its grounds
- West Potomac Park, which is the setting for numerous memorials, including the Lincoln Memorial, the World War II Memorial, the Vietnam Veterans Memorial, the Korean War Veterans Memorial, the Franklin Delano Roosevelt Memorial, the Tidal Basin, and the Thomas Jefferson Memorial

Often the terms National Mall and the Mall are used interchangeably, and map labeling and references to the National Mall have further created public confusion.

NEED FOR A PLAN

Comprehensive planning is needed to define the future for the National Mall and to detail specific desired conditions and actions. The approved plan will be similar to a general management plan, which the National Park Service requires for all parks, but it will not address all areas managed by the National Mall and Memorial Parks, so it is more focused than a general management plan. A comprehensive plan for the National Mall is needed for the following reasons:

- Congress has directed the National Park Service to plan for the National Mall within the Reserve so as to preserve its character.
- The National Mall must be refurbished so that (1) its treasured memorials and historic landscapes can be preserved, (2) very high levels of use can be sustained, and (3) the needs of visitors can be met. The National Mall plan must address
  - how to improve resource conditions; establish a standard of quality that invites respect and generates stewardship; and raise the standard of care and maintenance
  - how to prepare for intensive levels of use for First Amendment demonstrations, national celebrations, and special events
  - how to provide desired experiences, such as opportunities for education, contemplation, rest, relaxation, recreation, entertainment, and social experiences
  - how to address user capacity, which for this plan is defined as the type and level of visitor use that can be accommodated while sustaining desired resource and visitor experience conditions on the National Mall
  - how to provide for the physical needs, enjoyment, and convenience of visitors and park users, including information, restrooms, food, retail, drinking water, and access
- There may be opportunities for partnership groups to help fund construction, landscape renovation, and maintenance projects.

The need for the plan is further discussed in "Opportunities, Problems, and Challenges" (beginning on page 20).

PLAN OBJECTIVES

Plan objectives identify what achievements would make the plan successful. The objectives take into account the park purpose and significance, NPS policies, planning principles developed in cooperation with other federal and city agencies with planning responsibilities within the District of Columbia, public comments, and park goals and needs.

- ***Cultural Resource Protection***

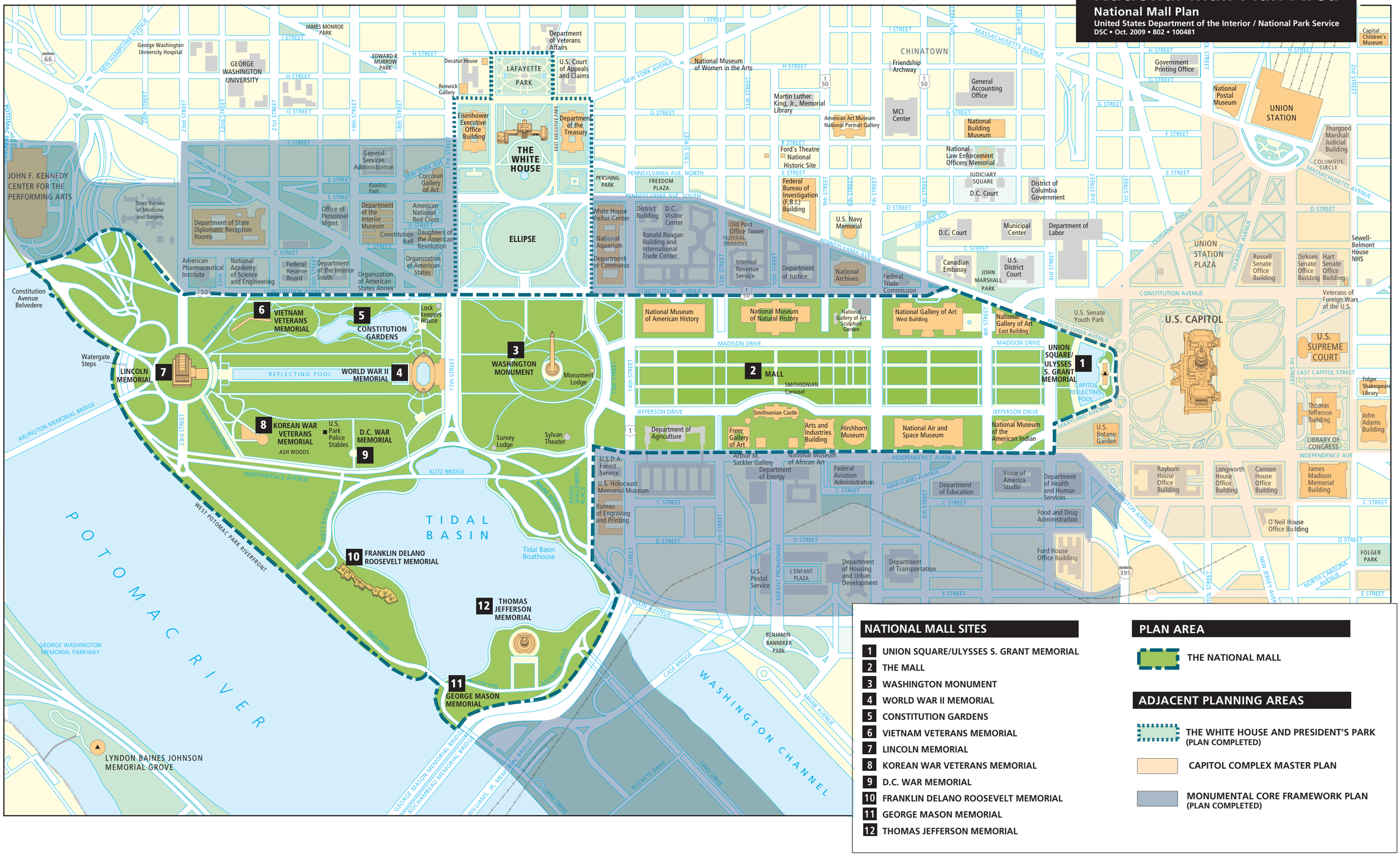
  Primary east-west vistas and several north-south vistas on the National Mall are improved and perpetuated.

National Mall Plan Area

National Mall Plan

United States Department of the Interior / National Park Service

DSC • Oct. 2009 • 802 • 100481



NATIONAL MALL SITES

1. UNION SQUARE/ULYSSES S. GRANT MEMORIAL
2. THE MALL
3. WASHINGTON MONUMENT
4. WORLD WAR II MEMORIAL
5. CONSTITUTION GARDENS
6. VIETNAM VETERANS MEMORIAL
7. LINCOLN MEMORIAL
8. KOREAN WAR VETERANS MEMORIAL
9. D.C. WAR MEMORIAL
10. FRANKLIN DELANO ROOSEVELT MEMORIAL
11. GEORGE MASON MEMORIAL
12. THOMAS JEFFERSON MEMORIAL

PLAN AREA

THE NATIONAL MALL

ADJACENT PLANNING AREAS

THE WHITE HOUSE AND PRESIDENT'S PARK (PLAN COMPLETED)

CAPITOL COMPLEX MASTER PLAN

MONUMENTAL CORE FRAMEWORK PLAN (PLAN COMPLETED)

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Cultural resources, including memorials and their settings, are preserved and protected.

Historic plans for the National Mall are respected. Resources are managed compatibly with the intent of historic plans.

- ***Natural Resource Protection***

  Natural resources, such as water, turf, trees/vegetation, and soils, are improved to be part of a sustainable urban ecosystem.

- ***Demonstrations and Special Events***

  The National Mall remains a venue for First Amendment demonstrations and national celebrations.

  Special events are managed to sustain the health of park resources, to balance the desires of all users, and to ensure a safe environment. No one's enjoyment of the National Mall is unacceptably compromised by others, now or in the future.

  Venues and facilities for demonstrations and special events are provided that are compatible with the historic significance of the National Mall, that enhance the experiences of users, and that accommodate operations efficiently and effectively with minimal impacts on nationally significant resources.

- ***Access and Circulation***

  To fulfill its symbolic and civic importance, the National Mall is a role model of inclusiveness and universal design for all citizens.

  Public access and circulation are convenient, and visitors are easily able to find their way to all sites on the National Mall.

  The National Mall is better integrated with and connected to the urban fabric of Washington, D.C.

- ***Visitor Information, Education, and Enjoyment***

  The National Mall provides the quintessential American experience where visitors can

  - feel welcome
  - fully understand the importance of this preeminent civic area for First Amendment rights
  - learn about our core values as a nation by making an educational, emotional, inspirational, or patriotic connection to the memorials that commemorate our history and the physical design that reflects our democratic form of government
  - appreciate the beauty of the National Mall during the day, at night, and year-round

  Lighting on the National Mall evokes emotion and provides enjoyment, while respecting historic fixtures and existing lighting at memorials. The Washington Monument, Lincoln Memorial, and Thomas Jefferson Memorial (as well as the U.S. Capitol and the White House) continue to be the most prominent nighttime features.

  Visitor information is convenient, accurate, easy to understand, and consistent throughout the site. Information and programs are universally accessible and reach the widest audience possible.

  Visitors understand and appreciate the social experiences they are likely to encounter — millions of people come here to celebrate, commemorate, demonstrate, or recreate.

  Learning opportunities are provided to engage all ages and abilities of an increasingly multicultural and technologically sophisticated society. Educational information inspires all visitors, including populations that have not typically visited national parks.

  Recreational opportunities are balanced with other uses of the National Mall, and both active and passive forms of recreation meet the needs of visitors, residents, and workers.

  The National Mall continues to function as an important part of the D.C. park and open space network.

- *Visitor Amenities*

  Facilities are of high quality and reflect a compatible and enduring character, thus creating a sense of place that reinforces the civic, historic, and symbolic role of the National Mall to our nation.

  Various visitor and commercial amenities are provided that are conveniently located and that are sized and configured to flexibly meet visitor-use patterns during the peak season.

- *Health, Public Safety, and Security*

  Safe, healthy, secure visits are provided, and visitors have adequate notification of emergency situations.

  The National Mall, including all walks and facilities, is a showcase for inclusiveness and universal design.

- *Park Operations*

  The National Mall is a role model in sustainable urban park development, resource protection, and management, focusing on six areas: requirements and policy, resource health, water use, circulation, facilities, and park operations.

  Facilities are consistently maintained to the desired standards of excellence.

  All maintenance and park operations emphasize efficient, effective, and sustainable practices.

  Cooperating agencies coordinate planning, information, services, facilities, and programs for visitors, residents, and the local workforce.

THE PLANNING PROCESS AND PUBLIC ENGAGEMENT

In recognition of the importance of the National Mall to many Americans, this planning effort has and will continue to emphasize open and inclusive communications to engage the public and to understand their desires and concerns. Completing the National Mall plan and subsequent implementation plans will require ongoing consultation and coordination with other entities involved in planning and construction efforts.

The planning process and public involvement are described in detail in the "Consultation and Coordination" chapter, beginning on page 559.

THE NEXT STEPS

The *Draft National Mall Plan / Environmental Impact Statement* was on public review from December 18, 2009, to March 18, 2010, after which the planning team evaluated comments from other federal agencies, organizations, businesses, and individuals regarding the draft plan. Appropriate changes have been incorporated into this *Final Environmental Impact Statement.* Comments from cooperating agencies, consulting parties, regional governments, organizations, and individuals are reprinted in volume 2, along with NPS responses to those comments. Following distribution of the final plan and a 30-day no-action period, a record of decision approving a final plan will be signed by the NPS National Capital regional director. The record of decision will document the NPS selection of an alternative for implementation. Once it is signed, the plan can then be implemented.

The approved National Mall plan will provide a comprehensive vision and framework to protect the historic character of the National Mall, to restore its health and beauty, to help it function better as America's civic space, and to meet the needs of local, national, and international visitors today and tomorrow for enjoyment, education, and recreation. However, completing the plan does not ensure that all actions will take place or that funding will be forthcoming. As the plan is implemented, many of the proposed projects would provide additional opportunities for public involvement. They would undergo reviews by and consultation with the U.S. Commission of Fine Arts, the National Capital Planning Commission, the Advisory Council on Historic Preservation, and the D.C. Historic Preservation Office. Some projects might require congressional action or changes in federal or park regulations.

FOUNDATION FOR PLANNING AND MANAGEMENT

Park planning and management are based on the legal purposes of a park, its significance, its fundamental resources and values, and its primary interpretive themes. These elements establish a foundation for planning and management so that everyone has a shared understanding of what is most important about the park. It is also important to identify the constraints of special mandates on planning and management. The purpose of the foundation statement is to help ensure that planning and management stay focused on what is most important. All alternatives must be consistent with and contribute to fulfilling the park's purpose, significance, and mandates.

- ***Purpose*** — The park purpose is the specific reason that a park was established by Congress or the president. Purpose statements are grounded in a thorough analysis of the park's establishing legislation or executive order, as well as the legislative history and studies prior to authorization. Purpose statements may go beyond a restatement of the law to document shared assumptions about what the law means in terms specific to the park.
- ***Park Significance*** — Park significance statements express why the park's resources and values are important enough to warrant national park designation. The statements capture the essence of the park's importance to our nation's heritage and help ensure that managers make decisions that preserve the resources and values for which the park was established or that are necessary to accomplish the park's mission.
- ***Fundamental Resources and Values*** — These are the most important ideas, tangible resources, or intangible values to be communicated to the public about a park and that warrant primary consideration during planning and management because they contribute to significance and are critical to achieving the park's purpose. A fundamental resource and value is one that was specifically sanctioned by Congress in legislation (such as for a memorial or monument), an important element or remnant of a historic plan (such as the L'Enfant plan), or an element without which the park would be greatly diminished.
- ***Primary Interpretive Themes*** — These are the major messages that visitors to a park should receive during their visit, and they connect park resources to relevant ideas, meanings, concepts, contexts, beliefs, and values. They support the desired interpretive outcome of increasing visitor understanding and appreciation of the significance of the park's resources. Primary interpretive themes are based on the park's purpose and significance.
- ***Other Important Resources and Values*** — Additional resources and values may have particular importance and warrant special consideration during general management planning, even though they do not contribute directly to the purpose and significance of the park.

The five foundational elements for the National Mall plan are presented below. They were developed as part of an NPS Foundation Workshop for the larger National Mall and Memorial Parks held in July 2006. The following purpose and significance statements specific to the National Mall were derived from court decisions; congressional statements; the laws, regulations, and policies that guide the National Park Service; and other laws and plans for Washington, D.C. (The foundation elements for the National Mall and Memorial Parks that relate to the National Mall plan are included in appendix A.)

THE NATIONAL MALL

Purpose

The purposes of the National Mall are to

- Maintain the National Mall in the heart of our nation's capital as a stage for national events and a preeminent national civic space for public gatherings because "it is here that the constitutional rights of speech

and peaceful assembly find their fullest expression."

- Provide a monumental, dignified, and symbolic setting for the governmental structures, museums, and national memorials as first delineated by the L'Enfant plan and further outlined in the McMillan plan, as well as other significant plans.
- Maintain and provide for the use of the National Mall with its public promenades as a completed work of civic art — a designed historic landscape providing extraordinary vistas to symbols of our nation.
- Maintain National Mall commemorative works (memorials, monuments, statues, sites, and gardens) that honor presidential legacies, distinguished public figures, ideas, events, and military and civilian sacrifices and contributions.
- Forever retain the West Potomac Park section of the National Mall as a public park for recreation and enjoyment of the people.
- Maintain the National Mall as an area free of commercial advertising while retaining the ability to recognize sponsors.

Significance

The National Mall is significant for the following reasons:

- *The National Mall is the home to the enduring symbols of our country*. It provides an inspiring setting for memorials, the backdrop for the legislative and executive branches of our government, as well as a visual connection between the branches of government, represented by the United States Capitol and the White House. The National Mall's monuments, memorials, statues, and other commemorative works honor important personages, historical events, and the ideals of democracy. As a result, it offers emotional and intellectual connections that affect our national perceptions, consciousness, and identity.
- *The National Mall is the heart of our nation's capital and has endured since the city's original design by Pierre L'Enfant over 200 years ago*. The form and character of our planned national capital still reflect the historic L'Enfant and McMillan plans.
- *The National Mall is an inclusive and open environment where we celebrate our national identity and important events*. The National Mall, the nation's foremost civic space, is the primary location for political demonstrations, First Amendment activities, rallies, parades, and numerous festivals. Visitors of every race, nationality, and faith come to the National Mall to celebrate, commemorate, demonstrate, or recreate.
- *The National Mall is a preeminent national landscape, and its history and appearance have been enriched by gifts to the United States from other countries*. It is a combination of formal designed areas, such as the Mall and the grounds of the Washington Monument, and naturalistic areas, such as the Tidal Basin and West Potomac Park. Various trees and gardens symbolize cultural and diplomatic exchanges and gifts from other nations — such as the Japanese cherry trees, pagoda, and lantern, and the German-American Friendship Garden, and Italy's gift of the *Arts of Peace*.
- *The National Mall is the center of our nation's cultural heritage*. The National Mall is surrounded by many of the country's most significant educational and cultural institutions, including the national museums of the Smithsonian Institution and the National Gallery of Art, along with the nearby National Archives, the U.S. Bureau of Engraving and Printing, and the U.S. Holocaust Memorial Museum.

Fundamental Resources

Memorials

- Franklin Delano Roosevelt Memorial
- Korean War Veterans Memorial
- Lincoln Memorial and Reflecting Pool
- Thomas Jefferson Memorial
- Ulysses S. Grant Memorial

- Vietnam Veterans Memorial, "In Memory" plaque, *The Three Servicemen* statue, Vietnam Women's Memorial, catalog listing of names on the wall, the flagpole
- Washington Monument
- World War II Memorial
- 56 Signers of the Declaration of Independence Memorial (Constitution Gardens and Lake)
- D.C. War Memorial
- First Air Mail Flight Marker
- George Mason Memorial
- John Ericcson Memorial
- John Paul Jones Memorial
- Martin Luther King, Jr. Commemorative Plaque — "I Have a Dream" Speech (steps of the Lincoln Memorial)

Park Areas

- Constitution Gardens and Lake
- German-American Friendship Garden
- Mall (1st Street to 14th Streets)
- Tidal Basin — first cherry tree planting, first planting plaque, inlet bridge, Japanese lantern, Japanese pagoda, Kutz Bridge, Outlet bridge, seawall, paddleboat kiosk

Statues

- *Arts of Peace* — Rock Creek and Potomac Parkway entrance (the complementary sculptures, *Arts of War*, are under the jurisdiction of George Washington Memorial Parkway)

Views and Vistas

- Hierarchy of internationally recognized symbolic views and vistas based on the L'Enfant and McMillan plans
- Key vistas defined or framed by vegetation, such as the formal rows of American elms on the Mall, European elms along the Lincoln Reflecting Pool, and cherry trees around the Tidal Basin
- The primary east-west cross axis between the Capitol and the Potomac River and beyond, planned by L'Enfant and symbolizing potential westward expansion of the nation, and the north-south vista from the White House to the Thomas Jefferson Memorial
- The Washington Monument — a pivotal, central element of most views and vistas

Plans

- "L'Enfant Plan of the City of Washington" (1791)
- "Ellicott Plan for the City of Washington in the Territory of Columbia" (1792)
- "Report of the Senate Committee on the District of Columbia on the Improvement of the Park System of the District of Columbia" (Senate Report No. 166, 57th Congress, 1st Session, 1902); hereafter referred to as the McMillan plan

Fundamental Values

- A majestic landscape and a fitting setting for the pomp and ceremony of state events, with the symbolism of strength, power, protection, and safety.
- Free and open public access, both to the physical space (which belongs to all citizens and is under the stewardship of the National Park Service) and to the government.
- The nation's premier civic space — a venue for First Amendment demonstrations, national celebrations, reflection and contemplation, recreation, and special events; a place to explore values and ideas that reflect how Americans see themselves; an area free of commercial advertising.
- A visible connection between the legislative and executive branches of government.
- The portrayal of our nation's history in the monuments and memorials that bear testimony to the vision of the founding fathers, and the struggles and sacrifices of extraordinary leaders and ordinary citizens to achieve that vision.

FIGURE 1: THE NATIONAL MALL



The National Mall

- *the home to the enduring symbols of our country*
- *the heart of our nation's capital*
- *a preeminent national landscape*



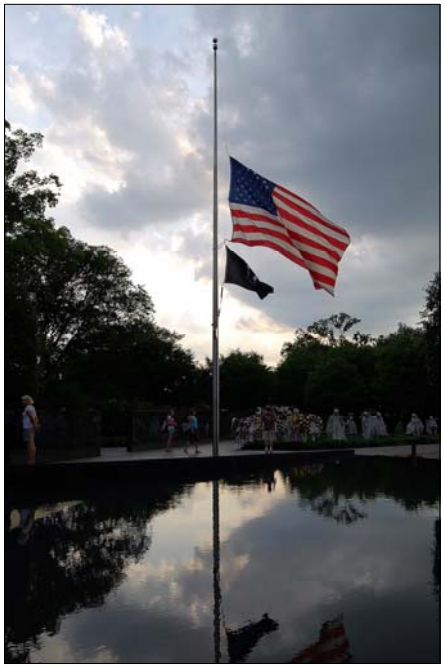















THEY (WHO) SEEK TO ESTABLISH
SYSTEMS OF GOVERNMENT BASED ON
THE REGIMENTATION OF ALL HUMAN
BEINGS BY A HANDFUL OF INDIVIDUAL
RULERS... CALL THIS A NEW ORDER.
IT IS NOT NEW AND IT IS NOT ORDER.





- The ideas and values symbolized in commemorative works — freedom of speech, national union, democracy, courage to fight for ideals, citizenship, patriotism, leadership, invention / innovation, international friendship, justice, unity leading to nationhood, and the emotional connections that provide inspiration and healing.
- The physical and symbolic gateway of the nation's capital, which was oriented to the west, representing national expansion.
- Educational opportunities (museums, cultural institutions, NPS interpretive programs).
- The visibility day and night of the National Mall's architecture and designed landscapes from the sky.
- The contribution of the design and architecture to the city's character, and landmarks that orient visitors to the city.
- Association with the preeminent names in late 19th and early 20th century landscape architecture, including Frederick Law Olmstead Jr.
- Healthy green infrastructure, ecosystems, and rivers; recognition that the National Mall is a significant component of the Washington, D.C., park system.

Primary Interpretive Themes

- The history of our capital and the story of our nation
- The symbolic nature and unique purposes of civic space in the nation's capital:
  - First Amendment freedom of speech
  - celebration and patriotism
  - The National Mall and Reserve as a completed work of civic art
  - L'Enfant and McMillan plans
  - Themes directly related to commemorative works:
    - themes common to multiple memorials (presidential legacies, sacrifice, liberty, equality, democracy, freedom, Civil War, etc.)
    - the Lincoln Memorial at the west end of the National Mall and the Grant Memorial at the east end, which physically and symbolically represent the re-unification of the nation at the end of the Civil War
- Land reclamation by the U.S. Army Corps of Engineers and the creation of park lands for a range of recreational uses

Other Important Resources

- Washington Monument flagpoles and U.S. flags, dedication flag, commemorative stones, plaques, elevation obelisk, Monument Lodge (tickets / bookstore), Survey Lodge (ranger station and information), Jefferson pier marker, Sylvan Theater, Bullfinch gateposts
- Museum collections and/or exhibits associated with the memorial sites — George Washington, Thomas Jefferson, Abraham Lincoln, Franklin Delano Roosevelt, and Vietnam Veterans
- Character-defining historic site furnishings — historic seating (NPS standard Washington benches) and lighting (Olmsted plan, Washington globe, Twin Twenty and Saratoga lantern streetlights)
- Lockkeeper's House for the Washington Canal
- Rainbow Pool Fountain renovated as a central feature at the World War II Memorial
- West Potomac Park — Watergate steps, Constitution Avenue belvedere, riverfront, seawall, and the historic fountain at the George Mason Memorial
- Trails and walks
- Active recreation space and athletic fields for the local workforce, residents, and visitors:
  - ballfields at the Washington Monument and the Franklin Delano Roosevelt Memorial
  - JFK hockey fields
  - Lincoln Memorial volleyball courts and ballfields

- activities such as bicycling, kite flying, Frisbee, baseball, softball, kickball, soccer, touch football
- Tidal Basin paddleboats

LEGAL CONSIDERATIONS

To aid in the discussion about the future of the National Mall, it is important to understand some of the key legal authorities that affect the management of these special areas and that will factor into the planning decisions for the National Mall plan. By no means does this discussion mention all of the authorities that apply. For more information about laws and regulations applying to the National Park Service, see the NPS website at www.nps.gov/applications/npspolicy/index.cfm.

NPS Laws, Regulations, and Policies

The National Park System

As part of the national park system, the National Mall is administered by the National Park Service. NPS historians describe the National Mall as one of the oldest elements of today's national park system, dating from the creation of the District of Columbia in the 1790s. Knowing why these legal considerations apply is essential to factoring them into planning decisions for the National Mall plan. In this instance, many of these laws and other requirements are applicable because these areas are part of the national park system. As described by the NPS *Management Policies 2006,*

> The national park system was created to conserve unimpaired many of the world's most magnificent landscapes, places that enshrine our nation's enduring principles, and places that remind us of the tremendous sacrifices Americans have made on behalf of those principles. They are the most remarkable collection of places in America for recreation and learning. Visitors can immerse themselves in places where events actually happened and enjoy some of the most significant natural and historic places in America. As required by the 1916 Organic Act, these special places must be managed in a special way — a way that allows them to be enjoyed not just by those who are here today, but also by generations that follow (NPS *Management Policies 2006*, p. iii).

Laws, regulations, and authorities that govern the management of the National Mall include those that are applicable to all national parks and to the National Park Service as a federal agency. As explained in the NPS *Management Policies 2006,*

> The management of the national park system and NPS programs is guided by the Constitution, public laws, treaties, proclamations, executive orders, regulations, and directives of the Secretary of the Interior and the Assistant Secretary for Fish and Wildlife and Water (NPS *Management Policies 2006,* p. 2).

The National Historic Preservation Act (NHPA), the National Environmental Policy Act (NEPA), the Clean Air Act, and the Clean Water Act are among the laws applicable across the system. Other laws apply to specific situations, such as those for making planning decisions affecting parks in the greater Washington, D.C., area and that involve the National Capital Planning Commission and the U.S. Commission of Fine Arts. Still other laws and requirements apply to just the National Mall, such as those for individual memorials.

NPS Organic and General Authorities Acts

According to the NPS *Management Policies 2006*, the most important statutory directive for the National Park Service is provided by interrelated provisions of the NPS Organic Act of 1916 and the NPS General Authorities Act of 1970, including amendments to the latter law in 1978. The key management-related provision of the Organic Act (16 USC 1) is as follows:

> [The National Park Service] shall promote and regulate the use of the Federal areas known as national parks, monuments, and reservations hereinafter specified . . . by such means and measures as conform to the fundamental purpose of the said parks, monuments, and reservations, which purpose is to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.

Congress supplemented and clarified these provisions through enactment of the General Authorities Act in 1970, and again through

enactment of a 1978 amendment to that act (16 USC la-1). These acts added

> [t]he authorization of activities shall be construed and the protection, management, and administration of these areas shall be conducted in light of the high public value and integrity of the National Park System and shall not be exercised in derogation of the values and purposes for which these various areas have been established, except as may have been or shall be directly and specifically provided by Congress.

First Amendment Jurisprudence

Any governmental regulation of demonstrations and related sales activities is subject to First Amendment jurisprudence. The National Park Service's regulation of demonstrations and sales activities on federal parkland has been the subject of extensive First Amendment litigation for many years.

Recognizing the importance of the National Mall and its nearby monuments and memorials, the United States Court of Appeals for the District of Columbia Circuit stated that "the Mall is more than home to these enduring symbols of our nationhood." The court opinion continues,

> Its location in the heart of our nation's capital makes it a prime location for demonstrations. It is where Martin Luther King, Jr., delivered his famous "I Have a Dream" speech, where both sides of the abortion debate have staged their demonstrations, and where on any given day one may witness people gathering to voice their public concerns. As the court has stated before, "It is here that the constitutional rights of speech and peaceful assembly find their fullest expression" (*Friends of Vietnam Memorial v. Kennedy,* 116 F.3d 495, 496 (D.C. Cir. 1997), quoting *ISKCON of Potomac v. Kennedy,* 61 F.3d 949, 952 (D.C. Cir. 1995)).

In the context of such longstanding First Amendment jurisprudence, and consistent with NPS regulations and policies that allow demonstrations and sales activities under certain conditions, as discussed below, demonstrations must be considered to be at least legally consistent with the special nature and sanctity of the National Mall. Other cases involving First Amendment rights are listed in Table 1.

Regulating Public Use

Regulations in the *Code of Federal Regulations* (CFR) apply to all federal agencies, and certain regulations apply only to the administration of the national park system. The *Code of Federal Regulations* addresses public use limits, which the superintendent may establish based on a determination that limits are "necessary for the maintenance of public health and safety, protection of environmental and scenic values, protection of natural and cultural resources, . . . or implementation of management responsibilities, equitable allocation and use of facilities, or the avoidance of conflict among visitor use activities" (36 CFR 1.5).

Permitted activities "shall be consistent with legislation, administrative policies and based upon a determination that public health and safety, environmental or scenic values, natural or cultural resources, scientific research, implementation of management responsibilities, proper allocation and use facilities, or the avoidance of conflict among visitor use activities will not be adversely affected" (36 CFR 1.6). A permit may be denied if the capacity of the area or facility would be exceeded by one or more of the factors previously listed.

Regulations at 36 CFR 7.96 contain provisions specific to the greater Washington, D.C., area. The following are provisions that center on public uses and figure prominently in the administration of the National Mall.

Demonstrations, Special Events, and National Celebrations

Demonstrations, special events, and national celebrations are defined as follows (36 CFR 7.96(g)(1)):

- **Demonstrations** — The term includes demonstrations, picketing, speechmaking, marching, holding vigils or religious services, and all other like forms of conduct that involve the communication or expression of views or grievances, engaged in by one or more persons, the conduct of which has the effect, intent, or propensity to draw a crowd or onlookers. This term does not include casual park use by visitors or

TABLE 1: RECENT FIRST AMENDMENT CASE LAW SUMMARY

Date	Topic/Issue and Outcome
1972	If one group is allowed to use structures to communicate views, then others must be similarly allowed. *Women Strike for Peace v. Morton,* 472 F.2d 1273 (D.C. Cir. 1972).
1975	The National Park Service may regulate demonstrations, including permit denial (36 CFR 7.96 (g)) if "enforced uniformly and without discrimination." The National Park Service may not limit the duration of demonstrations in view of the availability of less restrictive methods. *A Quaker Action Group v. Morton,* 516 F.2d 717 (D.C. Cir. 1975).
1982	The application of NPS camping regulations on the National Mall and in Lafayette Park does not violate the First Amendment. The regulation meets the requirements for a reasonable time, place, or manner restriction of expression, whether oral, written, or symbolized by conduct. The regulation is neutral and narrowly focuses on the federal government's substantial interest in maintaining the parks in the heart of the capital in an attractive and intact condition, readily available to the millions of people who wish to see and enjoy them. *Clark v. Community for Creative Non-Violence,* 468 U.S. 288 (1984).
1992	A prohibition against the free distribution of leaflets on certain sidewalks within the restricted zone of the Vietnam Veterans Memorial (36 CFR 7.96(j)(2)(vi)) was voided as not "narrowly tailored." *Henderson v. Lujan,* 964 F.2d 1129 (D.C. Cir. 1992).
1992	A conviction (36 CFR 2.12(a)(1)(i)) for creating an audio disturbance was voided. While the court recognized that the government may justifiably impose sound volume restrictions, the regulation was not "narrowly tailored." *United States v. Doe,* 968 F.2d 86 (D.C. Cir. 1992).
1995	NPS sales regulations (36 CFR 7.96(k)) were upheld as consistent with the First Amendment. *ISKCON of Potomac v. Kennedy,* 61 F.3d 949 (D.C. Cir. 1995).
1997	NPS sales regulations were again upheld as consistent with the First Amendment. *Friends of the Vietnam Veterans Memorial v. Kennedy,* 116 F.3d 495 (D.C. Cir. 1997).
2001	NPS sales regulations were again upheld as consistent with the First Amendment, as well as consistent with Religious Freedom and Restoration Act and equal protections. *Henderson v. Kennedy,* 253 F.3d 12 (D.C. Cir. 2001).

tourists which does not have an intent or propensity to attract a crowd or onlookers.

- **Special events** — The term includes sports events, pageants, celebrations, historical reenactments, regattas, entertainments, exhibitions, parades, fairs, festivals, and similar events (including such events presented by the National Park Service), which are not demonstrations as previously defined, and which are engaged in by one or more persons, the conduct of which has the effect, intent, or propensity to draw a crowd or onlookers. This term also does not include casual park use by visitors or tourists which does not have an intent or propensity to attract a crowd or onlookers.
- **National celebration events —** The term means the annually recurring special events regularly scheduled by the National Capital Region, including Lighting of the National Christmas Tree and Christmas Pathway of Peace, Cherry Blossom Festival, Fourth of July Celebration, Smithsonian Folklife Festival, Columbus Day Commemorative Wreath-Laying, and Presidential Inaugural Ceremonies.

Public gatherings or demonstrations involving more than 25 people within the National Mall and Memorial Parks generally require a permit issued by the National Park Service. To preserve an atmosphere of calm, tranquility, and reverence, certain memorial areas exclude demonstrations or special events. These areas include specific portions of the Washington Monument, the Lincoln Memorial, the Thomas Jefferson Memorial, the Vietnam Veterans Memorial, and the World War II Memorial (see 36 CFR 7.96(g)(3)(ii) for specific exclusions).

A permit may be denied if multiple uses cannot be accommodated in the same area at the same time; there is a clear and present danger to the public safety, good order, or health; the proposed demonstration or special event is of such a nature or duration that it cannot reasonably be accommodated in a certain area; or activities are

contrary to other applicable laws or regulations (36 CFR 7.96(g)(4)(iii)).

Permit conditions for demonstrations and events include how long events may last; hours of operation to avoid unreasonable interference with rush-hour traffic; and allowance of temporary structures erected for the purpose of symbolizing a message or meeting logistical needs (such structures may not unreasonably harm park resources and shall be removed as soon as practicable). Permits for special events are limited to four months. Permits for demonstrations may be extended if space is available (36 CFR 7.96(g)(5)). The regional director may impose reasonable restrictions on the use of temporary structures in the interest of protecting park areas, traffic, and public safety.

Sound amplification equipment is allowed in connection with permitted demonstrations or special events as long as it does not unreasonably disturb nonparticipating persons in, or in the vicinity of, the area (36 CFR 7.96(g)(5)(xii)).

Recreational Activities

Regulations pertaining to recreational activities require permits for organized games such as baseball and football, and for model airplane flying; prohibit athletics if the grounds are wet or otherwise unsuitable for play without damage to the turf; allow fishing in accordance with state law; allow ice skating only in designated areas; and prohibit swimming (36 CFR 7.96(b) through (e)).

Soliciting

Soliciting is allowed if under a permit (*ISKCON of Potomac v. Kennedy,* 61 F.3d 949 (D.C. Cir. 1995)).

Sales

A permit is required for the sale or distribution of books, newspapers, leaflets, pamphlets, buttons, and bumper stickers from a stand or structure during a special event (36 CFR 7.96(k)).

Memorials and the Reserve

Each memorial on the National Mall was placed there pursuant to a specific law or laws enacted by Congress for that particular memorial. Since the mid-1980s the process through which a memorial is authorized, funded, designed, and sited has been governed by the Commemorative Works Act (40 USC 8901 *et seq.*). This law provides standards and requirements for the location, design, and construction of new memorials on federal lands administered by the National Park Service and the General Services Administration in the District of Columbia and a portion of northern Virginia near the District. Provisions of the Commemorative Works Act include those requiring consultation with the National Capital Memorial Commission and for the review and approval of new memorials by the U.S. Commission of Fine Arts and the National Capital Planning Commission. Compliance with this law is informed by memorial guidance plans that have been developed by these commissions and others. Some of the 2003 amendments to this law stemmed from recommendations in these plans that were also presented to Congress in hearings.

The purposes of the Commemorative Works Act include preserving the integrity of the comprehensive design of the L'Enfant and McMillan plans for the nation's capital; ensuring the continued public use and enjoyment of open space in the District of Columbia; preserving and maintaining open space; and ensuring that these memorials are appropriately designed, constructed, and located, and that they reflect a consensus of the lasting national significance of their subjects.

Congress, in the 2003 amendments to the Commemorative Works Act, defined the Reserve as "the great cross-axis of the Mall which . . . generally extends from the United States Capitol to the Lincoln Memorial, and from the White House to the Jefferson Memorial" (sec. 202(a)). The National Mall is located within the Reserve. Frequently, memorials have some visitor facilities such as restrooms, visitor contact stations, and bookstores, but they stop short of being visitor centers both in size and in range and types of facilities they contain. Further, Congress provided that following enactment of the 2003 amendments "no commemorative work or visitor center shall be located within the

Reserve" (sec. 202(b)). This did not include those unbuilt memorials that had been previously approved for sites on the National Mall, such as the Martin Luther King, Jr. Memorial and the Vietnam Veterans Memorial Center.

On December 16, 2003, Congress authorized the establishment of the National Museum of African American History and Culture as part of the Smithsonian Institution and stated that it could be sited in some places on the National Mall. The site selected in January 2006 pursuant to that law is on the Washington Monument grounds, between 14th and 15th Streets NW and Constitution Avenue and Madison Drive NW. At present the site temporarily accommodates an NPS concession facility for refreshments and sundries. The National Park Service will not be administering this museum or its grounds.

Commercial Activities and Transportation

The National Park Service Concessions Management Improvement Act of 1998 directs that "except as provided by this title or otherwise authorized by law, the Secretary [of the Interior] shall utilize concessions contracts to authorize a person, corporation, or other entity to provide accommodations, facilities, and services to visitors of the National Park System" (Public Law [PL] l05-391, sec. 403, 112 Stat. 3504). The NPS regulations concerning concessions are found at 36 CFR Part 51.

It is the policy of Congress and the Secretary of the Interior that visitor services in park areas may be provided only under carefully controlled safeguards against unregulated and indiscriminate use so that commercial activities will not unduly impair park values and resources. Development of visitor services is limited to locations that are consistent to the highest practicable degree with the preservation and conservation of the resources and values of the park area. It is also the policy of the Congress and the secretary that development of visitor services in park areas must be limited to those as are necessary and appropriate for public use and enjoyment of the park area in which they are located.

At present, the National Park Service has a concession contract with Guest Services, Inc., to provide an array of services to visitors to the National Mall. Visitors to the National Mall may also obtain interpretive transportation services through the NPS concessioner known as Landmark Services Tourmobile Inc.

The Department of the Interior and Related Agencies Appropriations Act of 2004 (PL 108-108, Nov. 10, 2003) contains provisions to prohibit the erection, placement, or use of structures and signs bearing commercial advertising at special events on the National Mall (sec. 145). The sponsors of special events may be recognized provided that the size and form of the recognition is consistent with the special nature and sanctity of the National Mall.

The following regulations restrict commercial activities in all units of the national park system:

- **Advertisements** — Commercial notices or advertisements shall not be displayed, posted, or distributed on federally owned or controlled lands within a park area unless prior written permission has been given by the superintendent. Permission may be granted only if such notices and advertisements are found by the superintendent to be desirable and necessary for the convenience and guidance of the public (36 CFR 5.1).
- **Business operations —** Engaging in or soliciting any business in park areas, except in accordance with the provisions of a permit, contract, or other written agreement with the United States, except as such may be specifically authorized under special regulations applicable to a park area, is prohibited (36 CFR 5.3).

SCOPE OF THIS DOCUMENT

This chapter discusses opportunities, problems, and challenges that the alternatives need to address in order to fully meet the purpose of and need for the plan. Following this discussion is a list of the environmental impact topics that have been analyzed in detail; these topics are based on this discussion of opportunities, problems, and challenges, as well as on federal laws, regulations, and policies, and also on public scoping comments. This chapter concludes with a list of the topics that were dismissed from further consideration because there would be no impacts or because the impacts would be negligible or minor.

Both the National Mall and Pennsylvania Avenue were addressed during the early stages of this planning effort. Because the issues facing these areas are somewhat different, a separate environmental document will be prepared for Pennsylvania Avenue. This is consistent with the *Monumental Core Framework Plan: Connecting New Destinations with the National Mall,* a joint effort of the National Capital Planning Commission (NCPC) and the U.S. Commission of Fine Arts (NCPC 2009).

OPPORTUNITIES, PROBLEMS, AND CHALLENGES

A number of critical issues need to be addressed through comprehensive planning. Areas of public interest and concern include preservation of resources and the historic character, the health and appearance of the National Mall, appropriate uses and levels of use, the impacts of permitted events and security on public and recreational uses, and the challenges of maintaining the National Mall to high standards of excellence.

The most important goal for planning is to define a clear and common vision for balancing use of the National Mall, and achieving desired

Ongoing Projects on the National Mall

Several ongoing projects are related to this plan but are beyond its scope because they would be undertaken by other entities or because they have been previously approved and funded and implementation is underway.

When Congress amended the Commemorative Works Act in 2003, it stated that the National Mall is a "completed work of civic art," and it established the Reserve area to protect it (see page 263). The Reserve is to remain free of additional memorials and visitor centers except for the following, which Congress had already approved:

- *Vietnam Veterans Memorial Center* — An underground facility will include restrooms, information, exhibits, administrative space, and a bookstore.
- *National Museum of African American History and Culture* — Land has been transferred to the Smithsonian Institution. The food service and retail functions at the Washington Monument will be relocated.
- *Martin Luther King, Jr. Memorial* — The new memorial will include restrooms, a visitor contact station, and a bookstore.

Memorials are now being considered for sites outside the Reserve. These sites have been indentified in the 2001 *Memorials and Museums Master Plan,* which was produced by the National Capital Planning Commission working with the U.S. Commission of Fine Arts and the National Capital Memorial Commission (which includes the National Park Service) as the Joint Task Force on Memorials. Existing memorials on the National Mall will be maintained and protected under applicable law, regulations, and policy.

Five deferred maintenance projects affecting the National Mall have been funded through the American Recovery and Reinvestment Act of 2009. They include the Lincoln Memorial Reflecting Pool area (lower approachway, pool, and related landscape, plus the north and south elm walks), the D.C. War Memorial, the Thomas Jefferson Memorial plaza seawall, Madison Drive, and Ohio Drive. Also the preferred alternative in the NPS 2006 *Visitor Transportation Study,* which addresses strategies to reduce and manage transportation demand within the area, as well as a visitor transportation service around the National Mall, is being implemented. Other projects include a coordinated National Mall sign system, which has been approved, and the Potomac Park levee project, which will address flood protection for downtown D.C. These projects are considered as present and reasonably foreseeable projects in the cumulative impact analyses in "Environmental Consequences."

natural and cultural resource conditions. The NPS presence is not readily apparent on the National Mall, and the agency's stewardship mission and regulations may not be understood.

National Mall Issues and Background

Cultural Resources

The National Mall's Evolving History

Issue — To what extent can the evolving history of the National Mall be balanced with the conservation of the historic landscape character, and what desired cultural resource management standards should be achieved?

Background — The National Mall concept dates from the 1791 L'Enfant plan and took its present form as a result of the 1901 McMillan plan and other historically significant plans. Within the National Mall separate park areas have evolved as memorials and have been built to honor famous Americans or to commemorate important events. Planning over the last quarter of the 20th century focused on specific projects, such as memorials. The result has been a fragmented approach that affects our country's premier national historic landscape with its great American symbols of democracy.

Primary vistas that were defined in historic landmark plans, along with large areas of unprogrammed open space that emphasize historic landscape features, may be obscured. For example, the view from the White House to the Thomas Jefferson Memorial is somewhat obscured by trees on the northeast side of the Tidal Basin, and temporary facilities for events on the Mall can sometimes obstruct the view between the U.S. Capitol and the Washington Monument.

The Historic Landscape's Health and Appearance

Issue — To what extent can the highest standards for various landscapes be achieved and sustained while accommodating frequent intensive public use?

Background — The National Mall is a symbol of our nation and is expected to exemplify superior standards. Nearly 600 American elms line the Mall and over 2,100 Japanese cherry trees encircle the Tidal Basin. Flower beds are botanical showplaces for thousands of tulips, pansies, and annuals. The impressive mingling of natural and cultural resources has made Washington, D.C., one of the most heavily visited and photographed cities in the world. However, the National Park Service has repeatedly heard from the general public that landscape conditions and maintenance need to be improved.

FIGURE 2: MALL TREE CONDITIONS



It takes many years for replacement trees to reach the height of established trees. The bare spots are the result of temporary event facilities.

Turf and trees are generally perceived as renewable resources, but it takes generations to grow the Mall's magnificent shade and ornamental trees, which are important contributing features of the historic landscape. Over the last two decades there has been a substantial loss of tree cover within the District of Columbia, affecting not only air quality and temperature, but also the quality of life. Soil compaction affects the health of trees, as well as the urban ecosystem, and urban flooding.

Natural Resources

Issue — What is the most appropriate way to deal with water quality issues of natural and man-made features, soil and vegetative conditions, flood control, and urban wildlife?

Background — Water quality issues affect most water features, such as pools and ponds, and changes in water chemistry have resulted in algae growth. Some pools and ornamental fountains lack proper circulation systems, and the Tidal Basin does not flush as intended. Three major water features (the Lincoln Reflecting

Pool, Constitution Gardens Lake, and the Capitol Reflecting Pool at Union Square) use millions of gallons of potable water each year.

About half of the National Mall has been constructed from tidal flats, and much of the western portion of the National Mall lies within the 100- and 500-year floodplains. Imported soils have often been of poor quality. Additionally, soil compaction and hardened turf areas from high levels of use affect tree root systems, particularly the cherry trees near the Tidal Basin and the American elms on the Mall. Social trails (user-created trails off paved paths) adjacent to formal trails or water edges destroy turf and further compact soils. In 1992 the director of the National Capital Region wrote to the director of the National Park Service about the impact of activities on turfgrass on the Mall:

> The only way maintenance efforts can be realized is to restrict the recurrent scheduled activities and heavy visitor use patterns that negate every effort the National Park Service expends to manage the site.

Various urban wildlife species are present, along with less frequently seen fox and deer. Visitors have complained about droppings from resident ducks and Canada geese.

Urban air quality is impacted by vehicular exhaust. Urban sounds, such as traffic and airplane noise, are audible throughout park areas. Water features may mask noise to some degree.

Park managers can do little to prevent global climate change; however, they can take some steps to mitigate its impact. A 3-foot rise in sea levels would affect areas and infrastructure throughout Washington, D.C., including the National Mall. Increased storm severity could result in tidal surges that inundate more park areas.

A U.S. Army Corps of Engineers flood control levee runs north of the Lincoln Reflecting Pool to the Washington Monument grounds. Standards for flood control were modified after Hurricane Katrina, and the levee will need to meet higher standards. As a result, new improvements for the levee are being developed.

Large rainstorms may temporarily exceed the capacity of the stormwater drainage system and result in flooding. There is a high water table as a result of putting Tiber Creek underground to create Constitution Avenue.

Demonstrations, Special Events, and National Celebrations

Issues — Different regulations apply to demonstrations and special events, so the issues are slightly different.

- Within the confines of policy and regulation, to what extent can the ability to accommodate First Amendment demonstrations be improved on the National Mall?
- Within the confines of policy and regulation, to what extent can events be sustainably and efficiently staged on the National Mall while simultaneously achieving desired resource conditions?
- What is the role and physical expression of the civic stage in the 21st century?

Background — The National Mall has been referred to as the nation's front yard, the space where national pageantry, celebrations, cultural events, and demonstrations occur. This highly visible space in the heart of our nation's capital has evolved into the national forum — the place where large and small demonstrations and rallies take place, and where people can petition their government, present and debate differing positions, advocate for action, or express pride in their identity, organizations, or causes.

Over 3,000 permitted demonstrations, national celebrations, and other events (including permitted sporting events) take place annually on the National Mall, including

FIGURE 3: A NATIONAL DEMONSTRATION AT THE U.S. CAPITOL AND UNION SQUARE



Demonstration organizers frequently choose the National Mall because of its high visibility and recognizable national symbols.

- public demonstrations in connection with First Amendment rights
- annual celebrations, such as the National Cherry Blossom Festival, Memorial Day, the Smithsonian Folklife Festival, and the Fourth of July
- regularly scheduled concerts and cultural programs
- hundreds of events such as solar technology displays, book fairs, public employee recognition events, the laying of commemorative wreaths, re-enlistment ceremonies, or school group musical performances, as well as one-time events, such as a state funeral or home building for Hurricane Katrina victims
- annual marathons, triathlons, and foot races benefiting various causes, and hundreds of recreational league team sports

Additionally around 900 commercial filming permits are issued every year.

The sheer number of special events with attendant deliveries and logistics, setup and takedown, and temporary facilities affects landscape health and the ability of NPS staff to maintain park natural resources such as turf and trees. Significant character-defining elements and historic planned vistas are also affected. Temporary facilities, which include stages, signs, tents, bleachers, portable restrooms, and food service, are frequently located on turf or under tree canopies. Turf may be demolished and its health impacted by compaction that affects water infiltration. Compaction near the roots of trees is detrimental to tree health.

A late 1980s practice of installing 6 inches of mulch under trees was abandoned because of the cost burden of clean up. Instead, mats or temporary surfaces are used in some areas. Temporary walks, which spread weight to reduce soil compaction, at the same time deprive the turf of air and moisture, and in hot weather result in burning of the turf. In 1989 construction trenching of more than 4,400 linear feet severed tree roots on the Mall.

Utility infrastructure is lacking, and tent stakes used during events have penetrated into the irrigation system, rendering the system largely dysfunctional.

FIGURE 4: A SPECIAL EVENT ON THE MALL



Tents and other structures are used during permitted events.



Food tents set up in the elm tree panels on the Mall for a permitted event.

A number of highly visible venues are attractive for First Amendment demonstrations because their backdrops contain symbols of our nation. Improvements to access, paving, facilities, and utilities could facilitate demonstrations.

The *Code of Federal Regulations* limits permitted special events (not demonstrations) on the National Mall to four months, including setup and takedown time. This event time limit has not been enforced uniformly. The reservation system for events does not take advantage of current technology.

Access and Circulation

Issue — To what extent can public access be improved?

Background — The urban streets near the National Mall accommodate around 400,000 commuters every weekday. The road system

may be difficult to navigate for infrequent visitors. Crosswalks have limited pedestrian crossing times. There is a large regional bicycle riding population that commutes and engages in recreational riding. Up to 25% of visitors may not be able to walk long distances or may become exhausted from walking between memorials. There are few amenities for pedestrians walking to the National Mall.

The addition of public transit, including the Metro stop in front of the Smithsonian Castle, and increased nighttime visitation are important changes that were not anticipated by the original planners. Once visitors are on the National Mall, public transit access is limited. Tourmobile provides hop-on/-off service to attractions on the National Mall for $27 per day. The Smithsonian–National Gallery of Art Circulator provides seasonal service on Independence and Constitution avenues west to 17th Street.

Parking is at a premium within and near the National Mall, with many more vehicles than parking spaces. The National Park Service provides approximately 1,000 free on-street public parking spaces in and around the Mall. About 550 public parking spaces under the Smithsonian Institution museums were closed between 1983 and 1985 for security reasons. The District of Columbia has 200 parking meters on north-south cross streets (3rd, 4th and 7th streets NW/SW). There are 3,750 on-street metered parking spaces with 0.5 mile north and south of the National Mall. Drop-off locations for visitors with disabilities are not always convenient.

Public scoping comments have suggested that underground parking should be provided on the National Mall. Approved plans by the National Capital Planning Commission and the D.C. government envision a transit-oriented future for central Washington to address congestion and insufficient parking. Up to a third of visitors to the National Mall may arrive by tour bus.

The National Park Service has prepared an *Environmental Assessment and Visitor Transportation Study* (NPS 2006c) to continue providing interpretive visitor transportation service for access to museums and other visitor destinations on or near the National Mall and Pennsylvania Avenue. The system would offer more frequent service to destinations, improved connections to public transit, and links to public transportation. The preferred alternative in the study would be common to all alternatives and has been described under cumulative impacts in the "Environmental Consequences" portion of this document.

Visitor Education, Interpretation, and Enjoyment

The National Mall within a Complex Urban Framework

Issue — To what extent can this national symbolic landscape function efficiently and be compatible with desired experiences of national and international visitors while meeting the needs of federal and city governmental agencies, local residents, and the local workforce?

Background — The National Mall is a pilgrimage site for many people, precisely because it is located at the core of our national capital. It symbolizes the openness and diversity of a democratic society, and its design captures the country's core values and ideals. When it was planned, the National Mall was at the edge of the downtown area, now it is the heart of the city and its role in the city has evolved. The concentration of visitor destinations within the core area and ongoing numerous large-scale gatherings bring vitality to the urban environment, but also complicate maintenance tasks. Landscape conditions are not maintained to the highest standards. Streets accommodate heavy commuter traffic, and a large number of bicyclists use the same walkways as slower pedestrians. To orient people to the city, the Smithsonian Institution makes Tourmobile brochures available at the Smithsonian Castle visitor center, and the NPS Mall kiosk by the Metro entrance is supplied with a Smithsonian-designed Mall map on tear-off pads.

Interpretation / Education

Issue — What kinds of opportunities or improvements in interpretation and education should be made so that park visitors and all Americans can be inspired by the National Mall, as well as understand and enjoy it, and develop a personal stewardship ethic toward supporting its preservation?

FIGURE 5: RECREATION ON THE NATIONAL MALL



Portions of the National Mall are regularly used by local residents for informal recreation.

Background — Visitors come to the National Mall to experience and learn more about our national capital and the wealth of educational, cultural, civic, and recreational opportunities that it offers, from the many monuments and memorials, to the museums of the National Gallery of Art and the Smithsonian Institution, along with the National Archives, the U.S. Capitol, the Library of Congress, the U.S. Botanic Garden, the Supreme Court, the Bureau of Engraving and Printing, and the U.S. Holocaust Memorial Museum.

Memorials and park areas provide numerous opportunities to learn about commemorative sites, unique features, activities or uses such as demonstrations, and site history. With many international tourists, special efforts are made to communicate with non-English speaking visitors. Educational and interpretive opportunities are affected by the numerous activities that occur within the boundaries of the National Mall, from First Amendment demonstrations to large-scale annual celebrations. Space and time constraints also limit interpretive contacts.

Enjoyment

Issue — To what extent can additional opportunities be offered for visitors to enjoy themselves on the National Mall, while respecting the historic design and significance of the area?

Background — Inspiration, welcome, and patriotism are components of an enjoyable visit to the National Mall. Visits may also include programs, performances, demonstrations, sightseeing, and taking pleasure in eating, recreation, or other activities within the context of a nationally symbolic landscape.

Recreational Use

Issue — To what extent can recreational uses of the National Mall be achieved in combination with public gatherings and visitation to monuments, memorials, and museums?

Background — The National Mall has historically been the location for numerous local recreational activities. Passive recreation, such as picnicking, strolling, or sunbathing, occurs simultaneously with informal or organized activities, such as pickup games and league sports (softball, baseball, football, and soccer). The majority of active recreation occurs on open turf areas, with groups supplying their own equipment, such as goals and bases. The only recreational facilities provided are the paddleboats on the Tidal Basin, seasonal ice skating facilities, and a few locations with backstops or goal posts. Skateboarding is prohibited since it damages memorials, curbing, steps, and walls. Swimming and wading in memorial fountains are also prohibited.

Differing goals may result in safety concerns for various types of users. Out-of-town visitors typically want opportunities for passive recreation and sightseeing, along with access to monuments, memorials, and cultural destinations. Local residents, however, may desire consistent access to public open space that is suitable for active recreation. Large-scale events in particular may interfere with either or both of these uses.

Visitor Amenities

Issue — What visitor amenities and services are appropriate? How should the architectural character be unified?

Background — The National Park Service provides visitor amenities such as restrooms, bookstores, and concession and food service facilities. Past planning proposed a wider variety of restaurants and food service.

The variety of architectural styles in visitor facilities within the National Mall does not contribute to a unified identity to make them, as well as the NPS presence, readily apparent. Some facilities are outdated and difficult to maintain. Restrooms are insufficient for demand and are not located near food service outlets. Park furniture is not coordinated, and seating is insufficient at some times and is not focused on views. Shaded seating is highly desirable in the summer as is group seating. Shelter is desirable in case of inclement or hot weather.

The use of multiple types of paving throughout the National Mall does not contribute to a sense of place or unified character. Loose paving material, such as gravel, migrates onto paved walks and into grass. Gravel is also slippery to walk on, dust has resulted in complaints, and it makes access difficult for people with disabilities. Existing paving materials may not meet the needs of joggers and bicyclists.

The night sky in Washington, D.C., is dominated by five symbolic icons that focus how people see the city — the U.S. Capitol, the White House, the Washington Monument, the Lincoln Memorial, and the Thomas Jefferson Memorial. Other public and private buildings, memorials or public art, streets and walks, and park areas are lit to varying degrees, with the potential for conflict. There is no written and approved lighting plan to protect the city's nighttime character and provide guidance.

Food service is offered at refreshment stands and mobile carts, and retail items are available at some locations. Public comments indicate that additional commercial visitor services are desired, including recreational opportunities, such as kayaks, rowboats, model boats, and lawn chairs. The alternatives indicate general locations for these types of opportunities. Park staff must assess the economic feasibility, necessity, and appropriateness of any service changes.

Park staff must also assess the economic feasibility, necessity, and appropriateness of additional commercial services, plus determine the service types and levels that would be offered. Commercial service would be offered using available authorities. Currently authorized visitor services would be continued.

Health, Public Safety, and Security

Issue — What health and safety improvements are needed? How do safe, secure visits correlate with the openness that is characteristic of a democracy?

Background — The National Mall attracts immense numbers of visitors who need and expect adequate safety, public notification, protection from crime, and the ability to get help if they have health emergencies.

The National Capital Planning Commission and consultants have been involved for many years in reviewing the planning, design, and implementation of security measures throughout the District, even before the events of September 11, 2001. Constructed and proposed interim and permanent measures to protect important national symbols have been criticized for altering the character, openness, and democratic symbolism of the National Mall, and also for not addressing the area comprehensively.

NPS perimeter security projects have been completed or are underway for the Washington Monument, the Lincoln Memorial, and the Thomas Jefferson Memorial. Museums lining the Mall also have perimeter security projects underway or completed.

Highly used areas with many different activities can result in safety concerns or use conflicts. Examples are bicycle use on sidewalks and softball games near areas where people are picnicking or walking. Paving materials make some areas difficult to access for visitors with disabilities, and some furniture does not meet accessibility guidelines for disabled individuals.

Pedestrian waiting areas at some intersections are too small. Street crossing times may be too short for many visitors, and jaywalking is common in some areas. Some pedestrian walks are not lit at night. No lighting and low lighting can contribute to occurrences of criminal activity.

Hot, humid weather and air pollution contribute to visitor discomfort and health issues for the public as well as staff. Weather-related warnings are issued as needed both for the public and staff. Drinking fountains need frequent repairs, and surfaces and basins may not be sanitary.

Plastic water bottles generate a large amount of trash, and recycling is not universal.

The General Services Administration operates an aging steam tunnel / vent system that runs under the National Mall. The system needs extensive repairs; some repairs have been recently completed. It contributes to excess moisture inside the Washington Monument and can adversely affects nearby trees and vegetation. The vents attract use by homeless people during cold weather. Steam leaks may result in burns.

Shrub beds and other densely planted areas are used for storage and sleeping by the city's homeless population. Federal regulations prohibit camping on the National Mall. Restrooms and fountains may be misused for personal hygiene.

Nighttime visitation has become more common. Public comments have indicated the need for better lighting in some areas.

Park Operations

Maintenance and Operational Challenges

Issue — What types of facilities, furnishings, or organizational practices would make park maintenance operations more efficient?

Background — There is a substantial amount of deferred maintenance on the National Mall, totaling approximately $508 million. Park staff may not be able to keep up with planned and scheduled maintenance due to multiple, often conflicting and immediate demands. There are over 20,000 light fixtures and various site furnishings, such as bollards, post-and-chain fences, and signs. Park standards are outdated and limited to grounds maintenance; consequently, service improvement opportunities are neglected.

Adequate access for vehicles was never designed, affecting deliveries, trash removal, and grounds maintenance. As a result, vehicles drive over curbs and damage resources, as well as make operations less efficient. Some operations, such as trash removal, can be mechanized to improve efficiencies. There are nearly 900 trash containers, and 3–4 tons of trash are removed daily and up to 32 tons during events, such as the Fourth of July. Even though eating and drinking are prohibited at memorials, spills, stains, and gum removal may require special maintenance techniques.

Site furnishings such as signs, bicycle racks, or seating at specific memorials have been custom designed, or they may be contributing elements of historic landscapes and listed on the National Register of Historic Places. Various non-standardized furnishings (such as irrigation systems, mechanical systems for water features, and light fixtures and bulbs) contribute to maintenance challenges because of the need to stock an assortment of replacement parts and for staff to be familiar with multiple maintenance practices.

Communication capabilities for park operations, events, public information/education, emergencies, or media use are inefficient or lacking.

Specific Area Issues and Background

The Mall

- *Union Square (1st to 3rd Streets)* — The Ulysses S. Grant Memorial needs to be repaired and restored, and the Capitol Reflecting Pool needs to be rehabilitated. The Capitol backdrop makes this a popular venue for demonstrations and events, but there are no amenities or utilities to meet the needs of visitors or demonstrations and permitted events. The large pool is an obstacle to convenient pedestrian circulation between the Capitol and the National Mall. Multiple levels or grade changes inhibit universal access and include narrow walks that limit pedestrian circulation and park

FIGURE 6: UNION SQUARE



Grade level changes at Union Square and deteriorated paving make access difficult for visitors in wheelchairs.

operations. The reflecting pool contains 2.5 million gallons of potable water, but no circulation system, so the water becomes stagnant every summer. The pool is drained and cleaned twice a year. The Architect of the Capitol is responsible for roads surrounding Union Square, including permit parking.

- *The Mall (3rd to 14th Streets)* — The Mall is the designed historic landscape that articulates the vision of the McMillan plan in 1901–02 and renowned landscape architect Frederick Law Olmsted Jr. in the 1930s. The rows of American elm trees define the view between the Capitol and the Washington Monument and are internationally recognized. The shade provided by the mature elms is much appreciated by visitors during the hot, humid summer. Access to the Mall for million of visitors is by way of the Smithsonian Metro station, the only one within the National Mall. In addition to hosting millions of sightseers, the Mall is heavily used for demonstrations and permitted events. Resulting soil compaction affects the designed historic landscape and the health of trees and turf, as well as the urban ecosystem. Poor water infiltration may contribute to urban flooding. The Mall lacks restrooms (see appendix D); while restrooms are available in adjacent museum buildings, these buildings have prescribed hours of operation, and visitors need to go through a security check to use them. Gravel-paved walkways make access difficult for some visitors, and gravel migrates onto lawns. The former Adams and Washington drives, which ran parallel to Jefferson and Madison drives, were closed to traffic in 1975 and replaced with wide graveled walkways over asphalt that run along the inner edges of the rows of American elms.

FIGURE 8: WASHINGTON MONUMENT TEMPORARY CONCESSION FACILITY



The temporary refreshment and retail facility for the Washington Monument is at the future site of the National Museum of African American History and Culture. The tent cover was removed in 2010, while the underlying structure remains.

FIGURE 7: THE SMITHSONIAN METRO STATION



The Smithsonian Metro stop has minimal facilities for visitors.



There is an opportunity to improve information for visitors getting off the Metro at the Smithsonian station.

The Washington Monument and Grounds

- Celebrations, demonstrations, special events, and recreational activities take place on the monument's grounds. The temporary food and retail facility must be relocated to allow for construction of the National Museum of African American History and Culture on the northeast corner of the grounds. Survey Lodge, the main visitor contact station, is off the main circulation

routes and not easy to identify. Circular restrooms near a tour bus drop off are outdated and inadequate for demand. The north grounds are highly used for demonstrations, permitted events, celebrations, civic activities, and recreation, but no infrastructure is provided. The south grounds (south of Independence Avenue), which are cut off by park drives and roadways from both the monument and the Tidal Basin, provide recreation fields.

- In 2003 a landscape plan was approved for the grounds of the Washington Monument. This plan, developed by the Olin Partnership for the National Park Service, called for planting hundreds of additional trees to improve the appearance and health of the grounds, as well as to provide shade, to complement the revised circulation pattern, and to frame the grounds and reinforce viewsheds. The construction of the National Museum for African American History and Culture and other ongoing or proposed projects provide opportunities to update this plan.

West Potomac Park (North of Independence Avenue)

- *World War II Memorial* — No large-scale changes are recommended other than increased education at the World War II Memorial.
- *Constitution Gardens* — The gardens were designed as a resting area for people visiting the memorials. Poor quality soils have stunted tree growth, and the 7-acre concrete-lined shallow lake contains 5.5 million gallons of potable water but no circulation system, resulting in water quality problems. Asphalt walks embedded with small stones are deteriorating and are difficult to maintain.

  The historic Lockkeeper's House, previously moved to the corner of 17th Street and Constitution Avenue NW, is not being used and requires some preservation. Its location near the intersection affects pedestrian visibility and represents a possible threat to its preservation.

FIGURE 9: CONSTITUTION GARDENS LAKE



Constitution Gardens Lake has water quality problems from a lack of adequate water recirculation. The original 1970s plan included a restaurant at the east end of the lake.

- *Vietnam Veterans Memorial* — No opportunities for contemplation are provided near the memorial.
- *Lincoln Memorial and Grounds* — Multiple tour bus arrivals cause peak-season crowding, and restrooms are inadequate and frequently overwhelmed by demand. Recently opened north and south concession / refreshment stands provide visitor services but no restrooms. Concentric rows of elm trees affect where facilities can be placed. The exhibit area and bookstore are outdated.

  Events on the lower approachway require organizers to install temporary utilities and equipment. Issues related to the reflecting pool, approachway, and elm walkways are being addressed under the American Recovery and Reinvestment Act of 2009.

  The Watergate area is on the northwest edge of the National Mall, and it has been identified by the National Capital Planning Commission as a location for future national memorials. This area is discussed in the *Monumental Core Framework Plan: Connecting New Destinations with the National Mall* (NCPC 2009). This primary vehicular entrance to the city contains historic features, volleyball courts, and ballfields. There are proposals by other agencies to rebuild and simplify the road system and celebrate the Constitution Avenue belvedere.

FIGURE 10: TIDAL BASIN WALKWAY



The walkway around the Tidal Basin is frequently flooded by high water.

- *Korean War Veterans Memorial* — Narrow entry walks are frequently congested. Visitor walking patterns have changed, and there is no access from the east.
- *D.C. War Memorial* — This small events venue requires major preservation work, which has been funded by the American Recovery and Reinvestment Act of 2009. Use of the area as a performance venue could be enhanced.
- *Ash Woods* — Utilitarian wood fencing, truck and horse trailer parking, and the office trailer at the U.S. Park Police mounted patrol facilities are not in keeping with the historic character of the National Mall. The access road has become a popular pedestrian route. The circular restrooms on Ash Road are outdated and hard to maintain; this facility is near the newer restrooms at the World War II Memorial.

West Potomac Park (South of Independence Avenue)

- *Tidal Basin Area* — Local streets and parking bisect recreation areas. Commuter and recreational bicyclists share narrow sidewalks with much slower pedestrians.

  The Tidal Basin was designed to help flush the Washington Channel to support navigation. Over the last 100 years the flushing capability has been reduced and the basin has silted in. The Tidal Basin gates were replaced in 2007 to help restore the flushing function to the basin, but additional studies and improvements are needed.

  The deteriorating Tidal Basin walls are overtopped in some areas by high tides, spilling onto walkways and resulting in social trails as visitors try to avoid the water.

  Walkways are too narrow for current levels of use, so the adjacent cherry tree root systems are trampled by visitors. Paddleboats are the only boating choice for recreation, seasonal refreshment and recreation equipment rental facilities are outdated, and no restrooms are available with the exception of those located at the Thomas Jefferson Memorial and the Franklin Delano Roosevelt Memorial.
- *Franklin Delano Roosevelt Memorial* — Visitors trample some planting areas to take photos or shortcuts.
- *West Potomac Park Riverfront* — Dry-laid stone river walls are deteriorating and are overtopped by tidewater and debris. The National Capital Planning Commission's *Extending the Legacy* plan (1997) and the *Monumental Core Framework Plan* (2009) both call for water taxis along the river.
- *Thomas Jefferson Memorial* — The plaza edge is uneven due to the shifting of the Tidal Basin seawalls in front of the memorial, which is being addressed through the American Recovery and Reinvestment Act of 2009. Pedestrian access near the tour bus drop-off area has been controlled to pre-

FIGURE 11: WEST POTOMAC PARK RIVERFRONT



Dry-laid stone riverwalls have deteriorated, and riprap is used is some areas to control erosion.

FIGURE 12: NORTH PLAZA OF THE THOMAS JEFFERSON MEMORIAL



Temporary paving repairs have been made on the north plaza to correct problems caused by the settling seawalls. Permanent repairs have been funded through the American Recovery and Reinvestment Act of 2009 and are now underway.

vent unwanted visitor paths to the Tidal Basin and the memorial. Walks near the Tidal Basin have been relocated so that they are not inundated daily by tides.

ENVIRONMENTAL IMPACT TOPICS

This management plan develops a vision, or a shared understanding between NPS managers and the public, about the kinds of resource conditions, visitor experiences, and facilities that would best fulfill the purposes of the National Mall. Part of this process is the analysis of environmental impacts. This document identifies the types of impacts that would occur and where.

Impact topics were identified on the basis of federal laws, regulations, and executive orders; NPS *Management Policies 2006*; and NPS knowledge of limited or easily affected resources, as well as public input. A brief rationale for the selection of each impact topic is given below.

Impact Topics Analyzed in Detail

Cultural Resources

Impact topics were evaluated for archeological resources, historic properties, cultural landscapes, ethnographic resources, Indian Trust resources, and museum collections. It was determined that historic properties (buildings, sites, structures, objects, districts) and cultural landscapes could be affected by the implementation of the alternatives considered in this document, and they are the focus of the discussion of cultural resource impacts.

- Historic properties consist of several types — memorials, buildings, sites, structures, objects (such as statues), and districts.
- Cultural landscapes are defined areas associated with significant events, persons, design styles, or ways of life (such as a park or an estate).

Only properties listed on, or eligible for listing on, the National Register of Historic Places are considered cultural resources for the purposes of this plan.

It was determined that archeological resources, ethnographic resources, Indian Trust resources, and museum collections were dismissed from further analysis, as explained below.

Natural Resources

Impacts on soils, water resources (including water quality and quantity, floodplains and stormwater, and use of potable water), vegetation, and fish and wildlife are analyzed in detail. Impacts on geology, paleontology, topography, air quality, wetlands, special status species, soundscape, lightscape, climate change, agricultural lands / farmlands, and energy requirements were dismissed from further analysis, as explained beginning on page 34.

Demonstrations, Special Events, and National Celebrations

Impacts on First Amendment demonstrations, celebrations, and special events are analyzed. The analysis also considers opportunities to participate in demonstrations and events, including knowledge about what is happening, where, and how to participate. The capacities of various venues under each alternative are presented.

Access and Circulation

The analysis looks at (1) visitor access and circulation, including vehicle access, parking, and transit access (Metro system as well as taxis); (2) the pedestrian environment , including pedestrian experiences on the National Mall and con-

nections to adjacent areas; (3) bicycle use; and (4) motorized uses and the road system.

Visitor Use and Experience

Impacts are analyzed on a quality visitor experience, which is defined as one that would allow visitors (1) to understand and be able to contemplate core American values, government, and democracy as symbolized by the National Mall's history and memorials, as well as the adjacent cultural institutions; (2) to enjoy a welcoming experience and the beauty of the National Mall, both during the day and at night; and (3) to make emotional or intellectual connections to the National Mall and what it represents. The impacts of opportunities for information and education; for enjoyment, entertainment, and informal recreation; and for active recreation are evaluated. The impacts of visitor facilities and amenities on the visitor experience are also analyzed. Finally impacts on public health and safety, plus user carrying capacities, are analyzed.

Socioeconomic Environment

The analysis considers the impacts of increased visitation; impacts on commercial business opportunities, including commercial facilities for recreation and food service, and the type and dispersal of facilities; the impacts of construction opportunities on the local and regional economy, and visitor costs if free parking is converted to paid parking.

Park Operations

Impacts on park conditions are evaluated in terms of deferred maintenance projects, infrastructure, permitted activities, and staffing. The aspect of efficient and safe operations looks at permit processes for special events, the maintainability of mechanical systems, and best practices for operations that are used for maintaining high-use urban parks. Sustainability is considered in terms of facility design, recycling, water use, renewable energy, and circulation (vehicle trips and congestion).

Impact Topics Dismissed from Further Consideration

The following impact topics were considered, but further analysis showed that there would be no impacts or that the impacts would be negligible to minor.

Cultural Resources

Archeological Resources

Archeological resources — the physical evidence of past human activity — can represent both prehistoric and historic occupations. There is little potential for prehistoric sites to occur throughout most of the National Mall due to the fact that much of the area was created by the filling of Potomac River wetlands. In other areas any prehistoric resources would be so deeply buried as to be effectively inaccessible. There may, however, be areas where prehistoric archeological sites remain intact, although minimal archeological investigations have been undertaken.

The infill that created much of the National Mall may contain historic debris of archeological interest. Historic archeological features likely remain at each of the monument and memorial sites. Examples might be the foundations of buildings that once existed on the Mall, road traces, the remains of railroad structures and tracks, remnants of old landscape features, and canal structures.

While no complete survey or inventory of archeological resources on the National Mall has been attempted in accordance with section 110 of the National Historic Preservation Act of 1966, as amended, NPS policies and procedures require a professional archeologist to evaluate the possibility of such resources occurring before any ground disturbance. Based on previous archeological work, further testing or excavation may or may not be necessary before ground disturbance. As an additional precaution to avoid inadvertent destruction of archeological resources and to expedite project planning, the National Park Service will coordinate with the D.C. Historic Preservation Office to more thoroughly identify areas where archeological monitoring and testing may be appropriate. Should unexpected archeological resources be discovered during the course of proposed work, NPS policy requires that all work be halted until a professional archeological evaluation of the find can be made, along with a determination of its significance.

The NPS regional archeologist of the National Capital Region will determine the efficacy of a complete archeological resource survey of the National Mall in accordance with the National Historic Preservation Act and NPS policy. Until then, or in the absence of a complete archeological inventory, these procedures should provide a level of protection for any archeological resources that remain.

Because the National Park Service is required by law and policy to archeologically evaluate any site proposed for development, and because this plan does not entail actions that would affect specific known archeological resources, this topic has been dismissed from further consideration.

Ethnographic Resources

The NPS *Management Policies 2006* define park ethnographic resources as "the cultural and natural features of a park that are of traditional significance to traditionally associated peoples" (NPS 2006e). Traditionally associated peoples may include contemporary park neighbors as well as ethnic or occupational communities that have been associated with what is now a park for two or more generations (40 years), whose interests in the park's resources began before the park's establishment and whose cultural heritage and traditional way of life are involved.

Traditionally associated peoples generally differ as a group from other park visitors in that they typically assign significance to ethnographic resources — places closely linked with their own sense of purpose, existence as a community, and development as ethnically distinctive peoples. These places may be in urban or rural parks and support ceremonial activities or represent birthplaces of significant individuals, group origin sites, migration routes, or harvesting or collecting places. Although these places have historic attributes that are of great importance to the group, they may not necessarily have a direct association with the reason the park was established or be appropriate as a topic of general public interest. Some ethnographic resources might also be traditional cultural properties. A traditional cultural property is one that is eligible for inclusion on the National Register of Historic Places because of its association with cultural practices or beliefs of a living community that are (1) rooted in that community's history, and (2) important in maintaining the continuing cultural identity of the community (NPS 2006e).

No ethnographic overview and assessment study has been done for the National Mall to identify traditionally associated peoples; however, many park resources have significance to local Washingtonians, veterans, and individuals or groups who associate with the themes of the national memorials. An ethnographic overview and assessment could lead to a review of existing nominations to the National Register of Historic Places to determine if ethnographic data for traditional cultural property status should be included. Some resources have special associations for specific groups of people. Veterans of conflicts may associate with the World War II Memorial, Korean War Veterans Memorial, Vietnam Veterans Memorial, or D.C. War Memorial. Asians may associate with the flowering cherry trees along the Tidal Basin, the Japanese lantern, and the pagoda. The Lincoln Memorial has associations for African Americans owing to President Abraham Lincoln's emancipation of slaves, and events that have occurred on its steps, such as Marian Anderson's 1939 concert and Martin Luther King Jr.'s 1963 "I Have a Dream" speech. No American Indian tribes or sacred sites associated with the National Mall have been identified.

Even though an ethnographic overview and assessment have not been completed, preliminary analysis indicates that this plan will not affect those features that have the potential to be determined ethnographic resources. This plan does not propose any actions that would limit access to any of the monuments, memorials, or other features, nor change their cultural meaning to any group. All visitors will continue to have access to and use of the monuments and memorials as they do now. Permits for events or ceremonies will continue to be issued or denied under current rules and regulations. As a result, this topic has been dismissed from further discussion.

NPS Museum Collections

The museum collections of the National Mall and Memorial Parks contain both natural and

cultural objects. Collections of museum items are preserved either onsite or at the National Capital Region Museum Resource Center.

The Lincoln Memorial collection is made up of approximately 60 objects, only a few of which are actually on exhibit in the museum area, with the rest at the Museum Resource Center. The majority of these objects are related to the construction of the memorial; the installation of the Daniel Chester French statue of Abraham Lincoln or the murals painted by Jules Guerin; objects related to individuals who participated in the construction of the memorial, statue, or murals (ca. 1911–22); and objects related to architect Henry Bacon's involvement in the design and execution of the memorial.

The collection associated with the Washington Monument is made up of objects related to (1) the planning, design, and construction of the monument, including involvement by the Washington Monument Society, the Army Corps of Engineers, and architect Robert Mills, (2) individuals who participated in the construction, and (3) the design, production, and installation of the 191 memorial stones that are set in the interior walls of the monument. All of these objects are housed at the Museum Resource Center.

One object from the small Thomas Jefferson Memorial collection is on display at the memorial; the rest of this collection is housed at the Museum Resource Center.

The Vietnam Veterans Memorial collection is international in scope and is comprised of more than 100,000 objects that have been left at the memorial wall. The collection includes objects directly related to (1) military activities (dog tags, patches, uniforms and military clothing, combat boots, C rations, discharge papers, photographs, and medals); (2) framed and unframed materials (letters, poems, birth announcements, birthday cards, personal dedications, newspaper obituaries, books, Bibles, family photographs, and Vietnam snapshots); and (3) patriotic-to-protest objects (artificial flowers and wreaths, flags, missing-in-action and prisoner-of-war bracelets, clothing, canes, high school diplomas, records and tapes, teddy bears, liquor bottles, beer cans, and cigarette lighters). The collection also includes objects related to designer Maya Ying Lin's involvement in the design and construction of the monument, along with objects related to the Joel Meisner Foundry's involvement in the design, construction, and installation of the *Three Servicemen* statue. The proposed new Vietnam Veterans Memorial Center will exhibit many of the items in the collection, but the majority will remain at the Museum Resource Center.

Under all alternatives nearly all NPS museum objects will continue to be stored offsite at the Museum Resource Center. A small number of selected museum objects will be exhibited in buildings outside the floodplain. In addition, museum objects will continue to be acquired, accessioned and cataloged, preserved, protected, and made available for access and use according to NPS standards and guidelines (NPS 2000b). Therefore, museum objects would not be affected under any alternative, and this topic has been dismissed from further consideration.

Indian Trust Resources

The Department of the Interior is responsible for protecting Indian trust resources, including tribal lands, assets, resources, and treaty rights, that are held in trust by the Secretary of the Interior for the benefit of American Indians due solely to their status as American Indians. There are no Indian trust resources on the National Mall. Therefore, this topic was dismissed from further impact analysis.

Natural Resources

Geology, Paleontology, and Topography

The District of Columbia lies on the line between the Atlantic Coastal Plain physiographic province on the southeast and the Piedmont province on the northwest. This line roughly follows Rock Creek Park. The National Mall lies in the Atlantic Coastal Plain.

The Atlantic Coastal Plain province borders the Atlantic Ocean and consists of gravel, sand, silt, clay, and marl. Deposition of these sediments began 100 million years ago and continues to the present time. The oldest rocks in the Coastal Plain are poorly consolidated (i.e., easily crumbled) gravel, sand, silt, and clay derived from the weathering of rocks to the north and

west that were carried to the Coastal Plain by south-flowing rivers. Younger rocks consist of sands and clays containing the minerals glauconite and mica, which were deposited in estuaries and on the Continental Shelf at a time when water covered the present Coastal Plain to depths of as much as 200 feet (USGS 1999).

The Piedmont Plateau province lies west of the Coastal Plain. Piedmont rocks in and near Washington, D.C., are crystalline metamorphic rocks that are quite hard and resist weathering; they contain veins of quartz and pegmatite, and in many places have been intruded by igneous rock. These crystalline rocks can be seen most easily in valleys where the soil cover has been stripped away by erosion. Most of the crystalline rocks on the uplands were deposited about 550–600 million years ago. Over the ages, they have weathered to saprolite, a porous, spongy, red-brown clay-rich material, as much as 200 feet thick (USGS 1999).

From a surface geology standpoint, most of the study area is identified as disturbed ground and artificial fill. The southern part of the National Mall is low level Pleistocene-era fluvial and estuarine deposits and was originally swampland. It was reclaimed in the late 1800s by fill with material dredged from farther down the river.

The National Mall includes numerous structures built from fossil-bearing rock, such as sandstone, limestone, and marble (metamorphosed limestone) from quarries throughout the country. For example, Indiana limestone (Mississippian-age Salem limestone quarried near Bedford, Indiana) is highly fossiliferous. Marine invertebrate fossils are readily visible in the Indiana limestone used in many structures, such as the Capitol Reflecting Pool. The Lincoln Memorial and other NPS-managed structures also contain fossils in their building stone (NPS 2004c).

Central Washington and the National Mall and Memorial Parks are on a series of terraces that increase in elevation from the Potomac River. The majority of this area reflects the pressures of urban density and growth. The original landform has been highly manipulated to create appropriate settings for government buildings and memorials.

While the action alternatives include construction and landscape management actions, they would occur in previously disturbed areas. Because no alternatives presented in this document include any actions of the scale or type that would affect geologic formation, paleontology, or general topography of the area, these topics were dismissed from further analysis.

Air Quality

The planning area is within the National Capital Interstate Air Quality Control Region. While the District of Columbia region has been designated by the Environmental Protect Agency as a "serious non-attainment area" for fine particulate matter, it meets the national ambient air quality standards for other air pollutants.

The General Conformity Rule of the Clean Air Act Amendment of 1990 requires any federal agency responsible for an action in a non-attainment area to determine that the action is either exempt from the conformity rule requirements or that the action conforms to the applicable state implementation plan. The conformity assessment process is intended to ensure that federal agency actions (1) will not cause or contribute to new violations of the national ambient air quality standards; (2) will not increase the frequency or severity of any existing violations of national ambient air quality standards; and (3) will not delay the timely attainment of ambient air quality standards. An agency may establish that the projected emission rates would be less than specified emission rate thresholds, known as *de minimis* thresholds. If these conditions are met, conformity of a project is presumed.

The problem of urban pollution and acid precipitation (often called acid rain) is of increasing concern in the Washington metropolitan area. Pure, distilled water has a neutral pH of 7. Normal, unpolluted rain is slightly acid, with a pH of 5.6, because the carbon dioxide in air combines with water to form small amounts of a weak acid called carbonic acid. Rainfall in the Washington area has an average pH of 4.2 to 4.4, more than 10 times as acidic as unpolluted rain (USGS 2007). The main source of pollution in the greater Washington region is exhaust from automobiles, trucks, and other forms of transportation.

Vehicle exhaust contains nitrogen oxides and sulfur dioxide, which combine with water to form strong acids.

The stones that form many of the buildings and monuments in Washington are limestone and marble, which are vulnerable to acid precipitation because they are predominantly made of the mineral calcite (calcium carbonate), which dissolves easily in acid.

Should any of the action alternatives be selected, local air quality may be temporarily affected by construction-related activities. The operation of construction equipment would result in increased vehicle emissions in a localized area. Volatile organic compounds, nitrogen compounds, carbon monoxide, and sulfur dioxide emissions would be generated but would disperse fairly quickly from the construction area. This degradation would last only as long as construction activities occurred and would most likely have a negligible effect on regional pollutant levels. Fugitive dust from construction could intermittently increase airborne particulate concentrations in the area near the project site, but standard mitigating measures, such as wetting the disturbed soil, would be used to reduce potential adverse effects to a negligible level. One or more of the alternatives could result in a slight increase in visitation, with a corresponding increase in vehicle emissions. The adverse impacts of this would be reduced as national vehicle emission and fuel-economy standards are revised.

As mentioned above, the single main source of pollution in the greater District of Columbia metropolitan area is vehicle exhaust. The percentage of total vehicles in the metropolitan area that are directly related to visiting the National Mall is quite small during most of the year (non-summer months).

Alternative B proposes adding underground vehicle parking garages. An increase in vehicles and their emissions in the core of the planning area would have adverse impacts on air quality. However, even if 1,000 parking spaces were added, this would be less than a 1% increase in total spaces in the vicinity of the Mall (currently around 400,000). With mitigating factors such as more efficient vehicle standards, this impact is expected to be minor.

One of the goals of the preferred alternative and alternative C is to reduce the park's current output of greenhouse gases by 18% by 2012, which would be a long-term beneficial effect.

These actions would result in short- and long-term, negligible, adverse impacts on local air quality. Because no moderate or major impacts are anticipated from any of the potential actions in this plan, the topic of air quality has been dismissed from further analysis.

Wetlands

Most of the southern and western portions of the National Mall were low-lying swampy wetlands in the late 1800s. The swamp was later drained and/or filled in to create the landscape seen today. Photographs and maps from the 1870s through the early 1900s show the small Babcock Lake near the original Tiber Creek, and a carp pond near the Washington Monument (Milner Associates 2003). These were filled in by 1923.

Currently, wetlands are present in or along the Tidal Basin, the Washington Channel, and Potomac River. The National Wetlands Inventory categorizes the Tidal Basin as a lacustrine unvegetated wetland and the Constitution Gardens Lake as a freshwater pond/palustrine wetland (USFWS 1998).

Wetland habitat supports terrestrial and aquatic invertebrates, fish, waterfowl, reptiles, and amphibians. Uncontrolled growth of blue-green algae and some filamentous algae can reduce the ability of water to support fish.

Federal and state partners of the Chesapeake Bay Program have adopted an interim goal of no overall net loss of the drainage basin's remaining wetlands and a long-term goal of increasing the quality and quantity of the basin's wetlands resource base. Under the preferred alternative and alternative C, naturalized riverbanks would be established in some areas along the Potomac River frontage where existing river walls have deteriorated. These could become small wetland strips along the river. Constitution Gardens Lake would be maintained as a sustainable water body capable of supporting fish. These actions would result in long-term, minor, beneficial impacts to wetlands.

Under alternative B Constitution Gardens Lake would be reconstructed so that it could be drained for use during public events. This would result in the loss of an artificial wetland habitat, a long-term, negligible, adverse impact. Also under alternative B the Capitol Reflecting Pool would be removed, but this feature provides only a very small habitat need for some waterfowl, so the loss would be negligible. There would be no other impacts to wetlands.

Because there would be no moderate or greater impacts, this topic has been dismissed from further analysis.

Special Status Species

Except for occasional transient individuals, no proposed or federally listed endangered or threatened species are known to exist within the planning area (USFWS letter, Sept. 18, 2007).

A federally endangered species, the shortnose sturgeon (*Acipenser brevirostrum*), has recently been found in the Potomac River as far north as Little Falls (USFWS 2009). This large (up to 3 feet) native fish occurs mainly in rivers along the Atlantic coastline from southeastern Canada to Florida but may venture into saltwater. Shortnose sturgeons reportedly prefer deep pools with mixed or hard substrates and vegetated bottoms, but individuals may vary in preference for various water depths and substrate types. They eat mollusks, crustaceans, worms, and aquatic insects.

The current potential for the sturgeon to spawn within this area is of major interest because of the federally endangered status of the species and the federally mandated responsibility of the National Park Service to protect and enhance endangered species. Principal responsibility for the sturgeon rests with the National Oceanic and Atmospheric Administration's Fisheries Service. The National Park Service is responsible for managing the bed of the Potomac River within the District of Columbia where the shortnose sturgeon could potentially spawn.

The shortnose sturgeon was placed on the original endangered species list on March 11, 1967 (32 FR 4001) due to the damming of rivers and over-harvesting throughout its range. The fish was considered extirpated from the Potomac River but, as a result of the Atlantic Sturgeon Reward Program established in 1996 by the U.S. Fish and Wildlife Service, the first shortnose sturgeon since 1899 was found in the river. To date, 10 shortnose sturgeons have been documented from the Potomac (Minkkinen, pers. comm. 2007). Two females were telemetry-tagged, one in 2005 and another in 2006, in an effort to study their movements. Study results were included in an annual report dated March 21, 2007.

It is unlikely that shortnose sturgeon would be present in the Tidal Basin because of warm water temperatures and their preference for using deep channels and a variety of mixed or hard (non-mud) foraging substrates. However, there is always the possibility that an individual could wander into the basin. Therefore, any planned modifications to the substrate in the basin should follow NEPA compliance procedures and address the possibility of an adverse impact on this endangered species. While Washington, D.C., maintains water control into the basin, the National Park Service should exercise vigilance for any actions that could degrade water quality.

Under the action alternatives the subsiding Tidal Basin seawalls would be rebuilt, and under the preferred alternative and alternatives B and C the walkways atop the walls would be widened. Widening the walkways could require moving the basin walls into the basin, resulting in the loss of about 5 acres of warm, shallow water habitat. However, since the Tidal Basin is artificial, the long-term impacts of this would be adverse but negligible. Construction would result in short-term, negligible, adverse impacts because of habitat disturbance and sedimentation. Since it is unlikely that the shortnose sturgeon inhabits the basin, construction-related impacts would be unlikely to adversely affect this species. Other actions would have no effect on listed species or their habitat because they are not known to inhabit the planning area.

Species identified by the D.C. Department of the Environment as those in greatest need of conservation are listed in Table 2.

Bald eagles have been observed using the project area. Many black-crowned night herons are seen in the park, including Constitution Gardens

TABLE 2: SPECIES OF GREATEST CONSERVATION NEED, WASHINGTON, D.C.

Common Name	Scientific Name
Bald eagle	*Haliaeetus leucocephalus*
Black-crowned night heron	*Nictocorax nictocorax*
Scarlet tanager	*Prianga olivacea*
Wood thrush	*Hylocichla mustelina*

SOURCE: D.C. Department of the Environment, electronic letter, August 27, 2007.

Lake. Scarlet tanagers and wood thrushes have been seen in the vicinity of the National Mall. Both birds are migratory and have been recorded as breeding in the area (DC 2007). No nesting sites for either species are known within the study area.

Under the preferred alternative and alternative C portions of the wall along the Potomac River would be removed and replaced with native materials to create more natural riparian areas. This would result in a long-term, negligible, beneficial impact for special status species with riparian habitat needs, such as the D.C. listed black-crowned night heron.

Implementing the no-action alternative would have no effect on special status species. The action alternatives could affect, but would be unlikely to adversely affect, the federally listed shortnose sturgeon. They would result in negligible beneficial impacts to the D.C. listed black-crowned night heron. Because there would be no moderate or greater impacts and no adverse effects to special status species, this topic has been dismissed from further analysis.

Soundscape Management

In accordance with NPS *Management Policies 2006* and *Director's Order #47, Sound Preservation and Noise Management,* an important part of the National Park Service mission is the preservation of natural soundscapes associated with national park system units. Natural soundscapes exist in the absence of human-caused sound. The natural ambient soundscape is the aggregate of all the natural sounds that occur in park units, together with the physical capacity for transmitting natural sounds. Natural sounds occur within and beyond the range of sounds that humans can perceive and can be transmitted through air, water, or solid materials. The frequencies, magnitudes, and durations of human-caused sound considered acceptable vary among national park system units, as well as potentially throughout each park unit, being generally greater in developed areas and less in undeveloped areas.

The National Mall is in a highly urbanized area, where the protection of a natural ambient soundscape and/or opportunities for visitors to experience natural sound environments is not an objective of the park. Visitors would not come to the park to seek the quiet, intermittent sounds of nature.

Any construction associated with the implementation of the selected alternative, e.g., the hauling of material or the operation of construction equipment, could result in dissonant sounds, but such sounds would be temporary and not out-of-place in an urban setting. Because protection of a natural ambient soundscape and/or opportunities for visitors to experience natural sound environments is not an objective of the park, soundscape management was dismissed as an impact topic.

Lightscape Management

In accordance with NPS *Management Policies 2006,* the National Park Service strives to preserve natural ambient landscapes, which are natural resources and values that exist in the absence of human-caused light.

Due to its highly urbanized setting, the preservation of natural ambient landscapes is not an objective at the National Mall. The night sky in Washington, D.C., is dominated by lighting of five symbolic icons — the U.S. Capitol, the White House, the Washington Monument, the Lincoln Memorial, and the Thomas Jefferson Memorial. Other public and private buildings, memorials, public art, streets and walks, and park areas are lit to varying degrees.

Under the action alternatives the National Park Service would work closely with the Commission of Fine Arts, the National Capital Planning Commission, the Architect of the Capitol, the Smithsonian Institution, and D.C. city agencies to reestablish the lighting task force to develop an approved, written comprehensive lighting guideline for the monumental core that would address protection to maintain dominant light-

ing of the five symbolic icons, desired lighting character for urban and park areas, appropriate light levels and color for different areas, and light pollution / protection of night sky from excessive, horizontal light pollution. Any impacts of a lighting guideline would be beneficial, and lightscape management was dismissed as an impact topic.

Agricultural Lands, Prime and Unique Farmlands

No soils known in the planning area are regulated under the Federal Farmland Protection Policy Act. Additionally, no soils are identified as prime farmland, unique farmland, farmland of statewide importance, or hydric soils by the Natural Resources Conservation Service. None of the alternatives would affect agricultural lands or prime and unique farmlands as defined by the Natural Resource Conservation Service, so these resources have been dismissed from analysis.

Energy Requirements and Conservation Potential

Implementing any of the action alternatives would result in new facilities requiring energy use. The National Park Service has adopted the concept of sustainable design as a guiding principle of facility planning and development (NPS *Management Policies 2006,* sec. 9.1.1.6). The objectives of sustainability are to design facilities to minimize adverse effects on natural and cultural values, to reflect their environmental setting, and to require the least amount of nonrenewable fuels or energy. All NPS facility development must include improvements in energy efficiency and reduction in greenhouse gas emissions. In all the action alternatives new and reused facilities would be designed with long-term sustainability in mind.

Action alternatives could result in changed energy needs, but this change is expected to be negligible when seen in a regional context. Thus, this topic has been dismissed from further analysis.

Climate Change

Related to the energy use discussion is climate change, the human-caused change to global climate patterns. Climate change is perhaps the most far-reaching and irreversible threat the national park system has ever faced (NPCA 2007). Climate change in this context refers to a suite of changes occurring in Earth's atmospheric, hydrologic, and oceanic systems. These changes, including increased global air and ocean temperatures, widespread melting of snow and ice, and rising average sea level, provide unequivocal evidence that the climate system is warming. While the warming trend, commonly referred to as global warming, is discernible over the entire past century and a half, recent decades have exhibited an accelerated warming rate, with 11 of the last 12 years ranking among the 12 warmest years on record.

While climate change is a global phenomenon, it manifests itself differently in different places. One of the most dramatic effects is the impact on sea level. A rise in sea level could affect natural and cultural resources, and it would likely interfere with public use and enjoyment of parks in low-lying coastal areas. Although many places in the world have already observed and recorded changes that can be attributed to climate change, the impacts on the National Mall have not been specifically determined. Climate change is a long-term phenomenon, and the likelihood that significant effects will be seen during the life of this plan (50 years) is fairly certain. Some models predict a sea level rise of 15 to 37 inches in the Chesapeake Bay region.

Climate change and the response of governmental agencies are guided by the following regulations and policies:

- Executive Order 13423, "Strengthening Federal Environmental, Energy, and Transportation Management" (issued January 24, 2007), requires federal agencies to "conduct their environmental, transportation, and energy-related activities under the law in support of their respective missions in an environmentally, economically, and fiscally sound, integrated, continuously improving, efficient, and sustainable manner." It includes requirements for the reduction of greenhouse gases and implementation of other energy and water conservation measures. The order requires agencies to reduce greenhouse gas emissions by 3% annually through the end of fiscal year 2015, or 30% by the end of fiscal year 2015,

relative to the baseline of the agency's energy use in fiscal year 2003.

- *DOI Secretarial Order 3226* (issued January 19, 2001) ensures that climate change impacts are taken into account in connection with departmental planning and decision making.
- NPS *Management Policies 2006* state that "the Service will use all available authorities to protect park resources and values from potentially harmful activities. . . . NPS managers must always seek ways to avoid, or minimize to the greatest degree possible, adverse impacts on park resources and values" (NPS 2006e, sec. 4.7.2).

  The policies also discuss sustainable energy design, requiring any facility development to include improvements in energy efficiency and reduction in greenhouse gas emissions for both the building envelope and the mechanical systems that support the facility (NPS 2006e, sec. 9.1.1.6). Additionally, projects that include major visitor services facilities must incorporate Leadership in Energy and Environmental Design (LEED) standards to achieve a silver rating.

  The National Park Service will interpret for the public the overall resource protection benefits from the efficient use of energy, and will actively educate and motivate park personnel and visitors to use sustainable practices in conserving energy (NPS 2006e, sec. 9.1.7).

Implementing any of the alternatives described in this plan would have very little effect on the cumulative level of greenhouse gas emissions or other climate change factors (e.g., the carbon footprint) in the District of Columbia. However, the National Park Service is considering several management directions to reduce the park's contribution to climate change factors. Examples include replacing the current fleet of vehicles and motorized equipment with more fuel-efficient or alternate fuel models, adding insulation and weather-proofing to existing buildings, and using solar panels to generate electricity. New construction, such as restrooms and food service buildings under the preferred alternative, would be constructed to be energy efficient and sustainable. As part of an NPS initiative, the public would receive educational messages about reducing our impact on the climate. These programs and others would be implemented under all alternatives and would contribute to national and international efforts to decrease the effects of human-caused climate change.

Over the life of this plan, it is anticipated that national emission-reduction efforts and new technologies will become available that would decrease the overall output of greenhouse gases and other pollutants from motor vehicles.

Implementation of the preferred alternative could slightly increase total visitation to the park. If all of these visitors arrived by private vehicle, this would result in a corresponding increase in vehicle emissions. Therefore, the consequences of implementing this plan would be long-term, negligible, and adverse to climate change. Because there would be no impacts that would be moderate or higher in intensity, this topic was dismissed from further analysis.

Natural or Depletable Resource Requirements and Conservation Potential

Consideration of these topics is required by the Council on Environmental Quality's NEPA regulations (40 CFR 1502.16). The National Park Service has adopted the concept of sustainable design as a guiding principle of facility planning and development (NPS 2006e, sec. 9.1.1.6). The objectives of sustainability are to design facilities to minimize adverse effects on natural and cultural values; to reflect their environmental setting and to maintain and encourage biodiversity; to operate and maintain facilities to promote their sustainability; and to illustrate and promote conservation principles and practices through sustainable design and ecologically sensitive use. Essentially, sustainability is the concept of living within the environment with the least impact on the environment.

The planning area is an urban setting. Through sustainable design concepts and other resource management principles, no alternative analyzed in this document would result in an appreciable loss of natural or depletable resources. Thus, this topic was dismissed from further analysis.

Visitor Experience: Commercially Provided Opportunities

No alternative would affect commercial providers, sightseeing buses, or commercial guides that offer tours or guided walks on the National Mall. Financial transactions would continue to be made off park land. Therefore, this topic was dismissed from further analysis.

Park Operations

Operational Partnerships

The National Park Service has several operational partnerships for bookstores, programs, specific memorials, fundraising, law enforcement, recreation, and national celebrations or televised concerts. The Park Service maintains recreation fields that are permitted through the D.C. Department of Parks and Recreation. Under every alternative partnerships would continue and would not change as a result of a National Mall management plan. Agreements would be updated as needed. Therefore, this topic was dismissed from further analysis.

Shared Infrastructure and Jurisdiction

There are areas of shared infrastructure such as city-provided utilities (power, water, sewer) and GSA steamlines. Issues related to overlapping jurisdiction include roads, signs, and traffic signals. Any future actions by others would undergo collaborative planning, reviews, and approvals to ensure that the actions were beneficial to all parties. Sustainability and efficient park operations would be included in the collaborative process. As a result, any infrastructure upgrades or jurisdictional revisions would not change as a result of the plan. Therefore, no further analysis was conducted.

Perimeter Security

Common to every alternative would be the installation of authorized and funded perimeter security for the Thomas Jefferson Memorial and the Martin Luther King, Jr. Memorial, as well as the adjacent Smithsonian Institution museums, the National Gallery of Art, and federal buildings such as the Department of Agriculture. Any perimeter security improvements would undergo review by the National Capital Planning Commission and Commission of Fine Arts. The Washington Monument temporary security screening will be removed and replaced by an approved replacement screening approach. A goal of all security is to minimize the visual impact of security elements so they do not detract from the open character that defines the desired experience. There would be no change as a result of the plan; therefore, this topic was dismissed from further analysis.

Environmental Justice

Executive Order 12898 requires all federal agencies to incorporate environmental justice into their missions by identifying and addressing disproportionately high and adverse human health or environmental effects of their programs and policies on minorities and low-income populations and communities.

The Washington, D.C., metropolitan area contains both minority and low-income populations; however, environmental justice is dismissed as an impact topic for the following reasons:

- The park staff and planning team actively solicited public participation as part of the planning process and gave equal consideration to all input from persons regardless of age, race, income status, or other socioeconomic or demographic factors.
- Implementation of any alternative would not result in any identifiable adverse human health effects. Therefore, there would be no direct or indirect adverse effects on any minority or low-income population.
- The impacts associated with implementation of any of the alternatives would not disproportionately affect any minority or low-income population or community.
- Implementation of any of the alternatives would not result in any identified effects that would be specific to any minority or low-income community.
- The impacts to the socioeconomic environment resulting from implementation of any of the action alternatives would be predominantly beneficial. In addition, the park staff and planning team do not anticipate the impacts on the socioeconomic environment to appreciably alter the physical and social structure of nearby communities.

INTERRELATIONSHIPS WITH OTHER PLANS AND PROJECTS

Planning by the National Park Service for the National Mall takes place within an urban framework of roads, buildings, and open space (see Urban Design Framework map). Washington, D.C., is an outgrowth of the L'Enfant and McMillan plans, and early in the 20th century Congress created the United States Commission of Fine Arts and the National Capital Planning Commission to protect the visions of these visionary plans. Since 1933 the National Park Service has been responsible for managing federal park lands in Washington, D.C.

Planning for the National Mall is integrally tied to other comprehensive or cooperative planning efforts in the District of Columbia. These interrelated efforts are summarized below, and specific plans and projects are also considered in the cumulative impacts analysis in the "Environmental Consequences" portion of this document.

Planning and compliance for the Vietnam Veterans Memorial Center, the Dr. Martin Luther King, Jr. Memorial, and the National Museum of African American History and Culture is ongoing by each sponsor. The National Park Service is assisting in the planning and compliance efforts for each of these projects, and opportunities for public involvement are being provided through the NEPA and NHPA compliance processes.

ARCHITECT OF THE CAPITOL

The Architect of the Capitol's *Capitol Complex Master Plan* is an update of the 1981 *U.S. Capitol Master Plan,* which aligned with the 1970s NPS plans for the Mall. The revised plan addresses areas east of the National Mall, including the Capitol, the U.S. Supreme Court, the U.S. Botanic Garden, and the Library of Congress. The plan is a long-range vision, master plan, and implementation strategy for the maintenance, renovation, and improvement of the Capitol complex over the next 20 years. The planning principles address stewardship, urban form and context, and workplace and visitor needs and issues.

Planning for the design of Union Square would be coordinated with the Architect of the Capitol and could also consider design implications related to the U.S. Senate Youth Park and U.S. Botanic Garden Education and Outreach Center to the north, as well as the parking function within the rights-of-way of Maryland and Pennsylvania avenues between 1st and 3rd streets.

NATIONAL CAPITAL PLANNING COMMISSION

In the 1920s the National Capital Park and Planning Commission (renamed the National Capital Planning Commission in 1952) hired Frederick Law Olmsted Jr., an original member of the McMillan Commission, to prepare plans to implement the McMillan plan. Some of his resulting plans addressed the entire area, such as an illustrative master plan from 1939 that delineated a somewhat simplified vision of the McMillan plan. The Olmsted Jr. plans were implemented in Union Square and the Mall. His work at Union Square was changed in the 1970s by the "Washington Mall Plan" (Skidmore, Owings and Merrill 1973), but his design on the Mall retains great integrity.

In 1997 the National Capital Planning Commission prepared *Extending the Legacy,* which laid the groundwork for Congress to amend the Commemorative Works Act in 2003 to strengthen and clarify the act's purpose and to designate the Reserve area. The *Legacy* plan provides an overarching vision for the nation's capital that builds on the principles of the L'Enfant and McMillan plans and is their successor. It calls for re-centering the city on the U.S. Capitol by mixing public and private uses and extending new public buildings, memorials, and museums into all quadrants of the city.

The 2001 *Memorials and Museums Master Plan* identifies more than 100 sites in Washington, D.C., for future commemorative works and cul-

tural attractions, recognizing that the Reserve does not contain sufficient space to keep pace with our nation's evolving history and the need to commemorate its culture, heroes, and history in the future. Five of these sites have been selected for new memorials, including the U.S. Air Force Memorial and the Dwight D. Eisenhower Memorial.

The *Comprehensive Plan for the National Capital: Federal Elements* creates a planning framework connected by the following guiding principles: (1) accommodate federal and national activities, (2) reinforce smart growth and sustainable development and planning principles, and (3) support local and regional planning and development objectives (NCPC 2004a). Visitor elements, transportation, and open space goals are compatible with the National Mall plan.

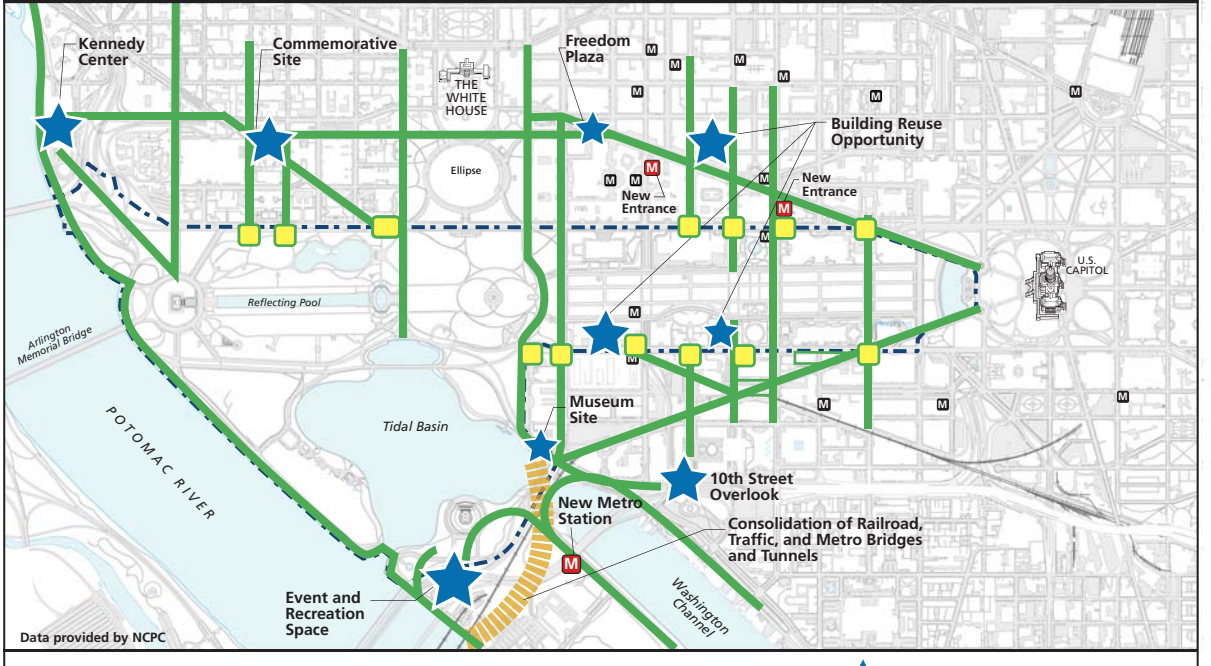
The *Comprehensive Plan* also called for an updated master plan for the National Mall. This *Final Plan / Environmental Impact Statement* presents the National Park Service's vision for the National Mall, something that has been missing. It also includes additional topics not covered in a master plan as defined by the National Capital Planning Commission.

The *Monumental Core Framework Plan: Connecting New Destinations with the National Mall* is a joint effort of the National Capital Planning Commission and the U.S. Commission of Fine Arts (NCPC 2009). It advances the vision articulated in the *Legacy* plan by focusing on the areas immediately adjacent to the National Mall. Through more detailed planning, it identifies opportunities to transform the architectural monumentality of the core to more contextual place-making. The *Framework Plan* lays out a series of proposals to integrate the civic qualities of the National Mall with the vitality of the city to create new destinations that will be prestigious locations for future cultural attractions, distinguished settings for government offices, and inviting places to enrich the experience of people who live, work, or visit here. Water taxi service with transfers to other transit modes is included, as it was in the 1997 *Legacy* plan.

Monumental Core Framework Plan Opportunities

Monumental Core Framework Plan Opportunities

U.S. Commission of Fine Arts
National Capital Planning Commission
DSC • May 2010 • 802 • 100474A



National Mall Plan Area
Bridge / Roadway

Existing Metro Station
Additional Metro Station or Entrance

Key MCFP Destinations
Key Connection / Access Point

Related to access and circulation, a long-term vision in the *Framework Plan* is to (1) relocate and consolidate the I-395/14th Street bridges (the George Mason, Rochambeau, Arland D. Williams Jr., Metro, and railroad bridges) to the south to create additional gathering space southeast of the Thomas Jefferson Memorial, (2) develop a new Metro station near the Thomas Jefferson Memorial, (3) provide new Metro station entries at 7th Street and Constitution Avenue NW, (4) add midblock crossings on Constitution Avenue, and (5) redesign roads north of Constitution Avenue and west of 23rd Street NW to improve pedestrian access and connections to neighborhoods and the Kennedy Center. The *Framework Plan* focuses on this area and recommends minimizing above-grade infrastructure and establishing: (1) a symbolic, visual, and physical connection between the Kennedy Center and the Lincoln Memorial; (2) commemorative and recreation space and improved pedestrian and bicyclist paths along the waterfront; and (3) an extension of Constitution Avenue to the historic belvedere. The National Park Service supports this vision. On April 2, 2009, the *Framework Plan* was approved (NCPC 2009). The National Mall planning effort has been coordinated with the development of the *Framework Plan*.

DISTRICT OF COLUMBIA

The District of Columbia's *City Center Action Agenda 2008* identifies challenges and actions needed to ensure the vitality and vibrancy of central Washington. It recognizes the great opportunity to develop well-connected and distinct areas in a rapidly expanding downtown area that now has the National Mall as its centerpiece. The plan advances Washington's identity as a waterfront city, and it recommends investment in key places, corridors, and transit to ensure economic vitality, sustainability, and cultural diversity (District of Columbia 2008). The plan identified 4th, 7th, and 14th streets as priority corridors for crossing the Mall; 10th Street would be restored north of the National History Museum. Additionally, the NCPC *Framework Plan* proposes pedestrian improvements along 12th, 14th, 15th, and 17th streets, as well as west of 17th Street.

SMITHSONIAN INSTITUTION

The Smithsonian Institution's Arts and Industries Building, which is just south of the Mall, has been suggested as a visitor or welcome center for the National Mall. The building is outside the Reserve, where visitor centers are prohibited. The Smithsonian Institution has stated that they believe visitors could be well served by coordinated and combined information. The building has large open exhibit halls, natural daylight, and is close to two subway stops. The Smithsonian Institution has begun repair and preservation work at the Arts and Industries Building, which has been funded by the American Recovery and Reinvestment Act of 2009. The ultimate use and treatment of the building is yet to be determined.

On May 8, 2008, the National Museum of American Latino Community Commission Act was signed into law (PL 110-229). The Hispanic caucus has asked that no permanent decision on the Arts and Industries Building be made until the commission has assessed it as a possible location for a new National Museum of the American Latino.

Under all alternatives the National Park Service will track progress on the future of this historic building and provide comment as needed. Any proposals affecting the National Park Service will be fully analyzed to determine their value, financial implications, and operational impacts.

NPS PLANNING EFFORTS

Visitor Transportation Study

The National Park Service prepared an *Environmental Assessment for a Visitor Transportation Study for the National Mall and Surrounding Park Areas* in 2006. A "Finding of No Significant Impact" for the *Visitor Transportation Study* was signed February 5, 2010, completing the planning effort. Park staff have begun discussions with the city and public transportation providers about potential partnerships. The study recommends a convenient visitor transportation service that will help protect park resources and ensure high-quality visitor experiences by offering a sustainable, educational, integrated, and affordable transportation network for park visitors (NPS 2006c). The service will replace the existing

Urban Design Framework

National Mall Plan

United States Department of the Interior • National Park Service

DSC • April 2010 • 802 • 100480

North

0 500 1,000 1,500 2,000 Feet

0 200 400 600 800 Meters

- Open Space in the Heart of Our Nation's Capital
- Gardens / Sculpture Gardens / Plazas
- Symbols of Our Nation
- Commemorative Works
- Primary Vistas — Great Cross Axis of National Mall
- Other Vistas
- Formal Landscape
- Built Environment

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educational hop-on / -off service known as Tourmobile. The plan proposes an integrated, easy-to-use system with basic orientation and a choice of additional educational / interpretive services.

The proposed service includes:

- a two-way National Mall route and an additional one-way loop linking the memorial core area to downtown
- a one-way loop serving Arlington Cemetery, with extensions to the U.S. Marine Corps (Iwo Jima) Memorial; future extensions are also proposed to the U.S. Air Force Memorial and the U.S. Department of Defense September 11th Memorial

These proposals could be compatible with existing transit, such as the Metrobus Circulator.

Free parking provided by the National Park Service in the vicinity of the National Mall would be changed to metered parking, and routes would be designated for the recreational use of Segway® HTs and electric scooters.

All visitor transportation service should be more frequent and at a lower cost. Additional convenient stops will be provided at Metro stations. All alternatives in this document are consistent with the proposed transportation service.

Mall Soil and Turf Study

In 2010 at the request of Secretary of the Interior Ken Salazar, a consultant design team with expertise in sports field development is developing a plan to restore the central Mall turf panels. The approach is to remove soil to a depth of about 2 feet and replace it with a compaction-resistant but drainable soil system. Turf panels would be crowned for good drainage, as they were designed in the 1930s by Frederick Law Olmsted Jr. The project includes the development of a durable irrigation system that would have the capacity to capture and reuse water from surrounding sources, such as groundwater currently being removed from tunnels under the National Mall. This sustainable approach would help meet the requirements of Executive Order 13514 ("Federal Leadership in Environmental, Energy, and Economic Performance") to reduce the use of potable water by 26% by 2020.

The White House and President's Park

The goal of the *Comprehensive Design Plan for the White House and President's Park* (NPS 2000a) is to improve the efficient functioning of the Office of the President, to preserve and enhance the symbolic and historic character of the site, and to improve the experience of the American public and all visitors who come to the house, the grounds, and the surrounding President's Park. The plan emphasizes a pedestrian-oriented experience within President's Park, and the White House Visitor Center in the Commerce Building would be expanded. Any actions taken under a National Mall plan would complement the *Comprehensive Design Plan for the White House and President's Park.*

The *Design Guidelines for the White House and President's Park* (NPS 1997) provide a framework of mutually agreed upon tenets that guide, but do not dictate, future designs. The White House and President's Park will continue to exhibit a sense of unity and to be an integral element of the urban fabric, with a direct connection to the District of Columbia, the monumental core, and the National Mall.

Center for Urban Ecology

The National Park Service's Center for Urban Ecology provides scientific guidance, technical assistance, and education for the preservation, conservation, and enhancement of park resources within urban landscapes. The center is committed to improving and conserving the quality of natural resources throughout the National Capital Region of the National Park Service. Working with resource managers, researchers, and the public, the center strives to discover and incorporate new ways to understand, preserve, and enhance natural communities within and around the national parks in the Washington, D.C., area. The center's research and initiatives continue to provide planning guidance on issues affecting the National Mall plan.

The center can undertake inventories, conduct monitoring, and prepare reports related to air and climate, geology and soils, water resources, biological integrity, and landscape dynamics. In the past they were involved in several studies of soils

that addressed compaction. The booklet *Values and Challenges in Urban Ecology* (NPS 2008f) identifies several challenges in urban park areas, including impervious surfaces and trees.

INTERAGENCY PLANNING EFFORTS

CapitalSpace

Washington, D.C., has more than 7,650 acres of public parks, ranging from Rock Creek Park to small neighborhood parks, playgrounds and ballfields. The National Capital Planning Commission, the National Park Service, and the District of Columbia have formed CapitalSpace to enhance existing plans for D.C. parks by providing closer coordination of separate initiatives (NCPC et al. 2008). The goal is to develop a citywide framework to achieve the full potential of a beautiful, high-quality, and unified park system for the nation's capital. As such, the National Mall and all of the areas managed by the National Mall and Memorial Parks play an important role in providing for active and passive recreation. The CapitalSpace initiative includes maps that provide a comprehensive analysis of access to various existing park resources, including active recreation fields, natural resources, and passive recreation amenities.

CapitalSpace envisions a beautiful, high-quality, unified park system for the nation's capital that

- is safe and accessible to everyone who lives in, works in, or visits the city
- includes a variety of parks and open spaces that connect communities
- incorporates stewardship and celebration or natural, cultural, commemorative and historic spaces
- provides a diversity of active and passive recreation
- contributes to a healthy, sustainable, and livable city
- serves as a national and international model of citizen engagement and collaboration

Planning Together for Central Washington

Planning Together for Central Washington is a collaborative effort of the Architect of the Capitol, the Commission of Fine Arts, the District of Columbia, the National Capital Planning Commission, and the National Park Service. Each of these agencies is undertaking major planning initiatives for central Washington, which together provide a framework to coordinate planning and investment to ensure that central Washington continues to serve as a model for the nation and the world through its cultural venues, its architecture and open spaces, its vibrant walkable neighborhoods and public transit, and its national and international presence. While each initiative reflects the mission and goals of its sponsoring agency, the plans share core objectives and implementation priorities.

Common objectives that the agencies have adopted include the following:

- *Welcoming Atmosphere* — Create an atmosphere that embraces local citizens and visitors, statesmen, foreign dignitaries, and the global media. Celebrate the warmth of a friendly town, the dignity of a seat of government, and the vibrancy of a progressive international city. Provide opportunities for the exchange of ideas, citizen action, enjoyment, and meaningful encounters and events. Create public spaces that are attractive year-round as well as programs and services that are accessible and easy to use.
- *Well-Connected Public Space* — Create a distinguished and accessible public realm of enduring quality shaped by beautiful civic infrastructure, architecture, streets, parks, and waterfronts. Connect destinations and overcome existing physical barriers with walkable landscaped corridors, interpretive and wayfinding systems, and engaging views. Meet the highest standards for design, construction, and maintenance.
- *Distinctive Places* — Create or renew neighborhoods and public places throughout central Washington to provide a mix of uses and experiences that are authentic, diverse, and reflect the city's history and culture. Devote attention and infrastructure reinvestment to ensure that the National Mall

remains a destination worthy of its civic, historic, and symbolic role in serving the city and the nation. Refurbish historic government facilities and sites that serve the American people and house the three branches of government.

- *Green and Sustainable* — Achieve a livable, healthy, and sustainable environment with clean air, water, and soil by using model development and maintenance practices. Apply an integrated ecological approach to implement programs for controlling emissions, plant trees, preserve and connect open spaces, encourage green and sustainable building practices, reduce pollutants, conserve energy, and reuse and recycle water and materials.
- *21st Century Transportation* — Establish a comprehensive, flexible, convenient, and coordinated network of public and visitor transit options — subway, light rail, streetcar, bus, water taxi — linking central Washington destinations to support economic investment and environmental health. Upgrade public infrastructure to encourage walking and bicycling, and develop comprehensive travel demand management programs to reduce congestion, improve air quality, and address parking and tour bus issues.

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ALTERNATIVES

DRAFT
NATIONAL MALL PLAN /
ENVIRONMENTAL IMPACT STATEMENT

THE NATIONAL MALL



THOMAS
JEFFERSON
MEMORIAL

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OVERVIEW OF ALTERNATIVES

This part of the *Final Environmental Impact Statement* presents the alternatives that are being considered for the long-term management of the National Mall. This overview section summarizes the process that was used to develop the alternatives, the range of alternatives being considered, and some of the best practices that were considered as the alternatives were developed. The overview is followed by a description of the conservation zones that are being proposed for the plan. The zones define desired resource and visitor experience conditions, along with appropriate uses and facilities and user capacities.

The next section describes actions common to all alternatives, followed by the highlights of each alternative presented in narrative form. Actions that were considered but dismissed are discussed beginning on page 129. The alternatives are then compared in terms of conceptual costs (beginning on page 137) and how well they would meet the goals of the National Environmental Policy Act (beginning on page 138) and plan objectives (Table 6, page 145). Table 7, beginning on page 156, presents all of the actions for each alternative in detail, allowing readers to directly compare what actions would take place under each alternative. Finally, a summary of impacts is presented in Table 8 (page 250) so readers can compare the level of impact under each alternative; this summary is based on the detailed impact analysis in the "Environmental Consequences."

DEVELOPMENT OF ALTERNATIVES

The National Park Service develops alternatives with input from several sources, including public comments, internal scoping, cooperating agency workshops, and cultural resource consultations in accordance with the National Historic Preservation Act. The process is a two-way exchange of ideas with the public, cooperating agencies, and others, and it ultimately leads to the development of the agency's preferred alternative.

The planning process began with an understanding and affirmation of the National Mall's purpose and significance, along with planning constraints, mandates, and NPS *Management Policies 2006*. Through internal scoping the National Park Service continually identified and revisited planning issues that would need to be addressed. Internal scoping also included discussions and workshops with other federal and local agencies that cooperate in planning. Studies of best practices were undertaken to examine how others successfully deal with similar issues or what is considered today's "state of the art" in pertinent topics.

Public Involvement and Preliminary Alternatives

Public participation and public comments were solicited through newsletters, public meetings, and on the park's planning website (www.nps.gov/nationalmallplan/). Reports, newsletters, and background information were made available on the website.

Three public meeting periods with multiple meetings were held during (1) scoping, (2) the development of alternatives, and (3) when a preliminary preferred alternative was announced. The National Park Service has met and made presentations to a number of citizen, civic, and educational groups and organizations.

Newsletter 1 (fall 2006) was a public scoping newsletter, which asked the public to identify what is important about the National Mall and what actions they think need to be taken to address issues and concerns. Newsletter 2 (summer 2007) summarized the resulting public scoping comments. Newsletter 3 (fall 2007) presented a range of preliminary alternatives that were based on public ideas. Readers were asked to identify which ideas they thought should be incorporated into a preferred alternative and why.

Using Choosing by Advantages to Develop a Preliminary Preferred Alternative

The planning team worked with park staff and cooperating agencies to refine all of the preliminary alternatives, and the Choosing by Advan-

tages process was used to compare, rate, and rank the advantages of alternative actions. This process looked at how well each alternative would address the following factors (in order of ranking importance, not the importance of resources):

1. providing enjoyable visitor experiences (providing a quality American experience)
2. improving natural resources
3. improving the ability to host national celebrations, First Amendment demonstrations, and permitted events
4. improving health and safety
5. protecting cultural resources (cultural resources must be protected; there was little difference among the alternatives in how this would be done so this factor did not rank as high)
6. improving park operations
7. providing other benefits

As a result of this process, the preferred alternative was developed, which included some new ideas as well as ideas from the preliminary alternatives presented in newsletter 3. Once the actions were identified, the comparable costs of the alternatives were considered (see page 137). The goal in developing the preferred alternative was to maximize the advantages to the public, as well as the National Park Service, and to provide an appropriate level of quality, while minimizing the costs. The preliminary preferred alternative was presented for public comment in newsletter 4 in spring 2009, providing another opportunity for public involvement before this *Final Environmental Impact Statement* was issued.

Public and agency involvement in the development of the alternatives is further discussed under "Consultation and Coordination," beginning on page 559. Because of interest and concern about the National Mall's cultural resources, consultation under section 106 of National Historic Preservation Act began when the range of alternatives was developed, much earlier than the preferred alternative stage, which is the usual time for consultations.

Range of Alternatives Considered in this Document

Some actions are common to all alternatives. Actions already authorized by Congress for the National Mall would continue. First Amendment demonstrations would continue to be fully accommodated, along with national celebrations and permitted special events. Other actions that would be taken under all alternatives include certain actions relating to historic and natural resources; access and circulation; visitor information, orientation, and enjoyment; visitor amenities; health, public safety, and security; and park operations.

The five alternatives that are being considered for the protection, use, and management of the National Mall are described in the following order:

- *No-Action Alternative* — This alternative describes current conditions and the continuation of current management. It establishes the baseline to compare all the other alternatives.
- *Preferred Alternative* — The preferred alternative is the National Park Service's proposed course of action in this *Final Environmental Impact Statement.* The intent of this alternative would be to establish a sense of place and an overall identity for the National Mall as the preeminent civic stage for our country, creating a coherent pedestrian environment that would complement and balance the natural environment, the National Mall's historic character, the combination of formal and informal features, and national commemorative works. The preferred alternative includes actions from alternatives A, B, and C.
- *Alternative A* — With a focus on the historic landscape and education, alternative A would restore and maintain the resources of the National Mall as a historic landscape. The designed historic landscape would evolve and its value over time would change, reflecting significant national events.
- *Alternative B* — Alternative B would improve the National Mall as the nation's premier civic space and would support very

high use levels. The National Mall's evolving ceremonial, celebratory, cultural, and visitor uses would be emphasized.

- *Alternative C* — Alternative C would meet evolving recreational needs in the nation's capital by providing beautiful, enjoyable, and ecologically sustainable open spaces that could be adapted to changing recreational patterns of diverse local and national users.

SUMMARY OF BEST PRACTICES

Before work was begun to develop the alternatives, best management practices used by others were researched to provide a foundation for determining what steps could be taken to improve maintenance and operations for the National Mall. Two studies examined a number of the best management practices used at designed landscapes in Washington, D.C., and at heavily used landscapes in New York City, Chicago, San Francisco, Atlanta, London, Ottawa, and Canberra. The review of best practices has been an ongoing process as alternatives were developed, and the most applicable practices have been included in the action alternatives. The best practices that have been considered in the development of alternatives are summarized below and are more fully discussed in appendix B.

Sustainable Sites Initiative

The Sustainable Sites Initiative™ is an interdisciplinary partnership led by the American Society of Landscape Architects (ASLA), the Lady Bird Johnson Wildflower Center, and the United States Botanic Garden. The partnership is seeking to create and implement clear and rigorous design, construction, operations, and maintenance criteria that would supplement existing green building and landscape guidelines, as well as to create a stand-alone tool for site sustainability (ASLA et al. 2008). The main principle is that sustainable land practices enable natural and built systems to work together to protect and enhance the ability of landscapes to provide services such as climate regulation, clean air and water, and improved quality of life. The U.S. Green Building Council anticipates incorporating proposed benchmarks into future versions of the LEED® Green Building Rating System™.

The initiative's guidelines and benchmarks are designed to preserve or restore a site's sustainability within the context of ecosystem services — the idea that healthy ecosystems provide goods and services of benefit to humans and other organisms. Restoring soils and integrating green stormwater management that would address collection, conveyance, detention, treatment, and reuse are best practices. In addition to collecting and cleansing stormwater, these techniques can also help recharge groundwater supplies and reduce the use of potable water for irrigation and water features. Sustainable maintenance reduces resource consumption and waste, enhances flora and fauna health and diversity, and provides positive and healthy experiences.

To maintain a landscape for long-term sustainability, the following operation and maintenance guidelines are recommended:

- Develop a landscape maintenance plan that outlines the long-term strategic plan for the site and identifies short-term action plans to achieve sustainable maintenance goals.
- Use vegetation trimmings generated during operations and maintenance as compost and mulch to improve soil health and reduce the need for chemical fertilizers, irrigation, and pesticides.
- Provide space for collecting recyclables (including paper, glass, plastics, and metals) to facilitate recycling and reduce waste generation and waste disposal in landfills.
- Use electricity from renewable sources to reduce a site's carbon footprint and to minimize air pollution and habitat destruction.

Design Features for Public Use and Maintenance

Destinations should be convenient and flexible, and they should be well used throughout the day so people are comfortable being there. Best practices for design include creating a sense of place and enhancing landscape appearance through a hierarchy of design for site furniture (benches, trash cans, information stations, light

fixtures, and orientation signs), with coordinated logos, color systems, signage, uniforms, and messages. Quality places are pleasant to be in and appeal to all five senses. Quality is the result of design, construction, facility condition, and maintenance. All four are needed components to achieve the desired standards. High-quality and durable materials and details can attract users, contribute to respect and user stewardship, and deter vandalism. Quality, comfort, cleanliness, and feelings of safety make a good first impression.

Certain visitor amenities go together, such as signs, seating areas, cafés, restrooms, and pathway intersections. Combining activities and uses in one area can help create a comfortable social place for people to relax and attend to several needs at once (Project for Public Spaces 2008). Encouraging visitors to linger at visitor service locations can concentrate trash where it can be handled, reducing trash at memorials or other trash-free zones.

Designs need to consider the ease of maintenance and typical uses, as well as incorporate ergonomics that support employee safety. Access and circulation routes should accommodate staff and maintenance vehicles, in addition to pedestrians and other types of use.

Excessive lighting and light pollution should be reduced. Cities as well as national and international associations (the American Medical Association, the International Dark-Sky Association, and environmental organizations) are increasingly concerned about the impact of light pollution and are seeking to reduce excessive lighting and its attendant biological and health concerns. Green and sustainable approaches are often required so that lighting provides safety, and night lighting is appropriate for the type of use and the environment. Less energy consumptive approaches are desirable. Standards are included in both LEED and the Sustainable Sites Initiative™.

Cultural Resources

Maintaining the historic character and identity of places and adaptively reusing historic structures to ensure their preservation are widely used best practices.

Natural Resources

Soil function should be maintained or restored to support healthy plants, biological communities, infiltration, and water storage. Erosion and compaction should be alleviated.

Green, organic landscapes are often safer, cleaner, and healthier for everyone. The public should understand "green" goals. Plants need to be selected that are suitable for the area to ensure that they will grow and that they can be easily maintained. Urban water ecology and sustainable management should be promoted.

Event Management

Spaces should be designed to sustainably accommodate demonstrations and events, including venues with hard surfaces and necessary infrastructure, specific locations for support facilities (such as portable restrooms), defined access routes, and specific procedures for event setup and takedown. On-line access for information and permit applications can make the process more efficient for event organizers in terms of scheduling and understanding permit requirements, as well as for onsite management.

Public Access

Walking environments should be safe, comfortable, convenient, efficient, and welcoming. Good pedestrian environments provide seating, human-scale street furniture, and interesting pedestrian amenities that make walking pleasurable. Multiple means of transportation access are available. Street crossings are safe, and various traffic-calming measures are used. Motorists and pedestrians are equitably treated; for example, waits at stoplights are equal for both pedestrians and drivers and vehicles do not have priority in walkable urban areas.

Better public transportation access equates with improved quality of life and better environmental quality. Connections between different modes of transit (subways, buses) should be facilitated. Increased bicycle use and alternative public transportation are important components of sustainable urban areas. Congestion, air quality, and quality of life can be enhanced by reducing private vehicle use and providing more integrated transit services.

Curbside loading / unloading areas should be designated, along with areas where these uses are prohibited, and time limits should be enforced for stopping or idling (3–10 minutes). Long-term parking should be provided in peripheral areas or at centrally located off-street, multimodal parking facilities.

Visitor Experience

Memorable visitor experiences can be created by considering all aspects of how visitors get to the park, find out where to go, learn about what they are seeing, and move through the site. In addition, providing quality places that are pleasant to be in can help visitors enjoy being on site, knowing that they are in a safe environment and that they can easily take care of personal needs. Onsite staff, settings, and programs should all support memorable visitor experiences.

Providing many diverse types of activities and choices of things to do will appeal to diverse users and all age groups. Sufficient convenient and accessible visitor amenities (rest areas, water, food service, gift shops, and stroller and locker rentals) should be sized and configured to meet the visitation levels on high-volume days.

To reduce congestion, use during non-peak times can be encouraged through coordination with tour companies and by using incentives and programs such as pricing breaks, advanced reservation systems, timed ticketing, and the scheduling of permitted events and programs during non-peak times or at locations that can accommodate more use.

Utilizing multiple types of food service — ranging from mobile carts, refreshment stands, food courts, order-ahead picnic or pickup food, to full-service restaurants — will meet a variety of user needs. The recommended split is 80% fast-food to 20% full-service facilities. Mobile carts are generally around 5% of the 80%.

Quality retail merchandise directly related to the experience should be available at all price ranges.

Operations and Maintenance

Building public support and encouraging positive visitor behavior can help achieve higher maintenance standards. Well-maintained and clean areas encourage a higher standard of behavior, along with prominently displayed visitor rules of behavior and visible management and staff presence. Taking time to help users understand regulations, limits, and maintenance goals will help gain their cooperation and support. Simple but visually unobtrusive systems, such as flags, can be used to identify areas closed for restoration.

Maintenance standards should be written so that all staff understand desired conditions, along with their role in achieving them. All staff members should help achieve standards and set a visible example for the public to follow, such as picking up trash or thanking people for their help in maintaining clean areas. In addition, written standards and guidelines for all staff should be focused on creating memorable visitor experiences.

Best practices for waste management include concentrating trash-generating activities at specific places, such as food service locations or refreshment stands. Trash and recycling containers should always be located together and have restricted openings so the containers are not misused. They should also have highly visible symbols and messages.

Trash and recyclable pickups should be mechanized to promote efficiency and reduce the potential for staff injuries. Regular maintenance needs to be provided during open hours. Use levels in facilities such as restrooms should be monitored so that facilities are cleaned in a timely fashion and the desired standard of care is achieved. Trash collection during the evening hours should be frequent enough to keep the trash receptacles tidy every night of the year.

Electronic monitoring can be used to identify maintenance needs (burned out light bulbs) or to set regular maintenance schedules (such as self-cleaning restrooms). A public website can also help identify maintenance and repair needs, as well as respond to public concerns.

CONSERVATION ZONES AND USER CAPACITIES

The National Park Service requires management plans to include descriptions of park management zones and user capacities (also known as carrying capacities) that are consistent with these management zones. (For this plan the term conservation zone is used rather than management zone to avoid confusion with city zoning requirements.) The National Park Service uses zoning to define the desired resource and visitor experience conditions, along with the appropriate uses and facilities that are proposed for each zone. Conservation zones are delineated for each alternative to illustrate intended resource conditions, visitor experiences, and management activities. No conservation zones have been defined for the no-action alternative.

As defined in the NPS *Management Policies 2006*, "Visitor carrying capacity is the type and level of visitor use that can be accommodated while sustaining the desired resource and visitor experience conditions in the park" (NPS 2006e, sec. 8.2.1). Park superintendents are to identify and stay within user capacities so that resources and values for which the park was established are not unacceptably impacted. In addition, ways to monitor for and address unacceptable impacts on park resources and visitor experiences are to be identified.

Conservation zones and user capacities are correlated because the zoning plan establishes the desired resource conditions and visitor experiences, which have implications for the kinds and levels of use that can be accommodated in an area. The intent of this section is to outline the criteria for desired park conditions, along with appropriate uses and facilities to support those conditions, and desired visitor experiences. Some desired conditions may apply throughout the National Mall, but the delineation of conservation zones will illustrate where there are differences in intended resource conditions, visitor experiences, and management activities (NPS 2006e, sec. 2.3.1.2).

Four conservation zones have been defined to protect resource conditions and the quality of visitor experiences on the National Mall. They are

- memorials
- character protection areas
- multipurpose areas
- high-use areas

Areas within each zone may have specific requirements or characteristics. Because each alternative has a difference emphasis, the delineation of conservation zones varies by alternative and is shown on a map for each alternative in the next chapter.

Regulations at 36 CFR 7.96 apply to all conservation zones, and only authorized or permitted activities may occur. The use of some memorials for demonstrations or permitted events is restricted by federal regulations (36 CFR 7.96(g)(3)(ii)). Permits are generally required for special events and for demonstrations with more than 25 people. The permit process sets specific criteria for each event to ensure that soils, turf, walks, trees, and irrigation systems are not degraded or are restored to the desired standards. The National Mall and Memorial Parks *Superintendent's Compendium* addresses additional public use limits to ensure safety, resource protection, and proper management, in accordance with 36 CFR Parts 1-7 and authorized by 16 USC 3 (NPS 2006f).

All areas of the National Mall are to remain free of commercial advertising. The regulations limit event sponsor and donor recognition to protect the sanctity of the National Mall. Commercial business services, such as food, retail, or recreation equipment rentals that have been determined to be necessary or appropriate are provided through contracts.

CONSERVATION ZONES

Memorials

The purpose of the conservation zone for memorials is to preserve the principal memorials and the character of their immediate surroundings, as well as to provide opportunities for contemplation, learning experiences, and appropriate activities. Many of the memorials are symbols of our nation and have taken on additional

iconic meanings over time, such as the connection of the Lincoln Memorial with civil rights.

Desired Cultural Resource Conditions

Cultural resources (buildings, sites, structures, objects, districts, and cultural landscapes) and related commemorative works of art are and can be maintained to the highest standard according to scheduled maintenance and major restoration schedules.

Desired Natural Resource Conditions

Related landscapes and plant materials are in excellent condition and meet the highest standards. Any related designed water features and lighting operate continuously to desired standards during scheduled times of operation.

Desired Visitor Experience / Allowable Activities

Memorials are pedestrian-only zones* that provide opportunities for quiet contemplation, inspiration, enjoyment, and understanding of the values and ideals of our country. Many visitors take photographs, enjoy the art or architecture, or read the quotations at each memorial. Related events such as presidential birthday celebrations, Veterans Day ceremonies, state visits, or programs occur.

The desired experience includes sufficient space so that each visitor can easily access a memorial, enjoy or photograph it, and look at the views and vistas without being overly affected by others. The desired capacity could occasionally be exceeded, yet the experience might still be acceptable if a special event serendipitously added to the visitor experience.

The necessary space per person to achieve the desired conditions varies, depending on the memorial's design, site conditions, time of day and year, visitor location within the memorial, or the attractiveness of views and vistas. At most memorials the optimal density for the desired experience would be 100–200 square feet per person, with more space desirable. At 100–200 square feet per person visitors would have sufficient space for contemplation, reading quotations, or taking photos. At 50–100 square feet per person the social experience could be congested for many visitors. A density of 50 square feet per person could be expected when high levels or pulses of visitation occur, such as when multiple tour buses arrive at the same time, with many people taking photographs or trying to see a memorial at once.

More people can be accommodated and have a quality visitor experience in an open memorial (such as the Vietnam Veterans Memorial or the Franklin Delano Roosevelt Memorial) than in an enclosed memorial (such as the Washington Monument, or the Lincoln or Thomas Jefferson Memorial). The desired visitor experience at the Vietnam Veterans Memorial is focused on a linear experience along a narrow walkway, so a density in the range of 7–10 square feet per person may be acceptable during the peak season as people progress slowly along the wall. Opportunities for contemplation may not be possible at this density, which could occur from midday to early evening from spring to early fall, as well as during events or holidays. (For example, it may be very hard for a visitor to have a quiet experience during the Memorial Day weekend when hundreds of people crowd the walkway.) Reflective or more emotionally powerful experiences may be possible during evenings or low-visitation times.

The proximity of tour bus drop-off and pickup locations and tour bus parking spaces near major memorials or groups of memorials affects the desired visitor experience. Simultaneous use of these locations may result in frequent high concentrations or pulses of visitors. Tour bus drop-offs and pickups and nearby parking spaces are noted in Table 3.

Demonstrations and permitted events are allowed in accordance with regulations at 36 CFR 7.96, and they are prohibited at certain memorials. These restrictions are included in Table 3.

Allowable Facilities

Some facilities are necessary to support visitor use. Memorials may have visitor seating to allow for contemplation, as well as unobtrusive facili-

* A pedestrian is defined as anyone on foot or using an assistive device, such as a wheelchair, electric scooter, or Segway® HT.

ties such as exhibits, visitor information, restrooms, bookstores, or retail in or near the memorial. Within the immediate area, a limited number of signs, compatible with the memorial design, may be provided to remind visitors about regulations or respectful behavior.

Character Protection

The character protection zone applies to components of the historic landscape that demarcate important designed vistas and that establish the character of the National Mall. This zone may serve as a pedestrian and vehicular entry to the National Mall, and it may contain necessary visitor orientation and directional information. The landscape character ranges from formal to informal and is generally comprised of simple components — landforms, tree plantings, lawn areas, and related park furniture or structures.

Character-defining features that are to be protected are described for each area (see Table 3). The visual great cross axis of the National Mall is defined by vegetation. This zone includes well-known landscapes such as the Tidal Basin, the Lincoln Reflecting Pool, the grounds of the Washington Monument and the Lincoln Memorial, and the D.C. War Memorial. Smaller scale memorials (such as the John Paul Jones and John Ericcson memorials) and landscape memorials (the German-American Friendship Garden) are also included.

Desired Cultural Resource Conditions

Historic structures, small-scale memorials, and other contributing features of the park's cultural landscapes are preserved and protected. Cultural resources are in the desired condition as defined in cultural resource documents, and they are maintained in accordance with planned maintenance and major restoration schedules. Any lighting and water features operate continuously to desired standards during scheduled times of operation.

Desired Natural Resource Conditions

The landscape and its features are nourished and perpetuated in a sustainable manner to desired standards for each area.

Desired Visitor Experience / Allowable Activities

The desired visitor experience includes enjoyment of the character of the designed landscape with its vistas to and from iconic memorials, sightseeing, education and orientation, small-scale entertainment, and passive or individual recreational activities such as paddleboating, walking, bicycling, kayaking or other self-propelled boating, picnicking, reading, children playing, and fishing. This zone may also accommodate spillover from extremely large First Amendment demonstrations that exceed the capacity of the adjacent multipurpose or high-use zones. Visitor service facilities are conveniently located outside vistas.

Landscaped areas are used for general enjoyment; as a result, more separation between others is desired. The minimum desired space per person in this zone would be 200 square feet on a high-use holiday, with 1,000 square feet preferred for daily use during the peak season. For example, at 200 square feet per person, many people could sit informally on the grass to enjoy picnics, garden concerts, or small events, but the sights and sounds of other people and groups would be very evident. At 1,000 square feet per person the atmosphere would be more relaxed and enjoyable for most visitors.

User densities on walks or at visitor facilities could be in the range of 10–50 square feet per person. Occasionally First Amendment gatherings or national celebrations could result in higher densities of short duration. A temporary density of 10 square feet per person would feel very crowded in this zone because landscape elements such as trees provide a sense of enclosure.

The permit process for demonstrations and events sets specific criteria for each event to ensure that soils, turf, walk, trees, and irrigation systems are not degraded (36 CFR 7.96).

Allowable Facilities

Allowable facilities in the character protection zone include pedestrian sidewalks and pathways; roads, parking, and multimodal transportation corridors and intermodal transportation stops; visitor facilities (food and related seating

areas, retail, restrooms, information); park furnishings (seating, lighting, trash containers, etc.); outdoor educational wayside exhibits; directional, orientation, and transit-related signs; and gardens and reflective or active water features.

Temporary facilities related to permitted special events are generally not allowed unless they are on paved surfaces.

Multipurpose Areas

Multipurpose areas provide for visitor access and services, and they accommodate programs, activities, events, recreation, and relevant entertainment in a high-quality parklike or historic setting. This zone is generally characterized by undulating landforms, with trees, walks, roads, and other features. Secondary and pleasant views of memorials and iconic features are maintained. This zone may serve as a pedestrian and vehicular entry to the National Mall, and it contains necessary visitor orientation and directional information. Areas in this zone include portions of Constitution Gardens, the Watergate area, and portions of the Washington Monument grounds and the Tidal Basin (see Table 3).

Desired Cultural Resource Conditions

Cultural resources, including small-scale resources, are preserved.

Desired Natural Resource Conditions

The landscape and its features are perpetuated in a sustainable manner to meet the desired standards for each area.

Desired Visitor Experience / Allowable Activities

Opportunities are provided for passive and active outdoor enjoyment in a pleasant atmosphere, with vistas to some of the National Mall's icons. Visitor service facilities and transit stops are conveniently located and able to meet the needs of groups as well as individuals. While First Amendment activities are fully accommodated, they are an occasional short-term use, and areas are more likely to be used to provide support for such permitted activities. Opportunities are provided for small events, educational waysides, programs, and relevant entertainment. Passive recreation (picnicking, sunning, fishing, and relaxing) may take place, along with active recreation, such as volleyball games, ballfields, or impromptu sports.

Because the purpose is to accommodate multiple uses, the space per person in visitor service portions of this zone ranges from 50 to 100 square feet, and the resulting social experience would mean that people would be very aware of the presence and sounds of others. In recreational areas a less dense experience of more than 1,000 square feet per person is desirable.

The permit process sets specific criteria for each event to ensure that soils, turf, walks, trees, and irrigation systems are not degraded or are restored to the desired standards.

Allowable Facilities

Facilities include pedestrian sidewalks and trails; roads, parking and multimodal transportation corridors and stops; visitor facilities (food and related seating areas, retail, restrooms, information); limited athletic facilities (such as existing backstops and volleyball courts); park furnishings (seating, lighting, trash containers, etc.); outdoor wayside exhibits; directional, orientation, and transit-related signs and facilities; and gardens.

High-Use Areas

High-use areas accommodate various well-attended activities, including national celebrations, First Amendment demonstrations, and special events, as well as sightseeing, and spontaneous or sport league recreation. Flexible areas are generally characterized by open turf or hard surfaces. Areas in this zone include Union Square, the central panels on the Mall, and athletic fields (see Table 3).

Desired Cultural Resource Conditions

Cultural resources include primarily views and vistas or small-scale elements such as light fixtures or benches. These elements are perpetuated to achieve desired conditions.

Desired Natural Resource Conditions

Landscapes are preserved to the desired standard. Shade and ornamental trees may edge open spaces.

Desired Visitor Experience / Allowable Activities

Multipurpose areas provide the primary space for First Amendment demonstrations, national celebrations, and special events. They also provide opportunities to enjoy views and vistas, along with passive and active outdoor enjoyment within a pleasant atmosphere that may be visually dominated by iconic American memorials. Opportunities for individual or spontaneous uses are generally accommodated. Picnicking, sunning, and relaxing may take place, depending on the location. Organized sports and recreation, such as softball, soccer, or even cricket and polo, may take place in designated and permitted locations. Participants supply needed equipment, activity marking, and cleanup.

Wide-ranging use densities are expected. Higher levels of use in the range of 3–50 square feet per person would occur during national celebrations, such as the recent Presidential Inauguration or a large First Amendment demonstration. Under these circumstances users would expect and tolerate extremely dense crowding. At 3 square feet per person, the experience would be extremely congested, with people standing shoulder-to-shoulder, and this level of use could not be safely sustained for any length of time. Space of 7–10 square feet per person would be typical during most demonstrations or permitted events and could be sustained for a day or the duration of an event. The desired experiences for sightseeing and general recreation would be in the range of 100 square feet or more per person; at lower densities this would allow for freedom of movement for active recreation or fewer people in viewsheds.

Permits are required for group activities, recreational sport leagues, and special events, as well as First Amendment demonstrations of 25 people or more. The permit process sets specific criteria for each event to ensure that soils, turf, walks, trees, and irrigation systems are not degraded or are restored to the desired standards.

Allowable Facilities

Allowable facilities include paving, pedestrian sidewalks or trails, athletic fields, parking lots, and event infrastructure. Irrigation systems are protected from damage during events.

Temporary facilities would be allowed. It is always preferable to locate temporary facilities on paved surfaces, convenient to access and civic event infrastructure.

RESOURCE STANDARDS

Standards further define the desired conditions for areas within zones. Five levels of care have been defined to help the National Park Service evaluate whether desired conditions are being achieved within an area.

1. *Level 1* — This first level represents the highest level of care and excellence in maintenance. Grounds would be manicured. Level 1 is appropriate for high-traffic areas, such as public squares and gathering areas, as well as commemorative works or memorials. Based on public scoping for this planning effort, the American public thinks this is the level at which the National Mall should be maintained.
2. *Level 2* — This level represents a very high level of care for public spaces that are primarily vegetated and see a very high volume of use due to permitted events and demonstrations. This zone may contain lesser known memorials.
3. *Level 3* — Level 3 represents a high level of care associated with locations that have moderate use and that have some maintained turf or naturalized areas. Facilities consist primarily of circulation corridors and small visitor facilities.
4. *Level 4* — This level relates to naturalized or vegetated areas that see some local use along well-maintained paths. There are no memorials or buildings.
5. *Level 5* — The fifth level relates to areas that see little use and require minimal effort to maintain. There are no memorials or buildings.

The first three levels of care will predominate on the National Mall. The levels of care set goals to help park staff assess whether desired conditions are being achieved.

Park staff are developing more detailed standards for each level of care. The more detailed standards for the National Mall are based on the

Operational Guidelines for Grounds Maintenance (APPA et al. 2001), a set of professional standards used by many organizations across the country to identify various levels of desired conditions for turf, trees, shrub and tree borders, floral plantings, site furnishings, display fountains, and irrigation, as well as various maintenance approaches such as repairs, inspections, pruning, surfaces, litter control, and snow removal. In applying the standards to the National Mall, they have been broadened to include memorials, permanent and temporary facilities, utilities, and construction, as well as grounds maintenance. They incorporate ideas from best practices, past maintenance standards, and those used by other federal entities, such as the Smithsonian Institution, National Gallery of Art, and the Architect of the Capitol.

User Capacity

The foundations for making user capacity decisions in this plan are the park's purpose, significance, special mandates, and conservation zones. The purpose, significance, and special mandates define why the park was established and identify the most important resources and values that will be protected and provided. The conservation zones describe the desired resource conditions and visitor experiences, including appropriate visitor activities, for different locations throughout the National Mall. As part of the National Park Service's commitment to implementing user capacity, the park staff will abide by these directives for guiding the types and levels of visitor use that will be accommodated while sustaining the quality of park resources and visitor experiences consistent with the purposes of the park.

In addition to these directives, this plan also includes indicators and standards, which are more specific guiding directives that will be used to direct the management of visitor use and can also be monitored to ensure that desired conditions are being achieved. The plan also includes a range of management strategies that would be used to achieve desired conditions.

The appropriate kinds of use were previously described for each conservation zone and are based on the purposes of the memorials, the sensitivity of resources, and the site characteristics of each area, along with maintenance and programming standards. The appropriate levels of use were also described for each zone and are largely derived from estimates of appropriate use densities for each area. The density of people (the number of square feet per person) in various park settings is an indicator of quality that has been shown to affect perceptions of crowding and visitors' ability to achieve desired intellectual, educational, and recreational outcomes. The standards for user density in this plan range from 3 square feet per person for a large demonstration or historic event like the 2009 Presidential Inauguration to 10,000 square feet per person for recreational activities like Frisbee or kite flying. At 3 square feet per person people would be standing shoulder-to-shoulder in a highly congested situation that would not be sustainable for more than a few hours. At 10,000 square feet per person the nearest person would be about 100 feet away, and the social experience would be very open, with visitors having ample opportunities for personal contemplative experiences or recreational activities.

User capacities would vary somewhat by alternative because conservation zones would be applied differently depending on the emphasis of a particular alternative. For example, more people could be accommodated under the preferred alternative and alternative B because of flexible spaces that could handle more people and an improved ability to host national celebrations, First Amendment demonstrations, and permitted special events.

The capacity of various park areas was examined by applying several different square footage options per person. Physical capacities are most important for determining the capacities of specific venues for demonstrations, national celebrations, and permitted events, and these densities range from 3 square feet to 50 square feet per person. A few locations such as the D.C. War Memorial, the Sylvan Theater, or Room 4 in the Franklin Delano Roosevelt Memorial were planned to accommodate performances or programs, and these areas generally require more space per person because the audience would typically be seated on chairs or blankets.

TABLE 3: NATIONAL MALL USER CAPACITIES

Area	Resource Standard*	Social Standard	Management / Features	Estimated Level of Use (at one time)	Notes
MEMORIAL AREAS					
Ulysses S. Grant Memorial	1	50–200 sq. ft. / person	*Traditional Uses:* Viewing the memorial, enjoying historic vistas, group photos.	500–2,000 people	
Washington Monument (within the inner circle of flags)	1	200 sq. ft. / person Higher use levels (e.g., 100 sq. ft / person) would result in feelings of congestion.	*Official Uses:* Annual birthday commemorative ceremony (Feb. 22) *Limitations:* No demonstrations or special events in the inner circle surrounding the monument, except for the official annual birthday ceremony (36 CFR 7.96).	500 people *Monument interior:* 80 people at one time.	Tour bus drop-off/ pickup and parking; parking for visitors with disabilities.
World War II Memorial	1	200 sq. ft. per person	*Traditional Uses:* Veterans Day programs.	Not more than 1,800 people	Tour bus drop-off/ pickup and parking; parking for visitors with disabilities. Also convenient to Constitution Gardens.
Vietnam Veterans Memorial	1	*Memorial wall:* 10–50 sq. ft. / person *Knoll east of the memorial:* 1,000 sq. ft. / person to retain an open character.	*Official Uses:* Memorial Day and Veterans Day commemorative ceremonies. *Limitations:* No demonstrations or special events within the memorial boundaries except for official annual Memorial Day and Veterans Day ceremonies (36 CFR 7.96 (g)(3)(ii) (D)). No stages or sound amplification closer than 100 feet from the memorial's boundaries; sound systems to be directed away from the memorial at all times.	*Memorial wall:* 50–250 people *Knoll east of the memorial:* 150 people	The lawn south of the wall is used for ceremonies and has the capacity for several thousand, but it is typically set up for only several hundred.
Lincoln Memorial	1	*Chamber:* 50–200 sq. ft. / person *Staircase to lower approachway:* 10 sq. ft. / person, allowing aisles.	*Official Uses:* Annual birthday commemorative ceremony (Feb. 12) *Traditional Uses:* The staircase may serve as seating for national celebrations, park programs, and events taking place near the reflecting pool. The stairs may also occasionally host small ceremonies and events related to civil rights and the First Amendment. *Limitations:* No demonstrations or special events at or above the large marble columns surrounding the memorial except for the official birthday ceremony (36 CFR 7.96(g)(3)(ii)(B)).	*Chamber:* 35–150 people *Staircase to lower approachway:* 4,000 people	Tour bus drop-off/ pickup and parking; parking for visitors with disabilities. Also serves the Vietnam and Korean War veterans memorials.
Korean War Veterans Memorial	1	*Walkways:* 50–200 sq. ft. / person	*Traditional Uses:* Armistice Day ceremonies, wreath-laying ceremonies.	*Walkways:* 80–300 people	Use has never exceeded several hundred. Parking for visitors with disabilities.
Martin Luther King, Jr. Memorial	1	To be determined.	To be determined.	To be determined.	
Franklin Delano Roosevelt Memorial	1	10–200 sq. ft. / person	The memorial is a series of large paved "rooms" that can accommodate higher levels of use because adjacent visual open space creates a more open feeling.	400–8,000 people	Tour bus drop-off/ pickup and parking; parking for visitors with disabilities. Will also serve the Martin Luther King, Jr. Memorial.

Area	Resource Standard*	Social Standard	Management / Features	Estimated Level of Use (at one time)	Notes
George Mason Memorial	1	50–200 sq. ft. / person	Sightseeing and understanding of American history.	25–100 people	Sidewalks and plaza can accommodate higher levels of use because adjacent visual open space creates a more open feeling.
Thomas Jefferson Memorial	1	*Chamber:* 50–100 sq. ft. / person *Stairs / plaza:* 10–50 sq. ft. / person	*Official Uses:* Annual birthday commemorative ceremony (Apr. 13). *Traditional Uses:* The staircase may serve as seating for events on the plaza. *Limitations:* No demonstration or special events at or above the circular portion of the memorial enclosed by the outermost series of columns except for the official birthday ceremony (36 CFR 7.96(g)(3)(ii)(C)).	*Chamber:* 60–120 people *Stairs / plaza:* 800–4,000 people	The plaza is used for performances and viewing and can accommodate higher use levels. Tour bus drop-off/ pickup and parking; parking for visitors with disabilities. Also serves the George Mason Memorial.
CHARACTER PROTECTION					
Mall Elm Tree Panels	1 or 2	For demonstrations (all alternatives) and special events (no-action alternative only) 7 sq. ft. / person. For general enjoyment, 200–1,000 sq. ft. / person.	Crisp formal design characterized by rows of mature elm trees planted every 50 feet in turf to define the primary east-west view corridor (U.S. Capitol to the Washington Monument). Other cultural landscape characteristics include historic site furnishings (seating, lighting).	For demonstrations (all alternatives) and special events (no-action alternative only) — 80,000 people. For general enjoyment, 1,000–7,000 people	
Washington Monument Grounds (above the retaining wall)	1 or 2	7–50 sq. ft. / person	Simple symmetrical layout of walkway circulation and turf emphasizing the monument. Flags and flagpoles characterize this visible orientation point, providing a 360 degree view of the city. Other components include the north-south vista from the White House to the Thomas Jefferson Memorial, the historic adaptively reused Monument Lodge, and the boulevard, along with informal tree plantings.	650–4,000 people	
Constitution Gardens	3	*Walks:* 10–100 sq. ft. / person. *Hillsides:* 200–1,000 sq. ft. / person	Informal character with undulating tree-covered enclosed terrain and meandering walkways. Direct views of the Washington Monument from around the lake; secondary views from various locations within the site, including the 56 Signers of the Declaration of Independence Memorial.	*Walks:* 200–2,000 people *Hillsides:* 800–4,000 people	Because of many trees, a density of 50 sq. ft. / person would feel very crowded. Walks can absorb higher use levels with 100 sq. ft. / person still retaining the informal garden character.
Lincoln Memorial Grounds					
• Inside Lincoln Circle	1 or 2	NA	The elevated memorial dominates viewsheds east to the Washington Monument and the U.S. Capitol and southwest to Arlington National Cemetery.		Little use occurs in area.
• Reflecting Pool	1 or 2	3–200 sq. ft. / person	Symmetrically laid out shady elm walkways flank the reflecting pool and frame vistas both to the east (the World War II Memorial) and the west (the Lincoln Memorial) and emphasize the most direct circulation pattern. Formal layout	2,000–90,000 people	

Area	Resource Standard*	Social Standard	Management / Features	Estimated Level of Use (at one time)	Notes
			contrasts with the informal tree plantings north and south of the walkways.		
• Watergate Area	2	200 sq. ft. / person	The setting of the Watergate steps provides a formal western foreground to the Lincoln Memorial, as well as a formal entrance to the city, with the *Arts of Peace* and the *Arts of War* sculptures. Informal tree plantings on a grassy hillside provide glimpses to the Potomac River and Arlington National Cemetery. The riverfront has a formal atmosphere characterized by high-quality construction and the stone river walls and the Constitution Avenue belvedere, as well as the Watergate Steps.	20 people	
D.C. War Memorial	*Memorial:* 1 *Surrounding landscape:* 2	*Memorial:* 10 sq. ft. / person *Paved areas:* 10 sq. ft. / person	The small, classical marble memorial set within a heavily wooded area may host small performances and special events (including weddings).	*Memorial:* 100 people *Paved areas:* 375 people	
Ash Woods	3	10,000 sq. ft. / person	Generally level terrain characterized by naturalized dense woods that provide separation from traffic on Independence Avenue. The woods enclose the central east-west vistas and border secondary views along the JFK hockey fields.	50 people	While the woods could absorb higher levels of use, more than 50 people at one time would alter the naturalized dense wood character.
West Potomac Park Riverfront	2 or 3	100–1,000 sq. ft. / person	River views dominated by a serene, parklike setting and the recreational and pleasurable nature of most boating. The south end has an informal atmosphere characterized by a gentle slope to the Potomac River, with informally planted flowering trees closer to the river bordered by taller shade trees.	60–600 people	
Tidal Basin and Walkways	1 or 2	*Walks:* 3–50 sq. ft. / person	Informal, undulating naturalistic water edge bordered by flowering cherry trees that sometimes overhang walks and water. The dominating visual element is the Thomas Jefferson Memorial. Other views from land, bridges, and water include the Washington Monument and glimpses into the Franklin Delano Roosevelt Memorial.	*Walks:* 1,800–25,000 people. If walks doubled in width, 3,600–50,000 people	
Thomas Jefferson Memorial	1	*Stairs / plaza:* 10–50 sq. ft. / person	The primary planned view is the north-south view between the White House and the Thomas Jefferson Memorial. From the plaza north of the memorial, the U.S. Capitol can also be seen.	*Stairs / plaza:* 800–4,000 people	
MULTIPURPOSE AREAS					
Washington Monument Grounds (below the retaining wall)	2	10–50 sq. ft. / person *Sylvan Theater:* 10–50 sq. ft. / person	Tree canopies; north-south vista between the White House and the Thomas Jefferson Memorial, historic Survey Lodge, and Sylvan Theater.	500–2,500 people *Sylvan Theater:* 4,000–15,000 people	

Area	Resource Standard*	Social Standard	Management / Features	Estimated Level of Use (at one time)	Notes
Constitution Gardens	2	10–50 sq. ft. / person	Informal, undulating tree-covered terrain and curving walkways, views focused to and from lake that is in a bowl; 56 Signers of the Declaration of Independence Memorial. Secondary views of the Washington Monument and glimpses to the World War II Memorial, the Vietnam Veterans Memorial, and Constitution Avenue.	600–1,200 people 20,000 people if the lake area was reconstructed to be drainable (alternative B).	
Lincoln Circle and Radial Roads / Watergate Area	3	50 sq. ft. / person	Tree canopy. Sloping terrain bisected by roadways make use of the area impractical for large events.	4,400	Recreation fields (volleyball courts, baseball/softball fields)
Tidal Basin	2	10–100 sq. ft. / person	Parking and food services areas. Flowering trees and perennial gardens, secondary views.	500–5,000 people	
HIGH-USE AREAS					
Union Square	1	*Paved areas:* 3–10 sq. ft. / person	No traditional or required ceremonies. Hard-surface area can absorb higher levels of use.	*Paved areas:* 30,000–100,000 people (or 50,000–290,000 if pool was drainable)	
Mall Center Panels	2	3–50 sq. ft. / person	No recreational league sportfields identified. Additional regulation to provide fair use of a limited resource; possible incentives to relocate events. Equitable use among events, restoration, open recreational use, and general visitation. Strong events monitoring program of indicators and standards.	30,000–500,000 people	
Washington Monument Grounds					
• North of Independence Avenue and west of 15th Street	2	3–50 sq. ft. / person	Fields identified for permitted recreation sport league use. Strong events monitoring program of indicators and standards	43,000–700,000 people	
• South of Independence Avenue	3	100–1,000 sq. ft. / person	Goal posts provided; area primarily used for recreation.	60–600 people	
JFK Hockey Fields	3	7–100 sq. ft. / person	Fields identified for permitted recreation league use. Infrequent use for permitted events.	4,500–60,000 people	
FDR Ballfields / Polo Grounds	3	*FDR ballfields:* 7–100 sq. ft. / person *Polo grounds:* 7–100 sq. ft. / person	Permanent backstops provided in some locations. Regularly used as a staging area and for starting footraces and charity walks. Polo grounds sometimes used for permitted events and a staging area for commercial filming FDR ballfields used primarily for local recreational league sports.	*FDR ballfields:* 10,000–120,000 people *Polo grounds:* 7,000–100,000 people	

NOTE: The social standard is based on the highest number of people that would be acceptable in terms of maintaining the desired visitor experience.

* Level 1 — the highest level of care and excellence in maintenance.
Level 2 — a very high level of care for public spaces that are primarily vegetated and see a very high volume of use due to special events and demonstrations.
Level 3 — a high level of care associated with locations that have moderate levels of use and that have some maintained turf or naturalized areas.

MONITORING AND ADAPTIVE MANAGEMENT

Monitoring use is critical to determining if and when standards are not being met. Different monitoring programs would be developed for normal visitation and permitted activities. Additionally, the National Park Service would continue to improve visitation counting methodologies. NPS staff would continue regularly gathering information in annual visitor surveys and authorized surveys, and undertaking assessments of various activities to determine if improvements could be made to either visitor experiences or resource conditions.

Social monitoring at memorials would track normal visitation and would examine whether desired conditions were being met or exceeded. When it was evident over an extended period (weeks, months, or seasons) that the desired memorial experiences could not be achieved and that general use levels were being consistently exceeded, the National Park Service would identify adaptive management techniques to mitigate adverse effects on visitor experiences. Elements of visitor experiences that would be desirable to maintain include ease of access, along with opportunities for contemplation, education, photography, seeing or reading memorial elements, or otherwise enjoying a memorial.

The monitoring of permitted activities would track and compile use and impact data related to First Amendment gatherings, national celebrations, special events, and commercial filming. Monitoring would include tracking events, event days, and locations; estimated sizes of events and general accuracy of estimates; weather conditions and temperatures; related planning documents; and fees, bonds, and permit compliance. Monitoring would also use pre- and post-permitted activity checklists, photographic records, and pre- and post-permitted activity testing of equipment, such as irrigation systems and other utilities, or soil conditions and compaction as needed, depending on location, season, and size of an event. In addition the National Park Service would use incentive programs and acknowledgments to encourage shorter, low-impact, green, and sustainable permitted activities.

When standards were not being met because of permitted activities, the following types of steps could be taken to mitigate impacts:

- revise the required recovery periods after permitted activities to shorten the permitted activity or its setup and takedown time
- require longer recovery periods between special events and national celebrations
- track and enforce compliance with permit conditions
- modify regulations for national celebrations, special events, and commercial filming (not First Amendment gatherings)
- increase bonding and cost recovery

If measures such as these were not effective, more stringent restoration measures could be recommended or required.

The National Park Service would also undertake more detailed implementation plans to lay out how to achieve desired resource conditions. Progress in meeting these conditions would be monitored as part of annual work plans. Plans would include the following:

- a soils management and restoration plan to rebuild healthy soils and describe appropriate soil treatment programs and schedules for areas within the National Mall
- a plan to preserve and restore special status vegetation, such as trees, turf, and other vegetation that is part of the historic landscape, including methods to increase onsite plant biomass and to reduce the carbon footprint
- a sustainable water management plan to address onsite water quality, irrigation, water cleansing, minimized use of potable water, ornamental water features, graywater use, and stormwater management

ACTIONS COMMON TO ALL ALTERNATIVES

A Vision for the National Mall — Enriching Your American Experience

The National Mall — the great swath of green in the middle of our capital city and stretching from the foot of the United States Capitol to the Potomac River — is America's civic stage. This historic open space with its planned vistas provides an inspiring setting for national memorials, many of them symbols of our democracy. It also provides a visual connection between the branches of government, and a backdrop for government buildings and the great cultural institutions of our nation. For more than 200 years it has symbolized our nation and its democratic values, which have inspired the world. "We the People" come here to demonstrate our rights and celebrate our freedoms, our history and culture, our unity and diversity, and our way of life.

Actions related to historic and natural resources of the National Mall, as well as current conditions and uses for First Amendment demonstrations, national celebrations, permitted events, and recreation, are described in this section. Actions that will be taken under all alternatives, such as visitor activities, access and circulation, public health and safety, and park operations, are also described.

After the plan is completed and approved, more detailed design and construction documents and plans might be needed to implement specific actions. The National Park Service will carry out additional compliance as required with the National Environmental Policy Act, the National Historic Preservation Act, and other relevant laws and policies, as well as consultation and public involvement. The additional consultation that may be needed is listed in the "Consultation and Coordination" portion of the document.

To comply with its mandate to manage the lands under its stewardship "in such manner and by such means as will leave them unimpaired for the enjoyment of future generations" (16 USC 1), the National Park Service routinely evaluates and applies mitigating measures whenever conditions could adversely affect the sustainability of national park system resources.

The National Park Service would conduct appropriate environmental review as required by the National Environmental Policy Act, the National Historic Preservation Act, and other relevant legislation for any future actions. As part of the environmental review, the National Park Service would avoid, minimize, and mitigate adverse impacts when possible.

Mitigating measures and best management practices would be used to avoid or minimize potential impacts on cultural and natural resources from construction activities, use by visitors, and NPS operations. These measures are described below under "Cultural Resources" and "Natural Resources" and would apply to all alternatives.

NATIONAL MALL ACTIONS

Cultural Resources

Common Actions

Cultural resources would continue to be preserved and would be managed in accordance with *The Secretary of the Interior's Standards for the Treatment of Historic Properties for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* (NPS 1995) and *The Secretary of the Interior's Standards for the Treatment of Historic Properties, with Guidelines for the Treatment of Cultural Landscapes* (NPS 1996c). The D.C. Historic Preservation Office would be consulted in the preservation, restoration, adaptive reuse, or rehabilitation of any cultural resource.

Current laws and policies require that the National Park Service take the following actions to meet its legal and policy requirements:

- Complete and regularly update cultural landscape inventories.
- Regularly update/certify the list of classified structures.
- Periodically update the National Register of Historic Places nominations for all national register properties.

- Treat all structures as eligible for listing on the National Register of Historic Places pending a formal determination by the National Park Service and the D.C. Historic Preservation Office, as appropriate, as to their eligibility.
- Determine, implement, and maintain the appropriate level of preservation for each historic property formally determined or considered eligible for listing on the National Register of Historic Places (subject to *The Secretary of the Interior's Standards)*.
- Before modifying any historic property found eligible for the National Register of Historic Places, consult with the D.C. Historic Preservation Office and the Advisory Council on Historic Preservation, as required.

Mitigating Measures

To the greatest extent possible, the National Park Service would preserve and protect resources that reflect human occupation of the National Mall. Specific mitigating measures would include the following:

- Continue to inventory and research archeological, historic, and ethnographic resources, as well as cultural landscapes, to better understand and manage the resources. Continue to follow federal regulations and NPS guidelines in managing cultural resources and collections.
- Avoid adverse impacts by applying *The Secretary of the Interior's Standards for Archeology and Historic Preservation*. If adverse impacts were unavoidable, minimize or mitigate them through consultation with all interested parties.
- Document structures to be adaptively reused according to the standards of the Historic American Buildings Survey / Historic American Engineering Record as defined in the *Re-engineering Proposal* (October 1, 1997).
- Wherever possible, place pathways and sidewalks, parking areas, and other facilities in previously disturbed areas or in existing developed areas. Design facilities to avoid known or suspected archeological resources.
- Complete project-specific archeological inventories before final decisions on project location and before finalizing construction designs.
- Conduct archeological site monitoring during construction. If protection or site avoidance during design and construction was infeasible, conduct data recovery excavations at archeological sites threatened with destruction. Should archeological resources be discovered, all work in the immediate vicinity of the discovery would be halted until the resources could be identified and documented and an appropriate mitigation strategy developed in consultation with the D.C. Historic Preservation Office.

Natural Resources

Common Actions

Water quality problems in designed water features would continue to be addressed. Soils and vegetation health would be managed to improve appearance. Technologies supported by scientifically sound research would be included for consideration to improve turf conditions and determine best management practices. Regional coordination on urban wildlife issues, such as Canada geese, would be continued with other national park system units, other federal agencies, and the city. Threatened or endangered species would be protected.

No additional management actions would be taken by the National Park Service to improve air quality.

Mitigating Measures

The National Park Service would preserve and protect, to the greatest extent possible, the natural resources of the National Mall. Mitigating measures intended to reduce or eliminate adverse effects on natural resources could include the following (additional mitigating measures for natural resources are listed in appendix B):

- ***Air Quality*** — A dust abatement program would be implemented. Standard dust abatement measures could include the following elements: water or otherwise stabilize soil, cover haul trucks, employ speed limits on unpaved roads, minimize vegetation clearing, and revegetate after construction. Vegetation and the tree canopy would be increased to reduce the carbon footprint. Sustainable management, planting, and rehabilitation of existing vegetation would be implemented to increase carbon sequestration capability.
- ***Water Resources*** — To prevent water pollution during construction, best management practices would be used, such as erosion control measures, minimized discharge to water bodies, and regular inspection of construction equipment for leaks of petroleum and other chemicals. The use of heavy equipment would be minimized in a waterway.

  A runoff filtration system would be designed and installed to minimize water pollution from larger parking areas. Both structural and biological (fungi, microorganisms, higher plants) remediation options would be considered.
- ***Wetlands*** — Wetlands would be delineated by qualified NPS staff or certified wetlands specialists, and they would be clearly marked before construction work. Construction activities would be performed in a cautious manner to prevent damage caused by equipment, erosion, siltation, etc.
- ***Soils*** — New facilities would be built on soil suitable for development. Soil erosion would be minimized by limiting the time that soil is left exposed and by applying other erosion control measures such as erosion matting, silt fencing, and sedimentation basins in construction areas to reduce erosion, surface scouring, and discharge to water bodies. Once work is completed, construction areas would be revegetated in a timely period.
- ***Vegetation*** — Areas used by visitors (e.g., trails) would be monitored for signs of vegetation disturbance. Public education, revegetation of disturbed areas, erosion control measures, and barriers would be used to control potential impacts on plants from trail erosion or social paths.
- ***Wildlife*** — Techniques would be used where necessary to reduce impacts on wildlife, including visitor education programs, restrictions on visitor activities, and park ranger patrols.

  A natural resource protection program would be implemented. Standard measures would include construction scheduling, biological monitoring, erosion and sediment control, the use of fencing or other means to protect sensitive resources adjacent to construction, the removal of all food-related items or rubbish, topsoil salvage, and revegetation. This could include specific construction monitoring by resource specialists as well as treatment and reporting procedures.
- ***Threatened and Endangered Species and Species of Concern*** — Mitigation actions would occur during normal park operations as well as before, during, and after construction to minimize immediate and long-term impacts on rare, threatened, or endangered species. These actions would vary by specific project and area affected, and additional mitigation would be added depending on the specific action and location. Many of the measures listed above for vegetation and wildlife would also benefit rare, threatened, or endangered species by helping preserve habitat. Mitigation actions specific to these species would include the following:
  - Conduct surveys for rare, threatened, or endangered species as warranted.
  - Locate and design facilities and actions to avoid adverse effects on rare, threatened, or endangered species. If avoidance was infeasible, minimize and compensate for adverse effects as appropriate and in consultation with the appropriate resource agencies. Conduct work outside of critical periods for specific species.
  - Develop and implement restoration and/or monitoring plans as warranted. Plans should include methods for implementation, performance standards, mon-

itoring criteria, and adaptive management techniques.

- Implement measures to reduce the adverse impacts of nonnative plants and wildlife on rare, threatened, or endangered species.

The Civic Stage: Demonstrations, Special Events, and National Celebrations

The First Amendment to the U.S. Constitution provides for freedom of expression as a right of citizens. The National Mall is the most prominent space in our country for the demonstration of these rights, and that is an essential purpose of the National Mall. Areas where national symbols are prominent backdrops are especially popular locations for demonstrations. Consistent with the First Amendment and federal regulations, demonstrations will continue to be fully accommodated on a first-come, first-served basis throughout the National Mall. Federal regulations (36 CFR 7.96) define allowable areas and activities at the Lincoln Memorial, Washington Monument, Jefferson Memorial, and Vietnam Veterans Memorial.

Demonstrations, special events, and national celebrations are defined differently (see page 16), and proposed alternative actions related to special events and national celebrations may not apply to demonstrations.

The National Park Service would seek to improve permit procedures for special events and First Amendment demonstrations. Also, procedures would be enhanced to ensure that resources are better protected and that soil, turf, and vegetation impacts were reduced. The Park Service would continue to work with the Environmental Protection Agency on guidelines for ensuring sustainable, low-impact events.

Access and Circulation

Access and circulation through the National Mall and surrounding downtown areas is part of the urban experience in Washington, D.C. There is a large regional bicycle-riding population that commutes and engages in recreational riding. Bicyclists commute through the park from Virginia and Maryland. Within the park they use multipurpose walks, which are also used by pedestrians and recreational bicycle riders. The city's *Bicycle Master Plan* identifies improved bicycle access and facilities. The National Park Service has also instituted a work-related employee bike-sharing program that would continue.

Existing tour bus drop-off and pickup locations would remain and would be improved where possible, including provisions for waste management. The Park Service would continue to work with the D.C. Department of Transportation and other city agencies to address tour bus parking. No changes are planned for taxi stands.

Visitor Information, Education, and Enjoyment

Visitor information is currently provided by the National Park Service online and in brochures. Maps would continue to be upgraded, and park websites would be improved. Park staff would work with professional tour guide groups and others to disseminate accurate, engaging information. NPS educational programs would be focused on the memorials as symbols of democracy and the history of the national capital. Living history programs and other special programs would continue to be offered by the park in some locations. Opportunities for entertainment at venues such as at the Sylvan Theater, the D.C. War Memorial, the lower approachway to the Lincoln Memorial, and the Thomas Jefferson Memorial plaza would continue.

The National Park Service and others would continue to offer guided walking and bicycling tours. Efforts would be made to incorporate technological advances to further diversify educational offerings, including programs and handouts related to national celebrations, anniversaries, and special events.

Recreational activities such as walking, picnicking, reading, sunning, kite flying, Frisbee, volleyball, softball, kickball, and playing would continue throughout the National Mall. Seasonal ice-skating occurs on natural ice when conditions permit. Permitted league sports would continue where authorized. Current commercial activities, such as seasonal paddleboat rentals at the Tidal Basin, would continue.

Visitor Amenities

Park managers would assess the economic feasibility, necessity, and appropriateness of additional food service, retail, and recreation equipment rentals. Based on this assessment, park managers would determine the service types and levels that would be offered. Commercial service would be offered using available authorities. Currently authorized visitor services would be continued.

Health, Public Safety, and Security

Existing law enforcement patrols would be continued. Law enforcement presence is currently increased during large events.

The National Park Service would work with the General Services Administration to permanently resolve public safety and health issues related to the steam tunnel and vent system that crosses under the National Mall.

Park Operations

The National Mall has a significant backlog of deferred maintenance projects (repairs) and related capital improvements. Projects would be undertaken to reduce the backlog. A visual quality team would continue to be used to identify high-profile problems and concerns that would be addressed promptly by a quick response team.

In addition to ongoing maintenance and repairs, restrooms would be cleaned and trash containers emptied at least twice daily. In-park communication systems would be upgraded. The National Park Service would develop a solid waste and recycling plan to incorporate best practices for collection, retrieval, storage, and hauling in order to expand recycling, reduce waste hauled to landfills, compost green waste, and reuse materials as much as possible. Key criteria for a suite of equipment and containers would be identified, along with the best locations for containers, routes for mechanized and manual retrieval, appropriate collection vehicles, schedule options, and implementation phasing. A public educational component would also be included.

To help meet NPS energy goals, energy-efficient bulbs that are compatible with the historic scene would be used in the more than 20,000 light fixtures on the National Mall. In addition, sustainable forms of transportation (such as electric cars) would be increasingly used for park operations. Water features would be designed or retrofitted to be sustainable, and durable, easy-to-use, standardized pumping systems would be installed.

The National Park Service has several agreements to facilitate park management. The purpose of these arrangements with authorized private and public partners, nonprofit organizations, and volunteers is to support park goals, provide service, supplement park staff, or undertake specific projects. These partnerships and agreements would continue.

THE MALL

Union Square (1st to 3rd Streets)

The 11.4-acre Union Square, with its presidential memorial to Ulysses S. Grant, will remain an essential civic space in the immediate vicinity of the legislative branch of government, and it will continue to provide opportunities for demonstrations and events. Consistent with the First Amendment and federal regulations, demonstrations will continue to be fully accommodated on a first-come, first-served basis. Special events and national celebrations will be accommodated in accordance with federal regulations and coordinated with the Architect of the Capitol as necessary.

FIGURE 13: ULYSSES S. GRANT MEMORIAL



Looking southeast toward the Grant Memorial.

The Mall (3rd to 14th Streets)

The Mall will remain the designed promenade west of the U. S. Capitol, featuring expansive green lawns (the formal French *tapis verte* or green carpet) bordered by formal rows of American elm trees that frame vistas to and from the Capitol, a fundamental concept of the L'Enfant and McMillan plans. Consistent with the First Amendment and federal regulations, demonstrations will continue to be fully accommodated on a first-come, first-served basis. Special events will also be accommodated, consistent with federal regulations.

The most popular transit entrance to the National Mall is the Smithsonian Metro station. The National Park Service would work with the Washington Metropolitan Area Transit Authority to add the National Mall to the station name. To minimize the cost, the timing of the name change could be coordinated with the 2013 opening of the Dulles Corridor Metro project.

FIGURE 15: THE WASHINGTON MONUMENT



The Washington Monument from near the Sylvan Theater.

FIGURE 14: THE MALL



Looking east on the Mall to the United States Capitol.

WASHINGTON MONUMENT AND GROUNDS

Washington Monument

One of the five presidential memorials on the National Mall, the Washington Monument will continue to be a historic character-defining feature and the visual orientation point for Washington, D.C. Hours at the monument would be extended seasonally until 10 p.m. to allow more people to visit.

Washington Monument Grounds

The grounds of the Washington Monument extend from Constitution Avenue on the north to Maine Avenue on the south, and from 14th Street on the east to 17th Street on the west. The German-American Friendship Garden is at the north edge of grounds on Constitution Avenue, across from the Ellipse. Consistent with the First Amendment and federal regulations, demonstrations will continue to be fully accommodated on a first-come, first-served basis on the Washington Monument grounds north of Independence Avenue. Special events and national celebrations will also be accommodated, consistent with federal regulations, and recreational activities will be allowed. Roadways bisect the south grounds, separating the monument and the Tidal Basin.

West Potomac Park (North of Independence Avenue)

World War II Memorial

The World War II Memorial commemorates the sacrifices, achievements, and activities of a major event of the mid-20th century, both at home and in the Atlantic and Pacific theaters. It was constructed around the historic Rainbow Pool. Living history is occasionally provided, along with programs on Veterans Day and Memorial Day. Wreaths are not permitted in front of the Freedom Wall, which encompasses the Field of Gold Stars (NPS 2006f). The memorial provides parking and drop-off for visitors with disabilities, and wheelchairs are provided. No major actions are planned for this memorial.

Constitution Gardens

Constitution Gardens was developed for the Bicentennial and was intended for event use. It is the site of the Memorial to the 56 Signers of the Declaration of Independence, which is located on an island in the lake, and it provides a pastoral setting for passive recreation and a respite as visitors travel between memorials. Consistent with the First Amendment and federal regulations, demonstrations will continue to be fully accommodated on a first-come, first-served basis. Special events will also be allowed, consistent with federal regulations.

Present public access and parking would remain on Constitution Avenue, including tour bus drop-off and parking spaces. Ice-skating is allowed on natural ice when conditions are safe.

Figure 17: Constitution Gardens



Looking east across Constitution Gardens Lake toward the Washington Monument. The Memorial to the 56 Signers of the Declaration of Independence is to the right.

Figure 16: World War II Memorial



Looking south across the Rainbow Pool at the World War II Memorial.

Vietnam Veterans Memorial

The 5.8-acre Vietnam Veterans Memorial honors those who served during this conflict. As previously noted, an underground memorial center will be constructed by others west of Henry Bacon Drive. Rangers and volunteers would continue to lead living history and educational programs. Catalogs listing the names on the wall are provided in several locations. Wayside exhibits provide additional information.

Figure 18: Vietnam Veterans Memorial



Looking west toward the Vietnam Veterans Memorial.

Except for official annual Memorial Day and Veterans Day commemorative ceremonies, federal regulations prohibit demonstrations and special events in certain areas of the memorial. First Amendment demonstration sites related to the Vietnam Veterans Memorial (small structures with displays) are present along the sidewalk of the Lincoln Memorial.

Under all alternatives circulation patterns and related pedestrian amenities (lighting, name catalogs, post-and-chain fencing) would be examined once the new Vietnam Veterans Memorial Center has been constructed.

Lincoln Memorial and Grounds

One of the five presidential memorials on the National Mall, the Lincoln Memorial will continue to be a historic, character-defining feature and the visual western terminus of the National Mall. The presidential memorial will remain a highly visited area also associated with civil rights history as well as the contributions of our 16th president. Consistent with the First Amendment, federal regulations, and the 2009 *Guidelines for Special Events and Demonstrations*, demonstrations will continue to be fully accommodated on a first-come, first-served basis. Special events and national celebrations will also continue to be allowed, consistent with federal regulations.

The memorial exhibit area and restrooms, which are on the lower level, would be renovated. The bookstore would be relocated from the chamber level to the lower level.

FIGURE 19: LINCOLN MEMORIAL



The Lincoln Memorial and steps.

The historic landscape design retains a great deal of integrity with existing plant materials, the elm walkways, and radial plantings around the base of the memorial and at the Watergate steps. The recommendations of the Lincoln Memorial *Cultural Landscape Report,* which seek to protect the historic design, would be implemented under all alternatives.

The Lincoln Memorial grounds include three component cultural landscapes: the reflecting pool, the memorial circle and roads, and the Watergate area. The reflecting pool area also contains the north and south elm walkways and the lower approachway (staircase to the reflecting pool).

The historic landscape associated with the memorial circle and radial roads would be rehabilitated. Existing public access and parking would be maintained, including tour bus drop-offs, parking for visitors with disabilities, and taxi stands.

The Watergate area is on the west edge of the National Mall and includes historic features and recreation areas (volleyball and softball). Adjacent to and north of Constitution Avenue is Braddock's Memorial Rock Well, which is within intertwined nonhistoric access roads for Rock Creek Parkway, the Kennedy Center parking area, U.S. Highways 50 and 66, and the Theodore Roosevelt Memorial Bridge.

The historic features of the Watergate steps, the Constitution Avenue belvedere, the John Ericcson Memorial, and the *Arts of Peace* statues would be maintained. In cooperation with other national park system units, Arlington Memorial Bridge and the *Arts of War* statues will be maintained. Portions of the area, which are outside the Reserve that was designated by Congress, have been identified in the NCPC *Memorials and Museums Master Plan* for future national commemorative sites. The National Park Service would accommodate future national memorials authorized by Congress, reinforcing that this is a commemorative landscape. The condition of volleyball courts and softball fields would be improved.

This area also serves as a major vehicular gateway to the city and the National Mall from Virginia and Maryland. Road projects and

FIGURE 20: KOREAN WAR VETERANS MEMORIAL



Looking west at the Korean War Veterans Memorial.

circulation improvements by others would be accommodated to simplify traffic patterns and to improve pedestrian connections from the Kennedy Center and adjacent neighborhoods.

Korean War Veterans Memorial

The Korean War Veterans Memorial commemorates the veterans and international coalition that fought the Korean War in the 1950s. Living history programs and annual special events at the memorial would continue.

D.C. War Memorial

The D.C. War Memorial primarily commemorates city residents' involvement in World War I. It is in a pleasant wooded setting with flowering trees and shrubs, and it was also designed to serve as a bandstand. Current use for small events would continue.

Ash Woods

Ash Woods, which is between Independence Avenue and Ash Road, was planned to be a naturalized, thickly wooded area with little understory vegetation, and this appearance would be maintained. The area contains the U.S. Park Police stables, a restroom, and recreation fields.

WEST POTOMAC PARK (SOUTH OF INDEPENDENCE AVENUE)

Tidal Basin Area

The Tidal Basin area, a designed water area of a little more than 100 acres, is the beautiful setting for several memorials, cherry trees that were a gift from Japan, historic monuments, and visitor amenities. It provides spectacular views, as well as reflected views, of the Thomas Jefferson Memorial and the Washington Monument.

Consistent with the First Amendment and federal regulations, demonstrations will continue to be fully accommodated on a first-come, first-served basis. National celebrations and special events will also be allowed, consistent with federal regulations.

Measures would be taken to reduce trampling, compaction, and erosion near the cherry trees, including the installation of post-and-chain fencing in some areas. Visitors would be educated about how they can help reduce damage to the trees.

Visitor enjoyment is primarily informal recreation, such as enjoying views, picnicking, and strolling along the Tidal Basin walks. Seasonal paddleboat rentals are provided on the east side of the Tidal Basin. These activities would continue under all alternatives.

FIGURE 21: THE D.C. WAR MEMORIAL



The D.C. War Memorial is within Ash Woods.

Franklin Delano Roosevelt Memorial

One of five presidential memorials on the National Mall, the Franklin Delano Roosevelt Memorial tells important stories of mid-20th century history — the Great Depression, the Roosevelt presidential legacy, and World War II. Based on Roosevelt's four terms as president, the memorial is subtly divided into four outdoor rooms; Room 4 was designed for programs. Existing public access and parking would continue. West Basin Drive would be realigned when the Martin Luther King, Jr. Memorial is built to the north. The information station, bookstore, and two restroom facilities would be maintained and updated as needed.

West Potomac Park Riverfront

Stretching south from the John Ericcson Memorial to the I-395 corridor, the Potomac Riverfront includes the First Air Mail Flight plaque, cherry trees, walks, views, and parking. This is primarily an informal area. Athletic fields are east of Ohio Drive. The riverfront trail system connects to Georgetown and East Potomac Park, as well as to the National Mall.

Informal or passive recreation, such as picnicking, play, and walking, would continue. Ballfields west of the Tidal Basin are highly sought after for league and recreational games. The fields are occasionally used for special events, as well as a staging area for events and commercial filming, and these uses would continue.

FIGURE 22: FRANKLIN DELANO ROOSEVELT MEMORIAL



Room 4 at the Franklin Delano Roosevelt Memorial.

George Mason Memorial

The memorial to this founding father emphasizes the rights of citizens in a democracy and is built around an existing historic fountain. It contains perennial gardens. The historic fountain would be rehabilitated to improve water quality.

Thomas Jefferson Memorial

One of the five presidential memorials on the National Mall, the Thomas Jefferson Memorial will continue to be a historic, character-defining feature and the visual southern terminus for the National Mall. This memorial to our third president includes the terrace wall and related plantings, the circular terrace roadway, and the north plaza. Exhibits, a bookstore, information, and restrooms would continue inside the memorial. Educational information about Thomas Jefferson would continue to be provided.

Consistent with the First Amendment and federal regulations, demonstrations will continue to be fully accommodated on a first-come, first-served basis. National celebrations and special events will also be allowed, consistent with federal regulations.

The memorial grounds include 19.2 acres immediately south of the Tidal Basin, with tall shade trees and cherry trees. Historic plantings would be preserved. A refreshment stand is located south of the memorial near the tour bus parking area.

FIGURE 23: THOMAS JEFFERSON MEMORIAL



The south side of the Thomas Jefferson Memorial.

THE ALTERNATIVES

THE NO-ACTION ALTERNATIVE — CONTINUE CURRENT MANAGEMENT

The no-action alternative describes how current management would be continued, and it identifies those plans and actions already moving forward. Park staff would continue standard maintenance activities and undertake deferred maintenance projects as funding permits. The following is a summary of actions that would occur under this alternative. All actions that would be taken under this alternative are listed in Table 7. Because this alternative outlines existing conditions, it serves as a baseline to compare the action alternatives.

All actions described below would be in addition to those under "Actions Common to All Alternatives" and highlighted in the accompanying text box. Only areas where actions would be taken are included in the following discussion.

National Mall Actions

Cultural Resources

In addition to the actions common to all alternatives, views and vistas within the historic landscape would be recognized, including large areas of unprogrammed open space.

Natural Resources

No actions beyond those described in "Actions Common to All Alternatives" would be taken.

Demonstrations, Special Events, and National Celebrations

No actions beyond those described in "Actions Common to All Alternatives" would be taken.

Access and Circulation

Various means of circulation within the National Mall would continue for different users (public transit, tour buses, taxis, commuters, pedestrians, and bicycle riders). The NPS visitor transportation system would be replaced when the current contract expires. No changes would be made to visitor parking or public access.

Actions Common to All Alternatives

As previously described, the following summarized actions are common to all alternatives:

- *Cultural Resources* — Preserve and protect cultural resources; manage in accordance with *The Secretary of the Interior's Standards* and with the general recommendations of cultural landscape reports and inventories.
- *Natural Resources* — Continue to manage and protect natural resources. Address water quality problems in water features.
- *Demonstrations and Special Events* — Consistent with the First Amendment and federal regulations, fully accommodate demonstrations on a first-come, first-served basis. Consistent with federal regulations, accommodate permitted events. Improve permit procedures for special events and First Amendment demonstrations. Enhance procedures to ensure that resources are better protected and that soil, turf, and vegetation impacts are reduced.
- *Access and Circulation* — Continue working with the city and other agencies to address tour bus parking.
- *Visitor Information, Education, and Enjoyment* — Continue to offer visitor information, educational programs, venues for entertainment, guided walking and bicycle tours, and a mix of recreational activities.
- *Visitor Amenities* — Assess the economic feasibility, necessity, and appropriateness of changes to commercial visitors services and facilities.
- *Health, Public Safety, and Security* — Continue law enforcement patrols and increase a law enforcement presence during large events.
- *Park Operations* — Make waste management more efficient; expand recycling at events; continue a visual quality team to improve conditions and the appearance of park facilities; and meet NPS energy efficiency goals.

Visitor Information, Education, and Enjoyment

No actions beyond those described in "Actions Common to All Alternatives" would be taken.

Visitor Amenities

The present variety of architectural styles for visitor amenities and site furnishings on the National Mall would continue. Various types of paving (including gravel, asphalt, concrete, brick, stone, and concrete pavers) would be maintained, repaired, and replaced as budgets allow. The National Park Service would work with the Commission of Fine Arts to retain the existing character of lighting. Present restroom, drinking fountains, and seating would remain.

Health, Public Safety, and Security

Highly used areas with many different activities (such as bicycle use on sidewalks or softball games near areas where people are picnicking) would continue.

Present street crossing times would remain, as would existing pathway lighting, furnishings, and paving materials. U.S. Park Police and ranger staff would continue to notify visitors of emergency situations, including severe weather conditions.

The National Park Service would continue to reduce opportunities for illegal camping and the misuse of public facilities through staff oversight (law enforcement rangers as well as maintenance personnel).

Public information and emergency announcements would continue to be made by park police and ranger staff. Improved mass notification methods would be researched.

Park Operations

Deferred maintenance would be addressed as budgets and staffing allow. Park standards, which are dated and limited in scope, would continue to be used. Current programs to make facilities sustainable would be continued, including designing any new facilities to incorporate sustainable systems. Operational access for vehicles would remain limited in some areas.

In accordance with the turf management record of decision, half of the Mall (3rd to 14th streets) would continue to be closed every other winter for restoration. Efforts would be made to reduce the use of snow fencing to restrict access to areas for security or resource rehabilitation.

For events, temporary communication systems would be installed as needed.

The Mall

Union Square (1st to 3rd Streets)

The Grant Memorial and the Capitol Reflecting Pool would continue to be the focal point of the east end of the National Mall, the foreground of the U.S. Capitol. Union Square would remain a popular location for demonstrations and special events.

The Grant Memorial would be maintained, and the historic features of the landscape would be preserved. Existing facilities would be maintained, but no additional facilities (such as seating, restrooms, or food service), infrastructure for demonstrations or special events, or information would be provided.

The Mall (3rd to 14th Streets)

The Mall would continue to serve as an extremely popular venue for demonstrations, special events, cultural activities, and other civic events.

The components of the historic landscape from the L'Enfant and McMillan plans that still have integrity would be preserved. Soils compacted by repeated events would remain. Half of the Mall would be rested every other winter for restoration, and new management techniques for lawn areas would be studied. American elm trees would be replaced as needed. Nonhistoric plantings of other trees (elms, bald cypress, cedar, and oak) would be maintained.

A temporary visitor contact station would continue to be provided, and orientation maps and information would be improved near the Metro stop and elsewhere on the Mall. No additional educational waysides would be provided. Designated drop-off and pickup sites for visitor transportation and commercial tour buses would remain. Free public and permit parking would continue on Madison Drive NW and Jefferson Drive SW. Gravel walkways, which are frequently difficult for people with disabilities to maneuver, would be maintained, and maintenance issues related to gravel (mi-

gration onto adjacent lawns, uneven surfaces, dust) would be dealt with as budgets allow.

Four stands for refreshments and souvenir sales, along with adjacent tables and seating, and a small information station, would be maintained. Tourmobile ticket booths, which are no longer used, would remain.

The following action for the Mall is common to all alternatives:

- Work with the Washington Metropolitan Area Transit Authority to change the name of the Smithsonian Metro station to include the National Mall.

Washington Monument and Grounds

The Washington Monument grounds would continue to be a popular location for demonstrations and special events. Food and retail, now in a temporary facility, would be relocated to a permanent location to be determined in this plan. The updated 2003 Olin landscape plan for the grounds (see appendix H) would be implemented. The highly used circular restroom near 15th Street and Independence Avenue SW would be maintained, along with benches, drinking fountains, and other facilities. The newly renovated Monument Lodge offers a bookstore, ticketing, and restrooms. The Sylvan Theater would continue to be used as a performance venue for an audience of several thousand people. Survey Lodge would continue to serve as the main visitor contact station, even though it is off the main circulation routes, not easily identifiable, and hidden by overgrown vegetation.

Informal games and recreational activities, along with permitted ball games, would continue.

Present public access and parking, including tour bus drop-offs, as well as parking for NPS staff, would remain.

West Potomac Park (North of Independence Avenue)

Lincoln Memorial and Grounds

The Lincoln Memorial would continue to be highly visited and would remain a popular location for demonstrations and special events. Maintenance activities would continue for the reflecting pool area, the historic features of the Watergate steps, the Constitution Avenue belvedere, the *Arts of Peace* statues, and the John Ericcson Memorial, as well as the circle and radial roads. The social trail created by heavy foot traffic along the length of the pool would be addressed. The north and south concession / refreshment stands would be retained, but no restrooms would be provided in those locations.

The following actions for the Lincoln Memorial and grounds are common to all alternatives:

- Renovate and expand the exhibit area, renovate the restrooms at the memorial, and relocate the bookstore to the lower level.
- Implement recommendations of the Lincoln Memorial *Cultural Landscape Report*.
- Rehabilitate the historic landscape associated with the memorial circle and radial roads.
- Accommodate future national memorials authorized by Congress in the area north of the Watergate steps.
- Accommodate road projects and circulation improvements by others to simplify traffic patterns and to improve pedestrian connections from the Kennedy Center and adjacent neighborhoods.

Ash Woods

The Ash Woods restroom would be upgraded as funds became available. The U.S. Park Police stables would be maintained in their current location, with access from the Ash Woods road.

West Potomac Park (South of Independence Avenue)

Tidal Basin Area

The Tidal Basin area would continue to offer a pleasant strolling and viewing experience.

Historic features within a naturalistic environment would be maintained. Engineering studies would be undertaken to improve Tidal Basin flushing and to ensure seawall stability. The basin walls would be maintained and repaired as

necessary, and walks would be relocated outside high-tide areas. Compacted soils and social trails, as well as adverse effects on cherry tree health, would be addressed as budgets and staffing allow. Walks would be maintained as budgets and staffing allow.

Public parking in the lot accessed from Maine Avenue would remain except during large events such as the National Cherry Blossom Festival, when it could be closed for event use and temporary facilities.

The refreshment stand would be retained, but no restrooms would be provided.

West Potomac Park Riverfront

The deteriorating dry-laid stone river walls south of Arlington Memorial Bridge would be stabilized with riprap. Recreational and commuter bicycle traffic would continue along the riverfront, along with parking on Ohio Drive.

Thomas Jefferson Memorial and Grounds

The Thomas Jefferson Memorial grounds would continue to be a popular destination for visitors and a venue for special events. Plantings on the grounds (deciduous trees, including cherry trees) have historic integrity and would be preserved. The present tour bus drop-off and parking lots A, B, and C would be retained, as would existing visitor amenities (bookstore, retail, refreshment stand, and restrooms).

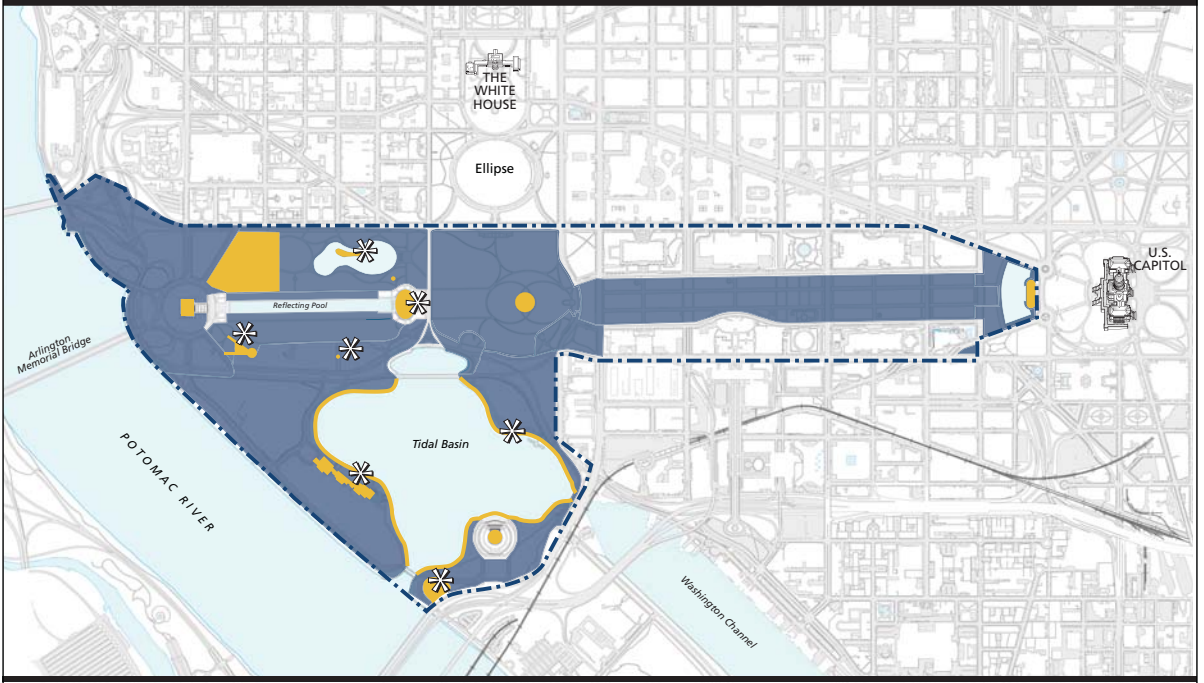
No-Action Alternative — Current Use Map

CURRENT USE MAP: No-Action Alternative

National Mall Plan

United States Department of the Interior / National Park Service

DSC • Oct. 2009 • 802 • 100451

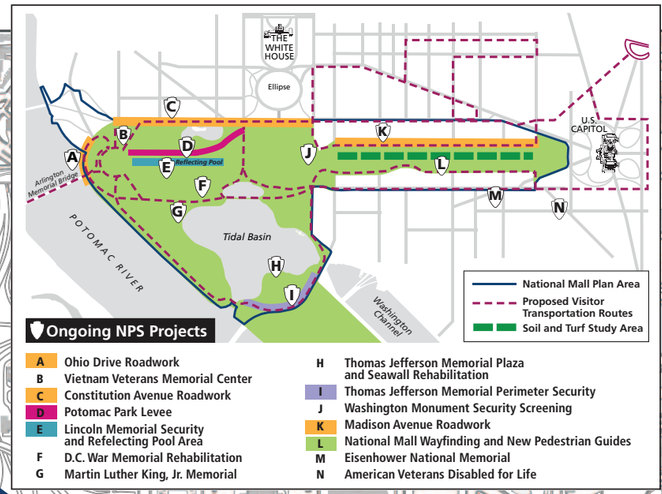


National Mall Plan Area

No Restriction

Restricted Use (✻ See Supintendent's Compendium)

No-Action Alternative
Continue Current Management
National Mall Plan
National Mall and Memorial Parks • Washington, D.C.
DSC • April 2010 • 802 • 20012B



Lafayette Park

THE WHITE HOUSE

Ellipse

NOTE:
FOOD AND RETAIL MUST BE RELOCATED

Northwest Area

Constitution Avenue

VIETNAM VETERANS MEMORIAL

CONSTITUTION GARDENS

LINCOLN MEMORIAL

WORLD WAR II MEMORIAL

WASHINGTON MONUMENT

KOREAN WAR VETERANS MEMORIAL

DC WAR MEMORIAL

UNION SQUARE

Grant Memorial

Independence Avenue

POTOMAC RIVER

Riverfront

Tidal Basin Area

FRANKLIN DELANO ROOSEVELT MEMORIAL

THOMAS JEFFERSON MEMORIAL

National Mall and Memorial Parks Headquarters

395

North

0 0.1 0.2 0.3 0.4 0.5 Mile

0 0.25 0.5 Kilometer

NOTE: See Circulation map in Environmental Consequences.

No-Action Alternative Legend

- National Mall Plan Area
- Mall Soil and Turf Study Area

EXISTING FACILITIES

- Information / Orientation
- Retail
- Food Service
- Restrooms
- Bookstore
- Recreation Equipment Rental
- Performance Space
- U.S. Park Police Stables
- Carousel
- Interactive Water Feature
- Metro Station
- Major Water
- Tour Bus Drop-off Location

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THE PREFERRED ALTERNATIVE

The National Mall, as the premier civic and symbolic space for our nation, would be respectfully rehabilitated and refurbished so that very high levels of use could be perpetuated and the needs of all visitors and users could be met in an attractive, high-quality, energy-efficient, and sustainable manner. Its memorials and landscapes would be protected, with large areas of unprogrammed open space as defining features of the historic landscape. The designed historic landscape would evolve, and its value over time would increase, reflecting significant national events. Contemporary uses would be accommodated while respecting the planned historic character and visions of the L'Enfant and McMillan plans. The intent would be to establish an overall identity and character for the National Mall, creating a coherent pedestrian environment that would complement and balance the natural environment, the combination of formal and informal features, and national commemorative works. The National Mall would be emphasized as a year-round destination where the beauty and variety of every season would enhance visitor experiences.

Uses for First Amendment demonstrations, commemorations, and national ceremonies and celebrations would be emphasized. Visitors would be made to feel welcome through helpful wayfinding signs, knowledgeable staff, and high-quality and accessible facilities. Diverse opportunities would be offered for public enjoyment, including educational, cultural, and musical programs, as well as active and passive recreational activities.

Professionals would be engaged to design high-quality solutions to unify the National Mall and to articulate the visions for specific sites. The National Park Service would ensure compatible and enduring high-quality design, as well as the highest facility maintenance standards, to create a sense of place that would reinforce the civic, historic, and symbolic role of the National Mall to our nation.

All actions described below would be in addition to those under "Actions Common to All Alternatives" and highlighted in the accompanying text box. Only areas where actions would be taken are included in the following discussion.

Actions Common to All Alternatives

As previously described, the following summarized actions are common to all alternatives:

- *Cultural Resources* — Preserve and protect cultural resources; manage in accordance with *The Secretary of the Interior's Standards* and with the general recommendations of cultural landscape reports and inventories.
- *Natural Resources* — Continue to manage and protect natural resources. Address water quality problems in water features.
- *Demonstrations and Special Events* — Consistent with the First Amendment and federal regulations, fully accommodate demonstrations on a first-come, first-served basis. Consistent with federal regulations, accommodate permitted events. Improve permit procedures for special events and First Amendment demonstrations. Enhance procedures to ensure that resources are better protected and that soil, turf, and vegetation impacts are reduced.
- *Access and Circulation* — Continue working with the city and other agencies to address tour bus parking.
- *Visitor Information, Education, and Enjoyment* — Continue to offer visitor information, educational programs, venues for entertainment, guided walking and bicycle tours, and a mix of recreational activities.
- *Visitor Amenities* — Assess the economic feasibility, necessity, and appropriateness of changes to commercial visitors services and facilities.
- *Health, Public Safety, and Security* — Continue law enforcement patrols and increase a law enforcement presence during large events.
- *Park Operations* — Make waste management more efficient; expand recycling at events; continue a visual quality team to improve conditions and the appearance of park facilities; and meet NPS energy efficiency goals.

National Mall Actions

Cultural Resources

The public's use of the designed historic landscape and the memorials, historic structures, and other landscape features would continue to evolve, and its value over time would increase, reflecting significant national events. The health and appearance of the historic landscape would

be improved. Planned vistas would be protected and preserved, including large open spaces that define the historic landscape.

Natural Resources

Natural resource conditions would be improved for tree and turf areas, soil conditions would be enhanced or reengineered to reduce or reverse the effects of compaction, and rehabilitation and recovery periods would be revised so that smaller areas could be set aside more frequently and broader public access maintained. To ensure optimal turf conditions and to enhance natural resources, irrigation systems would be installed or replaced in a manner that would protect them from damage during events.

Means would be developed to conserve water, reduce the use of potable water, and reuse water (for example, collecting and storing water from subsurface drainage / dewatering activities and using for irrigation purposes). Nonpotable water sources would be sought for water features. Sustainable water strategies would be developed in partnership with the General Services Administration, the Army Corps of Engineers, the National Capital Planning Commission, the D.C. Department of the Environment, the D.C. Water and Sewer Authority, and others to address flooding and stormwater management. Fountains or interactive water features would be designed so the sound of water would mask traffic noise and help create a more contemplative and enjoyable atmosphere.

Gravel would be eliminated as a paving material in some areas to improve air quality, stormwater collection and storage, as well as accessibility for pedestrians.

A comprehensive approach would be taken with others to address the impacts of climate change, such as rising sea levels.

Demonstrations, Special Events, and National Celebrations

To improve the nation's premier civic space, highly visible venues throughout the National Mall would be improved and designed to sustainably accommodate high levels of use for First Amendment demonstrations, national celebrations, events, and entertainment. Infrastructure, including connections for utility and communication systems, would be provided.

A new computer mapping based reservation system would be developed to provide venue and permit information, as well as to schedule events, maintenance, and recovery periods or to schedule park projects. The National Park Service would seek to provide more balance in the scheduling and distribution of special events (not First Amendment demonstrations) in order to more equitably accommodate open space for recreation, general visitation, and natural resource restoration. Organizers of large events would be encouraged to schedule their functions during non-peak seasons and to provide bicycle parking.

Sufficient staff would be provided to support national celebrations, events, and demonstrations. The National Park Service would continue to collect data on best practices for managing events, success rates, and standards to achieve, and where feasible procedures would be incorporated into park standards. Onsite staging and logistical areas for special events would be limited.

Permanent infrastructure and space would be planned for temporary facilities (such as portable restrooms, trash, recycling, logistical or operational space, media activities, access, and law enforcement), and venues would be designed to be universally accessible. Participation in events could be expanded by encouraging simulcasts of programs. The intent would be to protect resources, reduce the impact of annual events, and make setup and takedown operations for event organizers more efficient. Product types and standards to be used during events would be defined, including acceptable locations and seasonal time limits for temporary facilities. Better cost recovery procedures would be developed.

Intense post-event recovery procedures would be developed to improve resource conditions, but smaller areas could be set aside more frequently for rehabilitation so that broader public access could be maintained.

Access and Circulation

A coordinated pedestrian environment would be implemented and would accommodate various

user needs, including a high-quality, enjoyable walking and bicycling environment, while providing a positive urban experience and coordinated urban connections within a parklike setting. All areas of the National Mall would be connected, and better transitions would be provided into adjacent areas, such as walkways to the National Mall from Constitution and Independence avenues and along 7th, 12th, and 14th streets. Pedestrian and bicycle links to areas off the National Mall would be coordinated with city pedestrian and bicycle plans. Pedestrians and bicycle riders would have access to a continuous waterfront experience from Georgetown to the Southwest Waterfront and the Anacostia River. Information would be made available about bike routes.

The pedestrian experience would be improved by upgrading walking surfaces, developing a coordinated palette of National Mall paving materials for a variety of uses, developing consistent and identifiable crosswalks, making pedestrian waiting areas at intersections larger, programming automatic and extended pedestrian crossing times into signal phasing, and considering traffic-calming measures. Access for people with disabilities would be improved. For consistency, plans would be coordinated with city pedestrian program goals and design approaches.

Bicycling would be facilitated by providing separate circulation routes for bicyclists (or personal transit users) and pedestrians and by offering additional facilities geared to bicyclists and pedestrians. Park managers would also work with the city to implement compatible sections of its *Bicycle Master Plan* and bicycle rental program. When and where feasible, bicycle and vehicle routes would be physically separated.

A coordinated strategy to limit visitor vehicle traffic and emphasize alternative modes of transportation would be developed with the city and other governmental agencies. Valet or shuttle service could be provided to and from parking garages to designated drop-off and pickup locations on the National Mall. Some parking areas would be redesigned for more efficient traffic flows, and additional visitor parking for people with disabilities would be provided.

Tour bus drop-offs would be redesigned as needed. Supplementary transportation could be provided. Roving health and safety courtesy shuttles could provide service for the elderly, families with small children, and others as needed. The National Park Service could offer wheelchairs or rental electric scooters for seniors, the disabled, or those for whom walking long distances is difficult.

Visitor Information, Education, and Enjoyment

All people would be welcomed through improved orientation, wayfinding, and information services. Orientation / map areas would be provided near key pedestrian entries and intersections or corridors linking to the National Mall, and they would be readable at night. Sign and information systems would be flexible enough to incorporate changes in cutting edge technology. Signs and brochures would be welcoming and in multiple languages. In addition, roving rangers would welcome visitors and answer questions, and all park staff, including maintenance staff, would be able to direct visitors to destinations and provide park maps.

Communication networks, mass notification systems, program and activity listings, coordinated information about adjacent museums and visitor destinations, and links to tourist websites would create a seamless visitor experience.

Educational programs would be developed to inspire visitors so that they would leave with a new or renewed appreciation of their inalienable rights, the American experience, and our diverse culture. Programs would be flexible and adaptable to technological innovations, such as digital electronic displays, phone tours, and interpretive boards and activity listings that could be programmed by computer and would allow visits to the National Mall to be personalized. Mobile information stations and roving staff would supplement dispersed visitor contact stations rather than having a single visitor center to provide visitor orientation, information, and education. Self-guided thematic walking tour brochures would be available. The variety of NPS guided tours would be increased, such as multi-season touring opportunities, thematic walking tours, and multilingual tours.

Educational themes would include civic space and First Amendment demonstrations, history,

commemorative works, historic plans and the city's development, healthy life styles, and sustainability (including the importance of recycling, reducing waste, and reusing items as a stewardship message). All visitor amenities, including restrooms, would have educational, stewardship, or informational components.

Opportunities for entertainment would be increased through improved or additional venues with the necessary infrastructure. Performances, thematically appropriate entertainment, and educational programs could be provided at new visitor food service destinations. Small-scale programs or entertainment could be used as a way to enhance the pedestrian experience.

An on-line permitting system for athletic fields would be developed. Commercial recreational activities could be expanded and diversified, including possible recreation equipment rentals (for example, bicycles, kayaks, rowboats, model boats, kites, and ice skates). Offsite bicycle rentals would continue, and connections to other nearby recreation facilities in East Potomac Park, along with trail connections to the waterfront and the Potomac and Anacostia rivers, would be improved.

Visitor Amenities

Coordinated, high-quality, year-round and seasonal furnishings would be provided, including seasonal tables and chairs, as well as trash/recycling containers, curbs, signs, drinking fountains, and restrooms. Designs would be sensitive to the character of the historic landscape and would visually connect different areas of the National Mall to establish a sense of place and an overall identity. Sustainable designs would be incorporated into all new visitor amenities for ease of maintenance and use. Visitor facilities would be designed to withstand vandalism, forced entry, and skateboarding.

More seating opportunities and locations for visitors to enjoy views or summer shade would be provided, along with seating for groups. Seating options would include benches, the use of site components such as walls, and portable lawn chairs. Seating could be added at some memorials. Seating would be designed to meet the needs of people with disabilities.

The following character-defining components for furnishings would be incorporated into the overall design:

- historic benches, including the NPS standard Washington bench
- historic lighting (Olmsted, Twin twenties, Washington globe, Saratoga lights)
- furnishings specifically designed for memorials (seating, trash receptacles, signs, drinking fountains, light fixtures, etc.)

New walks would be developed to be low-maintenance, sustainable, and universally accessible. Along streets the walks would also conform to the design appearance of the *Streetscape Manual* (Interagency Initiative for National Mall Road Improvement Program 1992) and any updates. Paving would be suitable for pedestrian access and recreational activities, as well as durable enough for event access, operations, and maintenance. The use of porous or other sustainable approaches would be encouraged.

The National Park Service would work closely with the Commission of Fine Arts, the National Capital Planning Commission, the Architect of the Capitol, the Smithsonian Institution, and D.C. city agencies to reestablish the lighting task force to develop a comprehensive lighting guideline for the monumental core and to address:

- protection of the dominant lighting of the five symbolic icons (the Capitol, the White House, the Washington Monument, the Thomas Jefferson Memorial, and the Lincoln Memorial)
- desired lighting character for urban and park areas, character-defining elements such as statuary and building facades, pedestrian and vehicular areas, and transitions between different light levels
- appropriate light levels (foot-candles or lumens) and light color (color rendition) for different areas
- energy efficiency and sustainable lighting practices
- light pollution / protection of night sky from excessive, horizontal light pollution (temporarily blinding light)
- security lighting

All new and rehabilitated visitor facilities would be designed to be compatible with the character of the National Mall (e.g., the refreshment stands on the Mall and at the Lincoln Memorial could be used as the quality standard). The intent would be to make them easily identifiable, strengthening the NPS identity and denoting that they are secondary to national memorials.

If feasible, several well-located, convenient, attractive, and architecturally significant multipurpose facilities could be developed in certain locations (e.g., Union Square, the Washington Monument grounds, Constitution Gardens, and the Tidal Basin area). These facilities would provide pleasant places for visitors to sit and relax, and infrastructure would be provided for programs, performances, and entertainment. Food service could be offered, with more variety in types of food, along with indoor/outdoor seating. High-quality designs and pleasant surroundings would encourage visitors to linger. Also, trash and recycling would be concentrated at these locations to protect memorials. No indoor auditoriums or museum collections, which typify NPS visitor centers, would be proposed.

Well-designed and clearly identifiable mobile food carts and refreshment stands, coordinated with signs and site furnishings, would be available during high use seasons and special events. In addition, more variety would be provided in types of food, such as sit-down restaurants in addition to mobile carts and refreshment stands, and longer service hours. Refreshment stands would be pleasant places to pause for food or drink during daytime and evening hours, but the larger multipurpose visitor facilities (such as those proposed for the Washington Monument grounds or Constitution Gardens) would be destinations where visitors could linger.

Reflecting pools and ornamental water features would be retained. Some new water features would be added for visitor enjoyment as well as for health and safety, including interactive water features, such as those at the German-American Friendship Garden.

Drinking fountains would be provided near restrooms. Water stations would be designed to make it easier to fill reusable water bottles or take care of pet water needs, and they would also be designed to be vandal proof. New or renovated food service areas would be serviced more frequently. Additional conveniently located visitor restrooms would be constructed, cleanliness monitored, and servicing provided more frequently. In high use areas some restrooms would be located and sized to flexibly accommodate increased demand generated by events, tour buses, or peak-season visitation. The capacity of some existing restrooms would be increased. In some areas automated, self-cleaning public restrooms would be provided to extend operating hours of facilities.

Health, Public Safety, and Security

Areas would be redesigned to safely differentiate multiple uses (e.g., bicycle lanes to separate riders from vehicles). Measures such as programming automatic and extended pedestrian crossing times into signal phasing, traffic-calming measures (such as raised crosswalks), special crosswalk paving, midblock crossing points, larger waiting areas, better walkway lighting to emphasize surface conditions and the pedestrian environment, and emergency call stations would all enhance pedestrian safety.

Visitor contact with uniformed staff, including horse and bike patrols, would be maximized. Mass notification capability to keep visitors and staff informed of what to do in case of weather or other emergencies would be provided. This system would be coordinated with an upgraded communication network.

Seating would be increased in shaded areas, and shade would be added in some areas. Automated, self-cleaning public restrooms (which sanitize surfaces after use) would be provided in some areas.

Tall shrub beds and areas allowing cover and storage would be reduced or eliminated, in keeping with the original landscape design intent.

Park Operations

As deferred maintenance was addressed, some projects would be redefined to allow more use, to better protect resources, and to better provide visitor amenities. Park standards would be developed to clearly define desired qualities for different National Mall areas, including inspections, monitoring, maintenance (grounds,

memorials, and other facilities), education and interpretation, and activities by other park divisions. Best practices and approaches would be used for maintenance and operations to improve the National Mall's visual appearance and operational efficiency. Sustainable practices would be maximized.

New, high-quality facilities would be designed and constructed to achieve the highest maintenance standards and to be vandal-resistant. Cutting edge sustainable facility and site design measures and recycling would be incorporated in all facilities. Durable, easy-to-maintain, and standardized recirculation systems would be installed in water features.

Operational access would be provided as circulation systems were upgraded. Walkways would be wide enough to accommodate maintenance, staff, and operational vehicles, as well as the public, and they would be able to withstand the weight of vehicles used for park operations and event deliveries. Trash removal and restroom cleaning would be increased during visitor hours.

Turf management would be altered to close smaller areas more frequently and to provide more equitable opportunities for all uses — events, demonstrations, recreation, and general visitation, as well as restoration/rehabilitation. To protect areas during rehabilitation and restoration, an attractive, durable, temporary fence system (in lieu of snow fencing) would be developed. It should be lightweight, not easily scaled, and easy to store, transport, and install. Alternatively, a marking system could identify areas to be closed to use.

Renewable energy sources would be sought for lighting and pumping systems for water features (e.g., a large-scale photovoltaic system on the roof of the Interior Building). Advances in monitoring, such as locating burned out light bulbs, would be used to improve maintenance.

The required core operations planning would be used to match staffing needs to the core mission of the park. Staffing needs would be examined and correlated with park standards, particularly in the areas of resource management, communications, maintenance, events, special project teams, and law enforcement. Multiple contract opportunities would be offered to provide visitor services that have been determined to be necessary and appropriate. Posting listings of daily cleanup/fix-up opportunities for visitors to participate in would be explored as a means to increase volunteer efforts.

To advance the principles of sustainability and to educate the public about sustainable projects, the National Park Service would undertake the following:

- Participate in the EPA "Climate Friendly Parks" program.
- Reduce solid waste; increase recycling and use of biodegradable products.
- Reduce water use; retain stormwater for irrigation.
- Reduce energy consumption, greenhouse gas emissions, and air pollutants; use renewable energy sources; maximize energy efficiency.
- Increase educational information about green practices.
- Maximize public transportation; increase use of alternative fuels.
- Ensure that new or replacement facilities meet the LEED silver rating.

The National Park Service would strive to achieve the highest LEED standard practicable, would determine the park's carbon footprint (estimated through the Climate Leadership in Parks program), would reduce greenhouse gases by 18% by 2012, and would meet other federal and congressional requirements.

A state-of-the-art communications system would be provided, including wireless access and land-line pay phones (in cooperation with providers). Dedicated lines would be provided for NPS operations, law enforcement, emergency communications, media, and event sponsor use.

The Mall

Union Square (1st to 3rd Streets)

Union Square would fulfill its McMillan plan purpose of connecting the U.S. Capitol grounds with the National Mall, as well as providing more convenient and flexible land use at the foot of the Capitol. The Ulysses S. Grant Memorial

would be the focal point of a symmetrical and formally laid out civic square based on historic precedents. It would be a popular, active, and dignified day and evening destination, and it could be easily transformed into a larger venue for First Amendment demonstrations and events. Grade differences would be addressed, and circulation patterns would be improved for all visitors. The area would be visually and physically connected to the Botanic Garden to the south and the U.S. Senate Youth Park and U.S. Botanic Garden Education and Outreach Center to the north. Floral plantings would add color.

The Ulysses S. Grant Memorial would be restored. The condition of historic landscape components would be improved and incorporated into a new design, including historic or "witness" trees (trees that were present when the area was originally developed). The historic east-west vista between the U.S. Capitol and the Washington Monument would be improved and perpetuated. Turf areas would be minimized, eliminated, or redesigned, but low plantings would retain a sense of continuity with the historic landscape that was once home to the Botanic Garden.

Union Square would highlight sustainable water management practices and include reflective and interactive water features (such as jets to frame vistas of the Capitol, and provide play opportunities). Designs would be environmentally friendly to highlight sustainable water management practices, and the sound of water would be used to create a more enjoyable atmosphere by muffling the noise of urban traffic. A smaller reflecting pool or water features would be considered to make the space more suited to various uses and reduce water use. A nonpotable water source would be sought. To increase enjoyment, the pool could also be redesigned as a shallow sheet of interactive water that could be drained for demonstration and events or frozen for seasonal ice skating.

Pedestrian circulation would be improved, along with visual and physical connections and access to the Mall, the U.S. Capitol, and areas north and south of Union Square. Social trails would be eliminated. Crosswalks on 3rd Street would be designed to highlight and continue pedestrian connections and circulation patterns on the Mall. Educational media would address First Amendment demonstrations, the Grant Memorial, the city's history, and the U.S. Capitol.

Redesigning this area as a paved square would accommodate more use, including demonstrations and events. The size and character of visitor facilities and amenities would be determined during design. Infrastructure for events would be provided. The square would incorporate shade structures for visitor comfort, and pleasant places to rest and relax. Facilities would be located outside vistas. A flexible, indoor/outdoor, multipurpose destination would provide a site to enjoy views of the Grant Memorial and the Capitol, with space for seating, educational exhibits, and small exhibitions or displays.

High-capacity restrooms would be designed so that more stalls could be opened during high use, and nearby drinking water and recreation equipment rentals would be provided.

The Mall (3rd to 14th Streets)

The Mall would remain a highly visible landscape that would be renovated to improve conditions and to sustainably accommodate very high levels of use for First Amendment demonstrations, public gatherings, national celebrations, cultural programs, and special events, as well as passive recreation and informal play. The National Park Service would encourage partnerships with the managers of all visitor destinations along the Mall to better serve visitor needs.

Critical elements of the historic landscape, such as lawns and elm trees, would be improved and protected. The planting plan for all vegetation on the Mall would be updated and would be compatible with contributing features of historic plans. Compacted soils in turf areas would be replaced with engineered soils that could better withstand intense use, or other sustainable technologies would be implemented. Drainage and irrigation would be provided, and the irrigation system would be designed so that it would not be damaged by event facilities. Smaller areas would be restored more frequently. A combination of design elements, paving, and stewardship messages would be used to reduce social trails. Park furniture and cooling interactive water features would be added outside historic vistas.

Visitors would be able to enjoy the shade that the American elm trees on the Mall provide, along with low-intensity recreational activities. Past studies of the elm tree panels have recommended no longer allowing temporary event facilities, such as tents, stages, or vehicles. Based on public comment, additional scientific study would be undertaken to examine the health of the elm trees and soil conditions on the Mall, and to identify appropriate levels of use and protection.

The pedestrian circulation system would be improved and would better connect Union Square, the Washington Monument, and museums and other areas adjacent to the Mall. As part of a coordinated paving system for the National Mall, gravel on pathways and former roadbeds (with paving underneath) would be removed. Walks and other areas would be paved with low-maintenance, sustainable, and universally accessible materials that would be part of a coordinated palette of paving materials. The goal would be to improve circulation, facilitate events, improve recreational uses such as jogging, and maintain improved landscape conditions. Some walks would be widened to enhance the visitor experience by providing room for orientation and space for rest and enjoyment, to facilitate First Amendment demonstrations and permitted events, and to allow for more efficient park operations.

To improve growing conditions for trees, gravel between the street and paved walkways along Madison Drive NW and Jefferson Drive SW would be removed and replaced by turf panels edged with low curbs. Shaded seating and paved pathways would remain.

Event utility infrastructure would be developed to protect resources, to reduce setup and takedown times, and to accommodate media communications. Narrow strips of turf along 3rd, 4th, 7th, and 14th streets would be removed and paved to accommodate and concentrate event facilities. Locations would be identified for temporary restrooms so that these facilities would be convenient, easy to service, and not block views. A paved area for event use would be added south of the National Gallery of Art Sculpture Garden and north of the center grass panels, and visitor sidewalk amenities would be provided.

The 12th Street axis would be redesigned to accommodate high levels of use, and the placement of tents, stages, and logistical and operational areas for permitted events. Flexible office space and a public restroom facility would be constructed to support permitted events. Additional event staging space would be created over the 12th Street tunnel entry north of Madison Drive NW to reduce the impact of truck parking and setup areas on the historic landscape.

Like the other alternatives, the National Park Service would work with the Washington Metropolitan Area Transit Authority to add the name of the National Mall to the Metro station, which would remain the primary pedestrian entrance for the National Mall. A paved welcome plaza would be developed at 12th Street and Jefferson Drive SW that would include a visitor contact station, high-capacity public restrooms, multiple orientation maps, and a large tactile model or pavement map of the National Mall, along with shaded and group seating. Electronic information and a listing of events and activities would be provided.

Additional pleasantly shaded seating could be provided along north-south sidewalks within the elm tree panels. This could include some seating areas for groups. Containers with horticultural plantings could add seasonal color and enjoyment. To further enhance the Mall as well as public safety, pedestrian lighting levels along walkways could be increased to supplement the historic Olmsted lights.

Visitor transportation, commercial tour bus drop-offs, bicycles, and other wheeled vehicles would be accommodated on Madison and Jefferson drives over the short- to mid-term (10–15 years). Occasionally access would be restricted to accommodate permitted events and national celebrations (such as the Fourth of July). A long-term goal for Madison and Jefferson drives would be to improve traffic flow by removing private vehicle parking to better accommodate bicycling, visitor transit, and pedestrians. Tour bus drop-offs on the Mall would be increased.

Educational themes would address First Amendment demonstrations, the Mall as the nation's premier civic space, and development of the federal city around the Mall. The coordination of visitor information would be increased with museums surrounding the Mall. Existing recreational opportunities would be continued, and the agreement with the Smithsonian Institution for the carousel would be updated. Small-scale entertainment would be encouraged, along with programs, educational entertainment, and celebrations at events.

To create a pleasant ambience near all refreshment stands elements such as additional seating at tables, umbrellas, flower boxes, or display fountains could be added, encouraging visitors to stay and relax. The center grass panels near the 8th Street cross axis would be reconfigured to provide larger spaces for informal recreation (e.g., pickup games) and return a more historic configuration of eight panels. A small visitor restroom near the refreshment stand by the Air and Space Museum would have two to four potentially self-cleaning stalls. It would have a similar architectural character to the refreshment stand so that it would appear to have always been there. An additional higher capacity restroom would be located north of the central grass panel near 12th Street. NPS staff would also work with the National Gallery of Art and the Smithsonian Institution to improve access to food service and restrooms for National Mall visitors.

Washington Monument and Grounds

Views of the Washington Monument and the north-south vista between the Thomas Jefferson Memorial and the White House would be protected and improved. The condition of the grounds, trees, and the German-American Friendship Garden would also be improved. The 2003 Olin landscaping plan (see appendix H) would be updated to accommodate proposed projects and implemented.

The north grounds of the monument would continue to be used for large demonstrations and special events, but infrastructure would be provided to make them more sustainable. Electrical and communication connections, along with space for operations and the media, would be provided in several locations on the north grounds to make these areas more sustainable for demonstrations, national celebrations, and special events.

Roads and parking, along with bicycle and pedestrian circulation, would be redesigned on the south grounds (south of Independence Avenue) to reconnect park areas, to enhance safety and recreational opportunities, and to improve pedestrian connections between the Washington Monument grounds and the Tidal Basin, as well as to the southwest waterfront and East Potomac Park. A system of separate dedicated bike trails would be constructed to improve bicycling throughout the National Mall. The pedestrian environment would be improved by programming automatic and extended crossing times into signal phasing, special crosswalk paving, and improved signs.

Educational themes would address George Washington, the Washington Monument, the history of the National Mall, and the German-American Friendship Garden. Recreational activities would continue and could be expanded. Educational waysides and integrated exhibits would be provided at a new multipurpose facility.

A new indoor/outdoor, high-quality, multipurpose facility and performance space would be constructed on the northwest corner of 15th Street and Independence Avenue to replace the temporary facility. This facility would consolidate visitor services and take the place the Sylvan Theater. The facility would provide information, education, food service, retail, and restrooms (sized for high-use volumes). It would be a pleasant destination and would be constructed below the level of roads and oriented to muffle noise and provide views of the monument. Various programs, events, performances, and entertainment would be offered. For performances, audiences of up to 3,000 people could be accommodated on the hillside. The facility would also include operations space and ranger offices. It would be open from early morning, when visitors queue for monument tickets, until evening. Additional parking would be available for visitors with disabilities.

Survey Lodge would be adaptively reused for services and parking for visitors with disabilities (an additional 10–20 spaces), information, exhibits about the building's history, and possibly recreation equipment rentals (such as bicycles and kites). The lodge's access and visibility would be improved. Monument Lodge would continue to provide ticketing, a bookstore, and restrooms. Park ranger offices would be provided at the new multipurpose facility or at another facility off the National Mall.

West Potomac Park (North of Independence Avenue)

Constitution Gardens

Constitution Gardens would be a pleasant place for pedestrians to relax as they tour the National Mall. It would be a restful, high-quality, multipurpose visitor destination that would provide food service and opportunities for entertainment, enjoyment, and recreation.

Landscape conditions would be improved in accordance with the "Cultural Landscape Inventory" (NPS 2008a), and the pedestrian circulation system would be upgraded with coordinated paving and improved operational access. The lake would be rebuilt to be self-sustaining, and circulating pumps and a filtration system would be installed. A nonpotable, sustainable water source would be explored.

To accommodate demonstrations and special events, circulation patterns would be redesigned. Walks would be repaved, and some walkways and intersections would be widened to create venues for smaller events (exhibits, tents, and performances), and others would be reconfigured to accommodate the Potomac Park levee and provide accessible routes. Infrastructure (e.g., utility and communication connection systems) to facilitate demonstrations and events would be incorporated into the new design.

Educational themes would address the history of the area (the Washington Canal and the Lockkeeper's House), land reclamation, flood control, and the role and importance of the Declaration of Independence and the Constitution in our country's history.

Urban recreational activities, such as fishing or model boating, would be increased but would not conflict with commemorative experiences at nearby memorials. Children's play opportunities would make use of natural elements, boulders, sculpture or interactive water features, and pavement patterns or educational activities and programs to encourage exploration.

Multipurpose, coordinated visitor facilities would be provided near the east end of the lake, and the historic canal Lockkeeper's House could potentially be adaptively reused. The new food service facility would be a destination for visitors to linger and would include food service, restrooms, and potentially programs or entertainment. It would provide a unique indoor/outdoor garden character. A decision about the Lockkeeper's House would be coordinated with the Potomac Park levee, and the structure could be relocated away from the corner of 17th and Constitution Avenue to provide better protection for the structure and visitors alike. Coordinated functions could include visitor services, education, exhibits, information, a bookstore, retail, recreation equipment rentals (model boats, portable lawn chairs), and space for partner activities.

A flexible program or performance space, stage, or gazebo would be located in or near the east end of the lake, making it convenient to the multipurpose facility and taking advantage of the nearby rolling terrain to accommodate an audience of several thousand. Utilities would be provided. Sound levels from programs would be controlled so as to respect the ambience at nearby memorials.

Existing restrooms would be replaced with a facility more sensitive to the surroundings. The existing refreshment stand could be rehabilitated and adaptively reused or removed.

Vietnam Veterans Memorial

Space would be provided in the vicinity of the memorial for seating and contemplation. In addition to volunteer interpretation, educational themes would address the history of the memorial and its role on the National Mall.

Lincoln Memorial and Grounds

For demonstrations and special events on the memorial grounds, the *Lincoln Memorial Guidelines* would be expanded to address the availability and use of infrastructure (e.g., utilities, communication systems) to facilitate permitted events.

Educational themes would address Abraham Lincoln, the memorial's development, and the role of the memorial in civil rights and First Amendment demonstrations, as well as the history of the National Mall and Washington, D.C. Educational information would also enhance public understanding of the Watergate steps and the Constitution Avenue belvedere.

The historic landscape associated with the memorial circle and radial roads would be rehabilitated. A ceremonial use would be developed for the Watergate steps. The areas within the memorial circle and the radial roads would continue to provide visitor amenities such as food services and information stations for the Korean War Veterans Memorial and the Vietnam Veterans Memorial; the latter station would be removed once the memorial center has been completed, and the Korean War information station could be replaced. Pedestrian crossings would be better defined, and pedestrian and bicycle access to the Theodore Roosevelt Memorial Bridge would be improved. An architecturally compatible restroom would be added in the vicinity of the south refreshment stand, while respecting the historic planting patterns. Recreation fields for volleyball and softball would continue to be provided, and a small restroom and drinking water would be provided for the volleyball courts.

The following actions for the Lincoln Memorial and grounds are common to all alternatives:

- Renovate and expand the exhibit area, renovate the restrooms at the memorial, and relocate the bookstore to the lower level. In addition, expand the restroom within the building footprint.
- Implement recommendations of the Lincoln Memorial *Cultural Landscape Report*.
- Restore the historic landscape associated with the memorial circle and radial roads.
- Accommodate future national memorials authorized by Congress in the area north of the Watergate steps.
- Accommodate road projects and circulation improvements by others to simplify traffic patterns and to improve pedestrian connections from the Kennedy Center and adjacent neighborhoods.

Korean War Veterans Memorial

On the west side of the Korean War Veterans Memorial the walks would be widened to accommodate changing circulation patterns and group visitation. Pedestrian links between the memorial, the Lincoln Reflecting Pool, and Independence Avenue would be improved. Educational themes would address the Korean War, commemoration, and the history of the National Mall.

Ash Woods

The U.S. Park Police stables would be rebuilt to be compatible with the historic character and quality of the National Mall. Operational functions would remain fairly inconspicuous on the south side. The paddocks would be made part of the visitor experience, and educational exhibits about the U.S. Park Police and horse patrols would be offered. A new stables parking area and vehicle access road from Independence Avenue would be constructed. The present Ash Woods road would become primarily a walkway with a secondary function as a service road. Seating and inconspicuous pedestrian lighting would be provided. The recreational fields would remain.

To better distribute restrooms, the Ash Woods restrooms would be demolished, and a new restroom would be built nearer the U.S. Park Police stables. It would be designed using the visitor services architectural style. Food service could be provided nearby in the future.

West Potomac Park (South of Independence Avenue)

Tidal Basin Area

A sense of arrival at the Tidal Basin would be created by redesigning pedestrian circulation. Around the Tidal Basin high-quality recreational

experiences would be provided for strolling / sightseeing, bicycling, and boating. Improved circulation patterns, high-quality paving, additional seating, and more pedestrian stopping points would enhance visitor experiences. Pedestrian lighting would be installed so as not to impact the lighting ambience of memorials.

Based on the recommendations of engineering and scientific studies, the Tidal Basin seawalls would be rebuilt above tidewater. The historic appearance would be retained while accommodating wider walks and improving bicycling/ vehicular circulation and safety, slightly reducing the size of the basin.

Educational themes would address the history of the cherry trees and the Tidal Basin, the development of the Potomac parks, as well as the history of the National Mall. Rowboat, canoe, and kayak rentals could offer additional recreational boating opportunities. A Tidal Basin recreational excursion boat service could provide enjoyment and additional access to the Thomas Jefferson, Franklin Delano Roosevelt, and Martin Luther King, Jr. memorials, as well as the Tidal Basin parking lot.

A system of separate bicycle lanes or trails would be developed. Walks for pedestrians and bicyclists would be widened and separated near Inlet, Outlet, and Kutz bridges.

The recreation equipment rental facility and refreshment stand would be replaced by a new structure in the same general location. Restrooms and seating would be added.

Franklin Delano Roosevelt Memorial

A comprehensive condition assessment of the memorial, including visitor use patterns, would be undertaken. Educational programs would be increased, and Room 4 would be used for this purpose, as originally intended. Information, a bookstore, and restrooms are provided at the Franklin Delano Roosevelt Memorial and would also be provided at the Martin Luther King, Jr. Memorial. A small food service and restroom facility could be provided if warranted by demand.

West Potomac Park Riverfront

Where feasible, a sustainable, vegetated shoreline would be established along the Potomac River. In other areas stone-faced walls would provide space for seating, fishing, and enjoyment, or perhaps nodes for water taxi service or the launching of small, hand-carried watercraft (such as canoes or kayaks). Walks would be improved, and additional seating would be provided. Separate bicycle lanes or trails would be developed along Ohio Drive and the river walks. Visitor parking would be provided but areas might be reconfigured for more efficient multimodal circulation. Athletic fields would remain, and conditions would be improved.

Thomas Jefferson Memorial and Grounds

No special event stage, roof, or walls would be allowed to obstruct the view to the White House from the north plaza. Educational themes would address Thomas Jefferson, the memorial's development, and the history of the Tidal Basin, as well as the history of the National Mall.

The former parking area south of the memorial would be redesigned for demonstrations and special events, and utilities would be provided. The tour bus drop-off would be redesigned for better pedestrian circulation. New bicycle lanes or trails would provide improved and safer access near the memorial and to the I-395 bridges.

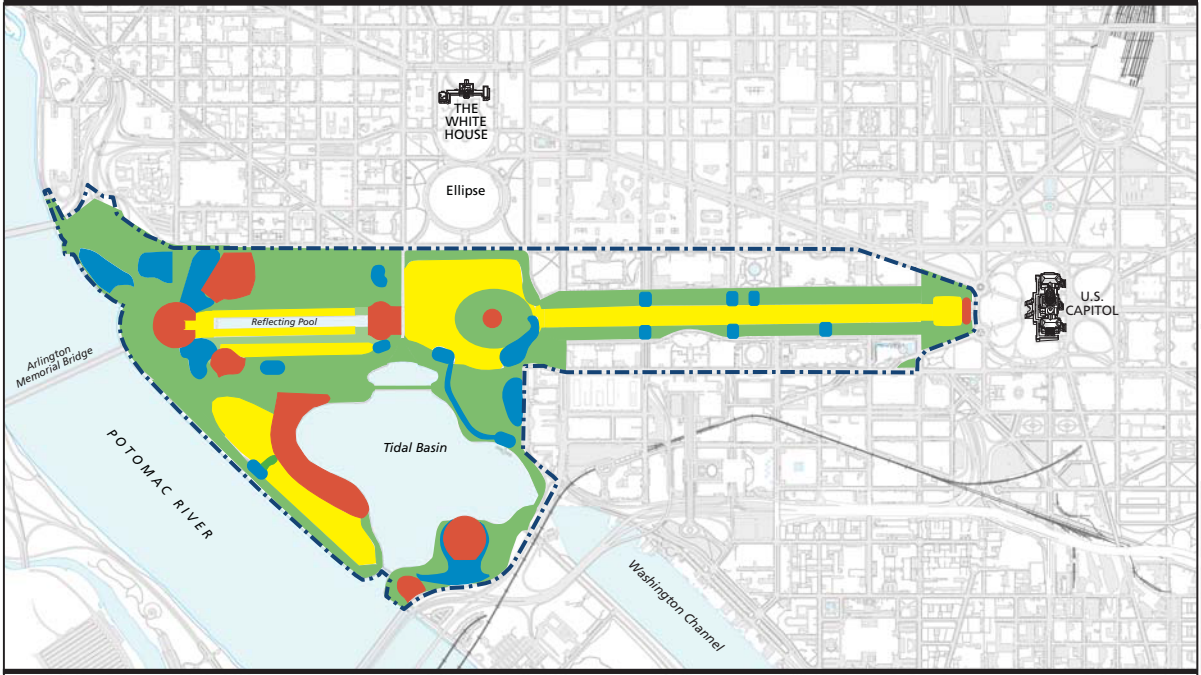
A new facility along East Basin Drive would replace the refreshment stand, providing food, restrooms, and retail. It would be sited to consider traffic and circulation patterns, and views to and from the memorial would be protected.

CONSERVATION ZONING: Preferred Alternative

National Mall Plan

United States Department of the Interior / National Park Service

DSC • Oct. 2009 • 802 • 100452



National Mall Plan Area

Memorial Area

Character Protection Area

Multipurpose Area

High-Use Area

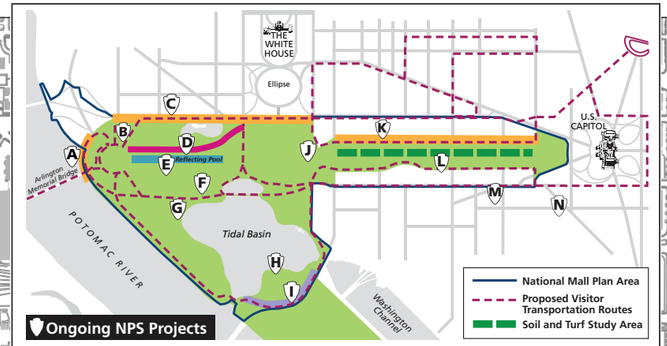
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Preferred Alternative

National Mall Plan

National Mall and Memorial Parks • Washington, D.C.

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Ongoing NPS Projects

- A Ohio Drive Roadwork
- B Vietnam Veterans Memorial Center
- C Constitution Avenue Roadwork
- D Potomac Park Levee
- E Lincoln Memorial Security and Refelecting Pool Area
- F D.C. War Memorial Rehabilitation
- G Martin Luther King, Jr. Memorial
- H Thomas Jefferson Memorial Plaza and Seawall Rehabilitation
- I Thomas Jefferson Memorial Perimeter Security
- J Washington Monument Security Screening
- K Madison Avenue Roadwork
- L National Mall Wayfinding and New Pedestrian Guides
- M Eisenhower National Memorial
- N American Veterans Disabled for Life

Lafayette Park

THE WHITE HOUSE

Ellipse

Northwest Area

Constitution Avenue

VIETNAM VETERANS MEMORIAL

CONSTITUTION GARDENS

LINCOLN MEMORIAL

WORLD WAR II MEMORIAL

WASHINGTON MONUMENT

KOREAN WAR VETERANS MEMORIAL

DC WAR MEMORIAL

THE MALL

UNION SQUARE

US CAPITOL

GRANT MEMORIAL

Independence Avenue

Independence Avenue

Riverfront

POTOMAC RIVER

Tidal Basin

FRANKLIN DELANO ROOSEVELT MEMORIAL

THOMAS JEFFERSON MEMORIAL

Maine Avenue

National Mall and Memorial Parks Headquarters

GEORGE MASON MEMORIAL

395

395

WASHINGTON

North

0 0.1 0.2 0.3 0.4 0.5 Mile

0 0.25 0.5 Kilometer

NOTE: See Circulation map in Environmental Consequences.

Preferred Alternative Legend

EXISTING FACILITIES
(Restrooms, Bookstore, Retail, Food Service, Information, Perfomance Space)

Existing Interactive Water Feature

National Mall Plan Area

Mall Soil and Turf Study Area

Existing Carousel

NEW OR CHANGED FACILITIES

- Information / Orientation
- Retail
- Food Service
- Restrooms
- Bookstore
- Recreation Equipment Rental
- Performance Space
- U.S. Park Police Stables
- Water Features Rehabilitated
- Natural Shoreline
- Interactive Water Feature
- Water Feature Drainable For Events
- Improvements (Turf/Trees, Park Furniture, Etc.)
- Pedestrian Improvements (Paved Areas)
- Multipurpose Facility

CIRCULATION CHANGES

- Separate Bike Routes/Lanes
- Road Realignment
- P Visitor Parking Lot
- Crosswalk Improvements

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Alternative A — Focus on the Historic Landscape and Education

Alternative A would restore and maintain the resources of the National Mall as a historic landscape. Under this concept the designed historic landscape would evolve and its value over time would change, reflecting significant national events. Contemporary uses would be accommodated while respecting the planned historic character and visions of the L'Enfant and McMillan plans.

The National Park Service would ensure compatible and enduring high-quality design, as well as the highest facility maintenance standards, to create a sense of place that would reinforce the civic, historic, and symbolic role of the National Mall to our nation.

The following actions would be in addition to those described under "Actions Common to All Alternatives" and highlighted in the accompanying text box. Only areas where actions would be taken are included in the following discussion.

National Mall Actions

Cultural Resources

Under alternative A memorials and historic structures would be preserved and protected and the health and appearance of historic landscapes would be improved. Historic views and vistas would be improved and perpetuated to ensure that they are not obscured, even during events.

Natural Resources

To improve water quality in water features, circulation and filtration systems would be installed. Current technology, maintenance techniques, and upgraded equipment would be used.

Soil conditions would be improved, and soils in some areas would be replaced and reengineered to reduce effects from compaction. The most successful turf management practices would be implemented. Trees and plants would be protected from social trails.

Actions Common to All Alternatives

As previously described, the following summarized actions are common to all alternatives:

- *Cultural Resources* — Preserve and protect cultural resources; manage in accordance with *The Secretary of the Interior's Standards* and with the general recommendations of cultural landscape reports and inventories.
- *Natural Resources* — Continue to manage and protect natural resources. Address water quality problems in water features.
- *Demonstrations and Special Events* — Consistent with the First Amendment and federal regulations, fully accommodate demonstrations on a first-come, first-served basis. Consistent with federal regulations, accommodate permitted events. Improve permit procedures for special events and First Amendment demonstrations. Enhance procedures to ensure that resources are better protected and that soil, turf, and vegetation impacts are reduced.
- *Access and Circulation* — Continue working with the city and other agencies to address tour bus parking.
- *Visitor Information, Education, and Enjoyment* — Continue to offer visitor information, educational programs, venues for entertainment, guided walking and bicycle tours, and a mix of recreational activities.
- *Visitor Amenities* — Assess the economic feasibility, necessity, and appropriateness of changes to commercial visitors services and facilities.
- *Health, Public Safety, and Security* — Continue law enforcement patrols and increase a law enforcement presence during large events.
- *Park Operations* — Make waste management more efficient; expand recycling at events; continue a visual quality team to improve conditions and the appearance of park facilities; and meet NPS energy efficiency goals.

Demonstrations, Special Events, and National Celebrations

A new computer mapping-based reservation system would be developed to provide venue and permit information, as well as to schedule events, maintenance, and recovery periods or to schedule park projects.

Product types and standards to be used during events would be defined, including acceptable locations for temporary facilities (e.g., portable –

restrooms, incident command centers, and event staging areas). Better cost recovery procedures would be developed.

Under alternative A events would be required to have a meaningful association with the National Mall venues, as required by NPS *Management Policies 2006* (NPS 2006e, sec. 8.6.2.1).

Permanent infrastructure and space for temporary facilities such as portable restrooms would be planned to reduce the impact of annual events. Standards would address location, installation, temporary surfacing materials, tent installation methods for various areas, generator decibel levels, use of waterless hand cleaners, need for supplementary drinking water, and locations that must remain free of event facilities.

Sufficient staff would be provided to monitor resource impacts during demonstrations and special events. Intense post-event recovery procedures would be developed to improve resource conditions and to minimize rest periods between events.

Visitor Information, Education, and Enjoyment

Website information would be improved by offering downloadable information for visitors planning trips. Visitors would be educated about the planned open space of the nation's capital as developed in the L'Enfant, McMillan, and other historic plans. Additional living history programs would be offered, as well as multilingual programs. An on-line permitting system for athletic fields.

Access and Circulation

Pedestrian circulation improvements, such as signs, wayfinding and orientation maps, and transit stops within the National Mall, would be coordinated. Tour bus drop-offs would be redesigned as needed.

Visitor Amenities

All new facilities would be designed to be compatible with the character of the National Mall (e.g., the design of the Mall and Lincoln Memorial refreshment stands). The goal would be to make visitor facilities more identifiable for visitors, to strengthen the NPS identity, and to denote that they are secondary to memorials. Visitor facilities would be designed to withstand vandalism, forced entry, and skateboarding.

A coordinated approach would be developed for furnishings, incorporating the following character-defining components:

- historic benches, including the NPS standard Washington bench
- historic lighting (Olmsted, Twin twenties, Washington globe, Saratoga lights)
- furnishings specifically designed for memorials (seating, trash receptacles, signs, drinking fountains, light fixtures, etc.)

New, coordinated, high-quality furnishings would be provided, for example trash/recycling containers, curbs, signs, and drinking fountains. New areas of paving would be coordinated with the most common and visible adjacent paving.

The National Park Service would work closely with the Commission of Fine Arts, the National Capital Planning Commission, the Architect of the Capitol, the Smithsonian Institution, and D.C. city agencies to reestablish the lighting task force to develop a comprehensive lighting guideline for the monumental core that addresses at a minimum:

- protection of the dominant lighting of the five symbolic icons (the Capitol, the White House, the Washington Monument, the Thomas Jefferson Memorial, and the Lincoln Memorial)
- desired lighting character for urban and park areas, character-defining elements such as statuary and building facades, pedestrian and vehicular areas, and transitions between different light levels
- appropriate light levels (foot-candles or lumens) and light color (color rendition) for different areas
- energy efficiency and sustainable lighting practices
- light pollution / protection of night sky from excessive, horizontal light pollution (temporarily blinding light)
- security lighting

Food service facilities would be replaced or upgraded. Efforts would be made to diversify food service, which would still be offered primarily at refreshment stands.

New restrooms would be provided near food service facilities, and outdated restrooms would be replaced.

More benches would be provided for seating to take advantage of views. Seating would be designed to accommodate the needs of people with disabilities.

Health, Public Safety, and Security

The National Park Service would work with the city to increase pedestrian street-crossing countdowns and add midblock crossings to enhance pedestrian safety. A mass notification system would be provided for emergency situations and would be coordinated with an upgraded communication network.

To deal with problems and concerns caused by homeless and transient populations, the National Park Service would work with city agencies, business improvement districts, and Congress to address the causes and impacts of homelessness.

The National Park Service would work with the General Services Administration to permanently resolve public safety and health issues as well as resource issues related to the steam system crossing through the park.

Park Operations

Deferred maintenance would be addressed as budgets and staffing allow. Staffing would be increased for resource management and communications (web, technology, media, and public information). Park standards would be developed to define desired conditions for different areas of the National Mall and covering all park operations.

The National Park Service would advance the principles of sustainability, as described in the preferred alternative. Existing facilities would be rehabilitated to be sustainable and to reduce maintenance, and new facilities would be designed for sustainable operations and efficient maintenance. Commercial business services would also be required to improve recycling efforts and reduce waste.

Any upgrades to circulation systems would ensure that operational access for maintenance vehicles would be available and would not cause damage to resources. A state-of-the-art communication network would be provided, with dedicated lines for NPS operations (phones/computers), law enforcement, media, and event sponsor use. An attractive, durable, temporary fence system (in lieu of snow fencing) would be developed to protect areas during rehabilitation and restoration.

The Mall

Union Square (1st to 3rd Streets)

The Ulysses S. Grant Memorial would be the focal point of a redesigned civic square and reflecting pool that would incorporate interpretation of the former Washington City Canal and the history of the U.S. Botanic Garden site.

The Grant Memorial would be restored, and the condition of historic landscape components would be improved and incorporated into a new design based on historic precedents. The reflecting pool would be redesigned to be much smaller to facilitate pedestrian circulation.

All viewing screens, stages, and large video screens would have to be located so as to not block the primary east-west vista for people on site. (This might require that video screens be located at angles.)

Additional educational information about the site would be provided for visitors. Walks would be widened to facilitate public access and maintenance. Seating would be added.

The Mall (3rd to 14th Streets)

The Mall would be rehabilitated to improve conditions. Soils would be augmented or replaced for better turf and tree growing conditions, and other sustainable technologies would be implemented. The gravel walkways would be refurbished, and edging or curbs would be installed to limit gravel migration. Post-and-chain fencing would be used to prevent social trails. A new irrigation system would be installed in a way that it could not be damaged during

events. American elms would be replaced as needed in accordance with the historic planting plan. Other trees that are noncontributing elements of historic plans would not be replanted.

For demonstrations and events, infrastructure would be provided. No temporary event facilities, such as tents, stages, or vehicles, would be allowed in the elm tree panels. Open, eye-level views between the U.S. Capitol and the Washington Monument would be protected. Event organizers would be encouraged not to install temporary event facilities, such as tents, directly in the center of the major view corridor between the U.S. Capitol and the Washington Monument.

A visitor contact station would continue to be provided near the Metro stop, and orientation maps and information would be improved here and elsewhere on the Mall. Educational panels would be provided about the history of the Mall and the development of the federal city. To restore the historic scene, the carousel would be removed.

The National Park Service would work with the city to remove vehicle parking on the north-south cross streets through the Mall (3rd, 4th, and 7th streets) within the east-west viewshed.

Small restroom facilities would be constructed near existing refreshment stands and would have a similar architectural style. Paving at refreshment stand areas would be redesigned to better accommodate use.

The following action for the Mall is common to all alternatives:

- Work with the Washington Metropolitan Area Transit Authority to change the name of the Smithsonian Metro station to include the National Mall.

Washington Monument and Grounds

The Washington Monument and grounds would continue to be highly used. The condition of the German-American Friendship Garden would be improved.

A high-quality indoor facility for visitor services and food service would be provided on the monument grounds between 14th and 15th streets. This facility would be partially underground and would have a grass roof so as to blend into the landscape.

The circular restroom would be replaced with a larger facility that would also contain a ranger information station.

West Potomac Park (North of Independence Avenue)

Constitution Gardens

Constitution Gardens would continue to be an informal area providing limited visitor services. The Lockkeeper's House would be kept in its current location, but it would be preserved and its visibility and appearance would be improved to reduce safety hazards for turning vehicles and pedestrians.

Soils and vegetation would be rejuvenated. The lake would be reconstructed to be self-sustaining for plants, but fish would be removed.

Walks would be repaved, and the refreshment stand and restrooms would be replaced.

Lincoln Memorial and Grounds

The Lincoln Memorial would continue to be a very popular destination and location for demonstrations and species events.

On the grounds of the memorial the recommendations of the *Cultural Landscape Report* would be implemented.

Educational exhibits would be provided in the Watergate area to enhance public understanding of the steps and the Constitution Avenue belvedere. The information stations for the Korean War Veterans and Vietnam Veterans memorials would be rehabilitated.

To help restore a more historic scene, the south ramp cloverleaf from Arlington Memorial Bridge to Rock Creek Parkway would be removed, and traffic would be redirected to 23rd Street NW. Jurisdictional adjustments would be made to correspond to new road and circulation improvements. Storage and maintenance areas

associated with the roads would be addressed with the realignment of the roads.

The following actions for the Lincoln Memorial and grounds are common to all alternatives:

- Renovate and expand the exhibit area, renovate the restrooms at the memorial, and relocate the bookstore to the lower level.
- Implement recommendations of the Lincoln Memorial *Cultural Landscape Report*.
- Restore the historic landscape associated with the memorial circle and radial roads.
- Accommodate future national memorials authorized by Congress in the area north of the Watergate steps.
- Accommodate road projects and circulation improvements by others to simplify traffic patterns and to improve pedestrian connections from the Kennedy Center and adjacent neighborhoods.

Ash Woods

The Ash Woods restroom would be replaced, and the U.S. Park Police stables would be renovated.

West Potomac Park (South of Independence Avenue)

Tidal Basin Area

The Tidal Basin area under alternative A would be upgraded with paved walks and facilities to enhance strolling and viewing experiences.

The recommendations of engineering studies about how the Tidal Basin is to function would be implemented, and the basin walls would be rebuilt in the current location to be above tidewater.

Soil conditions would be improved, social trail development thwarted, and erosion and soil compaction under trees would be addressed. The effectiveness of tree protection measures would be assessed, and the most effective measures would be implemented.

Walkways would be rebuilt and upgraded. Traffic lanes on the historic Kutz Bridge would be reconfigured to widen pedestrian walks on the south side.

Visitor facilities would be redesigned to reduce congestion and to blend with the historic character of the National Mall. New recreation rental and refreshment facilities would be provided, and restrooms would be added.

Franklin Delano Roosevelt Memorial

The Franklin Delano Roosevelt Memorial would remain a popular destination. A comprehensive condition assessment of the memorial, including visitor use patterns, would be undertaken periodically. Educational programs would be increased.

West Potomac Park Riverfront

The dry-laid stone river walls would be restored.

Thomas Jefferson Memorial and Grounds

The Thomas Jefferson Memorial would continue to be a popular destination that is also used for special events. No special event stage, roof, or walls would be allowed to obstruct the view to the White House. Cell phone tours would be developed.

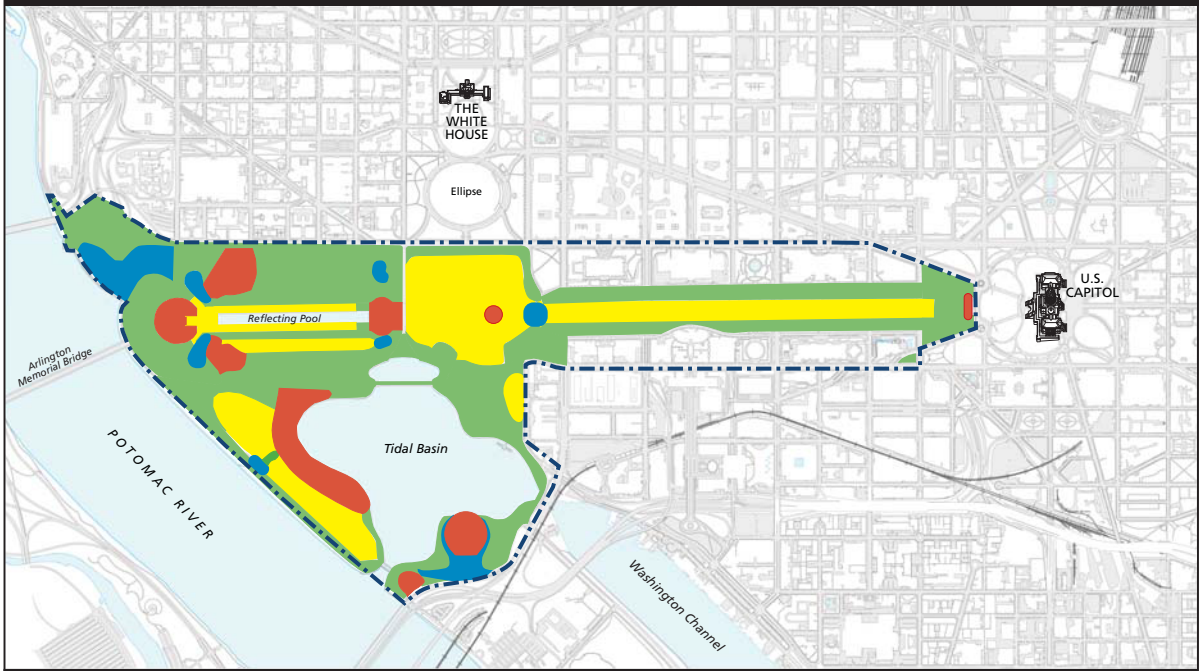
On the grounds the tour bus drop-off would be redesigned to facilitate pedestrian circulation.

CONSERVATION ZONING: Alternative A

National Mall Plan

United States Department of the Interior / National Park Service

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National Mall Plan Area

Memorial Area

Character Protection Area

Multipurpose Area

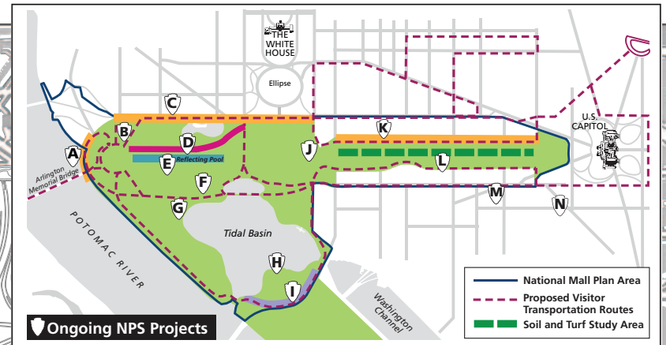
High-Use Area

Alternative A

National Mall Plan

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Ongoing NPS Projects

- A Ohio Drive Roadwork
- B Vietnam Veterans Memorial Center
- C Constitution Avenue Roadwork
- D Potomac Park Levee
- E Lincoln Memorial Security and Refelecting Pool Area
- F D.C. War Memorial Rehabilitation
- G Martin Luther King, Jr. Memorial
- H Thomas Jefferson Memorial Plaza and Seawall Rehabilitation
- I Thomas Jefferson Memorial Perimeter Security
- J Washington Monument Security Screening
- K Madison Avenue Roadwork
- L National Mall Wayfinding and New Pedestrian Guides
- M Eisenhower National Memorial
- N American Veterans Disabled for Life

Lafayette Square
THE WHITE HOUSE
Ellipse
Constitution Avenue
Northwest Area
VIETNAM VETERANS MEMORIAL
CONSTITUTION GARDENS
LINCOLN MEMORIAL
WORLD WAR II MEMORIAL
WASHINGTON MONUMENT
KOREAN WAR VETERANS MEMORIAL
DC WAR MEMORIAL
THE MALL
UNION SQUARE
Grant Memorial
Independence Avenue
POTOMAC RIVER
Riverfront
Tidal Basin Area
FRANKLIN DELANO ROOSEVELT MEMORIAL
THOMAS JEFFERSON MEMORIAL
National Mall and Memorial Parks Headquarters
395
North
0 0.1 0.2 0.3 0.4 0.5 Mile
0 0.25 0.5 Kilometer

NOTE: See Circulation map in Environmental Consequences.

Alternative A Legend

- EXISTING FACILITIES (Restrooms, Bookstore, Retail, Food Service, Information, Perfomance Space)
- Existing Interactive Water Feature
- National Mall Plan Area
- Mall Soil and Turf Study Area

NEW OR CHANGED FACILITIES

- Information / Orientation
- Retail
- Food Service
- Restrooms
- Bookstore
- Recreation Equipment Rental
- U.S. Park Police Stables
- Water Features Rehabilitated
- Improvements (Turf/Trees, Park Furniture, Etc.)
- Pedestrian Improvements (Paved Areas)

CIRCULATION CHANGES

- Tour Bus Drop-off Improvements

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Alternative B — Focus on a Welcoming National Civic Space for Public Gatherings, Events, and High-Use Levels

Alternative B would improve the National Mall as the premier civic space for our nation and would support very high use levels. The evolving ceremonial, celebratory, cultural, and visitor uses at this national civic space would be emphasized. Diverse peoples would be welcomed through multilingual educational opportunities, and the needs of large groups (including those arriving by tour bus), demonstrators, and event participants would be met.

Some areas would be redesigned to provide a more sustainable civic forum and a stage for First Amendment demonstrations and other events.

The National Park Service would ensure compatible and enduring high-quality design, as well as the highest facility maintenance standards, to create a sense of place that would reinforce the civic, historic, and symbolic role of the National Mall to our nation.

The following actions would be in addition to those described under "Actions Common to All Alternatives" and highlighted in the accompanying text box. Only areas where actions would be taken are included in the following discussion.

National Mall Actions

Cultural Resources

Cultural resources would be protected, and planned vistas within the historic landscape would be improved and perpetuated.

Natural Resources

The National Park Service would seek a long-term solution to flooding in the monumental core, based on the results of engineering studies. This would be done in cooperation with the Army Corps of Engineers, the Federal Emergency Management Agency, the National Capital Planning Commission, and city agencies.

Actions Common to All Alternatives

As previously described, the following summarized actions are common to all alternatives:

- *Cultural Resources* — Preserve and protect cultural resources; manage in accordance with *The Secretary of the Interior's Standards* and with the general recommendations of cultural landscape reports and inventories.
- *Natural Resources* — Continue to manage and protect natural resources. Address water quality problems in water features.
- *Demonstrations and Special Events* — Consistent with the First Amendment and federal regulations, fully accommodate demonstrations on a first-come, first-served basis. Consistent with federal regulations, accommodate permitted events. Improve permit procedures for special events and First Amendment demonstrations. Enhance procedures to ensure that resources are better protected and that soil, turf, and vegetation impacts are reduced.
- *Access and Circulation* — Continue working with the city and other agencies to address tour bus parking.
- *Visitor Information, Education, and Enjoyment* — Continue to offer visitor information, educational programs, venues for entertainment, guided walking and bicycle tours, and a mix of recreational activities.
- *Visitor Amenities* — Assess the economic feasibility, necessity, and appropriateness of changes to commercial visitors services and facilities.
- *Health, Public Safety, and Security* — Continue law enforcement patrols and increase a law enforcement presence during large events.
- *Park Operations* — Make waste management more efficient; expand recycling at events; continue a visual quality team to improve conditions and the appearance of park facilities; and meet NPS energy efficiency goals.

In addition to actions under alternative A (improving soil conditions, protecting trees and plants from social trails, implementing turf management practices, and developing a fencing system for use during rehabilitation and restoration), park managers would seek ways to reduce the physical impacts of events, such as soil compaction and erosion in the Mall elm tree panels and around the Tidal Basin cherry trees. As one of the measures to deal with the effects of climate change, raising the height of the seawalls at

the Tidal Basin and along the Potomac River would be considered.

Demonstrations, Special Events, and National Celebrations

Highly visible venues throughout the National Mall would be redeveloped to better accommodate and in some cases increase space available for demonstrations and special events. These spaces would be better designed for intense levels of use. Multiple, desirable, hard-surface venues, staging areas, and utilities (water, electrical, Internet, and media connections) would be provided.

Permit brochures and handouts would be rewritten to better inform potential demonstration and event organizers about how to promote sustainable, low-impact activities.

In addition to the regulation changes proposed under alternative A to reduce resource impacts and to implement post-event recovery procedures, the standard permit requirements would be revised to recommend that special event organizers consider placement of all structures so that they do not block eye-level views between national symbols (such as the U.S. Capitol, the Washington Monument, the Lincoln Memorial, the Thomas Jefferson Memorial, or the White House). Event organizers would be encouraged to use supplementary (hired) transit services to facilitate large-scale events based on estimated size and location of events.

Access and Circulation

For public access the intent would be to coordinate visitor circulation systems that would be focused on a high-quality, enjoyable pedestrian environment while providing a positive urban experience and coordinated urban connections within a parklike setting.

Some roads and crosswalks would be redesigned to improve and facilitate pedestrian movements while accommodating urban traffic, and traffic-calming measures would be considered. Additional parking would be provided for people with disabilities; parking areas would be redesigned for more efficient operation; and if determined feasible by engineering, security, geotechnical, and economic studies, underground paid public parking garages would be developed. Tour bus drop-offs would be redesigned as needed.

Pedestrian experiences would be improved with upgraded walking surfaces and programming automatic and extended pedestrian crossing times into signal phasing. Pedestrian bridges or tunnels would be added.

Visitor Information, Education, and Enjoyment

Park information and orientation would continue to be improved. In addition, an on-line events calendar would be provided on glare-free variable message signs that would also be capable of providing emergency information. Onsite orientation maps would be lit for readability and viewing during evening hours. Roving rangers would welcome visitors and answer questions, and all park staff, including maintenance staff, would be able to direct visitors to destinations and provide park maps. Greetings, welcoming information, publications, and tours would be offered in foreign languages, and the use of large-print publications would be increased. Park staff would work with adjacent museums and managers of visitor destinations to provide park information.

In addition to educational programs focused on the memorials and the history of the city, visitors would be educated about how the National Mall is the nation's civic stage and gathering place. The purpose and history of our nation's preeminent civic space would be discussed as the location for First Amendment demonstrations, special events, and national celebrations.

Multiple thematic walking tour brochures or cell phone tours would be offered, in addition to current bicycle and walking tours. Examples of topics include development of the federal city, the civic stage and First Amendment demonstrations, presidential memorials, tree guides, seasonal guides, and exploring with children.

Entertainment would be facilitated through improved or additional venues that would be designed with the necessary infrastructure, including new food service destinations (if feasible). Performances, educational programs,

and thematically appropriate entertainment would be encouraged.

A mix of recreational activities would be continued. Surface materials would be improved under alternative B to better accommodate some activities. Curbs and steps would be designed to discourage skateboarding. As described under the no-action alternative, the park would assess the economic feasibility, necessity, and appropriateness of additional food service. If feasible, existing facilities would be replaced or upgraded in some locations. Well-located, convenient, and attractive multipurpose facilities with indoor/outdoor seating and potential for performance venues would be provided. Longer service hours would be considered. An on-line permitting system for athletic fields.

Visitor Amenities

Like alternative A, all new facilities would be designed to be compatible with the character of the National Mall. They would also be more identifiable for visitors, would strengthen the NPS identity, and would denote that they are secondary to memorials. A limited number of architecturally significant destination visitor facilities could be developed in certain locations (e.g., the Washington Monument, Constitution Gardens, Union Square, and the Tidal Basin area).

A coordinated approach for furnishings would be developed, incorporating character-defining components (similar to alternative A):

- historic benches, including the NPS standard Washington bench
- historic lighting (Olmsted, Twin twenties, Washington globe, Saratoga lights)
- replacement furnishings at memorials (seating, trash receptacles, signs) to unify the National Mall except for custom furnishings such as seating specifically designed for memorials

New, coordinated, high-quality furnishings would be provided, including but not limited to trash/recycling containers, curbs, and fencing (including post-and-chain and temporary fencing).

New walks would be developed to be low-maintenance, sustainable, and universally accessible. Along streets the walks would also conform to the design appearance of the *Streetscape Manual* (Interagency Initiative for National Mall Road Improvement Program 1992) and any updates. Paving could simulate the appearance of gravel.

In addition to adopting lighting guidelines as described under alternative A, pedestrian lighting would be supplemented in some areas, but lighting sources would not contribute to light pollution.

Public restrooms would be provided approximately every quarter mile, and they would be kept open longer. New restrooms would include some sized to meet high use levels, and the capacity of some existing restrooms would be increased. Cleanliness would be frequently monitored.

Drinking fountains would be concentrated near staffed and monitored restrooms. Convenient locations would be designed for portable restrooms.

As described under the no-action alternative, the park would assess the economic feasibility, necessity, and appropriateness of additional commercial services, plus would determine the service types and levels that would be offered. Commercial service would be offered using available authorities. Currently authorized visitor services would be continued. If feasible, existing facilities would be replaced or upgraded in some locations. Well-located, convenient, and attractive multipurpose facilities with indoor/outdoor seating and potential for performance venues would be provided. Longer service hours would be considered.

Seating would be increased by using site components such as walls, and more seating would be provided at some memorials, including seating for groups.

Health, Public Safety, and Security

Areas would be redesigned to safely accommodate multiple uses, for example, separate bicycle lanes in some areas. In addition to pedestrian access improvements (programming automatic and extended pedestrian crossing times into

signal phasing, midblock crossings, wider waiting areas, special paving, in-pavement lighting, pedestrian tunnels or bridges), walkways would be lit for pedestrian safety, and emergency call stations would be provided near orientation signs. Paving materials would be universally accessible, and additional facilities would be provided for people with disabilities.

Park managers would work with the U.S. Park Police to expand horse patrols, and a law enforcement presence would be emphasized.

To help visitors cool off during hot weather, permanent or temporary water misters would be provided in paved areas, along with interactive water features.

Tall shrub beds and areas allowing cover and storage would be reduced or eliminated, which would be keeping with the original landscape design intent.

Park Operations

Deferred maintenance or repairs would be addressed as budgets and staffing allow, but some project areas would be redesigned to allow more use, to better protect resources, and to upgrade and provide sufficient visitor amenities. In addition to the actions under alternative A for operations and sustainability, staffing would be increased for maintenance, events, special project teams, and law enforcement to manage high volumes of use, events, and recovery/rehabilitation. Electronic facility monitoring would be used to schedule the opening/closing of restrooms and cleaning. A temporary fence system would be developed that is attractive, durable, not easily scaled, and lightweight so that it is easy to store, transport, and install. As described for alternative A, recycling programs would be improved, and facilities would be designed to withstand vandalism and forced entry.

Walkways would be wide enough to accommodate maintenance, staff, and operational vehicles, as well as the public, and they would be able to withstand the weight of vehicles used for park operations and event deliveries.

The Mall

Union Square (1st to 3rd Streets)

The Ulysses S. Grant Memorial would be the focal point of a dignified, paved urban civic square that is redesigned to highlight views, meet event needs, be a visitor destination, and offer comfort, convenience, and entertainment. It would also be a venue for demonstrations and special events.

Under alternative B the reflecting pool would be removed, and the square would be redesigned to increase space for demonstrations, civic engagement, and special events. Infrastructure such as utilities and communication system networks, including media connections, would be provided for demonstrations and events. A multipurpose visitor destination facility with food service, restrooms, retail, and entertainment or performance space would be developed.

The Mall (3rd to 14th Streets)

The Mall would be rehabilitated and redesigned as a highly visible, sustainable venue with more hard surfaces for very high levels of use (demonstrations, public gatherings, cultural programs, and other civic events). Its critical historic features would be maintained.

The condition of the historic landscape would be improved, and a decorative and interactive water feature would be added at the 8th Street cross axis, a site identified in the McMillan plan.

Soils, turf, and tree growing conditions would be improved, similar to alternative A, except gravel on the walkways would be eliminated. Ways would be sought to reduce soil compaction and erosion within the elm tree panels, and American elms would be replaced as needed. The use of post-and-chain fencing to control resource damage would be minimized. The planting plan for all vegetation on the Mall would be updated to ensure that any changes would be compatible with contributing features of historic plans.

For demonstrations and special events, actions would be similar to the no-action alternative and alternative A. However, some temporary event facilities (such as tents, stages, and vehicles) could be located in the elm tree panels if turf/root zones and soils were protected through an

acceptable and authorized method. In addition, Madison Drive NW and Jefferson Drive SW could be used during large special events or demonstrations (more than 250,000 people), and non-emergency / law enforcement vehicular traffic would be rerouted.

A welcome area would be developed near the Metro stop, with a large tactile model of the National Mall. Electronic information would be provided, along with a listing of events and activities. Educational panels would be provided about First Amendment demonstrations and the Mall as the nation's premier civic space.

Existing recreational opportunities would continue, and interactive water features would be provided in some locations. Regularly scheduled ranger programs or walks would be offered, and entertainment would be encouraged. The coordination of visitor information with museums surrounding the Mall would be increased.

Visitor transportation, commercial tour bus drop-offs, bicycles, and other wheeled vehicles would be accommodated on Madison and Jefferson drives, with access occasionally restricted to accommodate events and national celebrations (such as the Fourth of July). If determined feasible by engineering, security, geotechnical, and economic studies, an underground facility for paid visitor parking would be constructed between 15th and 12th streets, which would be entered from 15th Street. Tour bus drop-offs on the Mall would be increased.

For paving and pedestrian circulation, new walks would be developed to be low-maintenance, sustainable, and universally accessible. Along streets the walks would also conform to the design appearance of the *Streetscape Manual* (Interagency Initiative for National Mall Road Improvement Program 1992) and any updates. Surfaces in other areas would be provided to facilitate events and to maintain improved landscape conditions. Some walks would be widened, and some turf areas would be paved for event venues.

Small restroom facilities near existing refreshment stands would be constructed in a similar architectural style. A larger multi-agency restroom would be provided at the Smithsonian Metro station, and a custom-designed, covered entry would be constructed over the Metro entrance.

New public space for seating, pedestrian amenities, and event staging would be created over the 12th Street tunnel portals at Madison Drive NW and Jefferson Drive SW.

The following action for the Mall is common to all alternatives:

- Work with the Washington Metropolitan Area Transit Authority to change the name of the Smithsonian Metro station to include the National Mall.

Washington Monument and Grounds

A high-quality, convenient indoor/outdoor visitor service facility (food service, retail, information, entertainment, restrooms, and views of the monument) would be provided on the northwest corner of 15th Street and Independence Avenue, near the current location of the Sylvan Theater. The facility would be a pleasant destination and a model of adaptable, convenient space capable of meeting the needs of early morning ticket queues (ticketing and a contact station would still be provided in the Monument Lodge). Space would also be provided for food and retail, educational programs, and entertainment (events, performances, and evening entertainment), as well as office space. This facility would replace the Sylvan Theater and the circular restroom.

Infrastructure (utility connections, space for portable restrooms) would be developed to support demonstrations, national celebrations, events, performances, and staging in several locations on the monument's north grounds.

To improve public access under alternative B, pedestrian underpasses or bridges would be constructed between 14th and 15th streets near Madison Drive NW and Jefferson Drive SW. Paving would be expanded near major crosswalks. Additional parking for people with disabilities would be provided near the new multipurpose visitor facility. If determined feasible by engineering, security, geotechnical, and economic studies, an underground visitor

parking facility would be built below the multipurpose recreation fields on the south grounds, with pedestrian access under Independence Avenue to the monument's visitor service areas.

Survey Lodge would be rehabilitated to provide services for people with disabilities.

West Potomac Park (North of Independence Avenue)

Constitution Gardens

Constitution Gardens would be a restful, high-quality visitor destination, with food service and opportunities for entertainment and enjoyment. Soils and vegetation would be rejuvenated.

The Lockkeeper's House would be preserved, but it would be relocated slightly away from the intersection for safety reasons. The interior would be rehabilitated, and the building would be staffed for visitor information. Pedestrian and vehicular movements at the intersection would be improved.

To accommodate demonstrations and special events, the lake and circulation patterns would be redesigned to increase available space. Walks would be repaved, and some walkways would be widened to create venues for smaller events (exhibits, tents, and performances). The lake would be reconstructed as a very shallow pool that could be drained for demonstrations and special events. Infrastructure (e.g., utilities and communication systems) would be incorporated into the new design.

A multipurpose facility would be developed in the paved asphalt area as previously designed, with a unique indoor/outdoor character that could accommodate approximately 130 people indoors and 200 outside. A flexible, multi-use outdoor stage would be provided in the lake near this facility, with informal seating around the lake for several thousand people. Performances of thematic entertainment could be offered (e.g., World War II era music, Latin American music). The existing restrooms would be replaced.

Vietnam Veterans Memorial

Space would be provided near the memorial to allow for seating and contemplation.

Lincoln Memorial and Grounds

For demonstrations and special events on the memorial grounds, the *Lincoln Memorial Guidelines* would be expanded to address the availability and use of infrastructure (e.g., utilities, communication systems) to facilitate events.

Additional restrooms would be provided near the north and south concession / refreshment stands on the grounds. The integrity of the historic planting plan would be respected when adding restrooms.

Better pedestrian crossings of the memorial circle and radial roads would be provided.

Under alternative B the Vietnam Veterans Memorial information station would be removed once the memorial center was open, and the Korean War information station could be replaced.

A ceremonial use would be developed for the Watergate steps. Also, pedestrian crossings and access to Arlington Memorial Bridge would be improved.

The following actions for the Lincoln Memorial and grounds are common to all alternatives:

- Renovate and expand the exhibit area, renovate the restrooms at the memorial, and relocate the bookstore to the lower level. In addition under alternative B the restroom would be expanded within the building footprint.
- Implement recommendations of the Lincoln Memorial *Cultural Landscape Report*.
- Restore the historic landscape associated with the memorial circle and radial roads.
- Accommodate future national memorials authorized by Congress in the area north of the Watergate steps.
- Accommodate road projects and circulation improvements by others to simplify traffic patterns and to improve pedestrian

connections from the Kennedy Center and adjacent neighborhoods.

Korean War Veterans Memorial

Changes in visitor use patterns at the Korean War Veterans Memorial since the development of new memorials would be assessed. Additional east-side entry walks would be provided to accommodate changing circulation patterns.

Ash Woods

Ash Road would become primarily a pedestrian walk and secondarily a service road for emergency, law enforcement, and maintenance access. The restroom would be replaced with a new facility between the World War II and Lincoln memorials. The U.S. Park Police stables would be screened from view with a wall or fence appropriate for the historic design of the National Mall. A new parking area and vehicle access would be provided from Independence Avenue.

West Potomac Park (South of Independence Avenue)

Tidal Basin Area

The Tidal Basin area would be upgraded with high-quality, paved walks, improved circulation, furniture, facilities, and services to provide opportunities for more visitors to enjoy strolling and viewing experiences.

The recommendations of engineering studies of the basin function would be implemented, and the walls would be rebuilt to allow wider walkways to protect the cherry trees. Additional locations would be provided for visitors to enjoy views or take photographs, and walks would be widened to reduce trampling of tree roots. Three pedestrian bridges would be added near Inlet, Outlet, and Kutz bridges to reduce congestion, and pedestrian lighting would be added for visitor safety and enjoyment.

The parking lot would be removed if and when a new underground garage was provided on the south grounds of the Washington Monument.

Seating would be added, and facilities would be redesigned to reduce congestion and to complement the historic character of the National Mall. The refreshment stand would be replaced with a destination multipurpose facility, which would be a small-scale, year-round facility with a unique character, indoor/outdoor seating, and open views. Restrooms would be provided, and the recreation equipment rental facilities would be upgraded.

Franklin Delano Roosevelt Memorial

Under alternative B educational programs would be increased, and Room 4 would be used for this purpose, as intended. A comprehensive condition assessment of the memorial, including visitor use patterns, would be undertaken. Food service would be provided in a location that would also be convenient to the future Martin Luther King, Jr. Memorial.

West Potomac Riverfront Park

The river walls would be reconstructed as higher, stone-faced structural walls so they would not be overtopped by water and floating debris. A small staging area for demonstrations and events would be developed south of 23rd Street and Independence Avenue SW. Grass pavement and utilities would be provided.

Thomas Jefferson Memorial and Grounds

Proposals for the Thomas Jefferson Memorial would generally be similar to the no-action alternative and alternative A. Utilities and infrastructure for demonstrations and special events would be installed on the plaza.

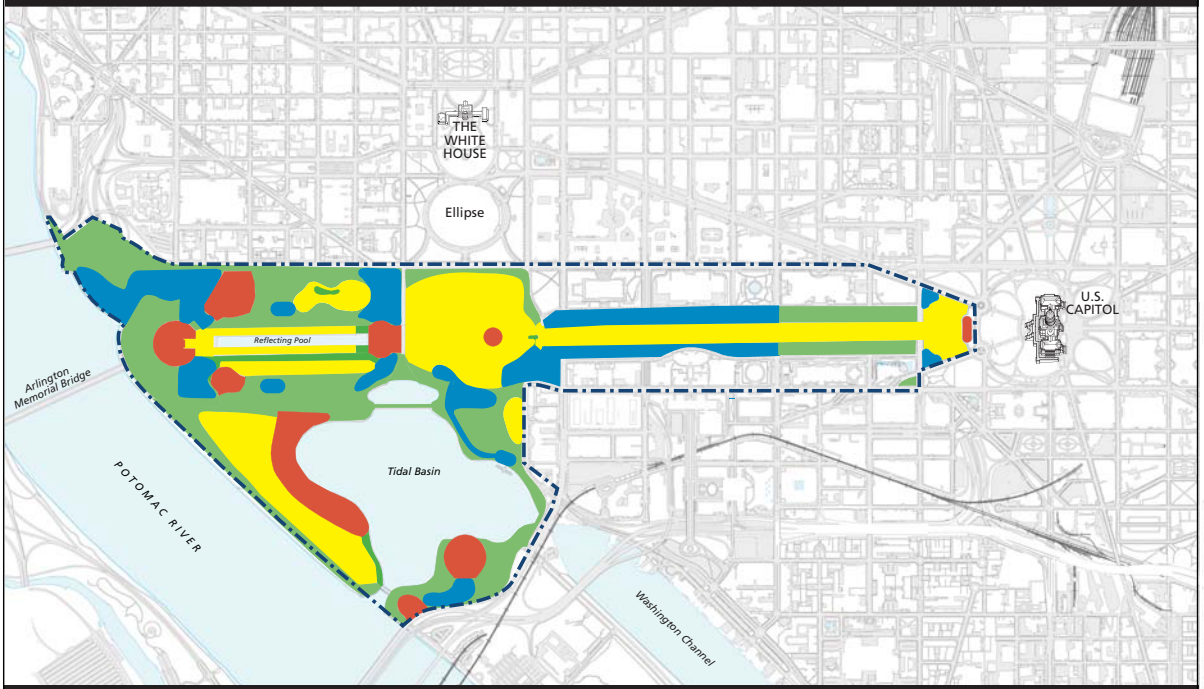
On the grounds historic plantings would be preserved. The refreshment stand along East Basin Drive would be replaced.

CONSERVATION ZONING: Alternative B

National Mall Plan

United States Department of the Interior / National Park Service

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National Mall Plan Area

Memorial Area

Character Protection Area

Multipurpose Area

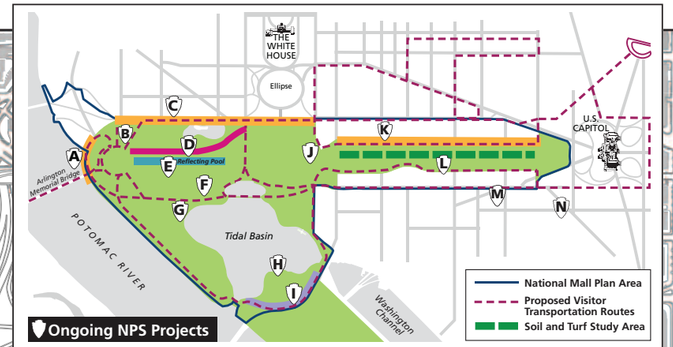
High-Use Area

Alternative B

National Mall Plan

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Ongoing NPS Projects

- A Ohio Drive Roadwork
- B Vietnam Veterans Memorial Center
- C Constitution Avenue Roadwork
- D Potomac Park Levee
- E Lincoln Memorial Security and Refelecting Pool Area
- F D.C. War Memorial Rehabilitation
- G Martin Luther King, Jr. Memorial
- H Thomas Jefferson Memorial Plaza and Seawall Rehabilitation
- I Thomas Jefferson Memorial Perimeter Security
- J Washington Monument Security Screening
- K Madison Avenue Roadwork
- L National Mall Wayfinding and New Pedestrian Guides
- M Eisenhower National Memorial
- N American Veterans Disabled for Life

Lafayette Park

THE WHITE HOUSE

Ellipse

Northwest Area

Constitution Avenue

VIETNAM VETERANS MEMORIAL

CONSTITUTION GARDENS

LINCOLN MEMORIAL

WORLD WAR II MEMORIAL

WASHINGTON MONUMENT

KOREAN WAR VETERANS MEMORIAL

DC WAR MEMORIAL

THE MALL

UNION SQUARE

Grant Memorial

Independence Avenue

POTOMAC RIVER

Riverfront

Tidal Basin Area

FRANKLIN DELANO ROOSEVELT MEMORIAL

THOMAS JEFFERSON MEMORIAL

National Mall and Memorial Parks Headquarters

395

North

0 0.1 0.2 0.3 0.4 0.5 Mile

0 0.25 0.5 Kilometer

NOTE: See Circulation map in Environmental Consequences.

Alternative B Legend

EXISTING FACILITIES
(Restrooms, Bookstore, Retail, Food Service, Information, Perfomance Space)

- Existing Interactive Water Feature
- National Mall Plan Area
- Mall Soil and Turf Study Area
- Existing Carousel

NEW OR CHANGED FACILITIES

- Information / Orientation
- Retail
- Food Service
- Restrooms
- Bookstore
- Recreation Equipment Rental
- Performance Space
- U.S. Park Police Stables
- Water Features Rehabilitated
- Interactive Water Feature
- Water Feature Drainable For Events
- Underground Parking
- Improvements (Turf/Trees, Park Furniture, Etc.)
- Pedestrian Improvements (Paved Areas)
- Multipurpose Facility

CIRCULATION CHANGES

- Tour Bus Drop-off Improvements
- Road Realignment
- Visitor Parking Lot
- Cross Walk Improvements

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Alternative C — Focus on Urban Open Space, Urban Ecology, Recreation, and Healthy Lifestyles

The vision for alternative C is to meet evolving recreational needs in the nation's capital by providing beautiful, enjoyable, and ecologically sustainable open spaces that could be adapted to changing recreational patterns of diverse local and national users. This concept would contribute to healthy lifestyles, healthy parks, and healthy, more sustainable cities.

Recreational activities would be expanded by redesigning some areas, increasing recreation equipment rentals (such as boats, skates, and bicycles), adding playgrounds, and emphasizing connections to the recreational and enjoyment opportunities in East Potomac Park, the Georgetown Waterfront, and Rock Creek Park, as well as the southwest waterfront.

The National Park Service would ensure compatible and enduring high-quality design, as well as the highest facility maintenance standards, to create a sense of place that would reinforce the civic, historic, and symbolic role of the National Mall to our nation.

The following actions would be in addition to those described under "Actions Common to All Alternatives" and highlighted in the accompanying text box. Only areas where actions would be taken are included in the following discussion.

Actions Common to All Alternatives

As previously described, the following summarized actions are common to all alternatives:

- *Cultural Resources* — Preserve and protect cultural resources; manage in accordance with *The Secretary of the Interior's Standards* and with the general recommendations of cultural landscape reports and inventories.
- *Natural Resources* — Continue to manage and protect natural resources. Address water quality problems in water features.
- *Demonstrations and Special Events* — Consistent with the First Amendment and federal regulations, fully accommodate demonstrations on a first-come, first-served basis. Consistent with federal regulations, accommodate permitted events. Improve permit procedures for special events and First Amendment demonstrations. Enhance procedures to ensure that resources are better protected and that soil, turf, and vegetation impacts are reduced.
- *Access and Circulation* — Continue working with the city and other agencies to address tour bus parking.
- *Visitor Information, Education, and Enjoyment* — Continue to offer visitor information, educational programs, venues for entertainment, guided walking and bicycle tours, and a mix of recreational activities.
- *Visitor Amenities* — Assess the economic feasibility, necessity, and appropriateness of changes to commercial visitors services and facilities.
- *Health, Public Safety, and Security* — Continue law enforcement patrols and increase a law enforcement presence during large events.
- *Park Operations* — Make waste management more efficient; expand recycling at events; continue a visual quality team to improve conditions and the appearance of park facilities; and meet NPS energy efficiency goals.

National Mall Actions

Cultural Resources

As described for alternative A, landscape health and appearance would be improved. Vistas within the historic landscape would be protected and preserved.

Natural Resources

Environmentally sound ways to improve water quality would be sought. Means would be developed to conserve water, reduce the use of potable water, and reuse water. Nonpotable water sources would be sought for water features. In cooperation with other federal and city agencies, the National Park Service would seek to develop sustainable approaches to address urban drainage flooding.

Stormwater management structures would be developed to mitigate urban drainage flooding. The potential for collecting and storing water from subsurface drainage / dewatering activities and reusing it for irrigation purposes would be explored, as would stormwater retention to reduce flooding from urban drainage (e.g., Constitution Gardens Lake) and rain gardens.

To improve soil and vegetation conditions, rehabilitation and recovery periods would be revised so that smaller areas could be set aside more frequently and broader public access maintained. Practices would be implemented to protect and improve conditions for special vegetation populations. Soils would be managed according to the Sustainable Sites Initiative™ approach.

To help address the effects of climate change, the park would coordinate with others to undertake a comprehensive approach to address the impacts of climate change. In addition, the park would seek to reduce greenhouse gases by 18% by 2012.

Demonstrations, Special Events, and National Celebrations

As described for alternative B, highly visible venues would be provided for demonstration and special events that would be better designed for high levels of use and with support infrastructure (electrical power, Internet and media connections) and durable surfacing.

In addition to the regulation changes proposed under alternative A for event permitting and monitoring, as well as post-event recovery procedures, the turf management program would be revised so that smaller areas would be set aside more frequently, thus allowing broader public access. Events — not First Amendment demonstrations — would be scheduled to equalize use of the National Mall at any time. Part of the Mall's grass panels would be open at all times for public recreation, part would be available for events, and part would be available for landscape recovery and restoration. Also, other means to expand participation in demonstrations and special events would be considered, e.g., opportunities for large viewing screens to simulcast offsite demonstrations.

Operational improvements would be the same as alternative A, including a new reservation system, infrastructure, and space for temporary facilities and law enforcement to reduce resource impacts.

Access and Circulation

Circulation systems would offer a high-quality, enjoyable environment for both pedestrians and bicyclists, while accommodating urban traffic within a park environment.

Some roads and crosswalks would be redesigned to improve and facilitate pedestrian movements, and some roads would be tunneled to improve vehicular circulation. Parking areas would be redesigned to be more efficient.

Pedestrian experiences would be improved with upgraded walking surfaces and longer pedestrian countdowns; low-maintenance, sustainable, and universally accessible paving (same as alternative B), and pedestrian bridges or pedestrian/vehicular underpasses. Nonmotorized access would be facilitated by providing separate circulation routes for pedestrians and bicyclists or personal transit users, and by providing additional facilities geared to pedestrians and bicyclists. Bicycle lanes or markings on roads would be coordinated with the city. Tour bus drop-offs would be redesigned as needed.

Visitor Information, Education, and Enjoyment

Visitors would be educated about healthy lifestyles, plant materials and gardens, natural resources, sustainable practices and ecosystems, and stewardship activities through brochures, exhibits, and tours. More guided walking/bicycling tours would be offered. Multi-season touring opportunities (spring cherry blossoms, fall colors) would be emphasized. Entertainment would be facilitated by providing better infrastructure at performance venues.

Consistent with this alternative's emphasis on healthy lifestyles, opportunities would be expanded to meet evolving recreational needs. Sport field conditions would be improved and additional fields created. Connections to other nearby recreation facilities would be improved, and information about recreational opportunities in East Potomac Park would be provided through brochures and web-based information. Trail connections along the Washington Waterfront, as well as along the Potomac and Anacostia rivers, would be improved. An on-line

permitting system for athletic fields would be developed.

If determined to be feasible in a commercial service plan, additional seasonal rentals of recreation equipment would be provided, as discussed below for each area.

Visitor Amenities

The architectural character of all facilities would be similar to alternative B, with the development of architecturally significant destination visitor facilities in certain locations. Under alternative C there would be a focus on cutting-edge, sustainable design solutions, exceeding the silver rating under the LEED program. Visible but subtle renewable energy components, such as photovoltaic solar energy systems, would be incorporated in designs. As described for alternative B, coordinated, high-quality, compatible site furnishings would be developed, but they would also be sustainable.

In addition to adopting lighting guidelines as described under alternative A, pedestrian lighting would be supplemented in some areas, but lighting sources would not contribute to light pollution.

Porous paving surfaces would be used if feasible, plus soft surfaces for jogging and smooth surfaces for in-line skating or wheeled recreation. Seating, including rental portable lawn chairs, would be increased in areas used for active recreation, such as ballfields.

For food service, facilities would be replaced or upgraded in some locations, but refreshment stands would be the primary venue. More food variety would be offered. New drinking fountains or water stations would be designed to reduce possible misuse and to facilitate the filling of reusable water bottles. Restrooms, including some that would be automated and self-cleaning, would be added near food service locations.

Health, Public Safety, and Security

Circulation systems would be redesigned and separated to improve safety and reduce use conflicts. As described for alternative B, pedestrian safety would be increased by programming automatic and extended pedestrian crossing times into signal phasing, adding midblock crossings, improving crosswalks, providing pedestrian tunnels or bridges, and redesigning roadways to connect park areas. Walkways would be lit so as to emphasize surface conditions but not be intrusive (hidden or low profile light sources). Universally accessible paving materials would be provided.

For law enforcement, bike patrols would be expanded. A mass notification system would be provided for emergency situations, as well as emergency call stations. Water misters and interactive water features would be provided to allow visitors to cool off.

Park Operations

Deferred maintenance would be addressed as budgets and staffing allow, but some project areas would be redesigned to allow more use, to better protect resources, and to upgrade and provide sufficient visitor amenities. Maintenance activities and operations would be increased, as described for alternatives A and B. Under alternative C staff increases for recreational and educational programs would be sought. Technological advances such as self-cleaning, automated public restrooms would be used in some areas to reduce maintenance. Means other than snow fencing would be developed to protect areas during rest and rehabilitation periods.

The park would take the lead in demonstration and interactive programs for efficient energy use. Renewable energy sources would be sought for lighting and pumping systems for water features. The National Park Service would advance the principles of sustainability, as described in the preferred alternative, and would strive to achieve the highest LEED standard practicable, determine the park's carbon footprint, and reduce greenhouse gases by 18% by 2012.

The Mall

Union Square (1st to 3rd Streets)

The Ulysses S. Grant Memorial would be the focal point of an active, paved urban civic square that would be a visitor destination and that

would showcase reflective and interactive water features with an environmentally friendly design to highlight sustainable water management practices. The area would be visually and physically connected to the U.S. Botanic Garden and U.S. Senate Youth Park and U.S. Botanic Garden Education and Outreach Center to the north.

As described for alternative A, the condition of historic landscape components would be improved. The Capitol Reflecting Pool would be redesigned as a shallow pool that could be drained for demonstrations and events or frozen for ice skating. Interactive water features would be provided to help visitors cool off during hot weather and to enliven the space.

Infrastructure would be provided for demonstrations and events. Food and retail sales would be provided, plus automated, self-cleaning public restrooms.

The Mall (3rd to 14th Streets)

The Mall would be redesigned to better accommodate high levels of use for demonstrations and special events. It would provide additional, sustainable areas for recreational enjoyment (gardens, fountains) and improved lawn conditions (for informal pickup games and play). A children's play area would be provided, as well as interactive water features at some locations. The center grass panels would be reconfigured to provide larger spaces for informal recreation.

Soil, turf, and tree growing conditions would be improved, and a new irrigation system would be installed, similar to alternatives A and B. American elms would be replaced as needed, and post-and-chain fencing would be used to prevent social trails. Like alternative B, the planting plan for nonhistoric elements would be updated to ensure that any changes would be compatible with historic plans.

Infrastructure would be provided for demonstrations and events, but no temporary event facilities, such as tents, stages, or vehicles, would be allowed in the elm tree panels.

A visitor contact station would continue to be provided near the Metro stop, and orientation maps and information would be provided here and elsewhere on the Mall. Information would also be provided about recreational opportunities and ecologically sustainable management of designed landscapes.

Additional lighting and floral displays would enhance the Mall. Park furniture and interactive water features would be provided outside the primary viewshed to protect the historic landscape. Paving near refreshment stands would be redesigned to allow for expanded service areas as needed. Small restroom facilities would be provided near the refreshment stands.

A 14th Street vehicular tunnel would be constructed to create a larger pedestrian-only area. Free public parking would continue to be allowed on Madison and Jefferson drives. Gravel would be replaced with sustainable, universally accessible surface materials. Some north-south walks would be eliminated between 7th and 9th streets to increase recreation space on center lawn panels.

The following action for the Mall is common to all alternatives:

- Work with the Washington Metropolitan Area Transit Authority to change the name of the Smithsonian Metro station to include the National Mall.

Washington Monument and Grounds

High-quality indoor/outdoor visitor services (food service, retail, restrooms) would be provided on the Washington Monument grounds between 14th and 15th streets. The circular restroom would be replaced, and automated, self-cleaning restrooms would also be installed near Constitution Avenue between 16th and 17th streets. The Sylvan Theater would be reconstructed and reoriented to provide a new entertainment venue with improved viewing.

A 14th Street vehicular tunnel would be constructed to improve pedestrian movement and safety, along with enhanced pedestrian crosswalks to increase their visibility to drivers, widened pedestrian waiting areas, and programming automatic and extended pedestrian crossing times into signal phasing, on 15th Street. Roads, parking, bicycle, and pedestrian circulation would be redesigned to reconnect park

areas, to improve safety and recreational opportunities, and to connect to the southwest waterfront and East Potomac Park. Separate, dedicated bike trails would be constructed. A turfed surface would be provided over Maine Avenue to connect the monument grounds with the Tidal Basin.

West Potomac Park (North of Independence Avenue)

Constitution Gardens

The Constitution Gardens would be a restful, quality visitor destination, with a garden café. As described for alternative B, the Lockkeeper's House would be preserved and moved to an adjacent location slightly away from the intersection for safety reasons. The interior would be rehabilitated, and the building would be staffed for visitor information. Vehicular and pedestrian movements would be improved at the intersection.

Soils and vegetation would be rejuvenated. The lake would be reconstructed to be self-sustaining for fish and plants. The lake would also be incorporated into the urban stormwater retention systems to control flooding, and a nonpotable water source would be found.

For visitor enjoyment recreation rentals, such as model boats and lawn chairs, would be provided. A children's play area would be added, along with an informal interactive water feature. Walks would be repaved and widened in some areas to create venues for small events (exhibits, tents, performances). Space would be provided for refreshment carts. Visitor facilities would be similar to alternative B, with a smaller food service facility.

Lincoln Memorial and Grounds

The historic landscape on the memorial grounds would be preserved and protected. As described for alternative B, the *Lincoln Memorial Guidelines* would be expanded to address the availability and use of infrastructure (e.g., utilities, communication systems) to facilitate events.

Educational information would enhance public understanding of the Watergate steps and the Constitution Avenue belvedere. In addition under alternative C water taxi stops could be accommodated at the steps, with a redesign of Ohio Drive for safe pedestrian access.

A north ramp and access to Constitution Avenue would be reestablished, in conjunction with the *Framework Plan*. Jurisdictional agreements and storage / maintenance facilities would be addressed as described under alternative A.

The addition of visitor restrooms at the south concession stand would respect the integrity of the historic planting plan. (Restrooms on the north side would be available at the planned Vietnam Veterans Memorial Center.) Facilities at volleyball courts would be improved.

The following actions for the Lincoln Memorial and grounds are common to all alternatives:

- Renovate and expand the exhibit area, renovate the restrooms at the memorial, and relocate the bookstore to the lower level.
- Implement recommendations of the Lincoln Memorial *Cultural Landscape Report*.
- Restore the historic landscape associated with the memorial circle and radial roads.
- Accommodate future national memorials authorized by Congress in the area north of the Watergate steps.
- Accommodate road projects and circulation improvements by others to simplify traffic patterns and to improve pedestrian connections from the Kennedy Center and adjacent neighborhoods.

Korean War Veterans Memorial

Screens for interactive computer displays would be replaced and upgraded as technology improves. As described for alternative B, visitor use patterns would be assessed, and additional east-side entry walks would be provided.

Ash Woods

Recreation fields in the Ash Woods area would be upgraded with backstops, etc., to avoid leagues leaving their equipment on the fields.

The restroom would be replaced with a new facility between the World War II and Lincoln

memorials (the same as alternative B). The U.S. Park Police stables would be reconstructed and would be designed to be compatible with the historic character and quality of the National Mall. The horse paddocks would become part of the visitor experience, with information about the U.S. Park Police and horse patrols. A new parking area and vehicle access road from Independence Avenue would be constructed.

West Potomac Park (South of Independence Avenue)

Tidal Basin Area

The Tidal Basin area would be upgraded with high-quality paved walks, improved circulation, and facilities, as well as additional recreational opportunities, to allow more visitors to enjoy strolling and viewing experiences.

A sustainable solution would be sought to comprehensively address hydrology and flooding in the Tidal Basin area. The recommendations of engineering studies would be implemented, and the ability of the basin to flush and absorb tidal surges would be maximized. The basin walls would be rebuilt to allow wider walkways. Soil and vegetation conditions would be improved.

During demonstrations and special events more roving educational ambassadors and more educational signs would help prevent resource damage.

Recreation equipment rentals would be expanded to include kayaks and rowboats. The bay north of Kutz Bridge would be filled to provide additional recreation fields.

Roads and parking areas would be redesigned to be more efficient. In addition to widening and repaving walkways, pedestrian bridges would be added to reduce congestion. Pedestrian lighting would be installed in a manner that would not affect the evening lighting ambience of memorials.

Visitor amenities, including the refreshment stand and the recreation equipment rental facilities, would be replaced to reduce congestion and to complement the historic character of the National Mall. Restrooms would be added.

Franklin Delano Roosevelt Memorial

Educational programs would be increased, and Room 4 would be used for this purpose, as intended. A comprehensive condition assessment of the memorial, including visitor use patterns, would be undertaken. A refreshment stand without restrooms would be constructed in a location that would also be convenient to the future Martin Luther King, Jr. Memorial.

West Potomac Park Riverfront

Where feasible, a sustainable, vegetated shoreline would be developed. The river walls would be reconstructed where necessary. Trees would be added, and river views would be emphasized.

Recreation fields could be occasionally used as staging areas for demonstrations, events, and filming; but other uses would be limited during recreation seasons. Lockers would be provided for personal storage near the recreation fields, and children's play areas would be developed.

Separate bike and walking trails would be provided, with an emphasis on trail connections to East Potomac Park and Rock Creek Park, as well as the southwest waterfront. Roads and parking areas would be redesigned as needed to accommodate bike lanes.

Thomas Jefferson Memorial and Grounds

Proposals for the Thomas Jefferson Memorial would generally be the same as the no-action alternative and alternative A. For demonstrations and special events utilities and infrastructure would be installed on the plaza. The restrooms in the memorial would be renovated and expanded. Under alternative C ranger programs would be increased.

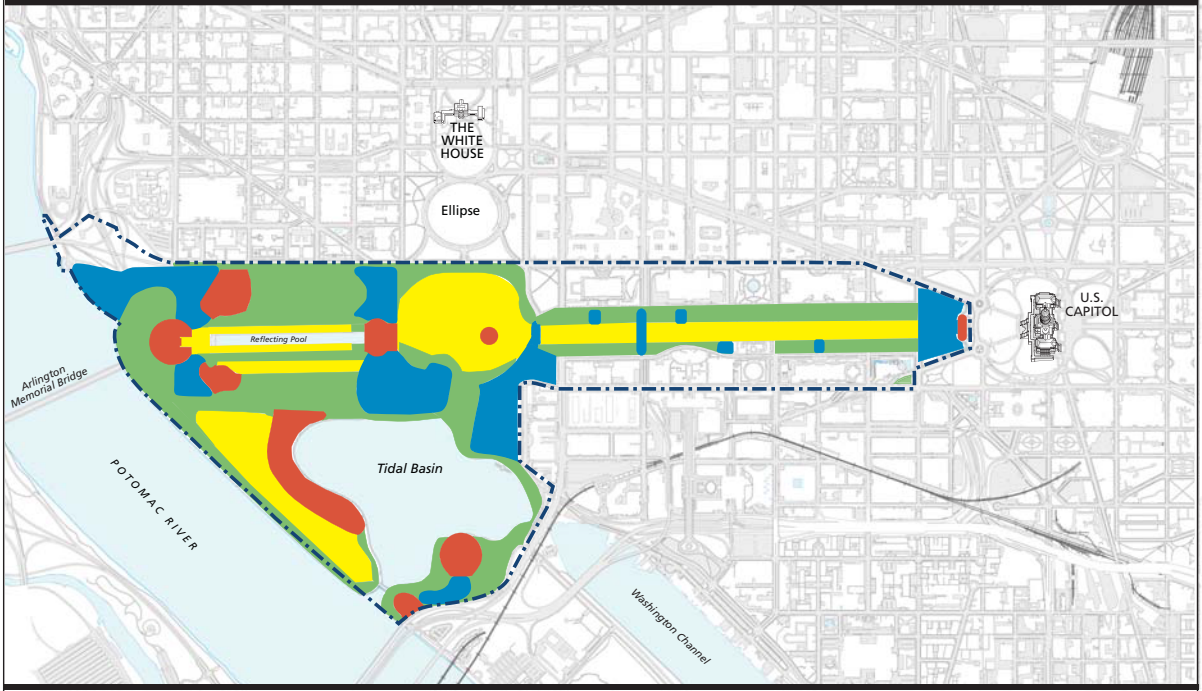
Historic plantings on the memorial grounds would be preserved. The tour bus drop-off would be redesigned to facilitate pedestrian circulation. The refreshment stand would be relocated to be more convenient to primary view routes (bicycle and pedestrian walkways), as well as the tour bus drop-off.

CONSERVATION ZONING: Alternative C

National Mall Plan

United States Department of the Interior / National Park Service

DSC • Oct. 2009 • 802 • 100455



National Mall Plan Area

Memorial Area

Character Protection Area

Multipurpose Area

High-Use Area

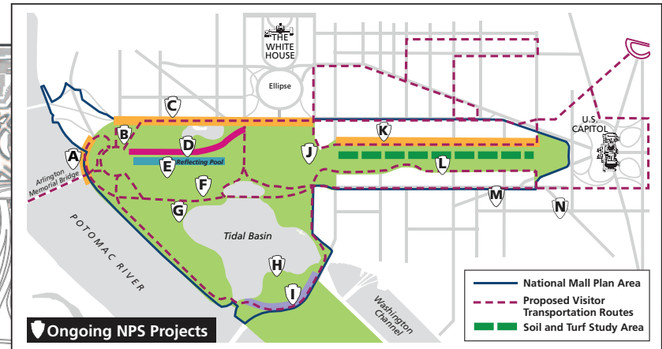
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Alternative C

National Mall Plan

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Ongoing NPS Projects

- A Ohio Drive Roadwork
- B Vietnam Veterans Memorial Center
- C Constitution Avenue Roadwork
- D Potomac Park Levee
- E Lincoln Memorial Security and Refelecting Pool Area
- F D.C. War Memorial Rehabilitation
- G Martin Luther King, Jr. Memorial
- H Thomas Jefferson Memorial Plaza and Seawall Rehabilitation
- I Thomas Jefferson Memorial Perimeter Security
- J Washington Monument Security Screening
- K Madison Avenue Roadwork
- L National Mall Wayfinding and New Pedestrian Guides
- M Eisenhower National Memorial
- N American Veterans Disabled for Life

Lafayette Park

THE WHITE HOUSE

Ellipse

Northwest Area

Constitution Avenue

VIETNAM VETERANS MEMORIAL

CONSTITUTION GARDENS

LINCOLN MEMORIAL

WORLD WAR II MEMORIAL

WASHINGTON MONUMENT

KOREAN WAR VETERANS MEMORIAL

DC WAR MEMORIAL

THE MALL

UNION SQUARE

Grant Memorial

Independence Avenue

Riverfront

POTOMAC RIVER

Tidal Basin Area

FRANKLIN DELANO ROOSEVELT MEMORIAL

THOMAS JEFFERSON MEMORIAL

National Mall and Memorial Parks Headquarters

395

North

0 0.1 0.2 0.3 0.4 0.5 Mile

0 0.25 0.5 Kilometer

NOTE: See Circulation map in Environmental Consequences.

Alternative C Legend

EXISTING FACILITIES
(Restrooms, Bookstore, Retail, Food Service, Information, Perfomance Space)

Existing Interactive Water Feature

National Mall Plan Area

Mall Soil and Turf Study Area

Existing Carousel

NEW OR CHANGED FACILITIES

- Information / Orientation
- Retail
- Food Service
- Restrooms
- Bookstore
- Recreation Equipment Rental
- Performance Space
- U.S. Park Police Stables
- Water Features Rehabilitated
- Natural Shoreline
- Interactive Water Feature
- Water Feature Drainable For Events
- Improvements (Turf/Trees, Park Furniture, Etc.)
- Pedestrian Improvements (Paved Areas)
- Multipurpose Facility

CIRCULATION CHANGES

- Separate Bike Routes/Lanes
- Tour Bus Drop-off Improvements
- Road Realignment
- P Visitor Parking Lot
- Crosswalk Improvements

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ACTIONS CONSIDERED BUT DISMISSED

Numerous suggestions were made during the public scoping and planning process. The National Park Service received around 30,000 public comments, and many public ideas have been included in the alternatives considered in this *Final Environmental Impact Statement.* These included separate bike routes or lanes, additional and more conveniently located restrooms, better pedestrian lighting, an emphasis on the importance of First Amendment demonstrations, removal of gravel on walkways, more choice in food service, more color, setting an example for green and sustainable uses, recycling, more passive recreational opportunities, family play opportunities, more recreation equipment rentals, and extended hours. In the preferred alternative at least eight ideas were included from each of the preliminary alternatives presented in newsletter 3, and these alternatives were originally developed to incorporate public ideas. The following discussion represents some of the ideas that were considered but dismissed from further consideration as described below.

As stated in NPS *Director's Order #12: Handbook for Environmental Impact Analysis* (NPS 2001b), the National Park Service generally eliminates alternatives from further study because of (a) technical or economic infeasibility; (b) inability to meet project objectives or resolve need; (c) duplication with other, less environmentally damaging or less expensive alternatives; (d) conflict with an up-to-date and valid park plan, statement of purpose and significance, or other policy such that a major change in the plan or policy would be needed to implement; and (e) too great an environmental impact. Reasons for dismissing individual actions are identified in the following discussion.

A National Mall Boundary Expansion

At the beginning of the 20th century the National Mall was expanded by the McMillan Commission at a time when new landfill presented opportunities for what was then an enormous swath of undeveloped space. That same opportunity no longer exists; the National Mall is now surrounded by federal, local, and private development.

Areas considered to be part of the monumental core have strong physical and symbolic connections to the National Mall, and this includes areas west of the river as well as areas to the north, east, and south. Even though these areas are beyond the defined boundaries of the National Mall, they still make significant contributions to its setting. The lands to the north and south of the National Mall are either privately owned or owned by the federal government and are principally used for agency headquarters. They have a much different character than the National Mall, which is defined by sweeping landscapes, the symbolic cross axis, and the iconic buildings that flank the Mall. The NCPC's *Extending the Legacy* and its implementing documents, the *Memorials and Museums Master Plan* and the *Monumental Core Framework Plan,* propose to elevate important secondary axes that emanate from the National Mall to establish new symbolic connections to sites that are prominently situated. These sites would be integrated within an urban context and would add a rich layer to the city's identity as a modern capital city. Rather than managing the monumental core as a whole landscape or precinct, planning calls for them to be managed as individual sites or corridors

As previously discussed, the National Park Service has defined the National Mall to include three specific areas over which the agency has legal jurisdiction:

- ***The Mall*** — This area includes Union Square, just to the west of the U.S. Capitol grounds, to 14th Street at the east edge of the Washington Monument grounds. The Mall itself extends from 3rd to 14th streets, and from Jefferson Drive on the south to Madison Drive on the north. Adjacent facilities facing the Mall are under the jurisdiction of the Smithsonian Institution, the National Galley of Art, and the U.S. Department of Agriculture.
- ***The Washington Monument*** — This portion of the National Mall lies between 14th

and 17th streets, and from Independence Avenue north to Constitution Avenue. The south Washington Monument grounds are between Maine Avenue and Raoul Wallenberg Place south of Independence Avenue.

- ***West Potomac Park*** — This portion of the National Mall lies west of 17th Street and extends to the Potomac River on the west and south; the northern boundary is basically Constitution Avenue. This is the setting for numerous memorials, including the Lincoln Memorial, the World War II Memorial, the Thomas Jefferson Memorial, the Vietnam Veterans Memorial, the George Mason Memorial, the Franklin Delano Roosevelt Memorial, and the Tidal Basin. The northwest end extends toward the Kennedy Center north of the U.S. 66 highway ramps.

The "Mall System" in the 1901 McMillan plan included eight areas, and the area that is now managed by the National Park Service covers all or a part of five of the eight areas. The other areas included (1) the White House and President's Park, which the National Park Service manages as a separate unit and for which a current comprehensive plan has already been approved; (2) the U.S. Capitol; and (3) the Federal Triangle area. East Potomac Park, which is adjacent to the National Mall to the south, has a separate legislated purpose to forever provide recreation space; this area has been addressed by the National Capital Planning Commission in the *Monumental Core Framework Plan* so that the National Park Service could focus on the National Mall.

The NPS *Management Policies 2006* stipulate the conditions under which boundary adjustments would be considered (NPS 2006e, sec. 3.5):

> As part of the planning process, the Park Service will identify and evaluate boundary adjustments that may be necessary or desirable for carrying out the purposes of the park unit. Boundary adjustments may be recommended to
>
> - protect significant resources and values, or to enhance opportunities for public enjoyment related to park purposes;
> - address operational and management issues, such as the need for access or the need for boundaries to correspond to logical boundary delineations such as topographic or other natural features or roads; or
> - otherwise protect park resources that are critical to fulfilling park purposes. . . .
>
> All recommendations for boundary changes must meet the following two criteria:
>
> - The added lands will be feasible to administer considering their size, configuration, and ownership; costs; the views of and impacts on local communities and surrounding jurisdictions; and other factors such as the presence of hazardous substances or exotic species.
> - Other alternatives for management and resource protection are not adequate.

The National Park Service does not believe that the current definition of the National Mall requires expansion because of coordinated planning efforts by three federal agencies — the National Capital Planning Commission, the U.S. Commission of Fine Arts, and the National Park Service. The National Capital Planning Commission is responsible for planning throughout Washington, D.C., including areas adjacent to the National Mall. The Commission of Fine Arts is responsible for advising on the location of statues, fountains, and monuments in the public areas in the District of Columbia and for reviewing the designs of private construction projects within certain areas of the national capital. Also, adjacent areas are being adequately managed by other entities, and the D.C. Office of Planning has undertaken numerous city planning projects. Therefore, expanding the National Mall would not achieve any purpose that is not already being addressed, would require a change in park purpose, and would not resolve any need or meet park policy. Therefore, it has been eliminated from further consideration.

A New National Mall Commission

Suggestions have been made to establish a new commission similar to the McMillan Commission to plan for the areas covered in that 1901 plan. At the time of the McMillan Commission no federal agencies were charged with either planning for or protecting the character of lands within Washington, D.C. Subsequent to the

McMillan plan, Congress established the National Capital Planning Commission and the U.S. Commission of Fine Arts to protect the visions embodied in the McMillan plan, as well as the L'Enfant plan. The National Capital Planning Commission's *Extending the Legacy* plan (NCPC 1997) is the successor to the McMillan plan and provides an overarching vision for the nation's capital that builds on the principles of the L'Enfant and McMillan plans and protects the National Mall. The *Monumental Core Framework Plan: Connecting New Destinations with the National Mall,* which was developed by the National Capital Planning Commission in cooperation with the Commission of Fine Arts, would implement the *Extending the Legacy* plan (NCPC 2009). These agencies have been working closely with the National Park Service, the D.C. Office of Planning, and the Architect of the Capitol to coordinate various planning efforts, including the development of the National Mall plan.

A new National Mall commission could only be authorized by Congress or the president, not by the National Park Service, and it would necessarily supersede the purview of the U.S. Commission of Fine Arts and the National Capital Planning Commission, as well as the National Park Service. Rather than clarifying the existing situation, a new commission would further complicate present planning and management efforts by delaying urgently needed deferred maintenance, jeopardizing funding that may become available, stalling private/public fundraising, and creating another advocacy or grievance forum.

The work of a new commission might identify some new ideas and provide a new forum for public participation, but public participation is currently part of ongoing planning efforts. Much of the work of a new commission would likely be duplicative and redundant to planning efforts undertaken by the National Capital Metropolitan Area Commission as well as the National Capital Planning Commission, the Commission of Fine Arts, the District of Columbia, the General Services Administration, the Smithsonian Institution, the National Gallery of Art, and the National Park Service. Washington residents have direct access to participating in decision-making on the National Mall now through NCPC membership (4 of 12 seats) and also on the National Capital Metropolitan Area Commission. A new commission could distance that relationship between D.C. citizens and decision-makers. This alternative would duplicate a less expensive alternative to use existing commissions that have been developed for the purposes of planning for and protecting the character of the federal city. Therefore, this proposal was eliminated from further consideration.

Building Out the McMillan Plan for the National Mall

Suggestions were made to complete the McMillan plan vision for the National Mall or portions of it, such as the design for the Washington Monument grounds. The development of the Mall, the Lincoln Memorial, the Thomas Jefferson Memorial, the Ulysses S. Grant Memorial, and adjacent museums were all clear outgrowths of the McMillan plan. While that plan established the character of the National Mall as the cultural core for our nation, as well as its general boundaries, it was a plan geared to the needs and sensibilities of the early 1900s. A number of projects proposed in the McMillan plan were undertaken, while others underwent significant changes or were never completed. As stated in *Designing the Nation's Capital: The 1901 Plan for Washington, D.C.* (U.S. Commission of Fine Arts [CFA] 2006), "As early as the mid-1920s, the commission's *Tenth Report* noted that the agency's position was that the L'Enfant plan of 1791 was the fundamental one for the District of Columbia, and the [McMillan] plan of 1901 was a 'restatement of the authority of the L'Enfant plan, together with such extensions of that plan as were necessary to make it apply to increased areas and changed conditions. This commission have [*sic*] never held that the plan of 1901 might not in its turn require changes and extensions'" (quoted in CFA 2006, 270).

One example is the McMillan plan's elaborate proposal for the Washington Monument gardens. Doubts about soil conditions around the foundations of the monument caused both the Commission of Fine Arts and the National Capital Park and Planning Commission (the predecessor of the National Capital Planning Commission) to call for a full engineering report, which recommended that the plan be aban-

doned because the areas requiring either excavation or heavy loading were located where they would seriously affect the stability of the monument (CFA 2006, 265). Another example is the Thomas Jefferson Memorial, which was placed on a site reserved for both a memorial, possibly to the Founding Fathers, and a grouping of public buildings (CFA 2006, 267).

The McMillan plan was a strong plan that provided an urban design and architectural concept illustrating the character for a portion of the symbolic monumental core that had not developed in accordance with L'Enfant's vision or affected land not available in L'Enfant's era. While the strength of the McMillan plan helped propel many components that were eventually realized, designs that were either not feasible or that no longer aligned with changing conditions or tastes were altered as projects were implemented. Projects completed during the 1930s and 1940s in Washington, nearly three decades after the McMillan plan, were as significant as the previous generation's efforts in contributing to the significance of the National Mall.

The design of the National Mall has become more significant with time, and Congress declared it to be "a substantially completed work of civic art" in the 2003 amendments to the Commemorative Works Act. While the National Park Service recognizes that the National Mall is an evolving landscape, there would be no reason to implement elements of the McMillan plan that were previously set aside. NPS *Management Policies 2006* stipulate that "as a basic principle, anything of historical appearance that the National Park Service presents to the public in a park will be either an authentic survival from the past or an accurate representation of that once existing there" (NPS 2006e, sec. 5.3.5). In addition, *The Secretary of the Interior's Standards for the Treatment of Historic Properties* specifically state, "Designs that were never executed historically will not be constructed." This precludes implementing historic plans that were never built. Therefore, this suggestion was dismissed from further consideration since it would conflict with NPS policy, as well as plans approved by the Commission of Fine Arts, and it would not meet any need.

CHANGING THE HISTORIC LANDSCAPE

Several proposals suggested that the center grass panels of the Mall are too wide and should be narrowed; that additional trees need to be added; that elm trees should be replaced with other species; or that some form of gravel should be used to replace grass under the elm trees. These proposals would alter character-defining components of one of the most historic landscapes and vistas in our nation. The simple and formal Mall landscape is comprised of regularly spaced elm trees and rectangular turf panels. The formal spatial relationships and circulation system were carefully considered in both the McMillan plan and in the 1930s when the present Mall took form under the guidance Frederick Law Olmsted Jr. Elm trees remain one of the most tolerant tree species, and the National Park Service has developed significant expertise in maintaining the trees. Placing gravel under the elm trees would further eliminate picnicking, reading, and general enjoyment of present turf areas. NPS policies prevent the alteration of contributing elements of a nationally significant historic landscape (such as different tree species, or adding gravel beneath the trees) without a compelling reason. Some of these proposals were previously rejected by the National Capital Planning Commission and the U.S. Commission of Fine Arts. As a result, these suggestions were considered but eliminated since several of them would conflict with proposals in park historic structure reports or cultural landscape inventories, or would alter or conflict with plans approved by established commissions.

Artificial turf has been suggested as a means to resolve turf issues. While current products may more closely resemble natural turf, artificial turf does not meet criteria for durability, maintainability, ease of repair, and sustainability. Artificial turf is hotter than natural turf, and it would not meet objectives to improve water infiltration. The National Park Service will continue to examine the use of new technologies to increase durability in natural turf or soil resiliency. Artificial turf has been dismissed from further consideration because of its technical infeasibility, inability to meet project objectives, and duplication with other less damaging alternatives.

There have been proposals to remove Constitution Avenue and reopen Tiber Creek as a canal. The National Park Service does not restore a landscape to a specific time without a significant reason and only when detailed plans are available. Constitution Avenue is a critical part of the urban circulation system, and reestablishing the canal would completely disrupt the city's circulation patterns, would be economically infeasible, would result in too great an environmental impact, and would fail to resolve any need.

It was suggested that the National Mall be turned into gardens to produce food. Given the National Mall's purpose and symbolic nature, and its historical use for national celebrations, First Amendment demonstrations, events, tourism, and recreation, the highest and best use would be to continue these uses, not agricultural production. This alternative was dismissed from further consideration since it would conflict with objectives to respect historic plans and provide a venue for First Amendment demonstrations and national celebrations, and it would not resolve any need.

Features on the National Mall

Additional Memorials or Museums

Several comments proposed additional memorials to people or events or a war museum. This action is prohibited by the Commemorative Works Clarifications and Revision Act of 2003. The act identifies the Reserve, which includes the National Mall and the White House and President's Park, and it states that this area is a "substantially completed work of civic art." The construction of additional memorials or visitor centers that had not already been authorized by Congress in 2003 is prohibited. Since this proposal would conflict with a congressional objective and would fail to resolve any need, it was not considered further.

Locations for future memorials and museums include Area 1, which is adjacent to the National Mall and would be appropriate for nationally significant memorials, and Area 2, which encompasses the remainder of the city and would be appropriate for other memorials. The NCPC *Memorials and Museums Master Plan* also identifies numerous locations outside the National Mall for future memorials in order to protect the National Mall from being overbuilt (NCPC 2001). One of the purposes of the NCPC *Monumental Core Framework Plan* is to improve the viability and attractiveness of proposed locations for cultural destinations or commemoration (NCPC 2009). Any proposals to add memorials or museums would conflict with the Commemorative Works Act and could be addressed in accordance within the *Memorials and Museums Master Plan*. Therefore, these proposals were dismissed from further consideration.

Moving, Removing, or Destroying Memorials or Historic Structures

Several people and organizations suggested that after the death of the last veteran of each war that is commemorated on the National Mall (the D.C. War Memorial, the World War II Memorial, the Korean War Veterans Memorial, and the Vietnam Veterans Memorial) each memorial should be relocated to Arlington National Cemetery. Congressionally authorized memorials are considered to be cultural resources, and relocating them would alter the historic landscape and the original context for the memorial. These memorials document our nation's history, and they have historic value for that reason. While individual memorials might not be seen as attractive or valued by one group, they may be highly valued by others. These proposals would conflict with NPS cultural resource policies or would not meet congressional objectives when the memorials were established, so they were dismissed from further consideration.

A suggestion was made to move the Ulysses S. Grant Memorial. However, *The Secretary of the Interior's Standards for the Treatment of Historic Properties*, as well as NPS *Management Policies 2006,* set very high standards for considering the relocation of an important commemorative element such as this presidential memorial that is the visually dominating feature of Union Square. Since this proposal would conflict with a congressional objective, as well as NPS cultural resource management policies, and it would constitute too great an environmental impact, this proposal was eliminated from further consideration.

It was also suggested that the historic Monument Lodge be moved because it is within the primary east-west viewshed. This structure is relevant to the history of the Washington Monument, and grading of the Mall screens it from view until viewers are west of 14th Street. The facility has been adaptively reused in the past, and NPS policy is to adaptively reuse buildings in place when their past use is no longer possible. The location of the lodge is also significant on the Washington Monument grounds and landscape. After its use for utilitarian purposes for the Washington Monument Grounds Society, it was used as a gathering place for visitors to the monument. In fact, it still serves this same purpose today. Monument Lodge now serves as a bookstore, ticket location for the Washington Monument, and restrooms. This proposal was dismissed from further consideration because it would conflict with NPS cultural resource management policies, would not meet any need, and would be economically infeasible.

A Central Visitor Center

Proposals have been made that a central visitor center should be provided on the National Mall to orient and educate visitors. However, the Commemorative Works Clarifications and Revision Act of 2003 prohibits the construction of any visitor centers within the Reserve, which includes the National Mall. Also, a National Visitor Center was provided at Union Station for the 1976 Bicentennial but was later removed. When the Washington Monument was restored, a temporary visitor center was provided. Neither of these facilities proved to be well used.

The National Park Service emphasizes the value of authentic experiences for visitors rather than virtual experiences. NPS *Management Policies 2006* state,

> Within the rich learning environments of national parks and facilitation by NPS interpreters, visitors will be offered authentic experiences and opportunities to immerse themselves in places where events actually happened, experience the thrill of connecting with real objects used by previous generations, enjoy some of the most beautiful and historic places in America, and understand the difficult moments our nation has endured (NPS 2006e, sec. 7.1).

The National Mall is the ideal location to achieve this goal without a central visitor center. Today, the widespread availability of websites facilitate advance planning, understanding of park resources, and getting an overview of visitor opportunities. Information and education for the National Mall would continue to be widely available through brochures, educational wayside panels, onsite radio information, guided walks, scheduled programs, and cell phone tours instead of being centralized at a visitor center. The optimal experience on the National Mall will continue to be direct personal experiences. Currently, a cohesive system of updated National Mall signs, orientation maps, and pedestrian guide signs is being developed to provide wayfinding information.

Focused indoor exhibits and audiovisual programs will continue to be offered at several memorials — the Washington Monument, the Lincoln Memorial, the Thomas Jefferson Memorial, and the Franklin Delano Roosevelt Memorial. Related bookstores will continue to have displays and presentations that use various media. Both the Korean War Veterans Memorial and the World War II Memorial have interactive computer listings. It is expected that the Martin Luther King, Jr. Memorial and the Vietnam Veterans Memorial Center will continue this approach to some extent. Surrounding museums and galleries also provide visitor information.

Multipurpose facilities proposed in some alternatives would also provide information and education that could be integrated with other visitor services. Other changes to facilitate educational opportunities are addressed in the alternatives. Traditional visitor centers, with auditoriums and extensive media or museum exhibits, have been successfully replaced by open-air facilities that provide a sense of welcome, orientation, information, and education, as well as a point of dispersal for personalized park visits. These methods also provide considerable cost savings.

Generally, visitor centers in national parks are located where the maximum number of visitors could be served. However, there are multiple entry points to the National Mall, and while the Smithsonian Metro station is a primary entrance for visitors arriving on the subway, visitors can

enter from one of several entry points and from any direction. Because the destinations are widespread, visitors primarily walk to them, making it logical to provide information at dispersed locations. The idea of a central visitor center was dismissed from further consideration because it would not meet plan objectives for visitor convenience and would duplicate less expensive alternatives of providing orientation and information at existing or needed multipurpose facilities.

A central visitor center has been proposed in the Smithsonian Institution's Arts and Industries Building. This location is outside the jurisdiction of the National Park Service, and as previously described, the Smithsonian Institution is considering alternative uses for this space, which the National Park Service is closely following.

Adding New Features

Some public comments suggested adding features such as a walk of presidents lined by statues, interactive statues, wishing wells, extremely large flagpoles, moats, or patriotically themed or brightly colored paving. These suggestions would alter the character of the historic landscape and vistas in a way that would be inconsistent with historic preservation guidelines and NPS policy. The historic landscape of the National Mall is a treasure that represents core values of our nation, and other comments have reflected a concern that the National Mall could be turned into a theme or amusement park. The NPS *Management Policies 2006* state that a cultural landscape may be rehabilitated for contemporary use if

- it cannot adequately serve an appropriate use in its present condition; and
- rehabilitation will retain its essential features and not alter its integrity and character or conflict with approved park management objectives (NPS 2006e, sec. 5.3.5.2.2).

The actions recommended in the alternatives, such as infrastructure for demonstrations and permitted events and restrooms for visitors, would meet contemporary needs and would be provided in a way that would maintain the integrity and character of the National Mall. However, adding any of the features suggested above would alter the integrity and character of the National Mall. Such alternatives would conflict with NPS policy and would not meet plan objectives to respect historic plans, so they were eliminated from further consideration.

Historic Appearance for New Features

Several suggestions were made that new features, such as signs, seating, or other small-scale features, should have a "historic" appearance. NPS *Management Policies 2006* state that new construction should be compatible but differentiated from historic features (sec. 5.3.5). This policy ensures that authentic historic resources are identifiable to the public as well as protected. This alternative was eliminated from further consideration because it would fail to meet NPS cultural resource management policies, would not meet the plan objective to respect historic plans and resources, and would not resolve any needs that could not be addressed in other ways.

Visitor Access

Underground Connections to Memorials

A proposal was made to develop an underground walk system between all visitor attractions on the National Mall. This area is crossed by several Metro lines and a number of utility systems. Costs to construct such a system would be exorbitant, and visitors would not be able to enjoy the historic landscape and vistas as they moved from one destination to another, part of the experience that makes the National Mall unique. This alternative would be economically and technically infeasible, and it would have too great an environmental impact. It would also fail to meet plan objectives for visitors to enjoy the beauty and significance of the National Mall, so it was dismissed from further consideration.

Tram, Monorail, or Streetcar System

A tram or streetcar system running around the National Mall was proposed as a way to improve visitor transportation. This system typically requires power to be run through overhead lines, which would intrude on views and vistas and is also prohibited by law in this area of the District.

Similarly, an elevated monorail system would intrude on the historic scene and its views and vistas. Such a system would have to be accessible to all people, and stations with elevators, stairs, and/or escalators would have a large impact. The same goal for transportation can be achieved with a bus system, as proposed in the NPS *Visitor Transportation Study* (NPS 2006c), without any adverse effects on the cultural landscape. Because this proposal would duplicate less expensive and less environmentally damaging means of transportation, and because it would fail to meet the plan objective to protect historic vistas, it was dismissed from further consideration.

Additional Vehicular Tunnels under the Mall

All current D.C. vision plans desire to improve connections to the National Mall in a manner that celebrates its key central location in the city. Tunnels, however, increase separation because they make sightseeing impossible, which is an important visual connection to the symbols on the National Mall. Tunnels were proposed for 4th, 7th, 14th, and 15th streets in the 1970s, but they were not constructed. After three tunnels were constructed (2nd, 9th, and 12th streets), it was determined that the visual impacts of the portals, especially those adjacent to the National Mall, were too great. Moreover, the McMillan plan showed these streets crossing the Mall at-grade, giving "needed life to the Mall" (U.S. Congress 1902, p. 45). Because of the high cost, other less expensive ways to improve pedestrian access, and conflict with the goals of current plans, additional vehicular tunnels under the Mall were dismissed from further consideration. However, some alternatives do include pedestrian and vehicular tunnels, including a vehicular tunnel for 14th Street.

Pedestrian Access to the Tidal Basin

Decking or a bridge over Independence Avenue for pedestrian access to the Tidal Basin was considered. Decking over Independence Avenue would require the roadway to be sunk sufficiently to accommodate a double-decker bus and would require special engineering considerations because of the high water table. An enclosed roadway would prevent sightseeing buses and other drivers from being able to enjoy north-south vistas.

A pedestrian bridge (included in alternative B to provide pedestrian access to underground parking south of Independence) would also present engineering challenges and would be costly. The bridge would need to be high enough to allow double-decker bus traffic on all lanes of Independence in both directions. Since Independence Avenue is a divided road, the bridge span would be long. The bridge would need to be accessible for all people, including those with disabilities, so ramps would be potentially up to 300 feet on each side. Also, access to the bridge and ramps would need to be convenient to the primary east-west walking patterns, possibly with two ramps on each side. Therefore, it is highly likely that pedestrian use patterns would not be as direct or convenient as on-grade crossings. The visual impact of a bridge would dominate the avenue and ramps could intrude into the north-south vista.

An alternative to a bridge or a deck would be improved crosswalks, which is considered under the preferred alternative. Waiting areas and walkway widths would be enlarged, and push-button crosswalk timing would be extended to provide more pedestrian safety and equity with vehicle traffic. This approach would also support city and regional transportation goals. City pedestrian goals are to meet the needs of pedestrians of all levels, to encourage walking as a healthy alternative, to reduce congestion, to improve quality of life, and to reduce pollution. These solutions incorporate good urban design principles and practices, including traffic calming, travel demand management, and transit-oriented development (on-site transit stops, coordination with visitor facilities, coordinated multimodal access).

Decking over Independence Avenue and constructing a pedestrian bridge were considered but dismissed because both options would duplicate lower cost or less environmentally damaging solutions, and they would have too great an environmental impact. It is also unlikely that given the extent of funding needs for the National Mall that either of these projects would be a priority or economically feasible.

COMPARISON OF ALTERNATIVES

Conceptual costs of the alternatives are presented to illustrate the order of magnitude of costs, allowing the comparison of the value of ideas with the cost to implement. The environmentally preferred alternative, as determined by comparing the alternatives to the goals listed in the National Environmental Policy Act, is then described and detailed in Table 5. How well the alternatives meet the objectives of the plan is presented in Table 6. The alternatives are shown in detail in Table 7, and the environmental impacts are summarized in Table 8.

CONCEPTUAL COST ESTIMATES

In 2008 an NPS consultant prepared conceptual cost estimates for the preliminary range of alternatives (the no-action alternative plus alternatives A, B, and C) to aid in the development of a preferred alternative (see page 53). This process looked first at the values and advantages of alternative actions, then the costs in order to maximize the advantages to the public, as well as the National Park Service, and to provide an appropriate level of quality, while minimizing the costs.

The conceptual cost estimates included projects within the NPS project management information system (PMIS), which parks use to request project funding. This task helped identify the magnitude of the deferred maintenance backlog for the National Mall at more than $400 million. The park is continually examining the costs to maintain, preserve, protect, and renew its assets and components, so deferred maintenance numbers, PMIS project descriptions, and estimates change as additional information is available. National Mall annual funding and staffing requests would continue to be submitted by the National Mall and Memorial Parks through the NPS National Capital Region.

Future annual operating fund requests and annual work plans would be based on two NPS planning efforts that are outside the scope of the National Mall plan: (1) core operations planning, which aligns staffing to essential tasks, and (2) park asset management planning, which examines approaches to preserve and maintain the National Mall and its new and existing facilities.

Several projects that were identified in the preliminary alternatives have since been funded, or planning has been completed. These projects are now addressed in this document under cumulative impacts, and their costs are not included in the conceptual cost estimates. These projects include:

- the Potomac Park levee, which is now underway
- five projects funded by the American Recovery and Reinvestment Act of 2009 for $60.8 million —Thomas Jefferson Memorial plaza seawall, D.C. War Memorial, the Lincoln Reflecting Pool area and elm walks, Madison Drive, and Ohio Drive
- the visitor transportation service — planning for the *Visitor Transportation Study* (NPS 2006c) is nearing completion

The conceptual cost estimates presented in Table 4 illustrate the relative magnitude of costs of each alternative. NPS and industry cost estimating guidelines were used to develop the costs (in 2008 dollars) to the extent possible, but the estimates should not be used for budgeting purposes. Once a plan has been approved, specific costs would be determined in subsequent, more detailed planning and design exercises. More specific estimates would also consider the design of facilities, the identification of detailed resource protection needs, and changing visitor expectations. Actual costs to the National Park Service will vary depending on if and when the actions are implemented, and on contributions by partners and volunteers.

The implementation of the approved plan, no matter which alternative is selected, will depend on future NPS funding levels and servicewide priorities, and on partnership funds, time, and effort. The approval of the plan does not guarantee that funding and staffing needed to implement the plan will be forthcoming. Full implementation of the plan could be many years in the future.

TABLE 4: CONCEPTUAL COST ESTIMATES FOR PLANNING COMPARISONS ONLY (IN MILLIONS OF 2008 DOLLARS)

	No-Action Alternative	Preferred Alternative	Alternative A	Alternative B	Alternative C
Alternative Focus	Primarily deferred maintenance; no expenditures to meet desired quality and use levels and standard.	Improvements to meet desired quality and use levels and standards, plus proposals for civic stage venues, circulation, visitor facilities, and resource sustainability.	Replacement in kind of facilities; some additional visitor facilities; levels of use or civic stage needs not addressed.	Improvements to meet use levels and standards, plus proposals for civic stage venues, circulation (including parking garages), visitor facilities, and resource improvements.	Improvements to meet use levels, plus proposals for civic stage venues, extensive circulation, visitor facilities, and resource sustainability.
One-Time Facility Costs					
New Visitor Facilities (restrooms, food service, and civic infrastructure)	$9.7	$62.5	$10.4	$63.4	$54.2
Underground Parking Garages	NA	NA	NA	$50–$100 for two facilities	NA
Other Costs (roads, walks, bicycle, park operational access, deferred maintenance, restoration or facility rehabilitation, misc.)	$107	$198.8	$147.1	$155.4	$261.6
Subtotal	$116.7	$261.3	$157.5	$268.8–$318.8	$315.8
Non-facility Costs					
Rehabilitation of Historic Water Features (Constitution Gardens Lake, Tidal Basin walls [more than $250 million], Potomac River seawalls, Capitol Reflecting Pool)	$269.8	$299.1	$299.2	$285.6	$301.8
Natural Resource Restoration	$16.3	$40–$80	$37.8–$80	$40–$80	$40–$80
Education and Communications (website, waysides, public address system, communication systems)	$5.2	$5.6–$7.6	$5.5–$7.6	$5.6–$7.6	$5.4–$7.4
Subtotal	$291.3	$344.7–$386.7	$342.5–$368.8	$331.2–$373.2	$347.2–$389.2
Total (including deferred maintenance)	**$408**	**$606–$648**	**$502–$542**	**$600–$652**	**$665–$705**
Difference from the No-Action Alternative		+$198–$240	+$94–$136	+$192–$284	+$255–$297

NOTE: Costs do not include projects funded by the American Recovery and Reinvestment Act of 2009 (stabilization of the Thomas Jefferson Memorial plaza wall; rehabilitation of the D.C. War Memorial; rehabilitation of the Lincoln Reflecting Pool, approachway, and elm walks; rehabilitation of Madison Drive and Ohio Drive) or the visitor transportation system.

THE ENVIRONMENTALLY PREFERRED ALTERNATIVE

The environmentally preferred alternative is defined as "the alternative that will best promote the national environmental policy as expressed in section 101(b) of the National Environmental Policy Act." (Council on Environmental Quality [CEQ] 1981). Section 101 (b) states that it is the continuing responsibility of the federal government to improve and coordinate federal plans, functions, programs and resources in order to

(1) fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;

(2) ensure for all Americans safe, healthful, productive and aesthetically and culturally pleasing surroundings;

(3) attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or undesirable or unintended consequences;

(4) preserve important historic, cultural, and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice;

(5) achieve a balance between population and resource use that will permit high standards of living and wide sharing of life's amenities; and

(6) enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

As the alternatives were analyzed, each alternative was evaluated as to how well the goals stated in section 101 of the National Environmental Policy Act would be met. The following discussion highlights how each alternative meets these goals and compares the differences of each alternative.

The No-Action Alternative

The no-action alternative represents continuity of present management; planned, congressionally approved projects would be constructed; perimeter security projects would be completed; First Amendment demonstrations and special events would continue to be permitted as they are today; and the park would continue to see improvements as deferred maintenance projects were addressed.

The impacts of special events would continue to result in an appearance visitors find unworthy, as well as a continual degradation of the National Mall's cultural and natural resources. Walks would continue to be too narrow for current use levels in some areas, and bicycles and pedestrians would continue to share the same space. Water quality issues would remain, and large amounts of potable water would be used in water features. Some areas would remain too dark for pedestrian nighttime comfort and safety. Visitor facilities would continue to be inadequate for demand; the distance between locations may be too great for many visitors; facility locations would remain utilitarian rather than pleasant; some facilities would continue to have an architectural style not harmonious with the cultural landscape; and a limited variety of choice in recreation rentals and food service would continue.

None of the NEPA goals would be met to the same degree as under other alternatives, and a greater portion of goals would not be met under the no-action alternative, as described below and shown in Table 5:

- *Goal 1* — The National Park Service would continue to be unable to fulfill its trustee role and pass the National Mall on to succeeding generations because conditions would worsen with high levels of use and deferred maintenance would likely increase.
- *Goal 2* — Perimeter security projects would be completed. It would remain difficult to provide aesthetically and culturally pleasing environments. Pedestrian safety concerns would remain.
- *Goal 3* — It would remain difficult to continue offering a wide range of uses, including permitted activities such as national celebrations and special events without ongoing degradation of the National Mall's natural resources.
- *Goal 4* — While important cultural resources would be preserved, the designed landscape setting for them would continue to deteriorate.
- *Goal 5* — While a variety of activities would continue to occur, the inadequate number and lack of conveniently located visitor facilities (necessities such as restrooms, water, and food) would continue to affect all the diverse groups visiting the National Mall and would not achieve the high expectations, nor the wide sharing of life's amenities.
- *Goal 6* — Despite the fact that new facilities would meet sustainability goals, many venues would remain unsustainable in terms of providing for permitted events, a primary function of the National Mall.

The Preferred Alternative

Under the preferred alternative, which was developed based on combining the advantages of the other alternatives, resource conditions would be greatly improved to help achieve the paramount goal of enriching and providing a quality American experience for all. The ability of today's and future generations to experience First Amendment rights, national celebrations, and special events would be ensured through improved sustainable venues. An understanding of core American values and the symbolic meanings of memorials would be improved through responsible stewardship, preservation and shared educational opportunities. Visitors would feel welcome and could widely share nationally significant symbols, national and patriotic activities, and amenities. Efforts to improve the day and nighttime appearance of the National Mall would allow visitors to be able to appreciate its beauty. This alternative would address high levels of use and improve conditions.

- *Goal 1* — Trustee responsibilities would be enhanced by addressing the challenges posed by events on natural resources; improving the health of resources; controlling potential memorial damage through education and improved visitor service locations; and improved waste management.
- *Goal 2* — Safe, healthy environments would be provided by completing perimeter security; providing additional restrooms with co-located drinking fountains; enhancing pedestrian lighting of walks; improving pedestrian walks/crosswalks and connections into the city; providing separate bicycle lanes; and installing mass notification systems.

  Aesthetically and culturally pleasing environments would be provided through improved natural resource conditions; pleasant multipurpose visitor service destinations where visitors could appreciate cultural icons and enjoy appropriate educational, performance, and entertainment opportunities; and visitor facilities that are contextually compatible with cultural landscape.
- *Goal 3* — A wide range of beneficial uses without environmental degradation would be accommodated through an improved ability of the National Park Service to provide event venues that could withstand high levels of use while placing additional areas off-limits to temporary facilities. Diverse educational programs would address civic space, memorials, historic plans and development, and issues related to stewardship and sustainability.
- *Goal 4* — The National Mall's important historic and cultural aspects are integral to our national heritage. It is an environment that supports diversity and variety of individual choice, where all visitors can come for contemplation, commemoration, demonstration, and celebration.
- *Goal 5* — The preservation of public resources would be balanced with public enjoyment, civic activity, national celebration, and recreation in a sustainable manner.
- *Goal 6* — Renewable resources would be emphasized through sustainable water management; facilities that are energy efficient and models of sustainability; solid waste and recycling improvements; and an emphasis on providing an improved walkable, bikable environment and a revised alternate transportation system.

Taken as a whole, the preferred alternative is the environmentally preferred alternative because it best meets all six goals in the National Environmental Policy Act.

Alternative A

Alternative A would focus on improving the historic landscape and education. Landscape health and appearance would be improved, and facilities including walks would be replaced. Contemporary uses would be accommodated, and over time the historic landscape would evolve to reflect ongoing significant historic events. The National Mall would continue to see First Amendment demonstrations and national celebrations and special events. Some permanent event infrastructure would be developed for events, and intensive recovery methods would used to restore landscape conditions after

events. Pedestrian crosswalk timing would be lengthened. The educational focus would be on memorials and the history of planning in Washington, D.C. Guided tours, recreation, and entertainment would remain unchanged. There would be less pedestrian lighting than today, but seating and restrooms would be increased. Outdated facilities would be replaced.

Alternative A would focus on improved conditions, it would largely meet goal 4 in terms of preserving important cultural resources (see Table 5). However, because it would not address the needs to sustain high levels of use, it would not fully realize goals 1 (fulfilling trustee responsibilities), 2 (ensuring safe surroundings), 3 (attaining the widest range of beneficial uses), 5 (achieving a balance between people and resources), and 6 (enhancing sustainability).

Alternative B

Alternative B would focus on a welcoming national civic space that would see high levels of use day and night throughout the year. In addition to improved resource conditions, this alternative would emphasize improving visitor experiences and facilities to make them pleasant and inviting. Multipurpose visitor facilities would encourage visitors to linger and would include indoor/outdoor seating and the potential for nearby or adjacent performance spaces. High-quality, coordinated paving, site furnishings, and facilities would meet the needs of visitors, and universal design and additional facilities for people with disabilities would be provided. Technology would be used to monitor and improve maintenance and park operations.

Because this alternative would focus on meeting the needs of visitors, it would fully meet goals 1 (trustee responsibilities) and 2 (ensuring safe surroundings) and fully or partially meet the remaining goals (see Table 5).

Alternative C

Alternative C would focus on the urban open space, ecology/sustainability, and recreation/healthy lifestyles. It would help meet recreational needs in the capital city, redesigning some areas, increasing recreational rentals, and emphasizing recreation connections to adjacent areas and the Potomac waterfront. It would focus on sustainable approaches to water management and a vegetated sustainable shoreline. It would encourage “virtual” events or demonstrations to limit impacts while increasing participation. Smaller areas of turf would be rehabilitated more frequently, and success would be carefully monitored so that areas could be open to public recreation between events. Alternative C would separate bicycles and pedestrians to encourage bicycling as recreation and alternative transportation. Pedestrian lighting would emphasize safe walking and limiting light pollution. Park programs would include active guided walks and bicycle tours and emphasize year round beauty. Cutting edge sustainable facilities would model green development. Under alternative C the north bay of the Tidal Basin would be filled in to provide more recreation space and to improve water quality. New walks would be low-maintenance, sustainable, and universally accessible. Paving would include soft surfaces for jogging, and smooth surfaces for in-line skating.

Because alternative C would focus on a healthy urban ecosystem, recreation, and sustainability, it would fully meet goals 2 (ensuring safe surroundings), 5 (achieving a balance between people and resources), and 6 (enhancing sustainability). As noted in Table 5, however, because this alternative would focus on recreation, it would not fully address the needs of a national audience, this alternative would not fully realize goals 1 (trustee responsibilities), 3 (attaining widest range of beneficial uses), and 4 (preserving resources).

TABLE 5: COMPARISON OF HOW THE ALTERNATIVES MEET THE GOALS OF THE NATIONAL ENVIRONMENTAL POLICY ACT

No-Action Alternative	Preferred Alternative	Alternative A	Alternative B	Alternative C
NEPA Goal 1: Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations.				
Meets goal: •First Amendment demonstrations accommodated. •Deferred maintenance addressed. *Partially meets goal:* •Resources repaired for future generations. *Does not meet goal:* •Continued unsustainable events approach, adversely affecting resources. •Inadequate facilities for use levels.	*Meets goal:* •First Amendment demonstrations accommodated. •Deferred maintenance addressed. •Resources improved for future generations. •Event venues improved to protect resources. •Natural resource conditions improved; irrigation systems provided. •Facilities redesigned to meet current and future high levels of use. •Water quality improved through re-circulation. *Partially meets goal:* •Location of temporary facilities limited.	*Meets goal:* •First Amendment demonstrations accommodated. •Deferred maintenance addressed. •Resources improved for future generations. *Partially meets goal:* •Facilities improved but still inadequate for demand. •Location of events limited.	*Meets goal:* •First Amendment demonstrations accommodated. •Deferred maintenance addressed. •Resources improved for future generations. •Event venues improved to protect resources. •Facilities redesigned to meet current and future high use levels.	*Meets goal:* •First Amendment demonstrations accommodated. •Deferred maintenance addressed. •Resources improved for future generations. •Event venues improved to protect resources. •Facilities redesigned to meet current and future high use levels.
NEPA Goal 2: Ensure for all Americans safe, healthful, productive and aesthetically and culturally pleasing surroundings.				
Meets goal: •Security projects completed. *Partially meets goal:* •Drinking water fountains dispersed, but frequently in need of repair *Does not meet goal:* •Walks too narrow in locations; graveled walks dusty and slippery. •Improvements needed to pedestrian environment / crosswalks. •Simultaneous use of same areas by bicyclists and pedestrians. •Mass notification system not up-to-date.	*Meets goal:* •Security projects completed. •Pedestrian safety improved with lighting. •Improved walks and crosswalks. •Improved communication and mass notification systems. •Separate bike lanes and routes. •Pleasant, restful visitor facility destinations •Contextually compatible facilities. •Pleasant seating environments with views of cultural symbols. •Year-round use and beauty emphasized. •Emergency call stations. •Cooling interactive water features. •Universal design and additional facilities for people with disabilities. •Improved pedestrian safety with a new entry at the USPP stables. *Partially meets goal:* •More restrooms, sized for level of use, but consolidated on Mall instead of near each refreshment stand. •Drinking fountains concentrated near restrooms; can fill water bottles and provide water for pets.	*Meets goal:* •Security projects completed. •Improved walks and crosswalks. •More restrooms near food service locations. •Pleasant, restful visitor facility destinations. •Contextually compatible facilities. •Pleasant seating environments with views. *Does not meet goal:* •Walks too narrow in locations; graveled walks dusty and slippery.	*Meets goal:* •Security projects completed. •Improved pedestrian safety with lighting. •Improved walks and crosswalks. •More restrooms near food service locations. •Improved communication and mass notification systems. •Separate bike lanes/ routes. •Pleasant, restful visitor facility destinations. •Contextually compatible facilities. •Pleasant seating environments with views of cultural symbols. •Emergency call stations. •Cooling interactive water features. •Universal design and additional facilities for people with disabilities. •Pedestrian safety improved with new entry to USPP stables. *Partially meets goal:* •Drinking water fountains concentrated near restrooms.	*Meets goal:* •Security projects completed. •Improved pedestrian safety with lighting. •Separate bike lanes and routes. •More restrooms near food service locations. •Cooling water features. •Cutting edge sustainable facilities. •Improved pedestrian safety at USPP stables with new entry. *Partially meets goal:* •Drinking water fountains concentrated near restrooms; can fill water bottles and provide water for pets.

No-Action Alternative	Preferred Alternative	Alternative A	Alternative B	Alternative C
NEPA Goal 3: Attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or undesirable or unintended consequences.				
Meets goal: •Congressionally approved projects constructed. *Partially meets goal:* •Limited food and recreation choice. •Continued variety of demonstrations, national celebrations and events. *Does not meet goal:* •Continued resource damage due to inadequate venues for events.	*Meets goal:* •Congressionally approved projects constructed. •Maximized choice in food and recreation •Improved walking and bicycling •Continued variety of demonstrations, national celebrations, and events. *Partially Meets Goal:* •Less resource damage due to improved venues and infrastructure for events.	*Meets goal:* •Congressionally approved projects constructed. •More food choice. •Continued variety of demonstrations, national celebrations, and events. *Partially Meets Goal:* •Less resource damage due to improved infrastructure for events. •Limited recreational opportunities.	*Meets goal:* •Congressionally approved projects constructed. •High choice in food and recreation. •Improved walking opportunities. •Continued variety of demonstrations, national celebrations, and events. *Partially meets goal:* •Less damage due to improved venues and infrastructure for events.	*Meets goal:* •Congressionally approved projects constructed. •High choice in food and recreation. •Improved walking and bicycling. •Continued variety of demonstrations, national celebrations, and events. *Partially meets goal:* •Less damage due to improved venues and infrastructure for events.
NEPA Goal 4: Preserve important historic, cultural, and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice.				
Meets goal: •Deferred maintenance addressed. •Memorials preserved. *Partially meets goal:* •Some cultural landscapes improved. *Does not meet goal:* •Continued poor appearance of turf areas due to unimproved soil conditions. •Mall landscape degraded because of temporary event facilities, such as tents, stages, and vehicles.	*Meets goal:* •Deferred maintenance addressed. •Memorials preserved. •Cultural landscapes improved. •Historic vistas protected and preserved. •Improved appearance of turf areas due to enhanced soil conditions. •Water quality improved. •Mall landscape improved. *Partially meets goal:* •Views in some areas obstructed by events. •Some historic landscapes altered in sensitive manner to protect characteristics and views.	*Meets goal:* •Deferred maintenance addressed. •Memorials preserved. •Cultural landscapes improved. •Historic vistas protected and preserved, and not obstructed by events. •Improved appearance of turf areas due to enhanced soil conditions. •Water quality improved. •Little change in appearance •Mall landscape improved.	*Meets goal:* •Deferred maintenance addressed. •Memorials preserved. •Cultural landscapes improved. •Historic vistas protected and preserved. •Improved appearance of turf areas due to enhanced soil conditions. •Water quality improved. *Partially meets goal:* •Views in some areas obstructed by events. •Temporary event facilities, such as tents, stages, and vehicles, allowed if determined to be sustainable. •Some historic landscapes altered in sensitive manner to protect characteristics and views. *Does not meet goal:* •Water feature in Union Square removed.	*Meets goal:* •Deferred maintenance addressed. •Memorials preserved. •Cultural landscapes improved. •Historic vistas protected and preserved. •Mall landscape improved. •Improved appearance of turf areas due to enhanced soil conditions. •Water quality improved. *Partially meets goal:* •Views in some areas obstructed by events. •Some historic landscapes altered in sensitive manner to protect characteristics and views. *Does not meet goal:* •North bay of Tidal Basin filled in.
NEPA Goal 5: Achieve a balance between population and resource use that will permit high standards of living and wide sharing of life's amenities.				
Partially meets goal: •Choice of recreational opportunities. *Does not meet goal:* •High use levels not planned for. •Social trails persist •Continued resource damage from events.	*Meets goal:* •High-use levels planned for in an energy efficient and sustainable manner. •Events venues improved, with more paved locations and event infrastructure. •Events management improved, with better recovery times / methods, balanced scheduling, data	*Meets goal:* •Reduced social trails. •Events management improved, with intense post-event recovery methods and permanent infrastructure. •Educational topics – history, national capital, memorials *Partially meets goal:* •Coordinated pedestrian amenities. *Does not meet goal:*	*Meets goal:* •High-use levels planned for in an energy efficient and sustainable manner. •Events venues improved, with more paved locations and event infrastructure. •Events management improved, with better recovery times / methods, balanced scheduling, data	*Meets goal:* •High-use levels accommodated in an energy efficient and sustainable manner. •Events venues improved, with more paved locations, event infrastructure. •More areas open for public use with more frequent landscape rehabilitation of smaller areas.

No-Action Alternative	Preferred Alternative	Alternative A	Alternative B	Alternative C
	collection, and monitoring. •More areas open for public use with more frequent landscape rehabilitation of smaller areas. •Widened walks, reduced social trails. •Coordinated visitor circulation. •High-quality pedestrian and bicycle environments; connections to adjacent areas, urban traffic accommodated in a parklike setting. •Welcome area near Metro station. •Most diverse educational topics — history, national capital, memorials, civic space, stewardship, sustainability. •Additional recreational opportunities with rentals of bicycles, boats, and model boats; improved athletic fields; and improved areas for pedestrians and passive recreation.	•High use levels not planned for.	collection, and monitoring. •Widened walks, reduced social trails •Coordinated visitor circulation. •Educational topics — history, national capital, memorials, civic space.	•Widened walks, reduced social trails. •Educational topics — stewardship and sustainability. •Additional recreational opportunities with rentals of bicycles, boats, and model boats; improved athletic fields; and improved areas for pedestrians and passive recreation.
NEPA Goal 6: Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.				
Meets goal: •Policy goals for sustainable practices met. •LEED silver standard met. *Does not meet goal:* •Unsustainable events management.	*Meets goal:* •Policy goals for sustainable practices met. •Goals of climate-friendly parks met with recycling, less water and energy use, reduced soil compaction. •Renewable energy sources sought for lighting and water features. •Sustainable pedestrian lighting. •Strive to achieve highest LEED standard practicable (silver minimum). •Reduced carbon footprint goals met. •More sustainable events management. •Sustainable Sites Initiative™ implemented.	*Meets goal:* •Policy goals for sustainable practices met. •LEED silver standard met. *Partially meets goal:* •Some climate-friendly parks goals met with recycling, reduced soil compaction, less energy use.	*Meets goal:* •Policy goals for sustainable practices met. •Goals of climate-friendly parks met with recycling, less water and energy use, reduced soil compaction. •LEED silver standard met. •More sustainable events management.	*Meets goal:* •Policy goals for sustainable practices met. •Goals of climate-friendly parks met with recycling, less water and energy use, reduced soil compaction. •Renewable energy sources sought for lighting and water features. •Sustainable pedestrian lighting. •Strive to achieve highest LEED standard practicable (silver minimum). •Reduced carbon footprint goals met. •More sustainable events management. •Sustainable Sites Initiative™ implemented.

TABLE 6: HOW WELL THE ALTERNATIVES MEET THE PLAN OBJECTIVES

No-Action	Preferred Alternative	Alternative A	Alternative B	Alternative C
CULTURAL RESOURCE PROTECTION				
Objective: Primary east-west vistas and several north-south vistas on the National Mall are improved and perpetuated.				
Partially meets objective: • Views and vistas remain important, but continued intrusions from temporary facilities. • Continued deterioration of vegetation that defines vistas, endangering for long-term perpetuation of views.	*Meets objective:* • Protected vegetation that defines and perpetuates vistas. • Continued predominance of east-west vistas, with improved multiple north-south vistas. • View protection encouraged when temporary facilities put in place. • Facilities located outside view corridors.	*Meets objective:* • Similar to the preferred alternative but east-west vistas protected from visual intrusion of temporary facilities.	*Meets objective:* • Similar to the preferred alternative, except view protection not considered for temporary facility placement.	*Meets objective:* • Same as the preferred alternative.
Objective: Cultural resources, including memorials and their settings, are preserved and protected.				
Partially meets objective: • Continued deterioration of portions of the historic landscape.	*Meets objective:* • Rehabilitation of memorials as needed. • Cultural landscape conditions protected and preserved.	*Meets objective:* • Same as the preferred alternative.	*Meets objective:* • Same as the preferred alternative.	*Meets objective:* • Same as the preferred alternative.
Objective: Historic plans for the National Mall are respected. Resources are managed compatibly with the intent of the historic plans.				
Meets objective: • The historic L'Enfant and McMillan plans respected; actions coordinated with the NCPC *Legacy Plan*.	*Meets objective:* • Same as the no-action alternative.	*Meets objective:* • Same as the no-action alternative.	*Meets objective:* • Same as the no-action alternative.	*Meets objective:* • Same as the no-action alternative.
NATURAL RESOURCE PROTECTION				
Objective: Conditions of natural resources, such as water, turf, trees/vegetation, and soils, are improved to be part of a sustainable urban ecosystem.				
Does not meet objective: • Continued water quality issues. • Unsustainable soil and vegetation conditions.	*Meets objective:* • Soil compaction reversed, improved soil conditions, with better air and water infiltration. • Improved plant growing conditions; vegetation protected from trampling by wider walks, edging / curbs, and post-and-chain fencing. • Improved water quality; reduced water use; efforts to find nonpotable water sources for display fountains and to reuse gray water; studies to reduce urban flooding.	*Meets objective:* • Improved soils, water, and vegetation conditions. • Most protection of vegetation from trampling (curbs, post-and-chain fencing).	*Meets objective:* • Improved soils, water, and vegetation conditions.	*Meets objective:* • Same as the preferred alternative.
Demonstrations, Special Events, and National Celebrations				
Objective: The National Mall remains a venue for First Amendment demonstrations and national celebrations.				
Meets objective: • Essential purpose of the National Mall continued.	*Meets objective:* • Same as the no-action alternative plus greater participation possible with improved and more flexible venues.	*Meets objective:* • Same as the no-action alternative.	*Meets objective:* • Same as the preferred alternative.	*Meets objective:* • Same as the preferred alternative.

No-Action	Preferred Alternative	Alternative A	Alternative B	Alternative C
Objective: Special events are managed to sustain the health of park resources, to balance the desires of all users, and to ensure a safe environment. No one's enjoyment is unacceptably compromised by others, now or in the future.				
Does not meet objective: • Use levels cannot be sustained without natural resource damage.	*Meets objective:* • Equitable space distribution plus natural resource restoration and time for general visitation and recreation. • Improved permitting procedures and management.	*Meets objective:* • Same as the preferred alternative.	*Meets objective:* • Same as the preferred alternative.	*Meets objective:* • Same as the preferred alternative.
Objective: Venues and facilities for demonstrations and special events are provided that are compatible with the historic significance of the National Mall, that enhance the experiences of users, and that accommodate operations efficiently and effectively with minimal impacts on nationally significant resources.				
Does not meet objective: • Present venues not planned to accommodate current uses, to meet user needs, or to protect resources.	*Meets objective:* • High-use venues redesigned to flexibly meet needs and reduce impacts. • Offsite participation encouraged through simulcasts.	*Does not meet objective:* • Same as the no-action alternative.	*Meets objective:* • Same as the preferred alternative.	*Meets objective:* • Same as the preferred.
ACCESS AND CIRCULATION				
Objective: To fulfill its symbolic and civic importance, the National Mall is a role model of inclusiveness and universal design for all citizens.				
Partially meets objective: • Accessibility standards met for some walks with accommodation for level changes and firm, stable, slip-resistant surfaces. • Separate accessible visitor buses. *Does not meet objective:* • Restricted access at some civic venues such as Union Square and the west end of the Lincoln Reflecting Pool due to stairs or slopes. • Accessibility standards not met for some walks due to level changes or lack of firm, stable, and slip-resistant surfaces.	*Meets objective:* • Civic venues designed to be universally accessible. • Universal accessibility standards met with improved walks and circulation routes. • Wheelchair or electric scooter rentals. • Increased parking and/or drop-offs for visitors with disabilities. • Supplementary roving courtesy shuttles for elderly, families with small children, or others as needed. • All future visitor transportation buses required to be accessible.	*Meets objective:* • All future visitor transportation buses required to be accessible. *Partially meets objective* • Upgraded civic venues designed to meet minimal accessibility standards. *Does not meet objective:* • Accessibility standards not met for some walks due to level changes or lack of firm, stable, and slip-resistant surfaces.	*Meets objective:* • Universal accessibility standards met with improved walks and circulation routes. • Wheelchair or electric scooter rentals. • Increased parking and/or drop-offs for visitors with disabilities. • Supplementary roving courtesy shuttles for elderly, families with small children, or others as needed. • All future visitor transportation buses required to be accessible. *Partially meets objective* • Civic venues designed to meet minimal accessibility standards.	*Meets objective:* • Universal accessibility standards met with improved walks and circulation routes. • All future visitor transportation buses required to be accessible. *Partially meets objective:* • Civic venues designed to be accessible.
Objective: Public access and circulation are convenient, and visitors are easily able to find their way to all sites on the National Mall.				
Partially meets objective: • Pedestrian environment dominated by vehicles. • Renamed Metro station to identify National Mall.	*Meets objective:* • Improved environments for walking and bicycling, with separate bike routes and potential traffic calming measures. Upgraded crosswalks and longer crossing times. • Supplementary transportation to meet visitor needs. • Parking programs with offsite garages. • Metro station renamed to identify National Mall; welcome plaza for visitor orientation.	*Partially meets objective:* • Improved pedestrian crossing times. • Renamed Metro station to identify National Mall.	*Meets objective:* • Similar to the preferred alternative, except ◦ Pedestrian bridges and tunnels to separate users. ◦ If feasible, develop onsite underground parking garages.	*Meets objective:* • Similar to the preferred alternative, except ◦ Vehicular tunnels to separate users.

No-Action	Preferred Alternative	Alternative A	Alternative B	Alternative C
Objective: The National Mall is better integrated with and connected to the urban fabric of Washington, D.C.				
Partially meets objective: •Continued physical connections to the fabric of the city with National Mall road systems, tunnels, and walks.	*Meets objective:* •Better pedestrian amenities, pedestrian entry area, and crosswalks emphasize pedestrian safety and connections to the fabric of the city. •Improved access and connection with road realignments and improved access. *Partially meets objective:* •Continued physical connections to the fabric of the city with National Mall road systems, tunnels, and walks.	*Partially meets objective:* •Same as the no-action alterative.	*Meets objective:* •Better pedestrian amenities, pedestrian entry area, and crosswalks emphasize pedestrian safety and connections to the fabric of the city. *Partially meets objective:* •Continued physical connections to the fabric of the city with National Mall road systems, tunnels, and walks.	*Meets objective:* •Same as the preferred alternative.
VISITOR INFORMATION, EDUCATION, AND ENJOYMENT				
Objective: The National Mall provides the quintessential American experience where visitors • can feel welcome.				
Partially meets objective: •Millions visit, but welcoming support opportunities (information, multilingual brochures, visitor services, or access to uniformed staff) possibly inconvenient or unknown.	*Meets objective:* •Enhanced services with welcome plaza, staff guest services training, improved onsite communication networks and mass notification system, better website. multilingual programs, and increased coordination with adjacent museums.	*Partially meets objective:* •Better website and foreign language materials.	*Meets objective:* •Some lighted signs for easier night viewing.	*Partially meets objective:* •Improved recreational information.
Objective: The National Mall provides the quintessential American experience where visitors • fully understand the importance of this preeminent civic area for First Amendment rights.				
Does not meet objective: •Minimal visitor programs to explain the role of the National Mall in providing for civic expression or the importance of the First Amendment.	*Meets objective:* •Improved programs about First Amendment rights and the role of the National Mall, supported by onsite wayfinding.	*Does not meet objective:* •Same as the no-action alternative.	*Meets objective:* •Same as the preferred alternative.	*Does not meet objective:* •Same as the no-action alternative.
Objective: The National Mall provides the quintessential American experience where visitors • learn about our core values as a nation by making an educational, emotional, inspirational, or patriotic connection to the memorials that commemorate our history and the physical design that reflects our democratic form of government.				
Meets objective: •Many visitors inspired and feel a patriotic connection. •Longer Washington Monument operating hours. *Partially meets objective:* •Importance of some under-visited memorials not fully explained.	*Meets objective:* •Increased education about all memorials, their values and ties to American culture, history and democratic form of government. •Better opportunities for visitor connections due to improved quality of all facilities and appropriate programs at multipurpose facilities. •Longer Washington Monument operating hours.	*Meets objective:* •Increased education about all memorials, their values and ties to American culture, history and democratic form of government. •Longer Washington Monument operating hours. •Many visitors inspired and feel a patriotic connection.	*Meets objective:* •Better opportunities for visitor connections due to improved quality of all facilities and appropriate programs at multipurpose facilities. •Longer Washington Monument. operating hours. •Many visitors inspired and feel a patriotic connection *Partially meets objective:* •Importance of some under-visited memorials not fully explained.	*Meets objective:* •Longer Washington Monument operating hours. *Partially meets objective:* •Same as the no-action alternative.

No-Action	Preferred Alternative	Alternative A	Alternative B	Alternative C
Objective: The National Mall provides the quintessential American experience • where visitors appreciate the beauty of the National Mall during the day, at night, and year-round.				
Does not meet objective: •Resources do not meet expected conditions for the nation's front yard.	*Meets objective:* •Improved resource conditions — vistas, plant materials, walks, lighting — while respecting the historic character and limiting light pollution.	*Meets objective:* •Improved resource conditions — vistas, plant materials, walks — while respecting the historic character. *Partially meets objective:* •Evening use limited by inadequate lighting.	*Meets objective:* •Similar to the preferred alternative. but less emphasis on limiting light pollution.	*Meets objective:* •Same as the preferred alternative.
Objective: Lighting on the National Mall evokes emotion and provides enjoyment, while respecting historic fixtures and existing lighting at memorials. The Washington Monument, Lincoln Memorial, and Thomas Jefferson Memorial (as well as the U.S. Capitol and the White House) continue to be the most prominent nighttime features.				
Does not meet objective: •Tidal Basin nighttime use limited by lack of lighting.	*Meets objective:* •Interagency lighting task force reestablished; lighting of five icons and nighttime character protected. •Energy-efficient pedestrian lighting provided to respect memorials, protect nighttime character, and limit light pollution.	*Partially meets objective:* •Work with others to reestablish interagency lighting task force.	*Meets objective:* •Same as the preferred alternative.	*Meets objective:* •Same as the preferred alternative.
Objective: Visitor information is convenient, accurate, easy to understand, and consistent throughout the site. Information and programs are universally accessible and reach the widest audience possible.				
Meets objective: •Cell phone tours provided. •Staff review of materials sold at bookstores or stands for accuracy. •Work with groups to disseminate accurate information. *Partially meets objective:* •Difficult to navigate park websites, with minimal planning information.	*Meets objective:* •Similar to the no-action alternative except ◦Improved park websites, with advance planning information.	*Meets objective:* •Same as the preferred alternative.	*Meets objective:* •Same as the preferred alternative.	*Meets objective:* •Same as the preferred alternative.
Objective: Visitors understand and appreciate the social experiences they are likely to encounter — millions of people come here to celebrate, commemorate, demonstrate, or recreate.				
Does not meet objective: •Limited visitor information about activities on the National Mall or how they may affect visitors.	*Meets objective:* •Expanded information about the National Mall's civic role through signs, education, waysides, and websites.	*Does not meet objective:* •Same as the no-action alternative.	*Meets objective:* •Same as the preferred alternative.	*Does not meet objective:* •Same as the no-action alternative.
Objective: Learning opportunities are provided to engage all ages and abilities of an increasingly multicultural and technologically sophisticated society. Educational information inspires all visitors, including populations that have not typically visited national parks.				
Meets objective: •Variety of programs offered, including maps, brochures, handouts, ranger talks, cell phone tours, bicycling tours, radio information and educational waysides.	*Meets objective:* •Same as the no-action alternative, plus ◦More living history, interactive programs, and use of technology.	*Meets objective:* •Same as the no-action alternative, plus ◦More living history.	*Meets objective:* •Same as the preferred alternative.	*Meets objective:* •Same as the no-action alternative, plus ◦Increased bicycling tours and emphasis on sustainable recreation.
Objective: Recreational opportunities are balanced with other uses of the National Mall, and both active and passive forms of recreation meet the needs of visitors, residents, and workers.				
Meets objective: •Improved conditions for volleyball courts. *Partially meets objective:*	*Meets objective:* •Improved conditions for volleyball courts, with nearby restrooms and	*Meets objective:* •Improved conditions for volleyball courts, athletic fields, and passive	*Meets objective:* •Improved conditions for volleyball courts, athletic fields, and passive	*Meets objective:* •Improved conditions for volleyball courts. athletic fields, and passive

No-Action	Preferred Alternative	Alternative A	Alternative B	Alternative C
•Continued sharing of walkways by bicyclists and pedestrians, resulting in use conflicts. •Limited recreation rentals.	drinking water. •Improved conditions for athletic fields, and passive recreation areas. •Pedestrian environment improved. •Improved bicycling with bike lanes. •More choice in seating for passive enjoyment. •More choice in potential recreation equipment rentals (bikes, boats, model boats, ice skates).	recreation areas. •Pedestrian environment improved. •More choice in seating for passive enjoyment. *Partially meets objective:* •Continued sharing of walkways by bicyclists and pedestrians, resulting in use conflicts. •Limited recreation equipment rentals.	recreation areas. •Pedestrian environment improved. •More choice in seating for passive enjoyment •More choice in potential recreation equipment rentals (boats, model boats). *Partially meets objective:* •Continued sharing of walkways by bicyclists and pedestrians, resulting in use conflicts.	recreation areas. •Pedestrian environment improved. •More choice in seating for passive enjoyment. •Improved bicycling opportunities with bike lanes. •More choice in potential recreation equipment rentals (bikes, boats, model boats, ice skates).
Objective: The National Mall continues to function as an important part of the D.C. park and open space network.				
Meets objective: •Continued local active recreation needs met through D.C. permitted use of athletic fields for organized sports (12 multipurpose fields and 11 volleyball courts). •Continued permit use of 15 multipurpose fields on the National Mall for organized sports through the National Park Service.	*Meets objective:* •Same as the no-action alternative.	*Meets objective:* •Same as the no-action alternative.	*Meets objective:* •Same as the no-action alternative.	*Meets objective:* •Same as the no-action alternative.
VISITOR AMENITIES				
Objective: Facilities are of high quality and reflect a compatible and enduring character, thus creating a sense of place that reinforces the civic, historic, and symbolic role of the National Mall to our nation and are appropriate for public commemorative and symbolic spaces in our nation's capital.				
Partially meets objective: •A few newer concession buildings, but many outdated facilities that generate complaints.	*Meets objective:* •High-quality facilities that reinforce the sense of place.	*Partially meets objective:* •Some new high-quality facilities that reinforce the sense of place, plus rehabilitated facilities from various eras.	*Meets objective:* •Same as the preferred alternative.	*Meets objective:* •Same as the preferred alternative.
Objective: Various visitor and commercial amenities are provided that are conveniently located and that are sized and configured to flexibly meet visitor-use patterns during the peak season.				
Does not meet objective: •Facilities such as restroom not easy to find, undersized for many uses, and are not located near food service.	*Meets objective:* •Visitor facilities better dispersed, easy to find, and convenient; sized for general high levels of use; restrooms near food service locations.	*Partially meets objective:* •Additional visitor facilities such as restrooms and more conveniently located, but possibly undersized for many uses.	*Meets objective:* •Same as the preferred alternative.	*Meets objective:* •Same as the preferred alternative.
HEALTH, PUBLIC SAFETY, AND SECURITY				
Objective: Safe, healthy, secure visits are provided.				
Partially meets objective: •Lack of pedestrian lighting in some areas, short pedestrian crosswalk countdowns, use conflicts with bicyclists and pedestrians on the same walkways. •Limited facilities to address heat and humidity.	*Meets objective:* •Improved pedestrian lighting for safer nighttime visitation, improved crosswalks and longer countdowns; separate bike lanes or routes, emergency call boxes. •Misters and interactive water features for summer heat and humidity relief, and more seating in shady areas.	*Partially meets objective:* •Less pedestrian lighting than today; longer crosswalk countdowns; use conflicts with bicyclists and pedestrians on the same walkways. •Limited facilities to address heat and humidity.	*Meets objective:* •Same as the preferred alternative plus ◦Pedestrian tunnels or bridges to separate users. •Misters and interactive water features for summer heat and humidity relief, and more seating in shady areas.	*Meets objective:* •Same as the preferred alternative plus ◦A vehicular tunnel at Maine Avenue and 14th Street.

No-Action	Preferred Alternative	Alternative A	Alternative B	Alternative C
Objective: Visitors have adequate information to find their way around or notification of what to do in emergency situations.				
Partially meets objective: • New sign system; interagency preparedness programs with shelter in place/safe haven or evacuation plans; and use of temporary signs and notification by personnel. • No public address system.	*Meets objective:* • Same as the no-action alternative except ◦ Electronic variable message signs. ◦ Staff notification; emergency call systems. ◦ Public address system.	*Meets objective:* • Similar to the preferred alternative.	*Meets objective:* • Same as the preferred alternative.	*Meets objective:* • Same as the preferred alternative.
Objective: Fully accessible visitor facilities, with appropriate walking surfaces, seating, lighting, and amenities; and programs offering visitors comfortable and enjoyable opportunities for reflection, commemoration, celebration, and recreation.				
Partially meets objective: • Access to memorials provided, and parking for visitor with disabilities; free wheelchairs available only at certain sites and not the entire National Mall. • Uneven and gravel walk surfaces difficult for visitors with wheelchairs and strollers.	*Meets objective:* • Improved access with better walkway surfacing; universal access for programs and facilities; more parking spaces for visitors with disabilities; wheelchairs or rental electric scooters available for day use; supplementary transportation on walkways for visitors needing assistance.	*Partially meets objective:* • Same as the no-action alternative.	*Meets objective:* • Same as the preferred alternative.	*Meets objective:* • Improved access with better walkway surfacing; universal access is the goal in facilities.
Objective: The National Mall, including all walks and facilities, is a showcase for inclusiveness and universal design.				
Partially meets objective: • Minimal accessibility standards met at some facilities. *Does not meet objective:* • Universal accessibility standards for stable, firm, and slip-resistant surfaces not met with existing gravel walkways.	*Meets objective:* • Universal accessibility standards met with improved walks, circulation routes, facilities, and civic venues.	*Partially meets objective:* • Minimal accessibility standards met at some improved facilities. *Does not meet objective:* • Universal accessibility standards for stable, firm, and slip-resistant surfaces not met with existing gravel walkways.	*Meets objective:* • Same as the preferred alternative.	*Partially meets objective:* • Minimal accessibility standards met with improved walks, circulation routes, facilities, and civic venues.
PARK OPERATIONS				
Objective: The National Mall is a role model in sustainable urban park development, resource protection, and management, focusing on six areas: requirements and policy, resource health, water use, circulation, facilities, and park operations,.				
Meets objective: • Facilities: NPS silver LEED standard requirement met at newer refreshment stands near Lincoln Memorial, with geothermal components. *Partially meets objective:* • Requirements and Policy: Steps being taken to meet policy requirements. Additional standards with Executive Order 13514. • Park Operations: Park converting to more efficient light bulbs; some alternative fuel vehicles in fleet; staff bicycle-sharing pro-	*Meets objective:* • Requirements and Policy: Green and sustainable policy requirements met or exceeded; deadlines for policy requirements met. • Resource Health: Increased resource monitoring; science-based decision making; more frequent restoration of smaller areas; improved ecosystem health (restored soil and tree health, protected special status trees, reduced impacts from high-use levels, and preserved or restored plant biomass); Sustainable Sites Initia-	*Meets objective:* • Same as the preferred alternative except ◦ Resource Health: Sustainable Sites Initiative™ not addressed. ◦ Facilities: NPS silver LEED requirement met for new facilities. *Does not meet objective:* • Circulation: Shared paths for pedestrians and bicycles traveling at different speeds. • Water Use: Dry-laid stone riverwalls rebuilt along Potomac River.	*Meets objective:* • Same as the preferred alternative except. ◦ Resource Health: Sustainable Sites Initiative™ not addressed. *Partially meets objective:* • Water Use: Higher structural Potomac River stonewalls built. *Does not meet objective:* • Circulation: Shared paths for pedestrians and bicycles traveling at different speeds.	*Meets objective:* • Same as the preferred alternative.

No-Action	Preferred Alternative	Alternative A	Alternative B	Alternative C
gram; permanent recycling containers being installed. *Does not meet objective:* • Resource Health: Soils highly compacted; poor tree-growing conditions, special status trees threatened; ecosystem health affected. • Water Use: High volume of potable water used in designed water features; water leaks and water quality issues; Potomac River shoreline subject to erosion. • Circulation: Pedestrian circulation dominated by vehicles; free parking a disincentive to transit use; shared paths for pedestrians and bicycles traveling at different speeds; gasoline vehicles used for visitor transportation • Facilities: NPS silver LEED requirement not met at aging facilities. • Park Operations: Aging facilities frequently inefficient and difficult to maintain.	tive™ implemented. • Water Use: Increased nonpotable water use in large designed water features and in irrigation, coupled with decreased nonpotable water use; stormwater and graywater captured, stored, filtered, and reused; vegetated Potomac River shoreline where feasible. • Circulation: Pedestrian circulation facilitated; alternative fuel visitor transportation vehicles; coordinated multimodal transportation system; separate bike routes and bike rentals; sustainable surface materials used to collect stormwater. • Facilities: NPS silver LEED requirement met at new facilities, plus visitor education about sustainability. • Park Operations: All new and improved facilities designed for ease of maintenance and efficiency; reduced energy consumption with renewable energy sources; expanded alternative fuel vehicle fleet; continued staff bike-sharing program; reduced solid waste; increased recycling and composting. For events, online permitting and scheduling; increased recycling, recycling education, and other green practices during events.			
Objective: Facilities are consistently maintained to the desired standards of excellence.				
Does not meet objective: • Out-of-date standards for facilities.	*Meets objectives:* • New standards for all facilities.	*Meets objectives:* • Same as the preferred alternative.	*Meets objectives:* • Same as the preferred alternative.	*Meets objectives:* • Same as the preferred alternative.
Objective: All maintenance and park operations emphasize efficient, effective, and sustainable practices.				
Partially meets objective: • Maintenance and operations not fully efficient or sustainable.	*Meets objective:* • Improved, more efficient, and sustainable maintenance and operations.	*Meets objective:* • Similar to the preferred alternative without an emphasis on sustainable practices.	*Meets objective:* • Improved, more efficient, and sustainable maintenance and operations.	*Meets objective:* • Improved, more efficient, and sustainable maintenance and operations.
Objective: Cooperating agencies coordinate planning, information, services, facilities, and programs for visitors, residents, and the local workforce.				
Partially meets objective: • Some NPS coordination with others to provide visitor information.	*Meets objective:* • Increased cooperation and coordination for information and onsite communication.	*Partially meets objective:* • Same as the no-action alternative.	*Meets objective:* • Same as the preferred alternative.	*Meets objective:* • Same as the preferred alternative.

Comparison of Concepts and Alternatives

In accordance with the Commemorative Works Act, as amended, the National Mall will be considered under all alternatives a substantially completed work of civic art — a historic open space with planned views that provide the setting for national memorials, many of them symbols of democracy, and a setting to showcase federal buildings and branches of government, as well as the great cultural institutions of our nation. Consistent with the First Amendment to the U.S. Constitution and federal regulations, the National Mall will continue to accommodate First Amendment demonstrations, special events, and national celebrations.

As previously described, several projects have been approved by Congress for the National Mall and would be implemented under all alternatives. Planning, compliance, and construction would be completed by others for the following:

- ***Vietnam Veterans Memorial Center*** — This would be an underground facility with restrooms, information, exhibits, and a bookstore.
- ***National Museum of African American History and Culture*** — Land has been transferred to the Smithsonian Institution; Washington Monument food and retail services will be relocated.
- ***Martin Luther King, Jr. Memorial*** — The memorial would include restrooms, information, and a bookstore.

The 2001 *Memorials and Museums Master Plan* by the National Capital Planning Commission identifies sites for future memorials in the study area, but outside the Reserve. The Watergate area (see row 19) could accommodate six memorials — the Constitution Avenue belvedere, a gateway site, two sites along Constitution Avenue, and two sites along Rock Creek Parkway. Under all alternatives future memorials will be accommodated in locations outside the Reserve. The National Park Service will participate in the memorial process to ensure that historic views, character, and plans are respected.

Also several projects that were previously considered in the alternatives have been funded by the American Recovery and Reinvestment Act of 2009. These include

- the Lincoln Reflecting Pool area (lower approachway, pool, and related landscape, plus the north and south elm walks)
- the D.C. War Memorial
- the Thomas Jefferson Memorial plaza seawall
- Madison and Ohio drives

Other projects include a coordinated National Mall sign system, which has been approved, and the Potomac Park levee project, which is underway and will address flood protection for downtown D.C. Proposals from the NPS 2006 *Visitor Transportation Study* were considered as this management plan was developed, and they will be implemented separately. Security screening for the Washington Monument will be completed separately. All of these projects are considered as projects outside the scope of this plan, and their impacts are addressed under cumulative impacts.

Sites on the National Mall where no major actions are proposed, such as the World War II Memorial and the D.C. War Memorial, are not included in Table 7.

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TABLE 7: CONCEPTS AND ALTERNATIVES FOR THE NATIONAL MALL

TOPIC OR AREA	NO-ACTION ALTERNATIVE: CONTINUE CURRENT MANAGEMENT	PREFERRED ALTERNATIVE — PROVIDE A QUALITY VISITOR EXPERIENCE, PROTECT THE HISTORIC LANDSCAPE, AND ACCOMMODATE HIGH-USE LEVELS
NATIONAL MALL CONCEPTS		
1. OVERALL CONCEPT		
1.1 Opportunities, Problems, and Concerns (Existing Conditions)	The National Mall has multiple purposes to fulfill — accommodating First Amendment demonstrations and national celebration events, preserving memorials and historic landscapes, and providing for diverse public use and enjoyment.	
1.2 Vision Emphasis	• This alternative outlines existing conditions and serves as a baseline to compare the action alternatives.	• The National Mall, as the premier civic and symbolic space for our nation, would be respectfully rehabilitated and refurbished so that very high levels of use could be perpetuated and the needs of all visitors and users could be met in an attractive, high-quality, energy-efficient, and sustainable manner. Its memorials and landscapes would be protected, with large areas of unprogrammed open space as defining features of the historic landscape. • The designed historic landscape would evolve, and its value over time would increase, reflecting significant national events. Contemporary uses would be accommodated while respecting the planned historic character and visions of the L'Enfant and McMillan plans. • The intent would be to establish an overall identity and character for the National Mall, creating a coherent pedestrian environment that would complement and balance the natural environment, the combination of formal and informal features, and national commemorative works. The National Mall would be emphasized as a year-round destination where the beauty and variety of every season would enhance visitor experiences. • Uses for First Amendment demonstrations, commemorations, and national ceremonies and celebrations would be emphasized. • Visitors would be made to feel welcome through helpful wayfinding signs, knowledgeable staff, and high-quality and accessible facilities. • Diverse opportunities would be offered for public enjoyment, including educational, cultural, and musical programs, as well as active and passive recreational activities. • Professionals would design high-quality solutions to unify the National Mall and to articulate the visions for specific sites. • The National Park Service would ensure compatible, enduring high-quality design, as well as the highest facility maintenance standards, to create a sense of place that would reinforce the civic, historic, and symbolic role of the National Mall to our nation.

ALTERNATIVE A — FOCUS ON THE HISTORIC LANDSCAPE AND EDUCATION	ALTERNATIVE B — FOCUS ON A WELCOMING NATIONAL CIVIC SPACE FOR PUBLIC GATHERINGS, EVENTS, AND HIGH-USE LEVELS	ALTERNATIVE C — FOCUS ON URBAN OPEN SPACE, URBAN ECOLOGY, RECREATION, AND HEALTHY LIFESTYLES
NATIONAL MALL CONCEPTS		
1. OVERALL CONCEPT		
1.1 Opportunities, Problems, and Concerns (Existing Conditions) — See facing page.		
• This alternative concept would restore and maintain the resources of the National Mall as a historic landscape. Under this concept the designed historic landscape would evolve, and its value over time would change, reflecting significant national events. • Contemporary uses would be accommodated while respecting the planned historic character and visions of the L'Enfant and McMillan plans. • The National Park Service would ensure enduring high-quality design, as well as the highest facility maintenance standards, to create a sense of place that would reinforce the civic, historic, and symbolic role of the National Mall to our nation.	• This alternative would improve the National Mall as the premier civic space for our nation and would support very high use levels. The evolving ceremonial, celebratory, cultural, and visitor uses at this national civic space would be emphasized. Diverse peoples would be welcomed through multilingual educational opportunities, and the needs of large groups (including those arriving by tour bus), demonstrators, and event participants would be met. • Some areas would be redesigned to provide a more sustainable civic forum and a stage for First Amendment demonstrations and other events. • The National Park Service would ensure compatible and enduring high-quality design, as well as the highest facility maintenance standards, to create a sense of place that would reinforce the civic, historic, and symbolic role of the National Mall to our nation.	• This alternative would meet evolving recreational needs in the nation's capital by providing beautiful, enjoyable, and ecologically sustainable open spaces that could be adapted to changing recreational patterns of diverse local and national users. This concept would contribute to healthy lifestyles, healthy parks, and healthy, more sustainable cities. • Recreational activities would be expanded by redesigning some areas, increasing recreation equipment rentals (such as boats, skates, and bicycles), adding playgrounds, and emphasizing connections to the recreational and enjoyment opportunities in East Potomac Park, the Georgetown Waterfront, and Rock Creek Park, as well as the southwest waterfront. • The National Park Service would ensure compatible and enduring high-quality design, as well as the highest facility maintenance standards, to create a sense of place that would reinforce the civic, historic, and symbolic role of the National Mall to our nation.

TOPIC OR AREA	NO-ACTION ALTERNATIVE: CONTINUE CURRENT MANAGEMENT	PREFERRED ALTERNATIVE — PROVIDE A QUALITY VISITOR EXPERIENCE, PROTECT THE HISTORIC LANDSCAPE, AND ACCOMMODATE HIGH-USE LEVELS
2. CULTURAL RESOURCES		
2.1 Memorials	*Opportunities, Problems, and Concerns (Existing Conditions):* The National Mall is the site of a number of memorials, some of them well-known symbols of our nation. All memorials are managed pursuant to specific laws and regulations, and changes may require congressional authorization. Commemorative works are generally subject to review, and in some instances approval by the National Capital Planning Commission and the U.S. Commission of Fine Arts, and possibly by the D.C. Historic Preservation Office. As a result of the 2003 amendments to the Commemorative Works Act, no new memorials will be added to the National Mall; however, memorials could be placed in area I or II adjacent to the National Mall.	
Actions	• Preserve memorials, related statuary, and places of commemoration.	• Same as the no-action alternative.
2.2 Historic Properties and Cultural Landscapes	*Opportunities, Problems, and Concerns (Existing Conditions):* The National Park Service consults with the D.C. Historic Preservation Office and others in accordance with section 106 of the National Historic Preservation Act to preserve, restore, adaptively reuse, or rehabilitate cultural resources (see specific areas).	
Actions	• Manage resources in accordance with *The Secretary of the Interior's Standards for the Treatment of Historic Properties* and general recommendations of historic structure reports. • Continue to consult with the D.C. Historic Preservation Office and others.	• Same as the no-action alternative.
2.3 Spatial Organization and Land Use	*Opportunities, Problems, and Concerns (Existing Conditions):* Areas with integrity of existing plant materials exist, including portions of Union Square, the Mall, the Lincoln Memorial, the Tidal Basin, and the Thomas Jefferson Memorial. Landscape health and appearance are deteriorating.	
Actions	• Manage the historic landscape in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties, with Guidelines for the Treatment of Cultural Landscapes* and general recommendations of cultural landscape reports and inventories. • Maintain landscape health and conditions at current levels.	• Similar to the no-action alternative, except ◦ Recognize that the public's use of the designed historic landscape and the memorials, historic structures, and other landscape features would continue to evolve and that its value would increase over time, reflecting significant national events. ◦ Improve landscape health and appearance. ◦ Implement general recommendations from historic structure and cultural landscape reports.
2.4 Historic Views and Vistas	*Opportunities, Problems, and Concerns (Existing Conditions):* Primary views (spatial organization and land patterns) were defined in historic landmark plans. Large areas of unprogrammed open space define historic landscape features. The view from the White House to the Thomas Jefferson Memorial is somewhat obscured by trees northeast of the Tidal Basin. Some events on the Mall can obstruct the view between the U.S. Capitol and the Washington Monument.	
Actions	• Recognize planned views within the historic landscape, including large areas of unprogrammed open space.	• Improve and perpetuate planned viewsheds or vistas, including large areas of unprogrammed open space.

ALTERNATIVE A — FOCUS ON THE HISTORIC LANDSCAPE AND EDUCATION	ALTERNATIVE B — FOCUS ON A WELCOMING NATIONAL CIVIC SPACE FOR PUBLIC GATHERINGS, EVENTS, AND HIGH-USE LEVELS	ALTERNATIVE C — FOCUS ON URBAN OPEN SPACE, URBAN ECOLOGY, RECREATION, AND HEALTHY LIFESTYLES
2. CULTURAL RESOURCES		
2.1 Memorials: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Same as the no-action alternative.	• Same as the no-action alternative.
2.2 Historic Properties and Cultural Landscapes: Opportunities, Problems, and Concerns (Existing Conditions) — See facing page.		
• Same as the no-action alternative.	• Same as the no-action alternative.	• Same as the no-action alternative.
2.3 Spatial Organization and Land Use: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Similar to the no-action alternative, except ◦ Recognize that the use of the designed historic landscape would continue to evolve and that its value would change over time, reflecting significant national events. ◦ Improve landscape health and appearance. ◦ Implement general recommendations from historic structure and cultural landscape reports.	• Same as alternative A.	• Same as alternative A.
2.4 Historic Views and Vistas: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Improve and perpetuate planned viewsheds or vistas, including large areas of unprogrammed open space. • Ensure views and vistas are not obscured, even during events.	• Improve and perpetuate planned viewsheds or vistas, including large areas of unprogrammed open space.	• Same as alternative B.

TOPIC OR AREA	NO-ACTION ALTERNATIVE: CONTINUE CURRENT MANAGEMENT	PREFERRED ALTERNATIVE — PROVIDE A QUALITY VISITOR EXPERIENCE, PROTECT THE HISTORIC LANDSCAPE, AND ACCOMMODATE HIGH-USE LEVELS
3. NATURAL RESOURCES		
3.1 Science and Urban Ecology	*Opportunities, Problems, and Concerns (Existing Conditions):* Various organizations have indicated a strong interest in helping undertake projects based on scientifically sound research to address problems. The National Park Service manages to preserve physical and biological processes, and national park system units are managed as parts of larger ecosystems. The National Park Service will pursue cooperative conservation. Nonnative species may be used to meet desired conditions at cultural resources.	
Actions	• Build on a science-based understanding of park resources. • Incorporate science-based decision making.	• Same as the no-action alternative plus ◦ Incorporate science and best practices in urban ecology, based on a continued program of inventorying, assessment, surveys, evaluation/analysis, data collection, documentation, and resource monitoring. ◦ Use sound science, support appropriately designed and peer reviewed scholarly studies, engage the scientific community, and seek subject matter expertise.
3.2 Water Resources	*Opportunities, Problems, and Concerns (Existing Conditions):* Water quality issues affect most water features; changes in water chemistry have resulted in algae growth; some pools and ornamental fountains lack proper circulation systems; and the Tidal Basin does not flush as intended. Large volumes of potable water are used in designed water features.	
Actions	• Continue to address algae growth in designed water features. • Design and install a runoff filtration system to minimize water pollution from larger parking areas; consider both structural and bioremediation (fungi, microorganisms, higher plants) options.	• Improve water resources by rehabilitating some water features, installing circulation and filtration systems, and taking advantage of current technology, maintenance techniques, and upgraded equipment. • Conserve water, reduce the use of potable water, reuse water, and seek nonpotable water sources for water features. • Seek environmentally sound, natural ways to improve water quality.
3.3 Flooding in the Monumental Core	*Opportunities, Problems, and Concerns (Existing Conditions):* Flooding in the Monumental Core occurs from Potomac River overbank flooding, urban drainage flooding (stormwater management), and tidal surges. Heavy rains can overwhelm the urban drainage system, and the city sewer system needs capital improvements. The National Capital Planning Commission has the lead in coordinating a comprehensive approach to flood prevention and control. Buildings in low-lying areas near submerged streams may require dewatering. Dewatering and its impact on urban drainage flooding will be examined by the commission and the city. The National Park Service released the *Potomac Park Levee Project Environmental Assessment* in 2008.	
Actions	• Continue cooperation with the Army Corps of Engineers to maintain the flood control system and address permanent solutions to hydrology and flood control. • Work with the Army Corps of Engineers, the Federal Emergency	• Same as the no-action alternative plus ◦ Undertake a comprehensive sustainable water management approach to address flooding. ◦ Develop sustainable approaches to address urban drainage flooding in conjunction with the Army Corps of Engineers,

ALTERNATIVE A — FOCUS ON THE HISTORIC LANDSCAPE AND EDUCATION	ALTERNATIVE B — FOCUS ON A WELCOMING NATIONAL CIVIC SPACE FOR PUBLIC GATHERINGS, EVENTS, AND HIGH-USE LEVELS	ALTERNATIVE C — FOCUS ON URBAN OPEN SPACE, URBAN ECOLOGY, RECREATION, AND HEALTHY LIFESTYLES
3. NATURAL RESOURCES		
3.1 Science and Urban Ecology: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative plus ◦ Incorporate science and best practices in urban ecology, based on a continued program of inventorying, assessment, surveys, evaluation/analysis, data collection, documentation, and resource monitoring. ◦ Use sound science, support appropriately designed and peer reviewed scholarly studies, engage the scientific community, and seek subject matter expertise.	• Same as alternative A.	• Same as alternative A.
3.2 Water Resources: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Improve water resources by rehabilitating some water features, installing circulation and filtration systems, and taking advantage of current technology, maintenance techniques, and upgraded equipment.	• Same as alternative A.	• Same as alternative A plus ◦ Seek environmentally sound, natural ways to improve water quality. ◦ Conserve water, reduce the use of potable water, reuse water, and seek nonpotable water sources for water features.
3.3 Flooding in the Monumental Core: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Same as the no-action alternative plus ◦ Seek a long-term solution based on results of engineering studies.	• Same as the no-action alternative plus: ◦ Develop sustainable approaches to address urban drainage flooding in conjunction with the Army Corps of Engineers, the Federal Emergency Management

TOPIC OR AREA	NO-ACTION ALTERNATIVE: CONTINUE CURRENT MANAGEMENT	PREFERRED ALTERNATIVE — PROVIDE A QUALITY VISITOR EXPERIENCE, PROTECT THE HISTORIC LANDSCAPE, AND ACCOMMODATE HIGH-USE LEVELS
	Management Agency, and the city as needed. • Help implement NCPC/DC plans for comprehensive flood prevention and control as appropriate.	the Federal Emergency Management Agency, the Environmental Protection Agency, the National Capital Planning Commission, the Washington Metropolitan Area Transit Authority, DC agencies, and others. ◦ Explore potential collection and storage of water from subsurface drainage / de-watering activities and re-use for irrigation.
3.4 Soils and Vegetation	*Opportunities, Problems, and Concerns (Existing Conditions):* About half of the nearly 700 acres within the National Mall were constructed on tidal flats. Imported soils have often been of poor quality. Additionally, soil compaction from high levels of use affects tree root systems and hardens turf areas. Soil compaction reduces water infiltration and contributes to runoff. Social trails adjacent to designated walkways or water edges destroy turf and further compact soils. Turf recovery periods are scheduled every other winter.	
Actions	• Manage soils and vegetation health; improve appearance.	• Improve natural resource conditions for tree and turf areas; improve soil conditions and/or reengineer and replace or restore soils to reduce or reverse effects from compaction; implement the most successful turf management practices; install or replace irrigation systems so that they would be protected from damage during events. • Seek ways to reduce the physical impacts of events, such as compaction and erosion within the Mall elm tree panels and around the Tidal Basin cherry trees. • Revise rehabilitation and recovery periods so that smaller areas could be set aside more frequently and broader public access maintained. • Protect trees and plants from social trails.
3.5 Wildlife	*Opportunities, Problems, and Concerns (Existing Conditions):* Urban wildlife is present, along with less frequently seen fox and deer. Visitors have complained about Canada geese droppings. There are a few listed threatened or endangered species.	
Actions	• Continue to protect threatened or endangered species. • Continue regional coordination with other national park system units and with other federal and city agencies to address urban wildlife issues and nuisance species.	• Same as the no-action alternative.

ALTERNATIVE A — FOCUS ON THE HISTORIC LANDSCAPE AND EDUCATION	ALTERNATIVE B — FOCUS ON A WELCOMING NATIONAL CIVIC SPACE FOR PUBLIC GATHERINGS, EVENTS, AND HIGH-USE LEVELS	ALTERNATIVE C — FOCUS ON URBAN OPEN SPACE, URBAN ECOLOGY, RECREATION, AND HEALTHY LIFESTYLES
		Agency, the Environmental Protection Agency, the National Capital Planning Commission, the Washington Metropolitan Area Transit Authority, DC agencies, and others. ◦ Explore potential collection and storage of water from subsurface drainage / dewatering activities and re-use for irrigation. ◦ Develop stormwater management structure(s) to mitigate urban drainage flooding. ◦ Explore stormwater retention to reduce flooding from urban drainage (e.g., Constitution Gardens Lake) as well as rain gardens.
3.4 Soils and Vegetation: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Similar to the no-action alternative, except: ◦ Improve soil conditions and/or reengineer and replace soils to reduce effects from compaction. ◦ Implement the most successful turf management practices. ◦ Protect trees and plants from social trails.	• Similar to alternative A plus ◦ Seek ways to reverse the physical impacts of events, such as compaction and erosion within the Mall elm tree panels and around the Tidal Basin cherry trees.	• Same as alternative B plus ◦ Revise rehabilitation and recovery periods so that smaller areas could be set aside more frequently and broader public access maintained. ◦ Implement practices to protect and improve conditions for special vegetation populations. ◦ Implement Sustainable Sites Initiative™ approach to soils management.
3.5 Wildlife: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Same as the no-action alternative.	• Same as the no-action alternative.

TOPIC OR AREA	NO-ACTION ALTERNATIVE: CONTINUE CURRENT MANAGEMENT	PREFERRED ALTERNATIVE — PROVIDE A QUALITY VISITOR EXPERIENCE, PROTECT THE HISTORIC LANDSCAPE, AND ACCOMMODATE HIGH-USE LEVELS
3.6 Air Quality	*Opportunities, Problems, and Concerns (Existing Conditions):* Urban air quality is impacted by vehicular exhaust. Air quality is affected by dust from gravel paving.	
Actions	• Take no additional management actions. Better air quality will result from improved technology (e.g., cleaner vehicles).	• Same as the no-action alternative, except ◦ Eliminate gravel as a paving material in some areas.
3.7 Noise	*Opportunities, Problems, and Concerns (Existing Conditions):* Urban sounds, such as traffic and airplane noise, are audible in all areas. Water features may mask noise to some degree.	
Actions	• Take no additional management actions; existing conditions would continue.	• Same as the no-action alternative plus ◦ Use the sound of water features to muffle urban traffic noise in additional areas.
3.8 Effects of Climate Change	*Opportunities, Problems, and Concerns (Existing Conditions):* There is little that park managers can do to prevent global climate change, which could affect temperature, rainfall, and sea level; however, they can take some steps to mitigate its impact. A 3-meter rise in sea levels could affect many areas in the park. Increased storm severity could result in tidal surges that would inundate more park areas.	
Actions	• Monitor conditions, assess potentially affected areas and risks for sea level rise, and consider strategies to mitigate impacts.	• Same as the no-action alternative plus ◦ Coordinate with others to undertake a comprehensive approach to address the impacts of climate change. ◦ Develop a natural shoreline.
4. THE CIVIC STAGE: DEMONSTRATIONS, SPECIAL EVENTS, AND NATIONAL CELEBRATIONS According to the *Code of Federal Regulations* (36 CFR 7.96(g)): • The term "demonstrations" includes demonstrations, picketing, speechmaking, marching, holding vigils or religious services and all other like forms of conduct which involve the communication or expression of views or grievances, engaged in by one or more persons, the conduct of which has the effect, intent or propensity to draw a crowd or onlookers. This term does not include casual park use by visitors or tourists which does not have an intent or propensity to attract a crowd or onlookers. • The term "special events" includes sports events, pageants, celebrations, historical reenactments, regattas, entertainments, exhibitions, parades, fairs, festivals and similar events (including such events presented by the National Park Service), which are not demonstrations under the previous, definition, and which are engaged in by one or more persons, the conduct of which has the effect, intent or propensity to draw a crowd or onlookers. This term also does not include casual park use by visitors or tourists which does not have an intent or propensity to attract a crowd or onlookers. • The term "national celebration events" means the annually recurring special events regularly scheduled by the National Capital Region, including the . . . the Fourth of July celebration, Festival of American Folklife, Columbus Day Commemorative Wreath-Laying, and Inaugural ceremonies.		
4.1 Demonstrations (First Amendment) (NOTE: Language related to demonstrations has also been included in the areas most frequently used for these purposes.)	*Opportunities, Problems, and Concerns (Existing Conditions):* The First Amendment to the U.S. Constitution provides for freedom of expression as a right of citizens. The National Mall is the most prominent space in our country for the demonstration of these rights, and that is an essential purpose of the National Mall. Areas where national symbols are prominent backdrops are especially popular locations for demonstrations. Consistent with the First Amendment and federal regulations, demonstrations will continue to be fully accommodated on a first-come, first-served basis throughout the National Mall. Federal regulations (36 CFR 7.96) define allowable areas and activities related to the Lincoln Memorial, Washington Monument, Jefferson Memorial and Vietnam Veterans Memorial. Demonstrations involving 25 people or fewer do not require a permit. Demonstration permits can be extended unless a site has already been reserved.	

ALTERNATIVE A — FOCUS ON THE HISTORIC LANDSCAPE AND EDUCATION	ALTERNATIVE B — FOCUS ON A WELCOMING NATIONAL CIVIC SPACE FOR PUBLIC GATHERINGS, EVENTS, AND HIGH-USE LEVELS	ALTERNATIVE C — FOCUS ON URBAN OPEN SPACE, URBAN ECOLOGY, RECREATION, AND HEALTHY LIFESTYLES
3.6 Air Quality: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Same as the no-action alternative, except ◦ Eliminate gravel as a paving material.	• Same as the no-action alternative, except ◦ Eliminate gravel as a paving material.
3.7 Noise: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Same as the no-action alternative plus ◦ Use the sound of water features to muffle urban traffic noise in additional areas.	• Same as alternative B.
3.8 Effects of Climate Change: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Same as the no-action alternative plus ◦ Consider raising the height of the seawalls.	• Same as alternative A plus ◦ Coordinate with others to undertake a comprehensive approach to address the impacts of climate change. ◦ Develop a natural shoreline.
4. THE CIVIC STAGE See facing page.		
4.1 Demonstrations (First Amendment): *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		

TOPIC OR AREA	NO-ACTION ALTERNATIVE: CONTINUE CURRENT MANAGEMENT	PREFERRED ALTERNATIVE — PROVIDE A QUALITY VISITOR EXPERIENCE, PROTECT THE HISTORIC LANDSCAPE, AND ACCOMMODATE HIGH-USE LEVELS
Actions	• Consistent with the First Amendment and federal regulations, continue to fully accommodate demonstrations. • Consistent with the First Amendment and federal regulations, better monitor demonstrations to facilitate and improve the ability to host them; ensure that resources are protected to the extent possible and that soil, turf, and vegetation impacts are reduced. • Seek to improve permit procedures for demonstrations.	• Same as the no-action alternative plus ◦ Improve highly visible venues throughout the National Mall and better design for high levels of use; provide infrastructure (electrical power, communication systems) and durable surfacing. ◦ Provide sufficient staff to support demonstrations.
4.2 Special Events and National Celebrations (NOTE: Language related to events has also been included in the areas most frequently used for these purposes.)	*Opportunities, Problems, and Concerns (Existing Conditions):* Regulations for special events and national celebrations on the National Mall are codified at 36 CFR 7.96. Federal courts have ruled that reasonable regulations relating to time, place, and manner for events are appropriate. All special events require a permit. Noise from generators used during events affects visitor experiences.	
Actions	• Continue to improve NPS events permitting procedures to better protect resources and to reduce soil, turf, and vegetation impacts. • Better enforce permit requirements and monitor events.	• Same as the no-action alternative plus ◦ Encourage organizers of large events to schedule their functions during non-peak seasons. ◦ Ensure that event scheduling (not First Amendment demonstrations) leaves part of the Mall's grass panels open for public recreation at all times, part available for events, and part available for landscape recovery/restoration. ◦ Define product types and standards to be used during events, and provide definitions to event organizers. Standards could address location, seasonal time limits for temporary surfacing materials, tent installation methods for various areas, generator decibel levels, use of waterless hand cleaners in portable restrooms, supplementary drinking water, locations to remain free of event facilities, and acceptable locations for temporary facilities (e.g., portable restrooms, incident command centers, and events staging). ◦ Require the use of supplementary (hired) transit services to facilitate large-scale events based on estimated event size and location. ◦ Encourage bicycle parking at special events.

ALTERNATIVE A — FOCUS ON THE HISTORIC LANDSCAPE AND EDUCATION	ALTERNATIVE B — FOCUS ON A WELCOMING NATIONAL CIVIC SPACE FOR PUBLIC GATHERINGS, EVENTS, AND HIGH-USE LEVELS	ALTERNATIVE C — FOCUS ON URBAN OPEN SPACE, URBAN ECOLOGY, RECREATION, AND HEALTHY LIFESTYLES
• Same as the no-action alternative plus ◦ Provide sufficient staff to prevent resource impacts.	• Same as the no-action alternative plus ◦ Improve highly visible venues throughout the National Mall and better design for high levels of use; provide infrastructure (electrical power, communication systems) and durable surfacing.	• Same as alternative B.
4.2 Special Events and National Celebrations: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative plus ◦ Require events to have a meaningful association with the National Mall venues. ◦ Define product types and standards to be used during events, and provide definitions to event organizers. Standards would address location, installation, temporary surfacing materials, tent installation methods for various areas, generator decibel levels, use of waterless hand cleaners in portable restrooms, supplementary drinking water, locations to remain free of event facilities, and acceptable locations for temporary facilities (e.g., portable restrooms, incident command centers, and events staging).	• Similar to alternative A except ◦ Revise NPS permit requirements to recommend that event organizers consider placement of all structures so that they do not block eye-level views between national symbols (such as the U.S. Capitol, the Washington Monument, the Lincoln Memorial, the Thomas Jefferson Memorial, and the White House). ◦ Require the use of supplementary (hired) transit services to facilitate large-scale events based on estimated size and location of events.	• Similar to alternative A except ◦ Revise NPS permit requirements to recommend that event organizers consider placement of all structures so that they do not block eye-level views between national symbols (same as alternative B). ◦ Ensure that event scheduling (not First Amendment demonstrations) leaves part of the Mall's grass panels open for public recreation at all times, part available for events, and part available for landscape recovery/restoration. ◦ Require that bicycle parking be provided at events estimated to be attended by more than 2,000 people (with estimated use by 1% of attendees) to encourage bicycle access.

TOPIC OR AREA	NO-ACTION ALTERNATIVE: CONTINUE CURRENT MANAGEMENT	PREFERRED ALTERNATIVE — PROVIDE A QUALITY VISITOR EXPERIENCE, PROTECT THE HISTORIC LANDSCAPE, AND ACCOMMODATE HIGH-USE LEVELS
4.3 Venues for Demonstrations, Special Events, and National Celebrations	*Opportunities, Problems, and Concerns (Existing Conditions):* Over 3,000 events take place annually on the National Mall, and the wear and tear contribute to the slow deterioration of significant character-defining elements within the historic landscape or affecting historic planned views and visitor experiences. Giant video screens are often used to broadcast onsite events to large crowds (e.g., the 2009 inauguration) or to broadcast offsite events.	
Actions	• Continue to accommodate demonstrations, special events, and national celebrations at current venues.	• Similar to the no-action alternative, plus ◦ Improve the nation's premier civic space, focusing on high visibility areas within the National Mall. ◦ Redesign some areas to provide improved or additional sustainable civic forums and stages for First Amendment demonstrations, as well as special events and enjoyment. ◦ Provide a more convenient, sustainable civic forum and stage for First Amendment demonstrations, national celebrations, ceremonies, and other events by providing multiple, desirable, hard-surface venues, staging areas, and utilities (water, electricity, communications). ◦ Provide civic infrastructure at convenient locations to accommodate portable restrooms and to facilitate servicing them. ◦ Design venues to be universally accessible.
4.4 Operations	*Opportunities, Problems, and Concerns (Existing Conditions):* The reservation system does not take advantage of current technology to schedule and coordinate events, maintenance and rehabilitation, and construction periods. Areas are regularly needed for law enforcement and command — first aid, command, parking, dogs, horses, motorcycles, bicycles, etc. Resource protection measures such as fencing, signs, and flooring may be required as part of the permitting process for special events. Covering turf distributes weight and reduces compaction but may kill grass. Under the turf management program record of decision half of the Mall area (3rd Street to 14th Street) is closed every other winter for restoration, making these areas unavailable for events or demonstrations. During the Fourth of July roads are closed, a temporary fence is erected, and security checkpoints are established throughout the National Mall. The capabilities and opportunities of different event areas (venues) are not effectively marketed. Portable restrooms are a permit requirement for some events and demonstrations. Staff are insufficient to monitor permitted activities.	
Actions	• Continue current practices for managing demonstrations, special events, and national celebrations. • Continue to work with the Environmental Protection Agency on guidelines for ensuring sustainable and low-impact events. • Continue to use portable restrooms at certain demonstrations and events.	• Develop a new computer mapping-based reservation system to provide venue and permit information, as well as to schedule events, maintenance, and recovery periods or to schedule park projects. • Seek to provide more balance in scheduling and the distribution of special events (not First Amendment demonstrations) to more equitably accommodate open space for events, recreation, general visitation, and natural resource restoration.

ALTERNATIVE A — FOCUS ON THE HISTORIC LANDSCAPE AND EDUCATION	ALTERNATIVE B — FOCUS ON A WELCOMING NATIONAL CIVIC SPACE FOR PUBLIC GATHERINGS, EVENTS, AND HIGH-USE LEVELS	ALTERNATIVE C — FOCUS ON URBAN OPEN SPACE, URBAN ECOLOGY, RECREATION, AND HEALTHY LIFESTYLES
4.3 Venues for Demonstrations, Special Events, and National Celebrations: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Similar to the no-action alternative, plus ◦ Improve the nation's premier civic space, focusing on high visibility areas within the National Mall. ◦ Provide a more convenient and sustainable civic forum and stage for First Amendment demonstrations, national celebrations, ceremonies, and other events by providing multiple, desirable, hard-surface venues, staging areas, and utilities (water, electrical, Internet, and media connections).	• Same as alternative B.
4.4 Operations: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Similar to the no-action alternative, except ◦ Develop a new computer mapping-based reservation system to provide venue and permit information, as well as to schedule events, maintenance, and recovery periods or to schedule park projects. ◦ Plan permanent infrastructure and space for temporary facilities	• Same as alternative A plus ◦ Rewrite permit brochures and handouts to better inform potential demonstration and event organizers about how to promote sustainable, low-impact activities. ◦ Provide infrastructure at convenient locations to accommodate portable restrooms and to facilitate servicing them.	• Same as alternative A plus ◦ Revise the turf management program rehabilitation and recovery periods so that smaller areas are set aside more frequently and broader public access is maintained. Monitor and consider turf recovery results in reopening venues early for general and recreational use.

TOPIC OR AREA	NO-ACTION ALTERNATIVE: CONTINUE CURRENT MANAGEMENT	PREFERRED ALTERNATIVE — PROVIDE A QUALITY VISITOR EXPERIENCE, PROTECT THE HISTORIC LANDSCAPE, AND ACCOMMODATE HIGH-USE LEVELS
4.4 Operations: Actions (cont.)		• Provide sufficient staff to monitor permitted activities. • Continue to collect data on best practices for events, success rates, and standards; incorporate into park standards where feasible. • Limit onsite staging and logistical areas for special events. Plan permanent infrastructure and space for temporary facilities (such as portable restrooms, trash, recycling, logistical or operational space, media activities, access, and law enforcement) in order to protect resources, reduce the impact of annual events, and make setup and takedown operations for event organizers more efficient. • Develop intense recovery procedures (such as turf renovation methods, deep-tine aeration, overseeding, with recovery time periods depending on event duration and attendance). Monitor and consider turf recovery results in reopening venues early for general and recreational use. • Continue to work with the Environmental Protection Agency and others on guidelines for ensuring sustainable and low-impact events. Rewrite permit brochures and handouts to better inform demonstration and event organizers about how to promote sustainable, low-impact activities.
5. ACCESS AND CIRCULATION		
5.1 Coordination of Circulation Systems	*Opportunities, Problems, and Concerns (Existing Conditions):* Commuter and urban traffic continues to mix with high volumes of pedestrians. There is a large community of bicycle commuters. The National Mall is walkable and easily bikable, but it lacks convenient, visible, and coordinated amenities and information to encourage healthy and non-polluting circulation activities. Pedestrian circulation can be encouraged by helping visitors get additional information that would make walking more enjoyable. Various public and commercial, tour and sightseeing bus services are provided, including NPS visitor transit. A majority of visitors arrive by public transportation and tour buses.	
Actions	• Continue uncoordinated means of circulation within the National Mall for different users (public transit, NPS visitor transportation system users, tour buses, taxis, commuters, pedestrians, and bicycle riders).	• Implement a coordinated pedestrian environment that would accommodate various types of uses and needs, including a high-quality, enjoyable pedestrian and bicycle environment, while providing a positive urban experience and coordinated urban connections within a parklike setting; connect all areas of the National Mall and provide better transitions into adjacent areas. • Increase coordinated pedestrian amenities (signs, orientation maps, transit stops, crosswalks, seating, and lighting). • Develop a coordinated strategy to limit visitor vehicular traffic and emphasize alternative modes of transportation in cooperation with the city and other governmental agencies.

ALTERNATIVE A — FOCUS ON THE HISTORIC LANDSCAPE AND EDUCATION	ALTERNATIVE B — FOCUS ON A WELCOMING NATIONAL CIVIC SPACE FOR PUBLIC GATHERINGS, EVENTS, AND HIGH-USE LEVELS	ALTERNATIVE C — FOCUS ON URBAN OPEN SPACE, URBAN ECOLOGY, RECREATION, AND HEALTHY LIFESTYLES
(such as portable restrooms and law enforcement) to reduce the impact of annual events. ◦ Develop intense recovery procedures (turf renovation methods, deep-tine aeration, overseeding, with recovery time periods depending on event duration and attendance) to improve resource conditions but minimize rest periods. ◦ Provide sufficient staff to monitor permitted activities.		
5. ACCESS AND CIRCULATION		
5.1 Coordination of Circulation Systems: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Coordinate pedestrian amenities (signs, orientation maps, transit stops).	• Implement coordinated visitor circulation focused on a high-quality, enjoyable pedestrian environment while providing a positive urban experience and coordinated urban connections within a parklike setting.	• Same as alternative B plus ◦ Provide a high-quality, enjoyable bicycling environment.

TOPIC OR AREA	NO-ACTION ALTERNATIVE: CONTINUE CURRENT MANAGEMENT	PREFERRED ALTERNATIVE — PROVIDE A QUALITY VISITOR EXPERIENCE, PROTECT THE HISTORIC LANDSCAPE, AND ACCOMMODATE HIGH-USE LEVELS
5.2 Roads	*Opportunities, Problems, and Concerns (Existing Conditions):* Roads provide important urban circulation and commuter routes, but high-volume roads (such as 17th, 14th, Constitution, and Independence), can be pedestrian barriers. Traffic may exceed the posted speed in some locations. Tunnels under the National Mall are at I-395, 9th Street, and 12th Street. The streets near the National Mall accommodate around 400,000 commuters every weekday. It may be difficult for infrequent visitors to navigate the roads.	
Actions	• Make no change to roads.	• Redesign some roads and crosswalks to improve and facilitate all circulation modes while accommodating urban traffic. • Add traffic-calming measures.
5.3 Visitor Parking	*Opportunities, Problems, and Concerns (Existing Conditions):* More than 1,000 free public parking spaces are provided, primarily along park roads and at the Tidal Basin, with approximately 250 additional spaces in three lots near the 14th Street bridge corridor. The amount of parking for people with disabilities is 10%, which exceeds standards; however, some locations attract more visitors who are elderly or have disabilities (see specific areas).	
Actions	• Make no change to parking.	• Work with the city and local parking garages to offer visitor parking and weekend rates; consider valet or shuttle service to and from parking garages to designated drop-off and pickup locations on the National Mall. • Provide additional parking for visitors with disabilities. • Redesign some parking areas for more efficient operation.
5.4 Pedestrian Access	*Opportunities, Problems, and Concerns (Existing Conditions):* Traffic lights generally include pedestrian countdown times, but they may be too short for many users. Pedestrians and bicyclists share paths but move at different speeds, with potential conflicts. City and regional plans focus on maximizing public transportation, and the city has pedestrian and bicycle plans.	
Actions	• Make no change to pedestrian access.	• Improve pedestrian experiences with upgraded walking surfaces and crosswalks, using a coordinated palette of paving materials to meet various user needs. Make pedestrian waiting areas at intersections larger and pedestrian crossing times longer. Coordinate with city pedestrian program goals and design approaches for consistency. • Improve access for people with disabilities. • Facilitate nonmotorized access by providing separate circulation routes for pedestrians and bicyclists or personal transit users, and additional facilities geared to pedestrians and bicyclists. When and where feasible, physically separate bicycle and vehicle routes. • Provide for electric scooter rentals to seniors, visitors with disabilities, or those for whom walking long distances is difficult. • Coordinate pedestrian and bicycle links to areas off the National Mall with city pedestrian and bicycle plans. Provide pedestrians and bicyclists access to a continuous waterfront experience from Georgetown to the Southwest Waterfront and the Anacostia River. Educate users about bike routes.

ALTERNATIVE A — FOCUS ON THE HISTORIC LANDSCAPE AND EDUCATION	ALTERNATIVE B — FOCUS ON A WELCOMING NATIONAL CIVIC SPACE FOR PUBLIC GATHERINGS, EVENTS, AND HIGH-USE LEVELS	ALTERNATIVE C — FOCUS ON URBAN OPEN SPACE, URBAN ECOLOGY, RECREATION, AND HEALTHY LIFESTYLES
5.2 Roads: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Redesign some roads and cross-walks for improved pedestrian movements. • Add traffic-calming measures.	• Same as alternative B plus ◦ Tunnel some roads to improve vehicular circulation.
5.3 Visitor Parking: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Provide additional visitor parking for people with disabilities. • Redesign parking areas for more efficient operation. • If determined feasible by engi-neering, security, geotechnical, and economic studies, develop under-ground public parking garages.	• Redesign parking areas for more efficient operation.
5.4 Pedestrian Access: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Relocate the truck route from 15th Street to 14th Street. Work with the city to lengthen pedestrian crossing times. • Educate users about identified bike routes.	• Improve pedestrian experiences with upgraded walking surfaces and longer pedestrian countdowns. • Add pedestrian bridges or tunnels. • Educate users about identified bike routes.	• Improve pedestrian experiences with upgraded walking surfaces and longer pedestrian countdowns; upgrade and coordinate paving (same as alternative B). • Redesign some roads. • Add pedestrian bridges or pe-destrian/vehicular underpasses. • Provide separate circulation routes for pedestrians and bicyclists or personal transit users; provide additional facilities for pedestrians. • Educate users about identified bike routes.

TOPIC OR AREA	NO-ACTION ALTERNATIVE: CONTINUE CURRENT MANAGEMENT	PREFERRED ALTERNATIVE — PROVIDE A QUALITY VISITOR EXPERIENCE, PROTECT THE HISTORIC LANDSCAPE, AND ACCOMMODATE HIGH-USE LEVELS
5.5 Supplementary Visitor Transportation	*Opportunities, Problems, and Concerns (Existing Conditions):* Up to 25% of visitors may not be able to walk long distances, or they may be exhausted from visiting multiple sites.	
Actions	• No opportunities for supplementary visitor transportation.	• Provide supplementary transportation, such as scooter rentals or wheelchairs, and roving health and safety courtesy shuttles for the elderly, families with small children, and others as needed.
5.6 Public Transportation	*Opportunities, Problems, and Concerns (Existing Conditions):* Public and commuter bus routes cross the National Mall, but the west end is not well-served. Circulator buses use several routes in the area. There is one Metro stop on the National Mall and four more within two blocks.	
Actions	• Continue to accommodate public and commuter bus services.	• Continue to accommodate public and commuter bus services. • Support an additional Metro entry at 7th Street and Constitution Avenue NW (Navy / Archives / Penn Quarter) and the Federal Triangle.
5.7 Taxis	*Opportunities, Problems, and Concerns (Existing Conditions):* Taxi or pedicab stands are dispersed throughout the National Mall, at the Washington Monument, major memorials, and near museums.	
Actions	• Make no change to taxi stands.	• Same as the no-action alternative.
5.8 Tour Bus Management	*Opportunities, Problems, and Concerns (Existing Conditions):* Up to a third of visitors to the National Mall may arrive by tour bus. Tour bus drop-offs and pickups are accommodated in the following areas: ◦ the Mall (four locations) ◦ Washington Monument ◦ Thomas Jefferson Memorial ◦ Franklin Delano Roosevelt Memorial / future Martin Luther King Jr. Memorial ◦ Lincoln Memorial (Daniel French, Henry Bacon drives) ◦ Raoul Wallenberg Place Tour bus regulations limit time for engine idling. Tour buses frequently deposit large amounts of waste from box lunches. Turf areas may be destroyed or compacted by large numbers of people getting on / off buses.	
Actions	• Continue to work with the D.C. Department of Transportation and other city agencies to address tour bus parking needs. • Continue to improve tour bus drop-off locations and waste management.	• Same as the no-action alternative plus ◦ Redesign tour bus drop-offs as needed. ◦ Increase tour bus drop-offs on the Mall.
6. VISITOR INFORMATION, EDUCATION, AND ENJOYMENT		
6.1 Park Information and Orientation	*Opportunities, Problems, and Concerns (Existing Conditions):* The National Park Service provides online information about visiting the National Mall, but layers of information may be hard to navigate. Brochures, maps, and general park information are available at visitor contact stations (see specific areas below). Outdated orientation maps are being replaced; wayfinding signs are coordinated with the city. The park radio station (AM 1670) provides onsite information. Park information has been provided by others through tour books, maps, and brochures, but sometimes this information is inaccurate.	

ALTERNATIVE A — FOCUS ON THE HISTORIC LANDSCAPE AND EDUCATION	ALTERNATIVE B — FOCUS ON A WELCOMING NATIONAL CIVIC SPACE FOR PUBLIC GATHERINGS, EVENTS, AND HIGH-USE LEVELS	ALTERNATIVE C — FOCUS ON URBAN OPEN SPACE, URBAN ECOLOGY, RECREATION, AND HEALTHY LIFESTYLES
5.5 Supplementary Visitor Transportation: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Provide supplementary transportation, including scooter rentals or wheelchairs, and roving health and safety courtesy shuttles for the elderly, families with small children, and others as needed.	• Same as the no-action alternative.
5.6 Public Transportation: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Continue to accommodate public and commuter bus services. • Support an additional Metro entry at 7th Street and Constitution Avenue NW (Navy / Archives / Penn Quarter).	• Same as alternative A.	• Same as alternative A.
5.7 Taxis: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Same as the no-action alternative.	• Same as the no-action alternative.
5.8 Tour Bus Management: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative plus ◦ Redesign tour bus drop-offs as needed.	• Same as the no-action alternative plus ◦ Redesign tour bus drop-offs as needed. ◦ Increase tour bus drop-offs on the Mall.	• Same as the no-action alternative plus ◦ Redesign tour bus drop-offs as needed.
6. VISITOR INFORMATION, EDUCATION, AND ENJOYMENT		
6.1 Parking Information and Orientation: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		

TOPIC OR AREA	NO-ACTION ALTERNATIVE: CONTINUE CURRENT MANAGEMENT	PREFERRED ALTERNATIVE — PROVIDE A QUALITY VISITOR EXPERIENCE, PROTECT THE HISTORIC LANDSCAPE, AND ACCOMMODATE HIGH-USE LEVELS
Actions	• Continue to improve website information about visiting the park as staffing and funding are available, and develop innovative improvements. • Continue to work with tour groups and others to disseminate accurate information. • Continue to replace outdated, onsite orientation maps.	• Same as the no-action alternative plus ◦ In addition to improved orientation, wayfinding, and information services; provide signs and brochures in multiple languages; provide roving rangers to greet visitors and answer questions. ◦ Provide orientation / map areas near key pedestrian entries and intersections or corridors that are readable at night. Make sign and information systems flexible enough to incorporate changes in cutting edge technology; use glare-free variable message signs. ◦ Create a seamless visitor experience through communication networks, mass notification systems, program/ activity listings (also on-line), coordinated information about adjacent museums and visitor destinations, and links to tourist websites. ◦ Ensure all park staff, including maintenance staff, are able to direct visitors to destinations and provide park maps. ◦ Work with adjacent museums and managers of visitor destinations to provide park information.
6.2 Educational Programs and Exhibits	*Opportunities, Problems, and Concerns (Existing Conditions):* Memorials and park areas provide interpretive opportunities based on commemoration, unique features, activities and uses, and the history of development and use. Audiovisual exhibits are provided at the Lincoln and Jefferson memorials. Interactive computer displays at the Korean War Veterans and World War II memorials may be difficult to see because of glare. Regularly scheduled daily programs take place. Programs include living history and curriculum-based education. Temporary and permanent educational panels provide additional visitor information. Special programs celebrate the Fourth of July, the National Cherry Blossom Festival, Veteran's Day, Memorial Day, and birthdays for George Washington, Thomas Jefferson, Abraham Lincoln, and Franklin Delano Roosevelt, as well as Dr. Martin Luther King Jr.	
Actions	• Focus educational programs on the memorials as symbols of democracy and the history of the nation's capital. • Continue to provide living history and special programs in some locations. • Continue to add educational panels.	• Same as the no-action alternative plus ◦ Develop programs to inspire visitors so that they leave with a new or renewed appreciation of their inalienable rights, the American experience, and our diverse culture. ◦ Develop educational methods that would be flexible and adaptable to technological innovations, such as digital electronic displays, cell phone tours, and interpretive boards and activity listings that could be programmed by computer and would allow visits to the National Mall to be personalized. ◦ Use mobile information stations and roving staff to supplement dispersed

ALTERNATIVE A — FOCUS ON THE HISTORIC LANDSCAPE AND EDUCATION	ALTERNATIVE B — FOCUS ON A WELCOMING NATIONAL CIVIC SPACE FOR PUBLIC GATHERINGS, EVENTS, AND HIGH-USE LEVELS	ALTERNATIVE C — FOCUS ON URBAN OPEN SPACE, URBAN ECOLOGY, RECREATION, AND HEALTHY LIFESTYLES
• Same as the no-action alternative plus ◦ Improve website information by offering downloadable information to help visitors plan their visits. ◦ Provide greetings, welcoming information, and brochures in foreign languages.	• Same as the no-action alternative plus ◦ Provide an on-line events calendar on glare-free variable message signs that can also be used to provide emergency information. ◦ Light onsite orientation maps for readability and viewing during evening hours. ◦ Provide roving rangers to welcome visitors and answer questions. ◦ Ensure all park staff, including maintenance staff, are able to direct visitors to destinations and provide park maps. ◦ Work with adjacent museums and managers of visitor destinations to provide park information.	• Same as the no-action alternative plus ◦ Provide information (brochures, web-based information) about recreational opportunities in East Potomac Park.
6.2 Educational Programs and Exhibits: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative plus ◦ Educate visitors about the planned open space of the nation's capital as developed in the L'Enfant, McMillan, and other historic plans, as well as about the history of planning and development of the nation's capital and individual memorials. ◦ Offer additional living history programs. ◦ Offer multilingual programs. ◦ Provide educational programs about sustainability.	• Same as the no-action alternative plus ◦ Educate visitors about how the National Mall is the nation's civic stage and gathering place, the history of First Amendment expression in a democracy, national celebrations, and the nation's capital as a civic stage for all kinds of cultural and other activities. ◦ Offer multilingual and educational publications and more large-print publications.	• Same as the no-action alternative plus ◦ Provide information about walking opportunities and trails. ◦ Educate visitors about healthy parks / healthy lifestyles, plant materials/gardens, natural resources, sustainable practices and ecosystems, and stewardship activities (including the importance of recycling, reducing waste, and reusing items).

TOPIC OR AREA	NO-ACTION ALTERNATIVE: CONTINUE CURRENT MANAGEMENT	PREFERRED ALTERNATIVE — PROVIDE A QUALITY VISITOR EXPERIENCE, PROTECT THE HISTORIC LANDSCAPE, AND ACCOMMODATE HIGH-USE LEVELS
6.2 Educational Programs and Exhibits: Actions (cont.)		visitor contact stations rather than having a single visitor center to provide visitor orientation, information, and education. ◦ Educate visitors about civic space and First Amendment demonstrations, history, commemorative works, historic plans and the development of the capital city, healthy lifestyles, and sustainability (including the importance of recycling, reducing waste, and reusing items as a stewardship message). ◦ Offer additional living history programs. ◦ Offer multilingual programs. ◦ Provide educational, stewardship, or informational components at all visitor facilities, including restrooms.
6.3 Guided Tours	*Opportunities, Problems, and Concerns (Existing Conditions):* The National Park Service and others provide sightseeing, bicycling, walking, and cell phone tours. Walking tour brochures and maps, as well as cell phone tours, are offered during the National Cherry Blossom Festival and at other special events and national celebrations. Technological advances, such as cell phones and portable media players, offer opportunities to reach visitors at times and locations convenient to them.	
Actions	• Continue to offer NPS bicycle and walking tours. • Continue to incorporate technology to diversify NPS educational tours (e.g., cell phone or downloadable tours). • Continue to develop NPS programs and handouts related to national celebrations, anniversaries, and special events. • Jointly promote walking and bicycle tours through Cultural Tourism DC.	• Same as the no-action alternative plus ◦ Provide more NPS guided walking/ bicycling interpretive tours and brochures. ◦ Emphasize multi-season touring opportunities (spring cherry blossoms, fall colors). ◦ Offer multiple thematic walking tour brochures or cell phone tours (e.g., development of D.C., civic stage / First Amendment, presidential memorials, tree guides, seasonal guides, exploring with children). ◦ Provide multilingual tours, perhaps by portable media players, cell phones, or other means.
6.4 Entertainment	*Opportunities, Problems, and Concerns (Existing Conditions):* Various locations are used for entertaining educational programs and performances, including concerts, small group performances, military tattoos, school band performances, Screen on the Green (movies), and Kennedy Center simulcasts.	
Actions	• Continue to offer opportunities for variety in entertainment at existing venues (Sylvan Theater, the D.C. War Memorial, lower approachway of the Lincoln Memorial, the Thomas Jefferson Memorial plaza) and at temporary locations set up for the event performances.	• Same as the no-action alternative plus ◦ Facilitate increased entertainment through improved or additional venues designed with the necessary infrastructure. ◦ Encourage thematically appropriate performances, entertainment, and educational programs at new visitor food service destinations (if feasible). ◦ Use small-scale programs or entertainment to enhance the pedestrian experience.

ALTERNATIVE A — FOCUS ON THE HISTORIC LANDSCAPE AND EDUCATION	ALTERNATIVE B — FOCUS ON A WELCOMING NATIONAL CIVIC SPACE FOR PUBLIC GATHERINGS, EVENTS, AND HIGH-USE LEVELS	ALTERNATIVE C — FOCUS ON URBAN OPEN SPACE, URBAN ECOLOGY, RECREATION, AND HEALTHY LIFESTYLES
6.3 Guided Tours: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Same as the no-action alternative plus ◦ Provide multilingual tours, perhaps by portable media players, cell phones, or other means. ◦ Offer multiple thematic walking tour brochures or cell phone tours (e.g., development of D.C., civic stage / First Amendment, presidential memorials, tree guides, seasonal guides, exploring with children).	• Same as the no-action alternative plus ◦ Provide more guided walking/ bicycling interpretive tours and brochures. ◦ Emphasize multi-season touring opportunities (spring cherry blossoms, fall colors).
6.4 Entertainment: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Same as the no-action alternative plus ◦ Facilitate increased entertainment through improved or additional venues designed with the necessary infrastructure. ◦ Encourage thematically appropriate performances, entertainment, and educational programs at new visitor food service destinations (if feasible).	• Same as the no-action alternative plus ◦ Facilitate entertainment through improved infrastructure.

TOPIC OR AREA	NO-ACTION ALTERNATIVE: CONTINUE CURRENT MANAGEMENT	PREFERRED ALTERNATIVE — PROVIDE A QUALITY VISITOR EXPERIENCE, PROTECT THE HISTORIC LANDSCAPE, AND ACCOMMODATE HIGH-USE LEVELS
6.5 Recreational Activities	*Opportunities, Problems, and Concerns (Existing Conditions):* Informal or passive recreation, such as walking, picnicking, reading, sunning, kite flying, Frisbee, and play, occurs everywhere. A variety of recreational activities are available, including softball, volleyball, kickball, running, rugby, soccer, kickball, bicycling, and football. Some areas are used for recreational sports leagues and are permitted through the D.C. Department of Parks and Recreation. Seasonal ice-skating occurs on natural ice when conditions permit. Organized sports require a permit. Swimming or wading in fountains and the Tidal Basin is prohibited. Pavement and surfaces are not conducive to some types of recreation, such as running or in-line skating. Skateboarding is prohibited since it damages memorials, curbing, steps, and walls.	
Actions	• Continue a mix of recreational activities, with some authorized locations used by organized sport leagues. • Reconfigure recreation fields to accommodate the Vietnam Veterans Memorial Center.	• Same as the no-action alternative plus ◦ Expand recreational opportunities to meet evolving recreational needs; improve field conditions. ◦ Improve surface materials to better accommodate some recreational activities, such as jogging. ◦ Improve connections to other nearby recreation facilities in East Potomac Park. ◦ Improve trail connections along the Washington Waterfront and along the Potomac and Anacostia rivers. ◦ Design all facilities, curbs, and steps to discourage skateboarding. ◦ Develop an online permitting system for athletic fields.
6.6 Commercial Recreational Activities	*Opportunities, Problems, and Concerns (Existing Conditions):* While additional recreational services may be desired, some may be outside existing contractual agreements. Actual future services and facilities will be contingent on a park assessment of the economic feasibility, whether the proposed services are necessary and appropriate, and under what authority these services could be offered. An example of an existing commercial activity is the rental of seasonal paddleboats at the Tidal Basin.	
Actions	• Assess the economic feasibility, necessity, and appropriateness of recreation services to determine the amount/level and type of such services to be offered. • Continue current commercial activities.	• Same as the no-action alternative plus ◦ Expand and possibly diversify recreational activities, including potential recreation equipment rentals: - rowboats and kayaks at the Tidal Basin - model boats at Constitution Gardens Lake - ice skates at Union Square/ Capitol reflecting pool - bicycles - kites at the Washington Monument grounds ◦ Work with city bicycle rental programs.

ALTERNATIVE A — FOCUS ON THE HISTORIC LANDSCAPE AND EDUCATION	ALTERNATIVE B — FOCUS ON A WELCOMING NATIONAL CIVIC SPACE FOR PUBLIC GATHERINGS, EVENTS, AND HIGH-USE LEVELS	ALTERNATIVE C — FOCUS ON URBAN OPEN SPACE, URBAN ECOLOGY, RECREATION, AND HEALTHY LIFESTYLES
6.5 Recreational Activities: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative plus ◦ Develop an online permitting system for athletic fields.	• Same as the no-action alternative plus ◦ Improve surface materials to better accommodate some recreational activities. ◦ Design curbs and steps to discourage skateboarding. ◦ Develop an online permitting system for athletic fields.	• Same as alternative B plus ◦ Expand opportunities to meet evolving recreational needs; improve field conditions. ◦ Improve connections to other nearby recreation facilities in East Potomac Park. ◦ Improve trail connections along the Washington Waterfront and along the Potomac and Anacostia rivers.
6.6 Commercial Recreational Activities: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Same as the no-action alternative plus ◦ Improve conditions and the variety of recreation equipment rentals.	• Same as the no-action alternative plus ◦ Expand recreational activities, including potential recreation equipment rentals: - rowboats and kayaks at the Tidal Basin - model boats at Constitution Gardens Lake - ice skates at Union Square/ Capitol reflecting pool - lawn chairs ◦ Continue offsite bicycle rentals.

TOPIC OR AREA	NO-ACTION ALTERNATIVE: CONTINUE CURRENT MANAGEMENT	PREFERRED ALTERNATIVE — PROVIDE A QUALITY VISITOR EXPERIENCE, PROTECT THE HISTORIC LANDSCAPE, AND ACCOMMODATE HIGH-USE LEVELS
7. VISITOR AMENITIES		
7.1 Architectural Character	*Opportunities, Problems, and Concerns (Existing Conditions):* Historic structures and memorials are unique and contribute to the National Mall character. Visitor amenities developed for memorials are generally compatible with the specific memorial's character. Historic buildings such as Survey Lodge and Monument Lodge on the Washington Monument grounds, or the Lockkeeper's House near 17th Street and Constitution Avenue, have been or are being adaptively reused to provide visitor amenities. Their character contributes to telling stories about the National Mall. The variety of architectural styles in visitor facilities does not contribute to a unified identity and awareness of an NPS management presence. Facilities such as restrooms, food service, and information/contact stations may not be recognizable or easy to find because there is no common architectural and graphic character. Newer visitor facilities developed since the mid 1990s have had a consistent use of materials, colors, and textures (e.g., refreshment stands on the Mall and north and south of the Lincoln Memorial), and are sustainable (geothermal). Other facilities are not readily apparent; their color, architectural character, materials, and appearance are not coordinated or compatible; and some look temporary or not in keeping with the importance of the National Mall. Some are nearing the end of their useful lives, were not designed for current use levels, or are no longer needed because of changing use or technology. Examples: ◦ circular restrooms — Washington Monument, Constitution Gardens, and Ash Woods ◦ refreshment stands or recreation equipment rental locations — Constitution Gardens, Tidal Basin, Jefferson Memorial ◦ small kiosks for tickets or bus ticket sales — Washington Monument, Mall, FDR and Jefferson memorials, carousel ◦ the U.S. Park Police stables, which include mobile structures and grapestake fencing, giving the facility a transient appearance.	
Actions	• Make no change to the mixture of architectural styles on the National Mall.	• Design all new visitor service facilities to be compatible with the character of the National Mall (e.g., the refreshment stands on the Mall and at the Lincoln Memorial), making them easily identifiable for visitors, strengthening the NPS identity, and denoting that they are secondary to national memorials. • Potentially develop a limited number of architecturally significant destination visitor facilities in certain locations (e.g., Union Square, Washington Monument, Constitution Gardens, Tidal Basin area). • Focus on cutting-edge, sustainable design solutions, exceeding the minimum requirement of a silver rating under the Leadership in Energy and Environmental Design (LEED) program. • Incorporate visible but subtle renewable energy components, such as photovoltaic solar energy and geothermal systems. • Design visitor facilities to withstand vandalism, forced entry, and skateboarding.

ALTERNATIVE A — FOCUS ON THE HISTORIC LANDSCAPE AND EDUCATION	ALTERNATIVE B — FOCUS ON A WELCOMING NATIONAL CIVIC SPACE FOR PUBLIC GATHERINGS, EVENTS, AND HIGH-USE LEVELS	ALTERNATIVE C — FOCUS ON URBAN OPEN SPACE, URBAN ECOLOGY, RECREATION, AND HEALTHY LIFESTYLES
7. VISITOR AMENITIES		
7.1 Architectural Character: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Design all new visitor service facilities to be compatible with the character of the National Mall (e.g., the refreshment stands on the Mall and at the Lincoln Memorial), making them more identifiable for visitors, strengthening the NPS identity, and denoting that they are secondary to national memorials. • Design visitor facilities to withstand vandalism, forced entry, and skateboarding.	• Similar to alternative A, except ◦ Potentially develop a limited number of architecturally significant destination visitor facilities in certain locations (e.g., Union Square, Washington Monument, Constitution Gardens, Tidal Basin area).	• Similar to alternative B, except ◦ Focus on cutting-edge, sustainable design solutions, exceeding the silver rating under the LEED program. ◦ Incorporate visible but subtle renewable energy components, such as photovoltaic solar energy and geothermal systems.

TOPIC OR AREA	NO-ACTION ALTERNATIVE: CONTINUE CURRENT MANAGEMENT	PREFERRED ALTERNATIVE — PROVIDE A QUALITY VISITOR EXPERIENCE, PROTECT THE HISTORIC LANDSCAPE, AND ACCOMMODATE HIGH-USE LEVELS
7.2 Ornamental Water Features	*Opportunities, Problems, and Concerns (Existing Conditions):* Water can be reflective or active and is highly attractive to visitors. The sound of water can muffle noise. Swimming and wading in memorial fountains is prohibited. Interactive water features, such as those at the German-American Friendship Garden, can provide opportunities for visitors to cool off and have fun.	
Actions	• Retain reflecting pools and active water features.	• Retain reflecting pools and active water features; add some new water features, including interactive water features.
7.3 Site Furnishings	*Opportunities, Problems, and Concerns (Existing Conditions):* Park furniture remains uncoordinated; some is outdated and difficult to maintain. Some site furnishings were developed for a specific memorial. Furnishings are diverse, with more than 10 kinds of seating, 5 types of bollards and post-and-chain fences, 8 kinds of light fixtures (in addition to memorial lights, ground lights, and fountain lighting); 5 kinds of drinking fountains, and more than 8 types of trash receptacles when planning began.	
Actions	• Maintain present site furnishings.	• Provide coordinated, high-quality, compatible furnishings, including seasonal tables and chairs, as well as trash/ recycling containers, curbs, signs, shelters, drinking fountains, and temporary components such as fencing. Design to be sensitive to the character of the historic landscape and to visually connect different areas on the National Mall to establish a sense of place and an overall identity. • Incorporate the following character-defining components for furnishings: ◦ historic benches, including the NPS standard Washington bench ◦ historic lighting (Olmsted, Twin twenties, Washington globe, Saratoga lights) ◦ furnishings specifically designed for memorials (seating, trash receptacles, signs, drinking fountains, light fixtures, etc.) • Use sustainable designs in all new visitor facilities for ease of maintenance and use.
7.4 Paving	*Opportunities, Problems, and Concerns (Existing Conditions):* The use of various types of paving does not contribute to a sense of place or character. Current paving includes gravel, asphalt, plain or brushed concrete, exposed aggregate concrete, brick, stone (cut granite, marble, flagstone), and concrete pavers. Loose paving material (e.g., gravel) migrates onto paved walks and into grass, is slippery, and creates dust, resulting in complaints. It may not be accessible to people with disabilities.	
Actions	• Maintain, repair, and replace current paving as budgets and staffing allow.	• Develop a low-maintenance, sustainable, universally accessible, coordinated palette of paving materials for sidewalks, jogging paths, walkways, and crosswalks on the National Mall to improve the visitor experience and park operations; ensure that the surface would be suitable for pedestrian access and recreational activities, as well as durable enough for event, operations, and maintenance access. Encourage the use of porous or other sustainable approaches.

ALTERNATIVE A — FOCUS ON THE HISTORIC LANDSCAPE AND EDUCATION	ALTERNATIVE B — FOCUS ON A WELCOMING NATIONAL CIVIC SPACE FOR PUBLIC GATHERINGS, EVENTS, AND HIGH-USE LEVELS	ALTERNATIVE C — FOCUS ON URBAN OPEN SPACE, URBAN ECOLOGY, RECREATION, AND HEALTHY LIFESTYLES
7.2 Ornamental Water Features: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Retain reflecting pools and active water features; add some new water features, including interactive water features.	• Same as alternative B.
7.3 Site Furnishings: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Provide new, coordinated, high-quality, compatible furnishings, including but not limited to trash/recycling containers, curbs, signs, drinking fountains, and temporary fencing. • Incorporate the following character-defining components for furnishings: ◦ historic benches, including the NPS standard Washington bench ◦ historic lighting (Olmsted, Twin twenties, Washington globe, Saratoga lights) ◦ furnishings specifically designed for memorials (seating, trash receptacles, signs, drinking fountains, light fixtures, etc.)	• Same as alternative A plus ◦ Develop replacement furnishings at memorials (seating, trash receptacles, signs) to unify the National Mall except for custom furnishings such as seating specifically designed for memorials	• Same as alternative B plus ◦ Ensure that furnishings are sustainable.
7.4 Paving: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative plus ◦ Coordinate new areas of paving with the most common and visible adjacent paving.	• Develop a low-maintenance, sustainable, universally accessible paving system to improve the visitor experience and park operations; consider paving that could simulate the appearance of gravel.	• Same as alternative B plus ◦ Consider porous paving if feasible, soft surfaces for jogging, and smooth surfaces for in-line skating or wheeled recreation.

TOPIC OR AREA	NO-ACTION ALTERNATIVE: CONTINUE CURRENT MANAGEMENT	PREFERRED ALTERNATIVE — PROVIDE A QUALITY VISITOR EXPERIENCE, PROTECT THE HISTORIC LANDSCAPE, AND ACCOMMODATE HIGH-USE LEVELS
7.5 Lighting Guidelines	*Opportunities, Problems, and Concerns (Existing Conditions):* The night sky in Washington, D.C., is dominated by lighting of five symbolic icons — the U.S. Capitol, the White House, the Washington Monument, the Lincoln Memorial, and the Thomas Jefferson Memorial. Other public and private buildings, memorials, public art, streets and walks, and park areas are lit to varying degrees, with the potential for conflict. Projects are reviewed by the U.S. Commission of Fine Arts; however, there is no written and approved lighting plan to protect the city's nighttime character and provide guidance.	
Actions	• Provide comments to the Commission of Fine Arts on lighting and work to retain the existing character while increasing the efficiency of light bulbs.	• Same as the no-action alternative plus ◦ Work closely with the National Capital Planning Commission, the Commission of Fine Arts, and the Architect of the Capitol to reestablish the lighting task force to develop an approved, written comprehensive lighting guideline for the monumental core area that addresses the following at a minimum: ∗ protections to maintain dominant lighting of the five symbolic icons ∗ desired lighting character for urban and park areas, character-defining elements such as statuary and building facades, pedestrian and vehicular areas, and transitions between different light levels ∗ appropriate light levels (foot-candles or lumens) and light color (color rendition) for different areas ∗ energy efficiency and sustainable lighting practices ∗ light pollution / protection of night sky from excessive, horizontal light pollution (temporarily blinding light) ∗ security lighting ◦ Improve the welcoming atmosphere and safety by increasing pedestrian-oriented lighting throughout the National Mall; ensure that pedestrian lighting sources would not contribute to light pollution.
7.6 Seating	*Opportunities, Problems, and Concerns (Existing Conditions):* Seating is provided on benches, tables, and chairs; on steps; and on some walls. Bench seating (nearly 1,200 seats) is insufficient at some times and in some locations. Bench seating is often not facing memorials, views, or features. Shaded seating is highly desirable in the summer.	
Actions	• Continue present seating.	• Increase seating opportunities and locations for visitors to enjoy views or summer shade; provide seating for groups. • Design seating to meet the needs of people with disabilities. • Increase seating options by using benches, site components such as walls, and portable lawn chairs. Consider adding seating at some memorials.

ALTERNATIVE A — FOCUS ON THE HISTORIC LANDSCAPE AND EDUCATION	ALTERNATIVE B — FOCUS ON A WELCOMING NATIONAL CIVIC SPACE FOR PUBLIC GATHERINGS, EVENTS, AND HIGH-USE LEVELS	ALTERNATIVE C — FOCUS ON URBAN OPEN SPACE, URBAN ECOLOGY, RECREATION, AND HEALTHY LIFESTYLES
7.5 Lighting Guidelines: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative plus ◦ Work closely with the National Capital Planning Commission, the Commission of Fine Arts, and the Architect of the Capitol to reestablish the lighting task force to develop an approved, written comprehensive lighting guideline for the monumental core area that addresses the following at a minimum: ∗ protections to maintain dominant lighting of the five symbolic icons ∗ desired lighting character for urban and park areas, character-defining elements such as statuary and building facades, pedestrian and vehicular areas, and transitions between different light levels ∗ appropriate light levels (footcandles or lumens) and light color (color rendition) for different areas ∗ energy efficiency and sustainable lighting practices ∗ light pollution / protection of night sky from excessive, horizontal light pollution (temporarily blinding light) ∗ security lighting ◦ Maintain present pedestrian lighting.	• Similar to alternative A except ◦ Improve the welcoming atmosphere and safety by increasing pedestrian-oriented lighting throughout the National Mall; ensure that pedestrian lighting sources would not contribute to light pollution.	• Same as alternative B.
7.6 Seating: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Increase numbers of benches and locate for enjoyment of views. Design seating to accommodate the needs of people with disabilities.	• Same as alternative A plus . ◦ Increase seating options by using site components such as walls. Increase seating at some memorials, including seating for groups.	• Same as alternative B plus ◦ Increase seating, including portable chairs, in areas used for active recreation, such as ballfields.

TOPIC OR AREA	NO-ACTION ALTERNATIVE: CONTINUE CURRENT MANAGEMENT	PREFERRED ALTERNATIVE — PROVIDE A QUALITY VISITOR EXPERIENCE, PROTECT THE HISTORIC LANDSCAPE, AND ACCOMMODATE HIGH-USE LEVELS
7.7 Drinking Water	*Opportunities, Problems, and Concerns (Existing Conditions):* Some drinking fountains have a delay feature, and drinking fountains need frequent repairs. Surfaces and basins may not be sanitary. During summer hydration is essential. Water bottles are readily available for purchase, and water is available at first-aid tents and EMS stations. Water bottles are also handed out at many events.	
Actions	• Maintain drinking fountains. • Continue to make water bottles available at some events and first-aid stations.	• Reduce the number of free-standing drinking fountains and concentrate drinking fountains near restrooms. • Provide new drinking fountains / drinking water stations designed to reduce the possibility of misuse (e.g., vandalism) and to facilitate filling reusable water bottles or taking care of pet water needs.
7.8 Food Service	*Opportunities, Problems, and Concerns (Existing Conditions):* Food service is limited to refreshment stands and mobile carts. While additional food services may be desired, some may be outside existing contractual agreements. Actual future services and facilities will be contingent on a park assessment of the economic feasibility, whether the proposed services are necessary and appropriate, and under what authority these services could be offered.	
Actions	• Assess the economic feasibility, necessity, and appropriateness of additional food service to determine the amount/level and type of such services to be offered. • Continue refreshment stands and mobile carts.	• Same as the no-action alternative, plus if feasible ◦ Provide more variety in food service (mobile carts, refreshment stands, and sit-down restaurants); extend service hours. ◦ In some locations replace or upgrade existing facilities. ◦ Provide several, well-located, convenient, attractive, and architecturally unique multipurpose facilities as pleasant places for visitors to sit and relax, with food service and infrastructure for programs, performances, and entertainment. ◦ Encourage visitors to linger with high-quality designs and pleasant surroundings, and concentrate trash and recycling at these locations to protect memorials. ◦ Consider multiple food service contracts. ◦ Use well-designed, clearly identifiable mobile food carts, coordinated with signs and site furnishings, to help convey the NPS stewardship message during high-use seasons and special events.
7.9 Public Restrooms	*Opportunities, Problems, and Concerns (Existing Conditions):* Restrooms are often insufficient for demand, are not well designed, and some are outdated and difficult to keep clean. Restrooms are not available east of 15th Street. Museum restrooms must be accessed through security checkpoints and are not open evenings. Restrooms are usually not provided near refreshment stands, so hand washing is not possible.	
Actions	• Continue present restroom facilities.	• Provide additional conveniently located visitor restrooms throughout the National Mall and service more frequently. Locate and size some restrooms to flexibly accommodate increased demand generated by events, tour buses, or peak-season visitation. • Be model for urban restroom design.

ALTERNATIVE A — FOCUS ON THE HISTORIC LANDSCAPE AND EDUCATION	ALTERNATIVE B — FOCUS ON A WELCOMING NATIONAL CIVIC SPACE FOR PUBLIC GATHERINGS, EVENTS, AND HIGH-USE LEVELS	ALTERNATIVE C — FOCUS ON URBAN OPEN SPACE, URBAN ECOLOGY, RECREATION, AND HEALTHY LIFESTYLES
7.7 Drinking Water: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Reduce the number of free-standing drinking fountains and concentrate more drinking fountains and drinking water near staffed and monitored restrooms.	• Provide new drinking fountains / drinking water stations designed to reduce the possibility of misuse (e.g., vandalism) and to facilitate filling reusable water bottles or taking care of pet water needs.
7.8 Food Service: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative, plus if feasible ◦ Replace or upgrade outdated food service facilities. ◦ Seek to improve and diversify food service, but rely on refreshment stands.	• Same as the no-action alternative, plus if feasible ◦ In some locations replace or upgrade existing facilities. ◦ Provide well-located, convenient, and attractive multipurpose facilities, with food service, indoor/outdoor seating, and potential for performance venues. ◦ Consider longer service hours. ◦ Consider multiple contracts to provide food service.	• Similar to alternative B, except if feasible ◦ Focus on providing more food variety, but still rely primarily on refreshment stands.
7.9 Public Restrooms: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Provide new restrooms near food service facilities. • Replace outdated restrooms.	• Provide public restrooms approximately every quarter mile and keep them open longer. • Increase the capacity of some existing restrooms; at new restrooms; monitor cleanliness.	• Add restrooms near food service (including some that are sustainable, automated, self-cleaning, and available day and night in some areas).

TOPIC OR AREA	NO-ACTION ALTERNATIVE: CONTINUE CURRENT MANAGEMENT	PREFERRED ALTERNATIVE — PROVIDE A QUALITY VISITOR EXPERIENCE, PROTECT THE HISTORIC LANDSCAPE, AND ACCOMMODATE HIGH-USE LEVELS
7.9. Public Restrooms: Actions (cont.)		• Expand capacity in some existing restrooms; increase staffing; monitor cleanliness. • Consider sustainable, automated, self-cleaning restrooms (which sanitize surfaces after use) to extend operating hours of facilities. • Provide restrooms at new or renovated food service areas.
8. HEALTH, PUBLIC SAFETY, AND SECURITY		
8.1 Incompatible Activities	*Opportunities, Problems, and Concerns (Existing Conditions):* Highly used areas with many different activities can result in safety concerns or use conflicts. Examples are bicycle use on sidewalks or softball games near areas where people are picnicking or walking.	
Actions	• Continue multiple uses of different areas. • Continue to offer bicycle parking at events to reduce bike riding in highly crowded areas.	• Continue to offer bicycle parking at events to reduce bike riding in highly crowded areas. • Redesign areas to safely differentiate multiple uses (e.g., separate bicycle lanes).
8.2 Pedestrian Safety	*Opportunities, Problems, and Concerns (Existing Conditions):* Pedestrian countdown times at street crossings are too short for many visitors; jaywalking is common in some areas. Some pedestrian walks are not lit.	
Actions	• Continue present conditions.	• Increase pedestrian street-crossing times; add mid-block crossing points; consider traffic-calming measures (such as raised crosswalks); improved crosswalks; provide wider waiting areas; explore in-pavement lighting; and redesign roadways to reconnect park areas and improve pedestrian safety. • Better light pedestrian walkways for safety and peace of mind, emphasizing surface conditions and the pedestrian environment. • Add emergency call stations, with a coordinated design and located near orientation signs.
8.3 Visitors with Disabilities	*Opportunities, Problems, and Concerns (Existing Conditions):* Visitors with disabilities find some areas difficult to access due to paving materials. Some furniture does not meet accessibility guidelines for people with disabilities.	
Actions	• Maintain present paving materials. • Improve park furniture, and improve access for visitors with disabilities.	• Provide universally accessible paving materials to improve conditions for all visitors; provide additional facilities for visitors with disabilities. • Offer wheelchairs or scooter rentals at central locations. • Increase parking for visitors with disabilities.
8.4 Mass Notification System	*Opportunities, Problems, and Concerns (Existing Conditions):* Visitors must be notified of severe weather conditions or other circumstances. No coordinated mass notification system is available.	
Actions	• Continue emergency notification by park police and ranger staff.	• Provide a mass notification capability to keep visitors and staff informed of what to do in case of weather or other emergencies; coordinate with an upgraded communication network.

ALTERNATIVE A — FOCUS ON THE HISTORIC LANDSCAPE AND EDUCATION	ALTERNATIVE B — FOCUS ON A WELCOMING NATIONAL CIVIC SPACE FOR PUBLIC GATHERINGS, EVENTS, AND HIGH-USE LEVELS	ALTERNATIVE C — FOCUS ON URBAN OPEN SPACE, URBAN ECOLOGY, RECREATION, AND HEALTHY LIFESTYLES
• Provide new restrooms near food service facilities. • Replace outdated restrooms.	• Provide public restrooms approximately every quarter mile and keep them open longer. • Increase the capacity of some existing restrooms; at new restrooms; monitor cleanliness.	• Add restrooms near food service (including some that are sustainable, automated, self-cleaning, and available day and night in some areas).
8. HEALTH, PUBLIC SAFETY, AND SECURITY		
8.1 Incompatible Activities: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Continue to offer bicycle parking at events to reduce bike riding in highly crowded areas. • Redesign areas to safely accommodate multiple uses (e.g., separate bicycle lanes).	• Redesign and separate circulation systems to improve safety and reduce use conflicts.
8.2 Pedestrian Safety: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Increase pedestrian street-crossing countdowns; add some midblock crossing points. • Emphasize lighting of memorials, rather than pedestrian walkways.	• Increase pedestrian street-crossing times; add mid-block crossings; provide wider waiting areas, improved crosswalks, special paving; install in-pavement lighting; provide pedestrian tunnels or bridges; redesign roadways to reconnect park areas, improve pedestrian safety. • Better light pedestrian walkways for safety and peace of mind. • Add emergency call stations, with a coordinated design and located near orientation signs.	• Same as alternative B plus ◦ Light pedestrian walkways in a manner that emphasizes surface conditions (low or hidden light sources for path lighting).
8.3 Visitors with Disabilities: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Provide universally accessible paving materials to improve conditions for all visitors; provide additional facilities for visitors with disabilities.	• Provide universally accessible paving materials to improve conditions for all visitors.
8.4 Mass Notification System: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Provide a mass notification capability to keep visitors and staff informed of what to do in case of weather or other emergencies; coordinate with an upgraded communication network.	• Same as alternative A.	• Same as alternative A.

TOPIC OR AREA	NO-ACTION ALTERNATIVE: CONTINUE CURRENT MANAGEMENT	PREFERRED ALTERNATIVE — PROVIDE A QUALITY VISITOR EXPERIENCE, PROTECT THE HISTORIC LANDSCAPE, AND ACCOMMODATE HIGH-USE LEVELS
8.5 Weather-Related Health Problems	*Opportunities, Problems, and Concerns (Existing Conditions):* Hot, humid weather and air pollution contribute to visitor discomfort and health issues for the public and park staff. Weather-related warnings and staff activity restrictions are instituted as needed. Shaded areas are highly desirable during hot weather.	
Actions	• Continue current warning systems.	• Same as the no-action alternative plus ◦ Add interactive water features and misters in paved areas to allow visitors to cool off. ◦ Increase seating in shaded areas and provide shade in some areas.
9. PARK OPERATIONS		
9.1 Deferred Maintenance	*Opportunities, Problems, and Concerns (Existing Conditions):* The National Mall has a large amount of deferred maintenance (repair) and related capital improvement projects that are already included in the NPS project management system.	
Actions	• Address deferred maintenance as funding and staffing allow.	• Same as the no-action alternative plus ◦ Redefine some projects to allow more use, to better protect resources, and to upgrade and provide sufficient visitor amenities.
9.2 Park Standards	*Opportunities, Problems, and Concerns (Existing Conditions):* NPS planning typically indentifies management zones for park areas to prescribe how areas are to be managed. Best practices include the development of written and photographic performance standards.	
Actions	• Continue to use current park standards, which are outdated and limited. • Continue to develop a pilot program on new standards.	• Develop park standards to clearly define desired qualities for different areas of the National Mall; address activities such as inspections, monitoring, maintenance (grounds, memorials, and other facilities), and education and interpretation, as well as activities by other park divisions. • Use best practices and approaches to achieve desired standards for maintenance and operations to improve the National Mall's visual appearance and operational efficiency; maximize sustainable practices.
9.3 Maintenance Activities and Operations	*Opportunities, Problems, and Concerns (Existing Conditions):* Park staff may not be able to keep up with planned and scheduled maintenance due to multiple, often conflicting and immediate demands. A study of best management practices revealed that some other sites use special teams to address immediate special project needs. Under the turf management program half of the Mall area (3rd Street to 14th Street) is closed every other winter for restoration, making it unavailable for events or demonstrations. Public comments indicate that the snow fencing used to protect turf areas undergoing rest and rehabilitation are out of character with the desired appearance for the National Mall. Existing infrastructure has not been designed to facilitate routine maintenance activities and operations, or for special events and demonstrations.	

ALTERNATIVE A — FOCUS ON THE HISTORIC LANDSCAPE AND EDUCATION	ALTERNATIVE B — FOCUS ON A WELCOMING NATIONAL CIVIC SPACE FOR PUBLIC GATHERINGS, EVENTS, AND HIGH-USE LEVELS	ALTERNATIVE C — FOCUS ON URBAN OPEN SPACE, URBAN ECOLOGY, RECREATION, AND HEALTHY LIFESTYLES
8.5 Weather-Related Health Problems: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Same as the no-action alternative plus ◦ Provide permanent or temporary water misters in paved areas during very hot weather. ◦ Add interactive water features to allow visitors to cool off. ◦ Increase seating in shaded areas.	• Same as alternative B.
9. PARK OPERATIONS		
9.1 Deferred Maintenance: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Same as the no-action alternative plus ◦ Redefine some projects to allow more use, to better protect resources, and to upgrade and provide sufficient visitor amenities.	• Same as alternative B.
9.2 Park Standards: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Develop park standards to clearly define desired qualities for different areas of the National Mall; address activities such as inspections, monitoring, maintenance (grounds, memorials, and other facilities), and education and interpretation, as well as activities by other park divisions. • Use best practices and approaches to achieve desired standards for maintenance and operations to improve the National Mall's visual appearance and operational efficiency; maximize sustainable practices.	• Same as alternative A.	• Same as alternative A.
9.3 Maintenance Activities and Operations: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		

TOPIC OR AREA	NO-ACTION ALTERNATIVE: CONTINUE CURRENT MANAGEMENT	PREFERRED ALTERNATIVE — PROVIDE A QUALITY VISITOR EXPERIENCE, PROTECT THE HISTORIC LANDSCAPE, AND ACCOMMODATE HIGH-USE LEVELS
9.3 Maintenance Activities and Operations: *Opportunities, Problems, and Concerns (Existing Conditions)* — cont.	Existing infrastructure has not been designed to facilitate routine maintenance activities and operations, or for special events and demonstrations. Equipment such as pumping systems for water features at various memorials (Korean War Veterans, Franklin Delano Roosevelt, George Mason, WWII, and Constitution Gardens) are difficult to maintain. The large homeless population challenges resources and maintenance. Tall shrub beds provide areas that are used for storage and sleeping. Federal regulations prohibit camping on the National Mall. Restrooms and fountains may be misused for bathing or toileting. Skateboarding can damage memorials and historic resources and is not allowed within the National Mall.	
Actions	• Clean restrooms twice daily. Address deferred maintenance as budgets and staffing allow. • For turf management, continue to close half of the Mall (3rd to 14th streets) every other winter for restoration. • Continue to use a visual quality team to identify and prioritize needed projects; establish a quick response team to make repairs and to improve conditions and appearance. • Continue to reduce the use of snow fencing to restrict access to certain areas.	• Similar to the no-action alternative, except ◦ Design and construct facilities to achieve the highest maintenance standards, generate respect, and be vandal-resistant; incorporate lessons learned and cutting edge sustainable design measures into all facilities and sites. ◦ For turf management close smaller areas more frequently and provide more equitable opportunities for all uses — events, demonstrations, recreation, and general visitation, as well as restoration/rehabilitation. ◦ Increase restroom cleaning to cover hours of visitation; use technology such as self-cleaning, automated public restrooms in some areas to reduce maintenance. ◦ Design or retrofit water features to be sustainable; install durable, easy-to-maintain, and standardized recirculation systems. ◦ To protect areas during rehabilitation and restoration, develop an attractive, durable, temporary fence system (in lieu of snow fencing) or another means to notify visitors when areas should not be used. Ensure the system is lightweight, not easily scaled, and easy to store, transport, and install. ◦ Reduce or eliminate tall shrub beds and areas allowing cover and storage, in keeping with the original landscape design intent.
9.4 Operational Access	*Opportunities, Problems, and Concerns (Existing Conditions):* Vehicular access has not been provided to all locations for park operations (deliveries, trash removal, grounds maintenance), resulting in vehicles driving over curbs and damaging resources, as well as making operations less efficient.	
Actions	• Continue limited operational access in some areas.	• Provide operational access as circulation systems are upgraded. • Develop walkways wide enough to accommodate maintenance, staff, and operational vehicles, as well as the public, and that can withstand the weight of vehicles used for park operations and event deliveries.

ALTERNATIVE A — FOCUS ON THE HISTORIC LANDSCAPE AND EDUCATION	ALTERNATIVE B — FOCUS ON A WELCOMING NATIONAL CIVIC SPACE FOR PUBLIC GATHERINGS, EVENTS, AND HIGH-USE LEVELS	ALTERNATIVE C — FOCUS ON URBAN OPEN SPACE, URBAN ECOLOGY, RECREATION, AND HEALTHY LIFESTYLES
9.3 Maintenance Activities and Operations: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page		
• Same as the no-action alternative plus ◦ Rehabilitate facilities to be sustainable and to reduce maintenance. ◦ Install durable, easy-to-maintain, and standardized pumping systems for water features. ◦ Design new facilities for sustainable operations and efficient maintenance. ◦ In cooperation with the city, comprehensively study the adequacy of utilities and the sewer system, and implement recommendations. ◦ To protect areas during rehabilitation and restoration, develop an attractive, durable, temporary fence system (in lieu of snow fencing). It should be lightweight, not easily scaled, and easy to store, transport, and install.	• Same as alternative A plus ◦ Utilize electronic facility monitoring to schedule opening/ closing of restrooms and cleaning.	• Same as alternative A, except ◦ Use technology such as self-cleaning, automated public restrooms in some areas to reduce maintenance. ◦ Develop means other than snow fencing to protect areas during rest and rehabilitation periods.
9.4 Operational Access: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Provide operational access as circulation systems are upgraded.	• Same as alternative A plus ◦ Develop walkways wide enough to accommodate maintenance/ operational vehicles and that can withstand the weight of vehicles used for park operations and event deliveries.	• Same as alternative A.

TOPIC OR AREA	NO-ACTION ALTERNATIVE: CONTINUE CURRENT MANAGEMENT	PREFERRED ALTERNATIVE — PROVIDE A QUALITY VISITOR EXPERIENCE, PROTECT THE HISTORIC LANDSCAPE, AND ACCOMMODATE HIGH-USE LEVELS
9.5 Energy Use	*Opportunities, Problems, and Concerns (Existing Conditions):* There are over 20,000 light fixtures in the park. The National Mall and Memorial Parks is the highest energy user within the national park system. The National Park Service is to further improve energy efficiency by 2010.	
Actions	• Use energy-efficient bulbs that would be compatible with the historic scene. • Increase the use of sustainable transportation (electric cars) for park operations, and explore the efficiency and reliability of new technology as it emerges. • Meet NPS energy efficiency goals.	• Same as the no-action alternative plus ◦ Seek renewable energy sources to reduce energy demand and supply energy for lighting and for water feature pumping systems (e.g., a large-scale photovoltaic system on the roof of the Interior Building).
9.6 Sustainability Indicators	*Opportunities, Problems, and Concerns (Existing Conditions):* NPS *Management Policies 2006* require environmental leadership and high standards for sustainable design, energy efficiency, and reduction of greenhouse gases, while providing opportunities to educate the public. All major facilities are required to meet the LEED silver rating. Recently completed concession refreshment stands and retail facilities north and south of the Lincoln Memorial use a closed loop geothermal heating and air conditioning system that also supports a freezer, refrigerator, and ice maker. The system is non-polluting, improves indoor air quality, lowers energy consumption, has almost no environmental impact, eliminates outdoor condensing units, and conserves water in ice making (saving 2.1 million gallons of fresh water annually).	
Actions	• Continue present programs.	• Provide public education about sustainable projects. • Advance the principles of sustainability: ◦ Participate in the Environmental Protection Agency's "Climate Friendly Parks" program. ◦ Reduce solid waste; increase recycling and use of biodegradable products. ◦ Reduce water use; retain stormwater for irrigation. ◦ Reduce soil compaction. ◦ Reduce energy consumption, greenhouse gas emissions, and air pollutants; use renewable energy sources; maximize energy efficiency. ◦ Maximize public transportation; increase use of alternative fuels. ◦ Ensure that new or replacement facilities meet the LEED silver rating. ◦ Strive to achieve the highest LEED standard practicable. ◦ Determine the park's carbon footprint (estimated through the Climate Leadership in Parks program). ◦ Reduce greenhouse gases by 18% by 2012. ◦ Implement recommendations of the Sustainable Sites Initiative™.

ALTERNATIVE A — FOCUS ON THE HISTORIC LANDSCAPE AND EDUCATION	ALTERNATIVE B — FOCUS ON A WELCOMING NATIONAL CIVIC SPACE FOR PUBLIC GATHERINGS, EVENTS, AND HIGH-USE LEVELS	ALTERNATIVE C — FOCUS ON URBAN OPEN SPACE, URBAN ECOLOGY, RECREATION, AND HEALTHY LIFESTYLES
9.5 Energy Use: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Same as the no-action alternative.	• Same as the no-action alternative plus ◦ Seek renewable energy sources for lighting and water feature pumping systems (e.g., a large-scale photovoltaic system on the roof of the Interior Building). ◦ Take the lead in demonstration/interactive programs for efficient energy use.
9.6 Sustainability Indicators: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Advance the principles of sustainability: ◦ Participate in the Environmental Protection Agency's "Climate Friendly Parks" program. ◦ Reduce solid waste; increase recycling and use of biodegradable products. ◦ Reduce water use; retain stormwater for irrigation. ◦ Reduce soil compaction. ◦ Reduce energy consumption, greenhouse gas emissions, and air pollutants; use renewable energy sources; maximize energy efficiency. ◦ Maximize public transportation; increase use of alternative fuels. ◦ Ensure that new or replacement facilities meet the LEED silver rating.	• Same as alternative A.	• Same as alternative A plus ◦ Strive to achieve the highest LEED standard practicable. ◦ Determine the park's carbon footprint. ◦ Reduce greenhouse gases by 18% by 2012. ◦ Implement recommendations of the Sustainable Sites Initiative™.

TOPIC OR AREA	NO-ACTION ALTERNATIVE: CONTINUE CURRENT MANAGEMENT	PREFERRED ALTERNATIVE — PROVIDE A QUALITY VISITOR EXPERIENCE, PROTECT THE HISTORIC LANDSCAPE, AND ACCOMMODATE HIGH-USE LEVELS
9.7 Solid Waste Management and Recycling	*Opportunities, Problems, and Concerns (Existing Conditions):* Park staff remove 3–4 tons of trash daily; a major event may produce 25 tons or more of trash. The National Park Service has been working with the Environmental Protection Agency to improve solid waste management and recycling for events and daily operations. Emptying heavy trash barrels by hand can result in injury. The park does not have the capability to mechanically empty trash containers. Plastic bottles generate a large amount of trash, and recycling is not universal.	
Actions	• Study and implement feasible waste management and recycling systems to increase efficiencies. • Expand recycling at events.	• Same as the no-action alternative plus ◦ Increase trash removal to cover hours of visitation; plan circulation routes for efficient mechanized trash removal. ◦ Require recycling at events; convey the importance of recycling, reducing waste, and reusing items. ◦ Increase NPS identity and stewardship messaging for recycling efforts.
9.8 Communication Network (Also see "6. Visitor Information, Education, and Enjoyment.")	*Opportunities, Problems, and Concerns (Existing Conditions):* Major communications and fiber-optic lines are close to the study area. Communication capabilities for park operations, events, public information/education, emergencies, or media use are inefficient or lacking. Temporary communication systems are installed as needed for events. There is increased public demand for access to wireless communication.	
Actions	• Continue to install temporary communication systems as needed for events.	• Provide state-of-the-art communications with dedicated lines for NPS operations (phones / computers), law enforcement, emergency communications (audio lines / loudspeakers / mass notification system), media, and event sponsor use. • Provide public wireless access and landline pay phones (in cooperation with service providers). • Provide emergency call stations.
9.9 Staffing	*Opportunities, Problems, and Concerns (Existing Conditions):* Present staffing numbers are lower than when there were fewer memorials and facilities to maintain. The staffing of some authorized positions has been deferred. The park completes core operations planning to align staffing needs to the core mission.	
Actions	• Maintain present staffing levels.	• Use core operations planning to match staffing needs to the core mission; examine staffing needs and correlate with park standards. • Reassess staffing levels and fill authorized positions. Likely increase staffing for resource management, communications (web, technology, media, and public information), maintenance, events, special project teams, and law enforcement to manage high volumes of use, events, and event recovery.

ALTERNATIVE A — FOCUS ON THE HISTORIC LANDSCAPE AND EDUCATION	ALTERNATIVE B — FOCUS ON A WELCOMING NATIONAL CIVIC SPACE FOR PUBLIC GATHERINGS, EVENTS, AND HIGH-USE LEVELS	ALTERNATIVE C — FOCUS ON URBAN OPEN SPACE, URBAN ECOLOGY, RECREATION, AND HEALTHY LIFESTYLES
9.7 Solid Waste Management and Recycling: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative plus ◦ Increase NPS identity and stewardship messaging for recycling efforts.	• Same as alternative A plus ◦ Plan circulation routes for efficient mechanized trash removal. ◦ Require recycling at events.	• Same as alternative B plus ◦ Convey the importance of recycling, reducing waste, and reusing items.
9.8 Communication Network: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Provide a state-of-the-art communication network with dedicated lines for NPS operations (phones/ computers), law enforcement, emergency communications (audio lines / loudspeakers / mass notification system), media, and event sponsor use. • Provide public wireless access and landline pay phones (in cooperation with service providers).	• Same as alternative A plus ◦ Provide emergency call stations.	• Same as alternative B.
9.9 Staffing: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Use core operations planning to match staffing needs to the core mission; examine staffing needs and correlate with park standards. Likely increase staffing for resource management and communications (web, technology, media, and public information).	• Similar to alternative A except ◦ Likely increase staffing for maintenance, events, special project teams, and law enforcement to manage high volumes of use, events, and event recovery.	• Similar to alternative A, except ◦ Likely increase staff to provide more recreational and educational programs.

TOPIC OR AREA	NO-ACTION ALTERNATIVE: CONTINUE CURRENT MANAGEMENT	PREFERRED ALTERNATIVE — PROVIDE A QUALITY VISITOR EXPERIENCE, PROTECT THE HISTORIC LANDSCAPE, AND ACCOMMODATE HIGH-USE LEVELS
9.10 Park Partners and Volunteer Activities	*Opportunities, Problems, and Concerns (Existing Conditions):* The National Park Service has several authorized partnerships and agreements to facilitate park management. The Trust for the National Mall is the authorized NPS fundraising partner. Eastern National is the cooperating association and operates educational bookstores. Volunteers-in-Parks help meet various needs.	
Actions	• Continue to work with authorized private and public partners, nonprofit organizations, and volunteers to support park goals, provide services, supplement park staff, or undertake specific projects.	• Same as the no-action alternative plus ◦ Explore listing daily cleanup/fix-up opportunities for visitors to participate in.
9.11 Commercial Business Services	*Opportunities, Problems, and Concerns (Existing Conditions):* Food, retail, transportation, and recreational services are provided through concession contracts. Current contracts have provisions that limit competition. As contracts expire, they will be replaced by revised contracts. New concession contracts are open to competition, no longer include provisions that limit competition, must be economically viable, and must be determined to be both necessary and appropriate.	
Actions	• Assess the economic feasibility, necessity, and appropriateness of any proposed changes to services, including service types and locations, appropriate educational messages, and desired identity. • Continue currently authorized visitor services.	• Same as the no-action alternative plus ◦ Require recycling and waste reduction. ◦ Incorporate public information about recycling / waste reduction and green practices. ◦ Offer multiple contract opportunities to provide visitor services determined to be necessary and appropriate.
THE MALL		
10. UNION SQUARE (1ST TO 3RD STREETS) The 11.4-acre Union Square, with its presidential memorial to Ulysses S. Grant, will remain an essential civic space in the immediate vicinity of the legislative branch of the government, providing opportunities for demonstrations and events.		
10.1 Opportunities, Problems, and Concerns (Existing Conditions)	Union Square lacks visitor amenities and infrastructure to attract visitation or to meet the needs of special events. Its overall condition is serious. The Capitol backdrop makes this area an essential civic and First Amendment space. Wide social trails have developed at the end of pedestrian walks on the Mall. Multiple levels or grade changes inhibit universal access and include narrow walks that limit pedestrian circulation and park operations.	
10.2 Vision Emphasis	• The Grant Memorial and the Capitol reflecting pool would remain the focal point of the east end of the National Mall, the foreground of the U.S. Capitol.	• Union Square would fulfill its McMillan plan purpose of connecting the U.S. Capitol grounds with the National Mall, as well as providing more convenient and flexible land use at the foot of the Capitol. The Grant Memorial would be the focal point of a symmetrical and formally laid out civic square based on historic precedents. It would be a popular, active, and dignified day and evening destination that could be easily transformed into a large venue for First Amendment demonstrations and events. Grade changes would be addressed to improve pedestrian access and circulation for all. The square would highlight sustainable water management practices, with reflective and interactive water features. The sound of

ALTERNATIVE A — FOCUS ON THE HISTORIC LANDSCAPE AND EDUCATION	ALTERNATIVE B — FOCUS ON A WELCOMING NATIONAL CIVIC SPACE FOR PUBLIC GATHERINGS, EVENTS, AND HIGH-USE LEVELS	ALTERNATIVE C — FOCUS ON URBAN OPEN SPACE, URBAN ECOLOGY, RECREATION, AND HEALTHY LIFESTYLES
9.10 Park Partners and Volunteer Activities: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Same as the no-action alternative.	• Same as the no-action alternative.
9.11 Commercial Business Services: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative plus ◦ Require recycling and waste reduction. ◦ Incorporate public information about recycling / waste reduction and green practices.	• Same as alternative A plus ◦ Offer multiple contracts to better provide visitor services that have been determined to be necessary and appropriate.	• Same as alternative A.
THE MALL		
10. UNION SQUARE (1ST TO 3RD STREETS) See facing page.		
10.1 *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• The Grant Memorial would be the focal point of a redesigned civic square and reflecting pool, highlighting the former Washington Canal and the history of the U.S. Botanic Garden site.	• The Grant Memorial would be the focal point of a dignified, paved urban civic square that would be redesigned to highlight views, meet event needs, be a visitor destination, and offer comfort, convenience, and entertainment. It would also be a venue for demonstrations and events.	• The Grant Memorial would be the focal point of an active, paved urban civic square that would be a visitor destination and that would showcase reflective and interactive water features with an environmentally friendly design to highlight sustainable water management practices. The area would be visually and physically connected to the U.S. Botanic Garden and U.S. Senate Youth Park and U.S. Botanic Garden Education and Outreach Center to the north.

TOPIC OR AREA	NO-ACTION ALTERNATIVE: CONTINUE CURRENT MANAGEMENT	PREFERRED ALTERNATIVE — PROVIDE A QUALITY VISITOR EXPERIENCE, PROTECT THE HISTORIC LANDSCAPE, AND ACCOMMODATE HIGH-USE LEVELS
10.2 Vision Emphasis (cont.)		water would be used to muffle the noise of urban traffic. The area would be visually and physically connected to the U.S. Botanic Garden and U.S. Senate Youth Park and U.S. Botanic Garden Education and Outreach Center to the north and would incorporate floral plantings.
10.3 Ulysses S. Grant Memorial	*Opportunities, Problems, and Concerns (Existing Conditions):* The Ulysses S. Grant Memorial, one of five presidential memorials on the National Mall, is in fair condition. Many people may be unaware of the memorial.	
Actions	• Maintain the Ulysses S. Grant Memorial. • Provide wayside exhibits about the man, the memorial, and its history.	• Restore the Ulysses S. Grant Memorial. • Provide more education about the man, the memorial, and its history.
10.4 Historic Resources	*Opportunities, Problems, and Concerns (Existing Conditions):* The historic landscape has some integrity, and a few trees have been listed as "witness" trees because of their age.	
Actions	• Continue to preserve components of the historic landscape that have integrity.	• Resolve any outstanding cultural resource identification issues associated with Union Square in consultation with the D.C. Historic Preservation Office before developing plans. • Improve the condition of historic landscape components and incorporate them into a new design. • Protect and emphasize the historic east-west views between the U.S. Capitol and the Washington Monument, as well as view corridors along Pennsylvania and Maryland avenues terminating in historic statuary near 1st Street. • Protect existing historic or "witness" trees. Minimize and redesign turf areas, but retain low plantings to create a sense of continuity with the historic landscape that was once home to the Botanic Garden.
10.5 Capitol Reflecting Pool	*Opportunities, Problems, and Concerns (Existing Conditions):* The Capitol Reflecting Pool has water quality, structural, and leaking problems. The size of the reflecting pool is an obstacle to pedestrian circulation.	
Actions	• Maintain the reflecting pool, along with the Grant Memorial, as the focal point of the east end of the National Mall; undertake improvements to solve water quality, structural, and leaking problems as budgets and staffing allow.	• Consider a smaller reflecting pool or water features to make the space more suited to various uses. • Reduce the water volume, and seek a non-potable water source. • To increase enjoyment, consider adding vertical water jets to create a more enjoyable atmosphere by muffling traffic noise and providing play opportunities; consider redesigning the pool as a shallow sheet of interactive water that could be drained for demonstrations and special events or frozen for seasonal ice skating.

ALTERNATIVE A — FOCUS ON THE HISTORIC LANDSCAPE AND EDUCATION	ALTERNATIVE B — FOCUS ON A WELCOMING NATIONAL CIVIC SPACE FOR PUBLIC GATHERINGS, EVENTS, AND HIGH-USE LEVELS	ALTERNATIVE C — FOCUS ON URBAN OPEN SPACE, URBAN ECOLOGY, RECREATION, AND HEALTHY LIFESTYLES
10.3 Ulysses S. Grant Memorial: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Restore the Ulysses S. Grant Memorial. • Provide wayside exhibits about the man, the memorial, and its history.	• Same as alternative A.	• Same as alternative A.
10.4 Historic Resources: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Resolve any outstanding cultural resource identification issues associated with Union Square in consultation with the D.C. Historic Preservation Office before developing plans. • Improve the condition of historic landscape components and incorporate them into a new design.	• Same as alternative A.	• Same as alternative A.
10.5 Capitol Reflecting Pool: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Redesign the reflecting pool to be smaller to facilitate pedestrian circulation.	• Remove the reflecting pool.	• Redesign the reflecting pool as a shallow, sustainable pool with interactive water features and that could be drained for demonstrations and events or frozen for ice skating.

TOPIC OR AREA	NO-ACTION ALTERNATIVE: CONTINUE CURRENT MANAGEMENT	PREFERRED ALTERNATIVE — PROVIDE A QUALITY VISITOR EXPERIENCE, PROTECT THE HISTORIC LANDSCAPE, AND ACCOMMODATE HIGH-USE LEVELS
10.6 Demonstrations, Special Events, and National Celebrations	*Opportunities, Problems, and Concerns (Existing Conditions):* The location of Union Square with the Capitol as the backdrop makes it very popular for demonstrations and special events. There are no utilities to facilitate events.	
Actions	• Consistent with the First Amendment and federal regulations, continue to fully accommodate demonstrations. • Continue to permit events at Union Square, consistent with federal regulations; coordinate with the Architect of the Capitol as necessary. • Provide no infrastructure for demonstrations or special events.	• Similar to the no-action alternative, except ◦ Redesign as a paved square to accommodate more use, including demonstrations and events. ◦ Provide infrastructure, such as utilities and communication system networks (including media connections), for demonstrations and events.
10.7 Access and Circulation	*Opportunities, Problems, and Concerns (Existing Conditions):* Access and circulation are constrained by the size and configuration of the reflecting pool. The current parking function at the terminus of Maryland and Pennsylvania avenues diminishes the grand views of the Capitol defined in the L'Enfant and McMillan plans, and disconnects the avenues from the Capitol complex, the National Mall, and the city. The Architect of the Capitol has responsibility for roads surrounding Union Square, has adjacent permit parking, and is completing a master plan for the Capitol Complex.	
Actions	• Maintain current public access and circulation.	• Improve pedestrian circulation and visual and physical connections and access to the Mall, the U.S. Capitol, and areas north and south of Union Square. • Eliminate social trails. • Design crosswalks on 3rd Street to highlight and continue pedestrian connections and circulation patterns on the Mall.
10.8 Visitor Information, Education, and Enjoyment	*Opportunities, Problems, and Concerns (Existing Conditions):* The area is heavily used for school and group photographs, but its lack of information, amenities, and facilities limits other uses.	
Actions	• Continue current conditions.	• Provide educational exhibits about First Amendment demonstrations, the Grant Memorial, history of the monumental core, and the U.S. Capitol. • To increase enjoyment, consider interactive water jets and seasonal ice skating (see row 10.5).
10.9 Visitor Amenities	*Opportunities, Problems, and Concerns (Existing Conditions):* Paving with asphalt embedded with small stones (seeded asphalt) creates maintenance challenges and plugs drains. There are no visitor amenities such as seating, restrooms, or food service.	
Actions	• Make repairs as needed.	• Provide shade structures for visitor comfort, and pleasant places for rest and relaxation. • Provide a flexible indoor/outdoor, multi-purpose food service destination, where views of the Grant Memorial and the Capitol could be enjoyed, with space for seating, performances, educational wayside exhibits, and small exhibitions or displays (size, character of facilities determined during design).

ALTERNATIVE A — FOCUS ON THE HISTORIC LANDSCAPE AND EDUCATION	ALTERNATIVE B — FOCUS ON A WELCOMING NATIONAL CIVIC SPACE FOR PUBLIC GATHERINGS, EVENTS, AND HIGH-USE LEVELS	ALTERNATIVE C — FOCUS ON URBAN OPEN SPACE, URBAN ECOLOGY, RECREATION, AND HEALTHY LIFESTYLES
10.6 Demonstrations, Special Events, and National Celebrations: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Similar to the no-action alternative, except ◦ Require that all viewing screens, stages, and large video screens be located so as to not block the primary east-west views for people on site. (This might require locating video screens at angles.)	• Similar to the no-action alternative, except ◦ Redesign Union Square to increase space available for demonstrations, civic engagement, and special events. ◦ Provide infrastructure such as utilities and communication system networks (including media connections), for demonstrations and events.	• Similar to the no-action alternative, except ◦ Provide infrastructure for demonstrations and events; provide structures to accommodate large video screens (provided by event organizers) to broadcast demonstrations taking place elsewhere.
10.7 Access and Circulation: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Same as alternative A.	• Same as alternative A.
10.8 Visitor Information, Education, and Enjoyment: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Provide additional educational information about the Washington City Canal and the history of the U.S. Botanic Garden site.	• Same as alternative A plus ◦ Provide entertainment or performance space at a multipurpose visitor destination facility.	• Same as the no-action alternative plus ◦ Provide interactive water features for summer use and explore seasonal ice skating (see actions for row 10.5).
10.9 Visitor Amenities: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Redesign paving and widen walks to facilitate public access and maintenance. • Add seating.	• Same as alternative A plus ◦ Provide utilities, shade, and seating on the north and south sides. ◦ Provide a multipurpose visitor facility with food service, retail, restrooms, and media stands.	• Same as alternative A plus ◦ Provide food and retail sales, plus automated, self-cleaning public restrooms.

TOPIC OR AREA	NO-ACTION ALTERNATIVE: CONTINUE CURRENT MANAGEMENT	PREFERRED ALTERNATIVE — PROVIDE A QUALITY VISITOR EXPERIENCE, PROTECT THE HISTORIC LANDSCAPE, AND ACCOMMODATE HIGH-USE LEVELS
10.9 Visitor Amenities: Actions (cont.)		• Provide flexible, high-capacity restrooms where more stalls could be opened during high use, with nearby drinking water and recreation equipment rentals.
11. THE MALL (3RD TO 14TH STREETS) The Mall (146.35 acres) will remain the designed promenade west of the U. S. Capitol, featuring expansive green lawns (the formal French *tapis verte* or green carpet) bordered by formal rows of American elm trees that frame views to and from the Capitol, a fundamental concept of McMillan plan. It is bordered by the museums of the National Gallery of Art and the Smithsonian Institution as well as the Department of Agriculture. The Mall is an extremely popular venue for demonstrations, special events, cultural activities, and other civic events.		
11.1 Vision Emphasis	• The Mall would continue to serve as a near non-stop venue for demonstrations, public gatherings, and cultural and other civic events.	• The Mall would remain a highly visible landscape that would be renovated to improve conditions and to sustainably accommodate very high levels of use for First Amendment demonstrations, public gatherings, national celebrations, cultural programs, and special events, as well as passive recreation and informal play. The National Park Service would encourage partnerships between all visitor destinations along the Mall to serve visitor needs.
11.2 Historic Resources	*Opportunities, Problems, and Concerns (Existing Conditions):* The Mall is a historic landscape with a great deal of integrity. The changes implemented as a result of the McMillan plan are clearly evident.	
Actions	• Continue to preserve components of the historic landscape that have integrity.	• Improve and protect the condition of critical elements of the historic landscape, such as lawns and elm trees. • Reduce social trails through a combination of design elements, paving, edging, and stewardship messages. • To protect the historic landscape, add park furniture and interactive water features outside the primary viewshed.
11.3 Natural Resources		
Soils	*Opportunities, Problems, and Concerns (Existing Conditions):* Soils compacted by high levels of use make turf very difficult to maintain and affect the health of the trees and lawns.	
Actions	• Continue to seek funding to treat soils compacted by repeated events.	• Restore soils to improve turf and tree growing conditions by replacing or augmenting soils or implementing other sustainable technologies. • Implement Sustainable Sites Initiative™ benchmarks for soils.
Lawns	*Opportunities, Problems, and Concerns (Existing Conditions):* The continuous green lawn is one of the most prominent and recognizable features of the Mall. Two grass types are used, but high use levels make it difficult to sustain the turf, which is often brown, with bare patches and many weeds. Access to half of the grass panels is restricted from late fall to spring every year for restoration by using snow fences and plastic tape. Gravel has migrated from paths, social trails near walks obliterate grass, and planned crisp turf edges have been destroyed by visitors cutting corners. The irrigation system has been damaged by tent stakes used during events.	

ALTERNATIVE A — FOCUS ON THE HISTORIC LANDSCAPE AND EDUCATION	ALTERNATIVE B — FOCUS ON A WELCOMING NATIONAL CIVIC SPACE FOR PUBLIC GATHERINGS, EVENTS, AND HIGH-USE LEVELS	ALTERNATIVE C — FOCUS ON URBAN OPEN SPACE, URBAN ECOLOGY, RECREATION, AND HEALTHY LIFESTYLES
11. THE MALL (3RD TO 14TH STREETS) See facing page.		
• The Mall would be rehabilitated to improve conditions.	• The Mall would be rehabilitated and redesigned as a highly visible, sustainable venue with more hard surfaces for very high levels of use (demonstrations, public gatherings, cultural programs, and other civic events), while its critical historic features would be maintained.	• The Mall would be redesigned to provide additional, sustainable areas for recreational enjoyment (gardens and fountains) and improved lawn conditions (for informal pickup games and play).
11.2 Historic Resources: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Improve the condition of components of the historic landscape that have integrity.	• Same as alternative A plus ◦ Add a decorative and interactive water feature at the 8th Street cross axis.	• Add park furniture and interactive water features outside the primary viewshed to protect the historic landscape.
11.3 Natural Resources		
Soils: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Restore soils to improve turf and tree growing conditions by replacing or augmenting soils or implementing other sustainable technologies. • Implement Sustainable Sites Initiative™ benchmarks for soils.	• Same as alternative A.	• Same as alternative A.
Lawns: Opportunities, Problems, and Concerns (Existing Conditions) — See facing page.		

TOPIC OR AREA	NO-ACTION ALTERNATIVE: CONTINUE CURRENT MANAGEMENT	PREFERRED ALTERNATIVE — PROVIDE A QUALITY VISITOR EXPERIENCE, PROTECT THE HISTORIC LANDSCAPE, AND ACCOMMODATE HIGH-USE LEVELS
Lawns (cont.) Actions	• Continue to rest half of the Mall every other winter. • Begin demonstration plots to try new management techniques, such as using organic practices or new grass varieties.	• Replace gravel walkways around lawns with new paved surfaces; install edges to define lawn panels. • To improve turf conditions, replace soils or implement other sustainable technologies. • Slightly elevate turf to improve drainage and perpetuate the sense of continuous turf on the Mall from ground-level views. • Undertake more frequent restoration of smaller areas. • Provide drainage and irrigation; design the irrigation system so that it would not be damaged by event facilities. • Remove narrow strips of turf and create wider sidewalks in center sections along 3rd, 4th, 7th, and 14th streets. To improve growing conditions for trees, remove gravel near Madison Drive NW and Jefferson Drive SW and replace with turf edged with low curbs. Retain shaded seating.
American Elms	*Opportunities, Problems, and Concerns (Existing Conditions):* American elms contribute to the high integrity of the historic planting plan. The National Park Service has successfully developed disease-resistant elm varieties. The side panels containing mature American elms have been used for special events, and the health of trees continues to be affected by soil compaction and large-scale events.	
Actions	• Control impacts to elm trees from overuse as budgets and staffing allow. • Continue to replace elm trees as needed in accordance with the historic planting plan.	• Undertake additional scientific study to examine the health of elm trees and soil conditions; identify appropriate levels of use and protection. • Allow individuals to still enjoy the shade that rows of American elm trees. • Continue to replace elm trees as needed in accordance with the historic planting plan. • Minimize the use of post-and-chain fencing to control resource damage. • Based on scientific study, continue to seek ways to reduce the impacts of compaction and erosion within the Mall elm tree panels.
Other Trees	*Opportunities, Problems, and Concerns (Existing Conditions):* A few trees (elms, bald cypress, cedar, and oak trees) do not contribute to the historic landscape.	
Actions	• Allow present noncontributing planting schemes to continue.	• Update the planting plan for all vegetation on the Mall and ensure it is compatible with contributing features of historic plans.
11.4 Demonstrations, Special Events, and National Celebrations	*Opportunities, Problems, and Concerns (Existing Conditions):* During the Fourth of July celebration Madison Drive NW and Jefferson Drive SW are closed to public vehicular access and parking, security checkpoints are established for portions of the National Mall, and additional restrooms, law enforcement, and first-aid stations may be established. The Smithsonian Institution has developed some infrastructure to support the Festival of American Folklife. (Also see "4. The Civic Stage: Demonstrations, Special Events.")	

ALTERNATIVE A — FOCUS ON THE HISTORIC LANDSCAPE AND EDUCATION	ALTERNATIVE B — FOCUS ON A WELCOMING NATIONAL CIVIC SPACE FOR PUBLIC GATHERINGS, EVENTS, AND HIGH-USE LEVELS	ALTERNATIVE C — FOCUS ON URBAN OPEN SPACE, URBAN ECOLOGY, RECREATION, AND HEALTHY LIFESTYLES
• Install edging or curbs to limit gravel migration and post-and-chain fencing to prevent social trails. • Install a new irrigation system designed so that it cannot be damaged during events.	• Same as alternative A except ◦ Eliminate gravel walkways around lawns; install edges to define lawn areas. ◦ Undertake more frequent restoration of smaller areas.	• Similar to alternative B, except do not install edging.
American Elms: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Install curbs or edging and/or post-and-chain fencing to protect improved landscapes and tree panels while allowing pedestrian access to shady areas. • Continue to replace elm trees as needed in accordance with the historic planting plan.	• Same as alternative A except ◦ Minimize the use of post-and-chain fencing to control resource damage. ◦ Continue to seek ways to reduce the physical impacts of compaction and erosion within the Mall elm tree panels.	• Same as alternative A.
Other Trees: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Update planting plan to address noncontributing vegetation on the Mall; do not replant noncontributing features.	• Update the planting plan for all vegetation on the Mall and ensure is it compatible with contributing features of historic plans.	• Same as alternative B.
11.4 Demonstrations, Special Events, and National Celebrations: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		

TOPIC OR AREA	NO-ACTION ALTERNATIVE: CONTINUE CURRENT MANAGEMENT	PREFERRED ALTERNATIVE — PROVIDE A QUALITY VISITOR EXPERIENCE, PROTECT THE HISTORIC LANDSCAPE, AND ACCOMMODATE HIGH-USE LEVELS
11.4 Demonstrations, Special Events, and National Celebrations: Actions (cont.)	• Consistent with the First Amendment and federal regulations, continue to fully accommodate demonstrations. • Consistent with federal regulations, accommodate special events.	• Increase paved areas to facilitate events and improve the Mall's appearance. • Allow no temporary event facilities, such as tents, stages, or vehicles, in the elm tree panels. (Note: This action would not apply to First Amendment demonstrations.) • Allow temporary event facilities (such as tents and stages) in the center grass panels or on paved areas, depending on the size of the facilities. Allow very limited, temporary staging and storage areas on site. • Develop event utility infrastructure to protect resources, reduce setup / takedown times, and accommodate media communications. • Identify locations for temporary portable restroom and trailers with restrooms so that these facilities would be convenient, easy to service, and not block views. • Add a paved area for events south of the National Gallery of Art Sculpture Garden and north of the center grass panels; provide visitor sidewalk amenities. • Redesign the 12th Street axis to accommodate high levels of use and the placement of tents, stages, and special events logistical and operational staging areas. Provide a flexible office space and public restroom facility to support demonstrations and special events. • Widen the north-south walks that border the center area between 10th and 13th streets. • Create additional special events staging space over the 12th Street tunnel entry north of Madison Drive NW to reduce the impact of truck parking on the historic landscape.
11.5 Access and Circulation (Also see "5.3 Visitor Parking.")	*Opportunities, Problems, and Concerns (Existing Conditions):* Three-hour free public and permit parking is allowed on Madison Drive NW and Jefferson Drive SW and is highly sought after by visitors and workers. There are 407 parking spaces, 47 for people with disabilities, and 32 tour bus drop-offs. The city provides metered parking on 3rd, 4th, and 7th streets NW/SW through the Mall.	
Actions	• Continue designated drop-off/ pickup stops for visitor transportation and commercial tour buses. • Continue to allow three-hour free public and permit parking on Madison and Jefferson drives.	• Continue designated drop-off/pickup stops for visitor transportation, commercial tour buses. • Accommodate visitor transportation, commercial tour bus drop-offs, bicycles and other wheeled vehicles on Madison and Jefferson drives over the short- to mid-term (10–15 years); occasionally restrict access to accommodate events and national celebrations (such as the Fourth of July). Adopt as a long-term goal the removal of private vehicle parking on Madison and Jefferson drives to improve traffic flow and better accommodate bicycling, visitor transit, and pedestrians.

ALTERNATIVE A — FOCUS ON THE HISTORIC LANDSCAPE AND EDUCATION	ALTERNATIVE B — FOCUS ON A WELCOMING NATIONAL CIVIC SPACE FOR PUBLIC GATHERINGS, EVENTS, AND HIGH-USE LEVELS	ALTERNATIVE C — FOCUS ON URBAN OPEN SPACE, URBAN ECOLOGY, RECREATION, AND HEALTHY LIFESTYLES
• Same as the no-action alternative plus ◦ Provide infrastructure for demonstrations and events. ◦ Allow no temporary event facilities, such as tents, stages, or vehicles, in the elm tree panels. ◦ Encourage event organizers not to install temporary event facilities, such as tents and stages, directly in the center of the major view corridor between the U.S. Capitol and the Washington Monument to protect open, eye-level views on the grass panels.	• Same as alternative A, except ◦ Allow some temporary event facilities to be located in the elm tree panels if turf/root zones and soils were protected through an acceptable and authorized method. ◦ Allow Jefferson and Madison drives to be used during large special events or demonstrations (more than 250,000 people) and reroute non-emergency / law enforcement vehicular traffic (similar to current management of the Fourth of July celebration). ◦ Create new public space for event staging, etc. over the 12th Street tunnel portals at Madison and Jefferson drives.	• Same as the no-action alternative plus ◦ Provide infrastructure for demonstrations and events. ◦ Allow no temporary event facilities, such as tents, stages, or vehicles, in the elm tree panels.
11.5 Access and Circulation: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Continue designated drop-off/ pick-up stops for visitor transportation and commercial tour buses. • Work with the city to remove vehicle parking on the north-south cross streets through the Mall (3rd, 4th, and 7th streets) within the east-west viewshed.	• Continue designated drop-off/ pick-up stops for visitor transportation and commercial tour buses. • Continue visitor transportation, commercial tour bus drop-offs, bicycles and other wheeled vehicles on Madison and Jefferson drives; occasionally restrict access for some events and national celebrations. • If determined feasible by engineering, security, geotechnical, and economic studies, provide an underground facility for paid visitor parking between 15th and 12th streets and entered from 15th Street.	• Continue designated drop-off/ pick-up stops for visitor transportation and commercial tour buses. • Construct a 14th Street vehicular tunnel to create a larger pedestrian-only area (one alternative in the *14th Street Bridge Corridor Study*).

TOPIC OR AREA	NO-ACTION ALTERNATIVE: CONTINUE CURRENT MANAGEMENT	PREFERRED ALTERNATIVE — PROVIDE A QUALITY VISITOR EXPERIENCE, PROTECT THE HISTORIC LANDSCAPE, AND ACCOMMODATE HIGH-USE LEVELS
Smithsonian Metro Station	*Opportunities, Problems, and Concerns (Existing Conditions):* The most popular transit entrance to the National Mall is the Smithsonian station. The name does not mention that this is the stop for the National Mall. The Smithsonian station is closed during highly attended events such as the Fourth of July celebration to prevent overcrowding on the Mall.	
Actions	• Work with the Washington Metropolitan Area Transit Authority to add the name of the National Mall to the Metro station; to reduce cost, coordinate timing of name change with the 2013 opening of the Dulles Corridor Metro project.	• Same as the no-action alternative plus ◦ Develop a welcome area on the Mall near 12th Street and Jefferson Drive (see actions for row 11.6).
Paving and Pedestrian Circulation	*Opportunities, Problems, and Concerns (Existing Conditions):* Pedestrian walks between Constitution Avenue and Madison Drive NW and between Independence Avenue and Jefferson Drive SW need improvements to enhance the aesthetic and functional qualities of the streetscape and to improve pedestrian safety, circulation, and connectivity between downtown and the National Mall, as outlined in the *Framework Plan*. Gravel-paved walkways are difficult for people with disabilities, They are slippery, dust can create breathing problems, and gravel migrates everywhere since it not contained by curbing (cut for budget reasons). The McMillan and the Skidmore, Owings and Merrill plans included curbs to define turf and tree areas.	
Actions	• Maintain gravel and exposed aggregate paving; deal with maintenance problems as budgets and staffing allow.	• As part of a coordinated paving plan for the National Mall, remove gravel from pathways and former roadbeds, and pave walks and other areas with universally accessible materials to improve circulation, facilitate events, and maintain improved landscape conditions; include materials suitable and desirable for jogging. • Widen some walks and pave some turf areas to enhance the visitor experience by providing space for orientation, rest and enjoyment, First Amendment demonstrations, and event venues; allow for more efficient park operations. • Improve the pedestrian circulation system and better connect Union Square, the Washington Monument, and museums and other areas adjacent to the east end of the National Mall. Remove some north-south walks between 7th and 9th streets. Design crosswalks on 3rd, 4th, 7th, and 14th streets, as well as on Madison and Jefferson drives, to identify and continue pedestrian connections and patterns on the Mall and emphasize the pedestrian experience.

ALTERNATIVE A — FOCUS ON THE HISTORIC LANDSCAPE AND EDUCATION	ALTERNATIVE B — FOCUS ON A WELCOMING NATIONAL CIVIC SPACE FOR PUBLIC GATHERINGS, EVENTS, AND HIGH-USE LEVELS	ALTERNATIVE C — FOCUS ON URBAN OPEN SPACE, URBAN ECOLOGY, RECREATION, AND HEALTHY LIFESTYLES
Smithsonian Metro Station: Opportunities, Problems, and Concerns (Existing Conditions) — See facing page.		
• Same as the no-action alternative.	• Same as the no-action alternative plus ◦ Construct a custom-designed, covered entry over the Metro entrance on the Mall; locate additional Metro signs to identify the station entrance on the Mall. ◦ Develop a welcome area on the Mall near 12th St. and Jefferson Drive (see actions for row 11.6).	• Same as the no-action alternative.
Paving and Pedestrian Circulation: Opportunities, Problems, and Concerns (Existing Conditions) — See facing page.		
• Refurbish gravel walkways, and keep exposed aggregate walkways, but create edging or curbs around grass panels to contain gravel.	• Develop a coordinated paving plan. • Replace gravel on walkways with universally accessible surfaced walks, and provide surfaces in other areas to facilitate events and to maintain improved landscape conditions. • Widen some walks and pave some turf areas for event venues.	• Replace gravel on walkways with sustainable, universally accessible surface materials; add soft pavement edges; and eliminate some north-south walks between 7th and 9th streets to increase recreation space on center lawn panels.

TOPIC OR AREA	NO-ACTION ALTERNATIVE: CONTINUE CURRENT MANAGEMENT	PREFERRED ALTERNATIVE — PROVIDE A QUALITY VISITOR EXPERIENCE, PROTECT THE HISTORIC LANDSCAPE, AND ACCOMMODATE HIGH-USE LEVELS
11.6 Visitor Information, Education, and Enjoyment	*Opportunities, Problems, and Concerns (Existing Conditions):* Outdated orientation maps are located around the Mall. In summer 2008 the National Park Service opened a contact station on the Mall at the Smithsonian Metro station.	
Actions	• Continue to provide a temporary visitor contact station at the Metro station; improve orientation maps and information here and elsewhere on the Mall.	• Create a paved welcome plaza near the Metro station entrance as the primary pedestrian entrance for the National Mall, including a visitor contact station, multiple orientation maps, and a large tactile model or pavement map of the National Mall. • Provide electronic information and a listing of events and activities. • Increase coordination of visitor information with museums surrounding the Mall.
Education	*Opportunities, Problems, and Concerns (Existing Conditions):* There are no educational panels.	
Actions	• Provide no additional education.	• Provide educational information about First Amendment demonstrations, the Mall as the nation's premier civic space, and the development of the federal city around the Mall. • Regularly schedule ranger programs, walks.
Visitor Recreation	*Opportunities, Problems, and Concerns (Existing Conditions):* Informal or passive recreation, such as picnicking, sunning, napping, reading, and enjoying views, occurs everywhere. The center grass panels are used for informal recreation (e.g., ball games, kite flying, Frisbee). The Smithsonian Institution operates a carousel under an agreement.	
Actions	• Continue existing recreational opportunities. • Provide entertainment at special events. • Update the agreement with the Smithsonian Institution for the carousel.	• Same as the no-action alternative plus ◦ Provide cooling interactive water features in some locations. ◦ Encourage small-scale entertainment, along with entertainment at events. ◦ Reconfigure the center grass panels near the 8th Street cross axis to provide larger spaces for informal recreation.
11.7 Visitor Amenities	*Opportunities, Problems, and Concerns (Existing Conditions):* Four refreshment stands provide souvenirs and food sales. There are nine tables and seating at each stand. The architecture is understated and timeless, and high-quality materials are used. However, the NPS identity and management are not apparent, and there are no nearby restrooms. There are 540 benches, 4 drinking fountains, 237 trash cans, and 4 bike racks on the Mall. Visitor facilities and adjacent museums must be accessed through security checkpoints.	
Actions	• Continue the four refreshment stands and retail (souvenir) sales.	• Provide a paved welcome plaza near the Metro station for visitor information and orientation; provide high-capacity restrooms, shade, and group seating. • Provide additional shaded seating along north-south sidewalks within the elm tree panels, including some group seating areas. • Add small interactive water features as a means for visitors to cool off during the summer, along with containers with plantings for seasonal color and enjoyment. • To enhance the Mall as well as pedestrian safety, increase pedestrian lighting levels (to supplement the historic Olmsted lights).

ALTERNATIVE A — FOCUS ON THE HISTORIC LANDSCAPE AND EDUCATION	ALTERNATIVE B — FOCUS ON A WELCOMING NATIONAL CIVIC SPACE FOR PUBLIC GATHERINGS, EVENTS, AND HIGH-USE LEVELS	ALTERNATIVE C — FOCUS ON URBAN OPEN SPACE, URBAN ECOLOGY, RECREATION, AND HEALTHY LIFESTYLES
11.6 Visitor Information, Education, and Enjoyment: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Same as the no-action alternative plus ◦ Provide a large tactile model of the National Mall for orientation. ◦ Provide electronic information and listings of events and activities. ◦ Increase coordination of visitor information with museums surrounding the Mall.	• Same as the no-action alternative.
Education: Opportunities, Problems, and Concerns (Existing Conditions) — See facing page.		
• Provide educational information about the history of the Mall and the development of the federal city.	• Provide educational information about First Amendment demonstrations and the Mall as the nation's premier civic space. • Regularly schedule ranger programs or walks.	• Provide educational information about recreational opportunities and ecologically sustainable management of designed landscapes.
Visitor Recreation: Opportunities, Problems, and Concerns (Existing Conditions) — See facing page.		
• Same as the no-action alternative, except ◦ Remove the carousel.	• Same as the no-action alternative plus ◦ Provide interactive water features in some locations. ◦ Encourage entertainment. ◦ Provide portable lawn chair rentals.	• Reconfigure the center grass panels near the 8th Street cross axis to provide larger spaces for informal recreation (e.g., pickup games). • Provide interactive water features at some locations. • Provide a children's play area.
11.7 Visitor Amenities: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Construct small restroom facilities near existing refreshment stands using a similar architectural style. Redesign paving near refreshment stands to better accommodate use.	• Construct small restroom facilities near existing refreshment stands using a similar architectural style. Redesign paving near refreshment stands to better accommodate use and to allow for expanded service as needed. • Provide a larger multi-agency restroom at the Smithsonian Metro stop. • Provide supplemental lighting along Mall walkways in addition to the Olmsted lights.	• Redesign paving near refreshment stands to allow for expand service areas as needed. • Provide small restroom facilities near refreshment stands. • Add a playground. • To enhance the Mall increase pedestrian lighting and add floral displays.

TOPIC OR AREA	NO-ACTION ALTERNATIVE: CONTINUE CURRENT MANAGEMENT	PREFERRED ALTERNATIVE — PROVIDE A QUALITY VISITOR EXPERIENCE, PROTECT THE HISTORIC LANDSCAPE, AND ACCOMMODATE HIGH-USE LEVELS
11.7 Visitor Amenities: Actions (cont.)		• Near all refreshment stands emphasize a pleasant atmosphere with elements such as additional seating at tables, colorful umbrellas, flower boxes, or display fountains for enjoyment and comfort. • Construct a higher capacity restroom near 12th Street (north of the central grass panel) designed for partial closure during lower use. • Construct a small, architecturally compatible visitor restroom with two to four potentially self-cleaning stalls near the Air and Space Museum refreshment stand. • Work with the National Gallery of Art and the Smithsonian Institution to improve access to food service and restrooms for National Mall visitors.
11.8 Health, Public Safety, and Security	*Opportunities, Problems, and Concerns (Existing Conditions):* The Mall is heavily used, and there have been public concerns about night lighting levels and safety. U.S. Park Police in vehicles frequently patrol the area.	
Actions	• Continue to provide safe public experiences.	• Same as the no-action alternative plus ◦ Add supplemental lighting. ◦ Add emergency call stations. ◦ Add interactive water features and consider temporary cooling misters.
THE WASHINGTON MONUMENT		
12. WASHINGTON MONUMENT One of the five presidential memorials on the National Mall, the Washington Monument will continue to be a historic character-defining feature and the visual orientation point for Washington, D.C. The total area of the monument and grounds is approximately 106 acres.		
12.1 Tours	*Opportunities, Problems, and Concerns (Existing Conditions):* In the past tours were offered from 9 a.m. to 5 p.m. daily, with free tickets available onsite. Visitors may order tickets online for a fee. Since summer 2008 hours have been extended to 10 p.m. seasonally. The interior of the monument includes 195 special commemorative stones that visitors may see as the elevator pauses on the way down, or during special walk-down tours.	
Actions	• Extend hours at the Washington Monument to 10 p.m. seasonally.	• Extend hours at the Washington Monument to 10 p.m. seasonally.
13. WASHINGTON MONUMENT GROUNDS The Washington Monument grounds extend from Constitution Avenue to Maine Avenue, and from 14th Street to 17th Street. The German-American Friendship Garden is at the north edge of grounds on Constitution Avenue, across from the Ellipse. The north grounds are highly used area for demonstrations, special events, national celebrations, civic activities, and recreation. The south grounds extend to the Tidal Basin.		
13.1 Vision Emphasis	• Existing Services (Limited) Would Be Continued On The Washington Monument Grounds. • The 2003 Olin landscape plan would be updated and implemented.	• The grounds of the Washington Monument would continue to see high volumes of use, including large demonstrations and special events, but infrastructure would be provided to make them more sustainable. • A high-quality multipurpose facility would replace the Sylvan Theater, nearby restroom. • The condition of the German-American Friendship Garden would be improved. • The 2003 Olin landscape plan would be updated and implemented.

ALTERNATIVE A — FOCUS ON THE HISTORIC LANDSCAPE AND EDUCATION	ALTERNATIVE B — FOCUS ON A WELCOMING NATIONAL CIVIC SPACE FOR PUBLIC GATHERINGS, EVENTS, AND HIGH-USE LEVELS	ALTERNATIVE C — FOCUS ON URBAN OPEN SPACE, URBAN ECOLOGY, RECREATION, AND HEALTHY LIFESTYLES
11.8 Health, Public Safety, and Security: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Same as the no-action alternative plus ◦ Add supplemental lighting. ◦ Add emergency call stations. ◦ Add interactive water features and cooling misters.	• Same as the no-action alternative plus ◦ Add interactive water features and misters as landscape features/destinations to improve visitor health and safety.
THE WASHINGTON MONUMENT		
12. WASHINGTON MONUMENT See facing page.		
12.1 Tours: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Same as the no-action alternative.	• Same as the no-action alternative.
13. WASHINGTON MONUMENT GROUNDS See facing page.		
• The Washington Monument grounds would provide a high-quality indoor facility for visitor services and food service. • The condition of the German-American Friendship Garden would be improved.	• The grounds of the Washington Monument would continue to see high volume of use, including large demonstrations and special events, plus infrastructure to make them more sustainable. • A high-quality multipurpose facility would replace the Sylvan Theater and nearby restrooms.	• The Washington Monument grounds would provide high-quality indoor/outdoor visitor services (food service, retail, restrooms), with views of the monument. A new entertainment venue would be provided at the Sylvan Theater.

TOPIC OR AREA	NO-ACTION ALTERNATIVE: CONTINUE CURRENT MANAGEMENT	PREFERRED ALTERNATIVE — PROVIDE A QUALITY VISITOR EXPERIENCE, PROTECT THE HISTORIC LANDSCAPE, AND ACCOMMODATE HIGH-USE LEVELS
13.2 Historic Resources	*Opportunities, Problems, and Concerns (Existing Conditions):* Monument Lodge has been recently renovated for visitor services. Survey Lodge is used as the main visitor contact station and for park operations.	
Actions	• Continue present uses.	• Continue to adaptively use Monument Lodge for visitor services. • Adaptively reuse Survey Lodge for increased visitor services.
13.3 Demonstrations, Special Events, and National Celebrations	*Opportunities, Problems, and Concerns (Existing Conditions):* The Washington Monument grounds north of Independence Avenue are highly used for demonstrations and special events, national celebrations, and civic activities, as well as recreation.	
Actions	• Consistent with the First Amendment and federal regulations, continue to fully accommodate demonstrations. • Consistent with federal regulations, accommodate special events, national celebrations, and civic activities.	• Same as the no-action alternative plus ◦ In several locations on the north grounds develop infrastructure (utility connections; space for portable restrooms, operations, and media) to support demonstrations, national celebrations, special events, and performances.
13.4 Access and Circulation	*Opportunities, Problems, and Concerns (Existing Conditions):* Maine Avenue SW, Independence Avenue SW, and Raoul Wallenberg Place SW, which border the south grounds, are major commuter roads where pedestrians frequently jaywalk. The south grounds are cut off by roadways from both the monument and the Tidal Basin. Commuter and recreational bicyclists share sidewalks with pedestrians, who travel at much slower speeds and are frequently focused on views. Tour bus drop-offs are provided on Independence Avenue SW. There are 8 parking spaces for visitors with disabilities, 9 tour bus spaces, and 1 taxi stand. Survey Lodge has 26 staff parking spaces. There is a visitor transit stop with seating, an orientation map, and a drinking fountain on the west side of Raoul Wallenberg Place SW. There are 10 tour bus drop-off locations on the east side of Raoul Wallenberg Place. Trucks are restricted on 15th Street.	
Actions	• Update the transit stop when the *Visitor Transportation Study* is implemented. • Maintain the tour bus drop-off area.	• Same as the no-action alternative plus ◦ Improve the pedestrian environment with longer crossing times, expanded paving near major crosswalks, enhanced crosswalks, and better pedestrian signs (at Independence and Constitution avenues on 14th, 15th, and 17th streets). ◦ Provide additional parking for visitors with disabilities at the new multipurpose facility and the Survey Lodge. ◦ Redesign roads, parking, bicycle, and pedestrian circulation south of Independence Avenue to reconnect park areas, to improve safety and recreational opportunities, and to improve pedestrian connections between the Washington Monument grounds and the Tidal Basin, as well as to the southwest waterfront and East Potomac Park, and to highlight north-south views between the Jefferson Memorial and the White House. ◦ Construct a separate dedicated bike trail.

ALTERNATIVE A — FOCUS ON THE HISTORIC LANDSCAPE AND EDUCATION	ALTERNATIVE B — FOCUS ON A WELCOMING NATIONAL CIVIC SPACE FOR PUBLIC GATHERINGS, EVENTS, AND HIGH-USE LEVELS	ALTERNATIVE C — FOCUS ON URBAN OPEN SPACE, URBAN ECOLOGY, RECREATION, AND HEALTHY LIFESTYLES
13.2 Historic Resources: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Continue to adaptively use Monument Lodge for visitor services. • Adaptively reuse Survey Lodge for increased visitor services.	• Same as alternative B.
13.3 Demonstrations, Special Events, and National Celebrations: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Same as the no-action alternative plus ◦ In several locations on the north grounds develop infrastructure (utility connections; space for portable restrooms, operations, and media) to support demonstrations, national celebrations, special events, performances.	• Same as the no-action alternative.
13.4 Access and Circulation: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Same as the no-action alternative plus ◦ Construct pedestrian underpasses or bridges between 14th and 15th streets near Madison and Jefferson drives; expand paving near major crosswalks. ◦ Improve crosswalks (Independence Avenue, Maine Avenue, and Raoul Wallenberg Place). ◦ Provide additional parking for people with disabilities near the new multipurpose visitor facility. ◦ If determined feasible by engineering, security, geotechnical, and economic studies, provide an underground paid parking facility below the south grounds recreation fields, with pedestrian access under Independence Avenue.	• Same as the no-action alternative plus ◦ Construct a 14th Street vehicular tunnel to create a larger pedestrian-only area. ◦ Make crosswalks more visible to drivers, widen pedestrian waiting areas, and increase crossing times on 15th Street. ◦ Redesign roads, parking, bicycle, and pedestrian circulation to reconnect park areas, improve safety and recreational opportunities, and connect to the southwest waterfront and East Potomac Park. ◦ Construct a separate bike trail. ◦ Provide a turfed surface over Maine Avenue to connect the monument grounds with the Tidal Basin area.

TOPIC OR AREA	NO-ACTION ALTERNATIVE: CONTINUE CURRENT MANAGEMENT	PREFERRED ALTERNATIVE — PROVIDE A QUALITY VISITOR EXPERIENCE, PROTECT THE HISTORIC LANDSCAPE, AND ACCOMMODATE HIGH-USE LEVELS
13.5 Visitor Information, Education, and Enjoyment	*Opportunities, Problems, and Concerns (Existing Conditions):* The National Park Service issues permits for league use of ballfields; no equipment, backstops, or bases are provided. Informal games and recreational activities take place around the grounds. Half of the area is rested every winter (fencing prevents use). The south grounds have a multipurpose recreation field. The Sylvan Theater hosts concerts and performances; however, the facilities are outdated and are not well placed for hillside viewing.	
Actions	• Continue to use the Sylvan Theater as a performance venue for an audience of several thousand people. • Continue informal games and recreational activities around the grounds, and league ball games on the north side of the grounds and on the south grounds fields.	• Provide visitor information, education, and entertainment at multipurpose visitor facility. • Provide educational information about George Washington, the Washington Monument, the history of the National Mall, and the German-American Friendship Garden. • Provide exhibits at the Survey Lodge about the building's history, and potentially add recreation equipment rentals (such as bicycles and kites). • Continue informal games and recreational activities around the grounds, and league ball games on the north side of the grounds.
13.6 Visitor Amenities	*Opportunities, Problems, and Concerns (Existing Conditions):* Survey Lodge is the main visitor contact station; it is off the main circulation routes, not easily identifiable, and hidden by overgrown vegetation. Monument Lodge offers a bookstore, ticketing, and restrooms. The outdated circular restroom near 15th Street and Independence Avenue SW is overwhelmed by high use, and the design is not in keeping with the site's historic character. There are 95 benches, 134 trash cans, 11 drinking fountains, 6 phone booths, 4 bike racks. Food and retail are located in a temporary facility and must be relocated to allow for construction of the National Museum of African American History and Culture. The public was invited to comment about various locations during the initial review of alternatives. Contractual agreements are required for food and retail.	
Actions	• Relocate food and retail services to a permanent location.	• Replace facilities in the Sylvan Theater area with a new, high-quality, indoor/outdoor, multipurpose visitor service facility that would be a pleasant destination and a model of adaptable, convenient space capable of meeting the needs of early ticket morning queues, information, education, waysides, food service, retail, restrooms sized for high volumes of use, office space, and various programs, events, performances, and entertainment. Locate below the level of roads; orient to muffle noise and provide views of the monument. For performances accommodate up to 3,000 people on the monument hillside. Keep facility open from early morning for monument ticketing until evening. • Remove the circular restroom. • Adaptively reuse the Survey Lodge for services and parking for visitors with disabilities, information, and recreation equipment rentals. Improve the lodge's access and visibility.

ALTERNATIVE A — FOCUS ON THE HISTORIC LANDSCAPE AND EDUCATION	ALTERNATIVE B — FOCUS ON A WELCOMING NATIONAL CIVIC SPACE FOR PUBLIC GATHERINGS, EVENTS, AND HIGH-USE LEVELS	ALTERNATIVE C — FOCUS ON URBAN OPEN SPACE, URBAN ECOLOGY, RECREATION, AND HEALTHY LIFESTYLES
13.5 Visitor Information, Education, and Enjoyment: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Provide visitor information, education, and entertainment at a new multipurpose visitor facility. • Continue informal games and recreational activities around the grounds, and league ball games on the north side of the grounds.	• Similar to the no-action alternative, except ◦ Reconstruct and reorient the Sylvan Theater to improve viewing.
13.6 Visitor Amenities: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Replace the circular restroom with a larger facility having a ranger information station. • Relocate food and retail services to a permanent, partially underground, grass-roofed facility between 14th and 15th streets.	• Replace facilities in the Sylvan Theater area with a new, high-quality, indoor/outdoor, visitor service facility that would be a pleasant destination and a model of adaptable, convenient space capable of meeting the needs of early morning queues, office space, and various daytime programs, events, performances, as well as evening entertainment. • Remove the circular restroom. • Rehabilitate the Survey Lodge to provide services for people with disabilities. • Continue to provide ticketing and a contact station in the Monument Lodge. • Coordinate and improve park furniture. • Relocate food and retail services, plus the bookstore, to the new	• Replace the circular restroom. • Install automated, self-cleaning restrooms near Constitution Avenue between 16th and 17th streets. • Relocate food and retail services to a permanent facility with a large restroom north of Independence Avenue between 14th and 15th streets.

TOPIC OR AREA	NO-ACTION ALTERNATIVE: CONTINUE CURRENT MANAGEMENT	PREFERRED ALTERNATIVE — PROVIDE A QUALITY VISITOR EXPERIENCE, PROTECT THE HISTORIC LANDSCAPE, AND ACCOMMODATE HIGH-USE LEVELS
13.6 Visitor Amenities: Actions (cont.)		• Relocate food and retail services, plus the bookstore, to the new destination, multipurpose facility (food service, stage, retail) on the northwest corner of 15th Street and Independence Avenue. • Continue to use Monument Lodge for visitor services and restrooms.
13.7 Operations	*Opportunities, Problems, and Concerns (Existing Conditions):* Ranger offices are located in the Survey Lodge. A heliport on the west side of the grounds (between existing walkways) is used for emergencies and occasionally for state arrivals. Walkways can accommodate only part of the helicopter wheels, and turf damage results. Heavier helicopters are expected to increase damage.	
Actions	• Continue current conditions.	• Provide ranger offices at the multipurpose facility or relocate to another facility off the National Mall. • Accommodate periodic helicopter landings by providing a landing surface in conjunction with upgrading the pedestrian circulation system and providing infrastructure for demonstrations and events.
WEST POTOMAC PARK (NORTH OF INDEPENDENCE AVENUE)		
14. CONSTITUTION GARDENS Constitution Gardens (52 acres) was developed for the Bicentennial and was intended for event use. It is the site of the Memorial to the 56 Signers of the Declaration of Independence, which is located on an island in the lake, and it provides a pastoral setting for passive recreation and a respite as visitors travel between memorials. This area will continue to accommodate demonstrations and special events.		
14.1 Vision Emphasis	• Constitution Gardens would continue as a pleasant respite for visitors walking between memorials.	• Constitution Gardens would be a restful, high-quality, multipurpose visitor destination that would provide food service and opportunities for entertainment, enjoyment, and recreation. The area would be a pleasant place for visitors to relax as they tour the National Mall. Present conditions would be improved, and the pedestrian circulation system would be upgraded with coordinated paving and improved operational access.
14.2 Historic Resources	*Opportunities, Problems, and Concerns (Existing Conditions):* The Lockkeeper's House at 17th and Constitution is one of the oldest structures in the city. Relocated to this site around 1915, it is somewhat hidden by overgrown vegetation and interferes with visibility at the intersection, creating safety hazards for turning vehicles and pedestrians. It is used for storage.	
Actions	• Continue to use the Lockkeeper's House for storage.	• Potentially relocate the canal Lockkeeper's House away from the corner of 17th and Constitution Avenue NW and adaptively reuse in conjunction with a new multipurpose facility, and coordinate use with Potomac Park levee.

ALTERNATIVE A — FOCUS ON THE HISTORIC LANDSCAPE AND EDUCATION	ALTERNATIVE B — FOCUS ON A WELCOMING NATIONAL CIVIC SPACE FOR PUBLIC GATHERINGS, EVENTS, AND HIGH-USE LEVELS	ALTERNATIVE C — FOCUS ON URBAN OPEN SPACE, URBAN ECOLOGY, RECREATION, AND HEALTHY LIFESTYLES
	destination, multipurpose facility (food service, stage, retail) on the northwest corner of 15th Street and Independence Avenue.	
13.7 Operations: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Provide office space for rangers. • Accommodate periodic helicopter landings by providing a landing surface in conjunction with upgrading the pedestrian circulation system and providing infrastructure for demonstrations and events.	• Same as the no-action alternative.
WEST POTOMAC PARK (NORTH OF INDEPENDENCE AVENUE)		
14. CONSTITUTION GARDENS See facing page.		
• Same as the no-action alternative.	• Constitution Gardens would be a restful, high-quality, multipurpose visitor destination, with food service and opportunities for entertainment and enjoyment. The area would be a pleasant place for pedestrians to relax as they tour the National Mall. Present conditions would be improved, and the pedestrian circulation system would be upgraded with coordinated paving and improved operational access.	• Constitution Gardens would be a restful, quality visitor destination, with food service.
14.2 Historic Resources: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Keep the Lockkeeper's House in its current location, preserve the building, but improve its visibility and appearance. • Reuse as a visitor information station.	• Relocate the Lockkeeper's House slightly away from the intersection for safety reasons. • Preserve structure and rehabilitate interior; staff for visitor information. • Improve pedestrian and vehicular movements at the intersection.	• Same as alternative B.

TOPIC OR AREA	NO-ACTION ALTERNATIVE: CONTINUE CURRENT MANAGEMENT	PREFERRED ALTERNATIVE — PROVIDE A QUALITY VISITOR EXPERIENCE, PROTECT THE HISTORIC LANDSCAPE, AND ACCOMMODATE HIGH-USE LEVELS
14.3 Natural Resources		
Soils and Vegetation	*Opportunities, Problems, and Concerns (Existing Conditions):* Poor quality soils were used when the area was constructed, and some trees were encircled with asphalt pavement, which has stunted normal tree growth. Thousands of bulbs were planted but have been removed.	
Actions	• Manage present soil and vegetation conditions as budgets and staffing allow. • Continue the bulb replanting program.	• Rejuvenate soil and vegetation conditions. • Continue the bulb replanting program (same as the no-action alternative).
Lake	*Opportunities, Problems, and Concerns (Existing Conditions):* The concrete-lined shallow lake has water quality problems. Small pumps recirculate water in several areas to improve water quality. Geese and other waterfowl degrade the water and contribute to algae, unpleasant odors, and insect problems.	
Actions	• Maintain the concrete-lined lake; address water quality problems as budgets and staffing allow.	• Reconstruct the lake to be self-sustaining, and install circulating pumps and a filtration system. Explore a nonpotable water source for filling the lake. • Design the lake to be part of the stormwater retention system to control flooding from urban drainage.
14.4 Demonstrations, Special Events, and National Celebrations	*Opportunities, Problems, and Concerns (Existing Conditions):* A limited number of events (primarily related to the Vietnam Veterans Memorial) occur. This area is large enough to accommodate more demonstrations and events.	
Actions	• Consistent with the First Amendment and federal regulations, continue to fully accommodate demonstrations. • Consistent with federal regulations, accommodate special events.	• Same as the no-action alternative plus ◦ Widen some walkways and intersections to create venues for smaller events (exhibits, tents, performances); also see row 14.7. ◦ Develop infrastructure (e.g., utilities and communication systems) to facilitate demonstrations and events.
14.5 Access and Circulation	*Opportunities, Problems, and Concerns (Existing Conditions):* The visitor transit stop for Constitution Gardens and the World War II Memorial is on Constitution Avenue NW. There are 3 tour bus drop-off spaces (during non-rush hours), 7 tour bus parking spaces, and 7 parking spaces for visitors with disabilities. There are public bus stops. The Smithsonian–National Gallery of Art Circulator provides seasonal service on Independence and Constitution avenues west to 17th Street.	
Actions	• Maintain present access and parking.	• Same as the no-action alternative.
Walkways	*Opportunities, Problems, and Concerns (Existing Conditions):* Asphalt walks embedded with small rocks (to resemble gravel) are deteriorating and are difficult to maintain. Some areas do not meet requirements for visitors with disabilities.	
Actions	• Repair walks.	• Repave walks as part of a coordinated paving system for the National Mall. • Reconfigure some walks to accommodate the Potomac Park levee and provide accessible routes.

ALTERNATIVE A — FOCUS ON THE HISTORIC LANDSCAPE AND EDUCATION	ALTERNATIVE B — FOCUS ON A WELCOMING NATIONAL CIVIC SPACE FOR PUBLIC GATHERINGS, EVENTS, AND HIGH-USE LEVELS	ALTERNATIVE C — FOCUS ON URBAN OPEN SPACE, URBAN ECOLOGY, RECREATION, AND HEALTHY LIFESTYLES
14.3 Natural Resources		
Soils and Vegetation: Opportunities, Problems, and Concerns (Existing Conditions) — See facing page.		
• Rejuvenate soil and vegetation conditions. • Continue the bulb replanting program (same as the no-action alternative).	• Same as alternative A.	• Same as alternative A.
Lake: Opportunities, Problems, and Concerns (Existing Conditions) — See facing page.		
• Reconstruct the lake to be self-sustaining for plants; remove fish and do not restock.	• Reconstruct the lake as a very shallow pool that could be drained for demonstrations and special events.	• Reconstruct the lake to be self-sustaining for fish and plants; explore a nonpotable water source for filling the lake. • Design the lake to be part of the stormwater retention system to control flooding from urban drainage.
14.4 Demonstrations, Special Events, and National Celebrations: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Same as the no-action alternative plus ◦ Redesign circulation and the lake to increase space for demonstrations and special events; also see row 0 under "Lake." ◦ Develop infrastructure (e.g., utilities and communication systems) to facilitate demonstrations and events.	• Same as the no-action alternative.
14.5 Access and Circulation: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Same as the no-action alternative.	• Same as the no-action alternative.
Walkways: Opportunities, Problems, and Concerns (Existing Conditions) — See facing page.		
• Repave walks.	• Repave walks as part of a coordinated paving system for the National Mall. • Widen some walkways to create venues for smaller events (exhibits, tents, performances).	• Similar to alternative B plus ◦ Provide space for refreshment carts.

TOPIC OR AREA	NO-ACTION ALTERNATIVE: CONTINUE CURRENT MANAGEMENT	PREFERRED ALTERNATIVE — PROVIDE A QUALITY VISITOR EXPERIENCE, PROTECT THE HISTORIC LANDSCAPE, AND ACCOMMODATE HIGH-USE LEVELS
14.6 Visitor Information, Education, and Enjoyment	*Opportunities, Problems, and Concerns (Existing Conditions):* This is a pleasant environment for relaxation. Requests have been received for additional entertainment venues. The lake was planned to accommodate model boats, but never has. The area is little used for recreation. Ice-skating is allowed on natural ice when conditions are safe.	
Actions	• No planned entertainment or recreation.	• Through educational information address the history of the area (the Washington Canal and the Lockkeeper's House), land reclamation in the Potomac Park, flood control, and the role and importance of the Declaration of Independence and the Constitution. • Provide visitor information, education, and opportunities for enjoyment at the new multipurpose facility at the east end of the lake, in conjunction with adaptively reusing the Lockkeeper's House; consider providing themed food and entertainment. • Ensure that recreational activities would not conflict with commemorative experiences at nearby memorials. Explore additional recreational activities, such as fishing or model boating. Explore children's play opportunities making use of natural elements, boulders, sculpture or interactive water features, and pavement patterns or educational activities and programs.
14.7 Visitor Amenities	*Opportunities, Problems, and Concerns (Existing Conditions):* The refreshment stand and circular restroom are outdated, not in a high use area, and difficult to maintain. There are 47 benches, 37 trash cans, and 1 drinking fountain.	
Actions	• Maintain the present facilities (refreshment stand and retail), with no improvements.	• Provide coordinated visitor facilities, including food service, retail, and restrooms, in the paved area at the east end of the lake. Potentially adaptively reuse the relocated Lockkeeper's House (see actions for row 14.2). • Provide a flexible performance space, stage, or gazebo in or near the east end of the lake, taking advantage of the nearby rolling terrain to accommodate an audience of several thousand; provide utilities; control program sound levels to ensure respect for the ambience of nearby memorials. • Replace the existing restrooms with a facility designed to be more sensitive to its surroundings. • Consider rehabilitating and adaptively reusing the existing refreshment stand.

ALTERNATIVE A — FOCUS ON THE HISTORIC LANDSCAPE AND EDUCATION	ALTERNATIVE B — FOCUS ON A WELCOMING NATIONAL CIVIC SPACE FOR PUBLIC GATHERINGS, EVENTS, AND HIGH-USE LEVELS	ALTERNATIVE C — FOCUS ON URBAN OPEN SPACE, URBAN ECOLOGY, RECREATION, AND HEALTHY LIFESTYLES
14.6 Visitor Information, Education, and Enjoyment: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Provide an outdoor entertainment stage (in the lake near a multi-purpose facility), with informal seating around the lake for several thousand people.	• Add recreation equipment rentals (model boats, chairs). • Add a children's play area. • Add an informal interactive water feature.
14.7 Visitor Amenities		
• Replace the refreshment stand and restrooms.	• Develop a multipurpose facility in the paved asphalt area as previously designed, with a unique character that could accommodate approximately 130 people indoors and 200 outside. • Develop a flexible, multi-use outdoor stage that could support performances of thematic entertainment (e.g., World War II era music, Latin American music). • Replace the existing restrooms.	• Similar to alternative B, except remove the restroom and refreshment stand and replace with a food service facility and new restrooms.

TOPIC OR AREA	NO-ACTION ALTERNATIVE: CONTINUE CURRENT MANAGEMENT	PREFERRED ALTERNATIVE — PROVIDE A QUALITY VISITOR EXPERIENCE, PROTECT THE HISTORIC LANDSCAPE, AND ACCOMMODATE HIGH-USE LEVELS
15. VIETNAM VETERANS MEMORIAL The 5.8-acre memorial honors those who served during the Vietnam War. As previously noted, an underground memorial center will be constructed by others west of Henry Bacon Drive. Except for official annual Memorial Day and Veterans Day commemorative ceremonies, federal regulations prohibit demonstrations and special events in certain areas of the memorial.		
15.1 Demonstrations, Special Events, and National Celebrations	*Opportunities, Problems, and Concerns (Existing Conditions):* First Amendment demonstration sites related to the Vietnam Veterans Memorial (small structures with displays) are present along the sidewalk of the Lincoln Memorial.	
Actions	• See actions for row 18.2.	• See actions for row 18.2.
15.2 Access and Circulation	*Opportunities, Problems, and Concerns (Existing Conditions):* Access and circulation may need to revised as a result of the new Vietnam Veterans Memorial Center.	
Actions	• Examine circulation patterns and related pedestrian amenities (lighting, name catalogs, post-and-chain fencing).	• Examine circulation patterns and related pedestrian amenities (lighting, name catalogs, post-and-chain fencing).
15.3 Visitor Information, Education, and Enjoyment	*Opportunities, Problems, and Concerns (Existing Conditions):* The visitor contact station provides information, and rangers and volunteers lead programs. Catalogs listing names on the wall are provided in several locations. Wayside exhibits provide additional information.	
Actions	• Continue living history and volunteer interpretation.	• Same as the no-action alternative plus ◦ Provide educational information about the history of the memorial and its role on the National Mall.
Opportunities for Contemplation and Rest	*Opportunities, Problems, and Concerns (Existing Conditions):* No seating is provided close to the wall so older visitors can pause to read and contemplate the names.	
Actions	• No further action.	• Provide additional seating in the vicinity of the memorial.
16. LINCOLN MEMORIAL One of the five presidential memorials on the National Mall, the Lincoln Memorial will continue to be a historic character-defining feature and the visual western terminus of the National Mall. The presidential memorial will remain a highly visited area also associated with civil rights history as well as the contributions of our 16th president. Demonstrations, special events, and national celebrations will continue on the grounds. The total area of the memorial and grounds is about 107 acres.		
16.1 Visitor Amenities		
Memorial Restrooms	*Opportunities, Problems, and Concerns (Existing Conditions):* The memorial restrooms are not staffed, are frequently overwhelmed by demand (the heaviest use area in the park), and need to be updated.	
Actions	• Renovate the memorial restrooms.	• Same as the no-action alternative plus ◦ Expand the restroom within the building footprint; monitor for safety and cleanliness.
Memorial Exhibits and Bookstore	*Opportunities, Problems, and Concerns (Existing Conditions):* A bookstore is located near the chamber. Exhibits and audiovisual presentations are on the lower level, along with the restrooms.	
Actions	• Relocate the bookstore to the lower level. • Renovate and expand the exhibit area.	• Same as the no-action alternative plus ◦ Upgrade exhibits, addressing Abraham Lincoln, the memorial's development, and the role of the memorial in civil rights and First Amendment demonstrations, as well as National Mall and Washington, D.C., history.

ALTERNATIVE A — FOCUS ON THE HISTORIC LANDSCAPE AND EDUCATION	ALTERNATIVE B — FOCUS ON A WELCOMING NATIONAL CIVIC SPACE FOR PUBLIC GATHERINGS, EVENTS, AND HIGH-USE LEVELS	ALTERNATIVE C — FOCUS ON URBAN OPEN SPACE, URBAN ECOLOGY, RECREATION, AND HEALTHY LIFESTYLES
15. VIETNAM VETERANS MEMORIAL See facing page.		
15.1 Demonstrations, Special Events, and National Celebrations: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• See actions for row 18.2.	• See actions for row 18.2.	• See actions for row 18.2.
15.2 Access and Circulation: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Same as the no-action alternative.	• Same as the no-action alternative.
15.3 Visitor Information, Education, and Enjoyment: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Same as the no-action alternative.	• Same as the no-action alternative.
Opportunities for Contemplation and Rest: Opportunities, Problems, and Concerns (Existing Conditions) — See facing page.		
• Same as the no-action alternative.	• Provide additional seating in the vicinity of the memorial.	• Same as the no-action alternative.
16. LINCOLN MEMORIAL See facing page.		
16.1 Visitor Amenities		
Memorial Restrooms: Opportunities, Problems, and Concerns (Existing Conditions) — See facing page.		
• Same as the no-action alternative plus ◦ Clean the restrooms more frequently during high-use times.	• Same as the no-action alternative plus ◦ Expand the restroom within the building footprint; monitor for safety and cleanliness.	• Same as alternative A.
Memorial Exhibits and Bookstore: Opportunities, Problems, and Concerns (Existing Conditions) — See facing page.		
• Same as the no-action alternative.	• Same as the no-action alternative.	• Same as the no-action alternative.

TOPIC OR AREA	NO-ACTION ALTERNATIVE: CONTINUE CURRENT MANAGEMENT	PREFERRED ALTERNATIVE — PROVIDE A QUALITY VISITOR EXPERIENCE, PROTECT THE HISTORIC LANDSCAPE, AND ACCOMMODATE HIGH-USE LEVELS
17. LINCOLN MEMORIAL GROUNDS The Lincoln Memorial grounds include three component cultural landscapes: the Reflecting Pool, the Memorial Circle and radial roads, and the Watergate area on the west edge of the National Mall. (The reflecting pool area is being addressed through the American Recovery and Reinvestment Act of 2009.)		
17.1 Historic Resources	*Opportunities, Problems, and Concerns (Existing Conditions):* The historic landscape design retains a great deal of integrity with existing plant materials, the elm walkways, and concentric plantings around the base of the memorial and at the Watergate steps. Concentric rows of elms affect where facilities (bicycle racks, etc.) can be located. The elm walkways, street tree grates, plantings around the base of the memorial, and the Watergate steps need to be rehabilitated or restored. Animal habitat needs to be addressed.	
Actions	• Preserve and protect the character of the historic landscape. • Implement recommendations of the Lincoln Memorial *Cultural Landscape Report*.	• Same as the no-action alternative plus ◦ Implement recommendations of the *Cultural Landscape Report*. ◦ Respect the integrity of historic planting plans.
17.2 Demonstrations, Special Events, and National Celebrations	*Opportunities, Problems, and Concerns (Existing Conditions):* The *Lincoln Memorial Guidelines for Special Events and Demonstrations* were developed in 1996 to supplement 36 CFR 7.96 and to fulfill statutory obligations to protect the Lincoln Memorial and its heritage for future generations. The guidelines address topics such as public access and operations, deliveries, temporary resource protection measures and requirements, temporary utilities, vibration, height limits, and equipment.	
Actions	• Consistent with the First Amendment and federal regulations, continue to fully accommodate demonstrations. • Consistent with federal regulations, continue to accommodate special events. • Revise the *Lincoln Memorial Guidelines* to reflect current conditions as the result of construction since 1996 (perimeter security and visitor facilities).	• Consistent with the First Amendment and federal regulations, continue to fully accommodate demonstrations. • Consistent with federal regulations, continue to accommodate special events. • Expand the *Lincoln Memorial Guidelines* to address the availability and use of proposed infrastructure designed to facilitate demonstrations and events (utilities, communication systems).
18. LINCOLN MEMORIAL GROUNDS: MEMORIAL CIRCLE AND RADIAL ROADS		
18.1 Historic Resources	*Opportunities, Problems, and Concerns (Existing Conditions):* The historic landscape retains its integrity.	
Actions	• Rehabilitate the historic landscape.	• Same as the no-action alternative plus ◦ Mitigate impacts on historic plantings when a restroom is constructed south of the memorial.
18.2 Demonstrations, Special Events, and National Celebrations	*Opportunities, Problems, and Concerns (Existing Conditions):* First Amendment demonstration sites related to the Vietnam Veterans Memorial (small structures with displays) are present along the sidewalk, but do not block the east-west view. Also see row 17.2.	
Actions	• Consistent with the First Amendment and federal regulations, continue to accommodate structures and displays related to the Vietnam Veterans Memorial.	• Same as the no-action alternative except ◦ Ensure that demonstrations are conducted in a manner and location that is consistent with improved circulation, security, and use.

ALTERNATIVE A — FOCUS ON THE HISTORIC LANDSCAPE AND EDUCATION	ALTERNATIVE B — FOCUS ON A WELCOMING NATIONAL CIVIC SPACE FOR PUBLIC GATHERINGS, EVENTS, AND HIGH-USE LEVELS	ALTERNATIVE C — FOCUS ON URBAN OPEN SPACE, URBAN ECOLOGY, RECREATION, AND HEALTHY LIFESTYLES
17. LINCOLN MEMORIAL GROUNDS See facing page.		
17.1 Historic Resources: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative plus ◦ Implement recommendations of the *Cultural Landscape Report*. ◦ Respect the integrity of historic planting plans.	• Same as alternative A.	• Same as alternative A.
17.2 Demonstrations, Special Events, and National Celebrations: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Same as the no-action alternative except ◦ Expand the *Lincoln Memorial Guidelines* to address the availability and use of proposed infrastructure designed to facilitate demonstrations and events (utilities, communication systems).	• Same as alternative B.
18. LINCOLN MEMORIAL GROUNDS: MEMORIAL CIRCLE AND RADIAL ROADS		
18.1 Historic Resources: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Same as the no-action alternative plus ◦ Mitigate impacts on historic plantings when a restroom is constructed south of the memorial.	• Same as the no-action alternative.
18.2 Demonstrations, Special Events, and National Celebrations: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative	• Same as the no-action alternative.	• Same as the no-action alternative.

TOPIC OR AREA	NO-ACTION ALTERNATIVE: CONTINUE CURRENT MANAGEMENT	PREFERRED ALTERNATIVE — PROVIDE A QUALITY VISITOR EXPERIENCE, PROTECT THE HISTORIC LANDSCAPE, AND ACCOMMODATE HIGH-USE LEVELS
18.3 Access and Circulation	*Opportunities, Problems, and Concerns (Existing Conditions):* Multiple tour bus arrivals can result in crowding at the memorial during the peak season. There are 18 tour bus drop-offs, 8 parking spaces for visitors with disabilities, and 4 taxi stands. Elevator access for visitors with disabilities can be challenging.	
Actions	• No further action.	• Same as the no-action alternative plus ◦ Better define pedestrian crossings.
18.4 Visitor Information, Education, and Enjoyment	*Opportunities, Problems, and Concerns (Existing Conditions):* Staffed information stations are provided for the Korean War Veterans Memorial and the Vietnam Veterans Memorial.	
Actions	• Continue staffed information stations.	• Consider removing the Vietnam Veterans Memorial information station once the Vietnam Veterans Memorial Center has been completed. • Consider replacing the Korean War Veterans Memorial information station.
18.5 Visitor Amenities		
South Concession Refreshment Stand	*Opportunities, Problems, and Concerns (Existing Conditions):* The south concession refreshment stand (opened summer 2007) has food and retail but no restrooms.	
Actions	• Retain the recently opened stand, which provides food and retail, but no restrooms.	• Construct a small restroom in the vicinity designed to appear as if it were part of the original facility design while respecting historic planting patterns.
North Concession Refreshment Stand	*Opportunities, Problems, and Concerns (Existing Conditions):* The north concession building (opened fall 2006) has food and retail but no restrooms. The future Vietnam Veterans Memorial Center will have restrooms, an information desk, and a bookstore.	
Actions	• Retain the recently opened concession refreshment stand, which provides retail and food, but no restrooms.	• Retain the concession refreshment stand (restrooms at the planned Vietnam Veterans Memorial Center).
19. LINCOLN MEMORIAL GROUNDS: WATERGATE AREA The Watergate area includes historic features and recreation areas (volleyball and softball). Adjacent to and north of Constitution Avenue is Braddock's Memorial Rock Well, which is within intertwined nonhistoric access roads (Rock Creek Parkway, the Kennedy Center parking area, U.S. Highways 50 and 66, and Theodore Roosevelt Memorial Bridge).		
19.1 Historic Resources	*Opportunities, Problems, and Concerns (Existing Conditions):* The Watergate steps were originally conceived as the ceremonial entrance to the city. Once used for concert seating, the steps are now used as a training site by runners. The belvedere is not identified as the terminus of Constitution Avenue (as envisioned by the McMillan plan). High stone-faced walls at this location are not overtopped by river flooding or debris. The John Ericcson Memorial is near 23rd and Independence Avenue SW. Other historic features include the Rock Creek Parkway entrance and abutments (flanked by the *Arts of Peace* statues), entrance to Arlington Memorial Bridge, walks, views, and trees.	
Actions	• Maintain the Watergate steps, Constitution Avenue belvedere, John Ericcson Memorial, and *Arts of Peace* statues. Maintain Arlington Memorial Bridge and the *Arts of War* statues in cooperation with other national park units.	• Same as the no-action alternative plus ◦ Use educational panels to enhance public understanding of the steps and the belvedere. ◦ Develop a ceremonial use for the Watergate steps.

ALTERNATIVE A — FOCUS ON THE HISTORIC LANDSCAPE AND EDUCATION	ALTERNATIVE B — FOCUS ON A WELCOMING NATIONAL CIVIC SPACE FOR PUBLIC GATHERINGS, EVENTS, AND HIGH-USE LEVELS	ALTERNATIVE C — FOCUS ON URBAN OPEN SPACE, URBAN ECOLOGY, RECREATION, AND HEALTHY LIFESTYLES
18.3 Access and Circulation: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Same as the no-action alternative plus ◦ Better define pedestrian crossings.	• Same as the no-action alternative.
18.4 Visitor Information, Education, and Enjoyment: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Rehabilitate both facilities.	• Remove the Vietnam Veterans Memorial information station once the Vietnam Veterans Memorial Center has been completed. • Consider replacing the Korean War Veterans Memorial information station.	• Same as the no-action alternative.
18.5 Visitor Amenities		
South Concession Refreshment Stand: Opportunities, Problems, and Concerns (Existing Conditions) — See facing page.		
• Same as the no-action alternative.	• Construct a nearby restroom facility.	• Same as alternative B.
North Concession Refreshment Stand: Opportunities, Problems, and Concerns (Existing Conditions) — See facing page.		
• Retain the refreshment stand (rest-rooms at the planned Vietnam Veterans Memorial Center).	• Provide restrooms adjacent to the concession refreshment stand.	• Same as alternative A.
19. LINCOLN MEMORIAL GROUNDS: WATERGATE AREA See facing page.		
19.1 Historic Resources: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative plus ◦ Use educational panels to en-hance public understanding of the steps and the belvedere.	• Same as alternative A plus ◦ Develop a ceremonial use for the Watergate steps.	• Same as alternative A plus ◦ Possibly accommodate water taxi stops at the Watergate steps, with a redesign of Ohio Drive for safe pedestrian access.

TOPIC OR AREA	NO-ACTION ALTERNATIVE: CONTINUE CURRENT MANAGEMENT	PREFERRED ALTERNATIVE — PROVIDE A QUALITY VISITOR EXPERIENCE, PROTECT THE HISTORIC LANDSCAPE, AND ACCOMMODATE HIGH-USE LEVELS
19.2 Commemorative Sites	*Opportunities, Problems, and Concerns (Existing Conditions):* The area has been identified in the NCPC *Memorials and Museums Master Plan* for several future national commemorative sites. This area is outside the Reserve that was designated by Congress.	
Actions	• Accommodate future national memorials authorized by Congress, and reinforce this area as a commemorative landscape.	• Same as the no-action alternative.
19.3 Access and Circulation	*Opportunities, Problems, and Concerns (Existing Conditions):* This area on the northwest corner serves as a major vehicular gateway to the city and the National Mall from Virginia and Maryland. Access to the Potomac Freeway, I-66, Ohio Drive, and Rock Creek Parkway are prominent parts of the road network, which is scheduled to be redesigned and simplified, with planning, compliance, and construction done by others. There are 70 public parking spaces along Parkway Drive. (See the *Framework Plan* for circulation and strengthening visual and physical connections to the Kennedy Center.)	
Actions	• Accommodate road projects and circulation improvements by others to simplify traffic patterns and to improve pedestrian connections from the Kennedy Center and neighborhoods.	• Same as the no-action alternative, plus ◦ Improve pedestrian and bicycle access to Theodore Roosevelt Memorial Bridge.
Arlington Memorial Bridge / Rock Creek Parkway Access	*Opportunities, Problems, and Concerns (Existing Conditions):* The nonhistoric off-ramp cloverleaf configuration dominates bridge access — the south off-ramp leads to Rock Creek Parkway and the north ramp onto Arlington Memorial Bridge.	
Actions	• Maintain existing circulation.	• Same as the no-action alternative plus ◦ Improve pedestrian crossings and access to Arlington Memorial Bridge. ◦ Adapt access to accommodate future road network improvements.
19.4 Visitor Enjoyment	*Opportunities, Problems, and Concerns (Existing Conditions):* The area provides space for recreational activities such as volleyball and softball.	
Actions	• Continue recreational activities. • Improve condition of volleyball courts and softball fields.	• Same as the no-action alternative, plus ◦ Provide a small restroom and drinking water for the volleyball courts.
19.5 Operations		
Jurisdictional Agreements	*Opportunities, Problems, and Concerns (Existing Conditions):* Following 1960s road work that altered the historic character, jurisdictional boundary lines were not adjusted to conform to new circulation patterns. The National Park Service and the city have maintenance agreements for the area. The National Park Service takes care of the Braddock Memorial Rock Well and surrounding turf.	
Actions	• Continue to maintain areas outside NPS jurisdiction through agreements with the city.	• Make jurisdictional adjustments to correspond to new road and circulation improvements.
Storage and Maintenance Facilities	*Opportunities, Problems, and Concerns (Existing Conditions):* Storage and maintenance facilities have been built into the structures for the Rock Creek Parkway and the roads north of Constitution Avenue. Roadway realignments would affect these uses, and they might not be compatible with future memorial sites proposed for this area.	
Actions	• Continue present storage and maintenance facilities.	• Address storage and maintenance areas as roads are realigned.

ALTERNATIVE A — FOCUS ON THE HISTORIC LANDSCAPE AND EDUCATION	ALTERNATIVE B — FOCUS ON A WELCOMING NATIONAL CIVIC SPACE FOR PUBLIC GATHERINGS, EVENTS, AND HIGH-USE LEVELS	ALTERNATIVE C — FOCUS ON URBAN OPEN SPACE, URBAN ECOLOGY, RECREATION, AND HEALTHY LIFESTYLES
19.2 Commemorative Sites: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Same as the no-action alternative.	• Same as the no-action alternative.
19.3 Access and Circulation: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Same as the no-action alternative.	• Same as the no-action alternative.
Arlington Memorial Bridge / Rock Creek Parkway Access: Opportunities, Problems, and Concerns (Existing Conditions) — See facing page.		
• Remove the south ramp cloverleaf and redirect traffic to 23rd Street.	• Same as the no-action alternative plus ◦ Improve pedestrian crossings and access to Arlington Memorial Bridge. ◦ Adapt access to accommodate future road network improvements.	• Same as the no-action alternative plus ◦ Reestablish a north ramp and access to Constitution Avenue.
19.4 Visitor Enjoyment: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Same as the no-action alternative.	• Same as the no-action alternative.
19.5 Operations		
Jurisdictional Agreements: Opportunities, Problems, and Concerns (Existing Conditions) — See facing page.		
• Make jurisdictional adjustments to correspond to new road and circulation improvements.	• Same as alternative A.	• Same as alternative A.
Storage and Maintenance Facilities: Opportunities, Problems, and Concerns (Existing Conditions) — See facing page.		
• Address storage and maintenance areas as roads are realigned.	• Same as alternative A.	• Same as alternative A.

TOPIC OR AREA	NO-ACTION ALTERNATIVE: CONTINUE CURRENT MANAGEMENT	PREFERRED ALTERNATIVE — PROVIDE A QUALITY VISITOR EXPERIENCE, PROTECT THE HISTORIC LANDSCAPE, AND ACCOMMODATE HIGH-USE LEVELS
20. KOREAN WAR VETERANS MEMORIAL The Korean War Veterans Memorial commemorates the veterans and international coalition that fought the Korean War in the 1950s. Living history programs are provided, and annual special events take place at the memorial.		
20.1 Access and Circulation	*Opportunities, Problems, and Concerns (Existing Conditions):* Narrow entry walks are frequently congested or may be inadequate for groups; changes in visitor walking patterns suggest pedestrians would like an east-side entry.	
Actions	• Continue present circulation patterns, with the entry approach from the west.	• On the west side widen the walks; improve pedestrian connections between the memorial, the Lincoln Memorial reflecting pool, and Independence Avenue to accommodate changing circulation patterns and group visitation.
20.2 Visitor Information and Education	*Opportunities, Problems, and Concerns (Existing Conditions):* There is a visitor contact station with interactive computer displays (see row 18.4).	
Actions	• Take no further action.	• Provide educational information about the Korean War, commemoration, and National Mall history.
21. ASH WOODS Ash Woods, which is between Independence Avenue and Ash Road, was planned to be a naturalized, thickly wooded area with little understory vegetation. The area contains the U.S. Park Police stables, a restroom, and recreation fields.		
21.1 Access and Circulation — Ash Road	*Opportunities, Problems, and Concerns (Existing Conditions):* Ash Road, originally designed as a service road, provides pedestrian access between memorials and to recreation areas and facilities, as well as the U.S. Park Police stables. Visitor pedestrian traffic along this service road is likely to continue to increase when the Martin Luther King Jr. Memorial is built.	
Actions	• Continue to provide access to recreation areas and facilities in addition to the U.S. Park Police stables.	• Make Ash Road primarily a pedestrian walk with a secondary function as a service road (e.g., emergency, law enforcement, and maintenance access); provide amenities such as seating and lighting.
21.2 Visitor Information, Education, and Enjoyment	*Opportunities, Problems, and Concerns (Existing Conditions):* The multiuse JFK recreation fields are used daily and are closed during the off-season. They have been used infrequently for large events.	
Actions	• Continue to maintain recreation fields and allow infrequent large events.	• Same as the no-action alternative plus ◦ Soften the strong geometric edges of the JFK recreation fields. ◦ Provide educational exhibits at the U.S. Park Police stables. ◦ Make the horse paddocks part of the visitor experience, and provide information about the U.S. Park Police and horse patrols.
21.3 Visitor Amenities	*Opportunities, Problems, and Concerns (Existing Conditions):* The restroom facility is outdated and difficult to maintain.	
Actions	• Upgrade the restroom as funds become available.	• Demolish the restroom facility and construct a new facility near the U.S. Park Police stables to better distribute restrooms, using the visitor services architectural style. • If feasible, provide nearby food service to meet expected increased visitation and changed circulation patterns when the Martin Luther King Jr. Memorial is finished.

ALTERNATIVE A — FOCUS ON THE HISTORIC LANDSCAPE AND EDUCATION	ALTERNATIVE B — FOCUS ON A WELCOMING NATIONAL CIVIC SPACE FOR PUBLIC GATHERINGS, EVENTS, AND HIGH-USE LEVELS	ALTERNATIVE C — FOCUS ON URBAN OPEN SPACE, URBAN ECOLOGY, RECREATION, AND HEALTHY LIFESTYLES
20. KOREAN WAR VETERANS MEMORIALS See facing page.		
20.1 Access and Circulation: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Assess changes in visitor use patterns due to the development of new memorials. • Provide additional east-side entry walks to accommodate changing circulation patterns.	• Same as alternative B.
20.2 Visitor Information and Education: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Replace and upgrade computer screens as technology improves.	• Same as alternative A.	• Same as alternative A.
21. ASH WOODS See facing page.		
21.1 Access and Circulation — Ash Road: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Make Ash Road primarily a pedestrian walk with a secondary function as a service road (e.g., emergency, law enforcement, and maintenance access).	• Same as alternative B.
21.2 Visitor Information, Education, and Enjoyment		
• Same as the no-action alternative plus ◦ Soften the strong geometric edges of the JFK recreation fields.	• Same as the no-action alternative.	• Upgrade recreation field conditions with backstops, etc., to avoid leagues leaving their equipment on the fields. • Make the horse paddocks part of the visitor experience, and provide information about the U.S. Park Police and horse patrols.
21.3 Visitor Amenities		
• Replace the restroom facility.	• Demolish the restroom and construct a new facility closer to the U.S. Park Police stables (halfway between the World War II and Lincoln memorials).	• Same as alternative B.

TOPIC OR AREA	NO-ACTION ALTERNATIVE: CONTINUE CURRENT MANAGEMENT	PREFERRED ALTERNATIVE — PROVIDE A QUALITY VISITOR EXPERIENCE, PROTECT THE HISTORIC LANDSCAPE, AND ACCOMMODATE HIGH-USE LEVELS
21.4 Operations — United States Park Police Stables	*Opportunities, Problems, and Concerns (Existing Conditions):* The U.S. Park Police stables provide a necessary law enforcement facility. Utilitarian grapestake wood fence, truck and horse trailer parking, and the office trailer at the U.S. Park Police facilities are not in keeping with the historic character of the National Mall.	
Actions	• Maintain the stables in their current location, with access from Ash Woods road.	• Reconstruct the stables to be compatible with the historic character and quality of the National Mall. • Redesign the area so that operational functions remain fairly inconspicuous on the south side. • Construct a new parking area and vehicle access road from Independence Avenue. • Accommodate infrastructure as needed for Lincoln Reflecting Pool water filtration.
WEST POTOMAC PARK (SOUTH OF INDEPENDENCE AVENUE)		
22. TIDAL BASIN AREA The Tidal Basin area, a designed water area of a little more than 100 acres, is the beautiful setting for several memorials, the cherry trees that were a gift from Japan, historic monuments, and visitor facilities. It provides spectacular views and reflected views of the Thomas Jefferson Memorial and the Washington Monument. The Tidal Basin area is used for demonstrations, national celebrations, and special events.		
22.1 Vision Emphasis	• The Tidal Basin offers a pleasant strolling and viewing experience.	• A sense of arrival at the Tidal Basin would be created by redesigning pedestrian circulation. • Around the Tidal Basin the highest quality recreational experiences would be provided, including strolling/sightseeing, bicycling, and boating. Improved circulation patterns, high-quality paving, additional seating, and more pedestrian stopping points would enhance the strolling and viewing experiences. New visitor services would provide pleasant interludes for enjoyment. • Based on the recommendations of engineering and scientific studies, the Tidal Basin seawalls would be rebuilt above tidewater to retain the historic appearance while accommodating wider walks.
22.2 Historic Resources	*Opportunities, Problems, and Concerns (Existing Conditions):* The historic Tidal Basin has been altered in the past and was reduced by 4 acres to build the Thomas Jefferson Memorial. Inlet, Outlet, and Kutz bridges are historic resources.	
Actions	• Maintain the Inlet, Outlet, and Kutz bridges as historic features within a naturalistic environment.	• Widen and separate pedestrian/ bicycling walks near Inlet, Outlet, and Kutz bridges.
22.3 Natural Resources		
Tidal Basin Function and Walls	*Opportunities, Problems, and Concerns (Existing Conditions):* The Tidal Basin was designed to help flush the Washington Channel to support navigation. Over the last 100 years the flushing capability has been reduced and the basin has silted in. The Tidal Basin gates were replaced in 2007 to help restore the flushing function to the basin, but additional studies and improvements are needed. The Tidal Basin walls are deteriorating. High tides overtop the walls between the Jefferson Memorial to the north of Inlet Bridge and spill onto the walkways, resulting in social trails as visitors try to avoid the water.	

ALTERNATIVE A — FOCUS ON THE HISTORIC LANDSCAPE AND EDUCATION	ALTERNATIVE B — FOCUS ON A WELCOMING NATIONAL CIVIC SPACE FOR PUBLIC GATHERINGS, EVENTS, AND HIGH-USE LEVELS	ALTERNATIVE C — FOCUS ON URBAN OPEN SPACE, URBAN ECOLOGY, RECREATION, AND HEALTHY LIFESTYLES
21.4 Operations — United States Park Police Stables: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Renovate the U.S. Park Police stables.	• Screen the stables with a wall or fence appropriate for the historic design of the National Mall. • Construct a new parking area and vehicle access road from Independence Avenue.	• Reconstruct the stables to be compatible with the historic character and quality of the National Mall. • Construct a new parking area and vehicle access road from Independence Avenue.
WEST POTOMAC PARK (SOUTH OF INDEPENDENCE AVENUE)		
22. TIDAL BASIN AREA See facing page.		
• The Tidal Basin area would be upgraded with improved paved walks and facilities to enhance strolling and viewing experiences.	• The Tidal Basin area would be upgraded with high-quality, paved walks, improved circulation, furniture, facilities, and services to provide opportunities for more visitors to enjoy strolling and viewing experiences.	• The Tidal Basin area would be upgraded with high-quality, paved walks, improved circulation, and facilities, as well as more recreational opportunities, to allow more visitors to enjoy strolling and viewing experiences.
22.2 Historic Resources: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Reconfigure Kutz Bridge traffic lanes to widen walks on the south side.	• Widen Tidal Basin walks; add pedestrian bridges near Inlet, Outlet, Kutz bridges to reduce congestion.	• Fill in the north lobe of the Tidal Basin for additional recreation space.
22.3 Natural Resources		
Tidal Basin Function and Walls: Opportunities, Problems, and Concerns (Existing Conditions) — See facing page.		

TOPIC OR AREA	NO-ACTION ALTERNATIVE: CONTINUE CURRENT MANAGEMENT	PREFERRED ALTERNATIVE — PROVIDE A QUALITY VISITOR EXPERIENCE, PROTECT THE HISTORIC LANDSCAPE, AND ACCOMMODATE HIGH-USE LEVELS
Tidal Basin Function and Walls: Actions	• Undertake engineering studies to improve Tidal Basin flushing and to ensure seawall stability. • Sign high-water conditions in areas overtopped by water. • Maintain the walls and make temporary repairs.	• Based on recommendations of engineering and scientific studies rebuild the Tidal Basin seawalls to be above tidewater, allowing wider walkways to protect the cherry trees.
Soils and Vegetation	*Opportunities, Problems, and Concerns (Existing Conditions):* Soils are compacted at the base of cherry trees and along some social trails that have been created either for convenience or to avoid high water.	
Actions	• Address soil compaction and social trails as budgets and staffing allow.	• Improve soil conditions, thwart social trail development, and address erosion / soil compaction under trees.
Cherry Trees	*Opportunities, Problems, and Concerns (Existing Conditions):* Thousands of cherry trees define the character of the Tidal Basin. Trampling by visitors spilling off narrow walkways causes soil compaction and erosion near tree roots and a decline in the health of the trees.	
Actions	• Address adverse effects on cherry tree health as budgets and staffing allow. • Install post-and-chain fencing in some areas to reduce trampling, compaction, and erosion near cherry trees. • Increase stewardship messages about how to reduce damage to the trees.	• Similar to the no-action alternative except ◦ Reduce trampling of tree roots by widening walkways.
22.4 Demonstrations, Special Events, and National Celebrations	*Opportunities, Problems, and Concerns (Existing Conditions):* The National Cherry Blossom Festival is the most attended annual event in the national park system.	
Actions	• Consistent with the First Amendment and federal regulations, continue to fully accommodate demonstrations. • Consistent with federal regulations, continue to accommodate special events. • Continue to examine current operations and use best management practices to improve operations for demonstrations and special events. • Close the Tidal Basin parking lot during the National Cherry Blossom Festival; concentrate facilities on hard surfaces and outside the north-south viewshed.	• Same as the no-action alternative plus ◦ Use more roving educational ambassadors during the National Cherry Blossom Festival and more educational signs to prevent resource damage.
22.5 Access and Circulation	*Opportunities, Problems, and Concerns (Existing Conditions):* Roads provide convenient access to the Tidal Basin area. Access to the Tidal Basin parking lot is from Independence Avenue SW by way of Maine Avenue; it has 132 parking spaces and 9 spaces for people with disabilities. Three facilities (paddleboat rental, refreshment stand, and public parking) in one small location result in periodic pedestrian / vehicular congestion. During the National Cherry Blossom Festival the parking area is closed to public parking to provide a location for temporary event facilities.	

ALTERNATIVE A — FOCUS ON THE HISTORIC LANDSCAPE AND EDUCATION	ALTERNATIVE B — FOCUS ON A WELCOMING NATIONAL CIVIC SPACE FOR PUBLIC GATHERINGS, EVENTS, AND HIGH-USE LEVELS	ALTERNATIVE C — FOCUS ON URBAN OPEN SPACE, URBAN ECOLOGY, RECREATION, AND HEALTHY LIFESTYLES
• Implement the recommendations of engineering studies and rebuild the basin walls in their current location so they are above tidewater.	• Implement the recommendations of engineering studies and rebuild the basin walls to allow wider walkways to protect the cherry trees.	• Seek a sustainable solution to comprehensively address hydrology and flooding in the Tidal Basin area. • Implement the recommendations of engineering studies and maximize the ability of the basin to flush and absorb tidal surges. Rebuild the basin walls to allow wider walk-ways, and eliminate the bay north of Kutz Bridge to provide additional recreation space.
Soils and Vegetation: Opportunities, Problems, and Concerns (Existing Conditions) — See facing page.		
• Improve soil conditions, thwart social trail development, and address erosion / soil compaction under trees.	• Same as alternative A.	• Same as alternative A.
Cherry Trees: Opportunities, Problems, and Concerns (Existing Conditions) — See facing page.		
• Similar to the no-action alternative except ◦ Continually assess the effectiveness of tree protection measures and continue to implement the most effective.	• Similar to the no-action alternative except ◦ Reduce trampling of tree roots by widening walkways.	• Same as alternative B.
22.4 Demonstrations, Special Events, and National Celebrations: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Same as the no-action alternative.	• Same as the no-action alternative plus ◦ Utilize roving educational ambassadors and more educational signs to prevent resource damage.
22.5 Access and Circulation: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		

TOPIC OR AREA	NO-ACTION ALTERNATIVE: CONTINUE CURRENT MANAGEMENT	PREFERRED ALTERNATIVE — PROVIDE A QUALITY VISITOR EXPERIENCE, PROTECT THE HISTORIC LANDSCAPE, AND ACCOMMODATE HIGH-USE LEVELS
22.5 Access and Circulation: Actions	• Continue parking lot access from Maine Avenue. • Close the Tidal Basin parking lot during the National Cherry Blossom Festival.	• Same as the no-action alternative plus ◦ Redesign roads and parking areas for more efficient access and use. ◦ Redesign circulation to separate bicyclists, pedestrians, and vehicles.
Walkways	*Opportunities, Problems, and Concerns (Existing Conditions):* Walkways continue to deteriorate, and they are too narrow for current use. Congested areas include Kutz, Inlet, and Outlet bridges. There is an opportunity to enhance the meandering, strolling experience through the area.	
Actions	• Maintain walks as budgets and staffing allow.	• Widen and repave walkways as part of a coordinated paving system for the National Mall, widen walkways for pedestrians and bicyclists near Inlet, Outlet, and Kutz bridges.
22.6 Visitor Information, Education, and Enjoyment	*Opportunities, Problems, and Concerns (Existing Conditions):* Seasonal paddleboat rentals are provided on the east side of the Tidal Basin. Private boat access is not allowed in the Tidal Basin. Visitor enjoyment is primarily informal recreation, such as enjoying views, picnicking, and strolling along the Tidal Basin walks.	
Actions	• Continue current management for informal recreation. • Continue to provide seasonal paddleboat rentals.	• Provide educational information about cherry tree history and the Tidal Basin, the development of the Potomac parks, as well as history of the National Mall. • Provide additional boat choices for visitors, such as rowboat and kayak rentals. • Consider providing boat service between the Thomas Jefferson, Franklin D. Roosevelt, and Martin Luther King Jr. memorials, as well as the Tidal Basin parking lot.
22.7 Visitor Amenities	*Opportunities, Problems, and Concerns (Existing Conditions):* Seasonal refreshment and recreation equipment rental facilities near the Tidal Basin parking lot are outdated and are occasionally inadequate for demand. There are no restroom facilities. The appearance of some facilities is out of character with the National Mall.	
Actions	• Retain the recreation equipment rental area with public parking and a refreshment stand, but without restrooms.	• Replace the Tidal Basin refreshment stand with a stand similar to those on the Mall or at the Lincoln Memorial, including outdoor seating (some shaded) and a few restrooms. Design the new facility to blend with the historic character of the National Mall and to reduce congestion. • Add seating along walks. • Provide additional locations for visitors to enjoy views. • Install pedestrian lighting so that it would not impact the evening lighting ambience of memorials. • Replace the recreation equipment rental facilities.

ALTERNATIVE A — FOCUS ON THE HISTORIC LANDSCAPE AND EDUCATION	ALTERNATIVE B — FOCUS ON A WELCOMING NATIONAL CIVIC SPACE FOR PUBLIC GATHERINGS, EVENTS, AND HIGH-USE LEVELS	ALTERNATIVE C — FOCUS ON URBAN OPEN SPACE, URBAN ECOLOGY, RECREATION, AND HEALTHY LIFESTYLES
• Same as the no-action alternative.	• Same as the no-action alternative plus ◦ Remove the parking lot if and when new underground parking garage provided on the south Washington Monument grounds (see actions for row 13.4).	• Same as the no-action alternative plus ◦ Redesign roads and parking areas for more efficient access and use. ◦ Separate bicyclists, pedestrians, and vehicles.
Walkways: Opportunities, Problems, and Concerns (Existing Conditions) — See facing page.		
• Upgrade/rebuild walkways. • Widen sidewalks at Kutz Bridge by moving all traffic lanes to the north side.	• Widen and repave walkways as part of a coordinated paving system for the National Mall, construct three pedestrian bridges near vehicular bridges to reduce congestion. • Install railings between the walkway and the water for visitor safety, particularly for evening walks.	• Widen and repave walkways as part of a coordinated paving system for the National Mall, construct three pedestrian bridges near vehicular bridges to reduce congestion.
22.6 Visitor Information, Education, and Enjoyment: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Same as the no-action alternative.	• Same as the no-action alternative plus ◦ Provide rowboat and sea kayak rentals as an additional choice of boating experiences for visitors. ◦ Develop recreation fields when the north bay has been filled in.
22.7 Visitor Amenities: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Redesign facilities to blend with the historic character of the National Mall and to reduce congestion. • Replace the recreation equipment rental and refreshment facilities; add restrooms.	• Add seating. • Redesign facilities to reduce congestion and to complement the National Mall's historic character. • Replace the refreshment stand with a multipurpose facility (small-scale, year-round facility with a unique character, indoor/outdoor seating, open views) with restrooms. • Provide additional locations for visitors to enjoy views. • Install pedestrian lighting so that it would not impact the evening lighting ambience of the memorial. • Upgrade the recreation equipment rental facilities.	• Replace visitor facilities to complement the historic character of the National Mall and to reduce congestion. • Replace the refreshment stand; add restrooms. • Provide additional locations for visitors to enjoy views. • Install pedestrian lighting in a manner that would not impact the evening lighting ambience of the memorial. • Replace the recreation equipment rental facilities.

TOPIC OR AREA	NO-ACTION ALTERNATIVE: CONTINUE CURRENT MANAGEMENT	PREFERRED ALTERNATIVE — PROVIDE A QUALITY VISITOR EXPERIENCE, PROTECT THE HISTORIC LANDSCAPE, AND ACCOMMODATE HIGH-USE LEVELS
23. FRANKLIN DELANO ROOSEVELT MEMORIAL One of five presidential memorials on the National Mall, this memorial tells important stories of mid-20th century history — the Great Depression, the Roosevelt presidential legacy, and World War II. The adjacent area to the north is the site of the future Martin Luther King Jr. Memorial.		
23.1 Access and Circulation	*Opportunities, Problems, and Concerns (Existing Conditions):* A visitor transit stop is provided. There are 18 tour bus drop-offs, 12 tour bus parking spaces, 10 parking spaces for visitors with disabilities, and 4 taxi stands. West Basin Drive will be realigned when the Martin Luther King Jr. Memorial is built.	
Actions	• Provide access and parking in coordination with the plans for the Martin Luther King Jr. Memorial.	• Same as the no-action alternative.
23.2 Visitor Information, Education, and Enjoyment	*Opportunities, Problems, and Concerns (Existing Conditions):* Room 4 is designed for programs.	
Actions	• Room 4 not used for programs.	• Undertake a comprehensive condition assessment of the memorial, including visitor use patterns. • Increase education and programs by using Room 4 as it was intended.
23.3 Visitor Amenities	*Opportunities, Problems, and Concerns (Existing Conditions):* Visitor facilities include an information station, bookstore, and two restrooms.	
Actions	• Maintain present facilities; renovate restrooms as needed.	• If warranted by demand, provide a small food service / restroom facility convenient to both the Franklin Delano Roosevelt and the future Martin Luther King Jr. memorials. Use an identifiable visitor services design, similar to the Lincoln Memorial refreshment stands, and consider providing themed food menus and space for programs and performances.
24. WEST POTOMAC PARK RIVERFRONT Stretching south from the John Ericcson Memorial to the I-395 corridor, the Potomac Riverfront includes the First Airmail Flight Plaque, cherry trees, walks, views, and parking. This is primarily an informal area. Athletic fields are east of Ohio Drive SW. The riverfront trail system connects to Georgetown and East Potomac Park, as well as to the National Mall.		
24.1 Historic Resources (south of Arlington Memorial Bridge)	*Opportunities, Problems, and Concerns (Existing Conditions):* Dry-laid stone river walls south of Arlington Memorial Bridge are deteriorating and are overtopped in some areas by tidewater and debris. Current riprap is an emergency repair.	
Actions	• Continue to make stabilization repairs to the stone river walls.	• Where feasible, establish a sustainable, vegetated shoreline; in other areas construct stone-faced river walls.
24.2 Demonstrations, Special Events, and National Celebrations	*Opportunities, Problems, and Concerns (Existing Conditions):* The recreation fields west of the Tidal Basin are regularly used for special events and for stages and seating. The area may be used as a staging area during runs, walks, and marathons.	
Actions	• Consistent with the First Amendment and federal regulations, continue to fully accommodate demonstrations. • Consistent with federal regulations, continue to accommodate special events.	• Same as the no-action alternative.

ALTERNATIVE A — FOCUS ON THE HISTORIC LANDSCAPE AND EDUCATION	ALTERNATIVE B — FOCUS ON A WELCOMING NATIONAL CIVIC SPACE FOR PUBLIC GATHERINGS, EVENTS, AND HIGH-USE LEVELS	ALTERNATIVE C — FOCUS ON URBAN OPEN SPACE, URBAN ECOLOGY, RECREATION, AND HEALTHY LIFESTYLES
23. FRANKLIN DELANO ROOSEVELT MEMORIAL See facing page.		
23.1 Access and Circulation: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Same as the no-action alternative.	• Same as the no-action alternative.
23.2 Visitor Information, Education, and Enjoyment: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Undertake a comprehensive condition assessment of the memorial, including visitor use patterns. • Increase programming.	• Undertake a comprehensive condition assessment of the memorial, including visitor use patterns. • Increase education and programs by using Room 4 as it was intended.	• Same as alternative B.
23.3 Visitor Amenities: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Same as the no-action alternative plus ◦ Provide food service that would also be convenient to the future Martin Luther King Jr. Memorial.	• Similar to alternative A except ◦ Construct a refreshment stand without restrooms that would also be convenient to the future Martin Luther King Jr. Memorial.
24. WEST POTOMAC PARK RIVERFRONT See facing page.		
24.1 Historic Resources (south of Arlington Memorial Bridge) : *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Restore the dry-laid stone river walls.	• Reconstruct the river walls as higher, stone-faced structural walls so they are not regularly overtopped by tidewater and floating debris.	• Where feasible, establish a sustainable, vegetated shoreline; reconstruct river walls where necessary; add trees; emphasize river views.
24.2 Demonstrations, Special Events, and National Celebrations: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Same as the no-action alternative plus ◦ Develop a small staging area for demonstrations and events (grass pavement, utilities) south of 23rd and Independence Avenue.	• Same as the no-action alternative.

TOPIC OR AREA	NO-ACTION ALTERNATIVE: CONTINUE CURRENT MANAGEMENT	PREFERRED ALTERNATIVE — PROVIDE A QUALITY VISITOR EXPERIENCE, PROTECT THE HISTORIC LANDSCAPE, AND ACCOMMODATE HIGH-USE LEVELS
24.2 Demonstrations, Special Events, and National Celebrations: Actions (cont.)	• Continue to allow the recreation fields to be occasionally used as staging for demonstrations, events, and filming; but limit other uses during recreation seasons.	
24.3 Access and Circulation	*Opportunities, Problems, and Concerns (Existing Conditions):* There are 170 public parking spaces along Ohio Drive. The National Capital Planning Commission's *Extending the Legacy* plan (1997) and the *Monumental Core Framework Plan* (2009) both call for water taxis along the river.	
Actions	• Continue to provide parking along Ohio Drive. • Limit access or the direction of traffic during some events.	• Same as the no-action alternative plus ◦ Possibly reconfigure visitor parking areas for more efficient use but retain similar parking levels. ◦ Accommodate water taxi service and stops.
Pedestrian and Bicycle Trails	*Opportunities, Problems, and Concerns (Existing Conditions):* Recreational and commuter bike traffic use the riverfront. The Rock Creek *Trail Plan* calls for widening the trail and Parkway Drive.	
Actions	• Continue to allow recreational and commuter bike traffic use.	• Same as the no-action alternative plus ◦ Improve walks and provide additional seating (see actions for row 24.1). ◦ Develop a system of separate bicycle lanes or trails along Ohio Drive and river walks, including the proposed Washington Waterfront Walk and bridge access.
24.4 Visitor Information, Education, and Enjoyment	*Opportunities, Problems, and Concerns (Existing Conditions):* Informal or passive recreation occurs, such as picnicking, play, and walking. Recreation ballfields west of the Tidal Basin are highly sought after for league and recreational games. The fields are occasionally used as staging areas for events and commercial filming.	
Actions	• Continue current use policies for recreation fields, including using areas as staging for demonstrations, special events, and filming.	• Same as the no-action alternative plus ◦ Provide space for seating, fishing, and enjoyment of the river and the launching of small, hand-carried watercraft (such as canoes or kayaks).
25. GEORGE MASON MEMORIAL The memorial to this Founding Father emphasizes the rights of citizens in a democracy and is built around an existing water feature. It contains perennial gardens. No additional actions other than routine maintenance are planned.		
25.1 Historic Resources	*Opportunities, Problems, and Concerns (Existing Conditions):* The George Mason Memorial incorporated an existing historic fountain.	
Actions	• Rehabilitate the historic fountain to improve water quality.	• Same as the no-action alternative.
26. THOMAS JEFFERSON MEMORIAL One of the five presidential memorials on the National Mall, the Thomas Jefferson Memorial will continue to be a historic, character-defining feature and the visual southern terminus for the National Mall. This memorial to our third president includes the terrace wall and related plantings, the circular terrace roadway, and the north plaza. It is the site for demonstrations, national celebrations, special events, and civic activity.		
26.1 Demonstrations, Special Events, and National Celebrations	*Opportunities, Problems, and Concerns (Existing Conditions):* The memorial plaza provides a stage for the National Cherry Blossom Festival and other events, and its hard surfacing make it a sustainable location for demonstrations, special events, and the media. Management changes in 2008 recommend that stages must be located so they do not block views between the White House and the memorial.	

ALTERNATIVE A — FOCUS ON THE HISTORIC LANDSCAPE AND EDUCATION	ALTERNATIVE B — FOCUS ON A WELCOMING NATIONAL CIVIC SPACE FOR PUBLIC GATHERINGS, EVENTS, AND HIGH-USE LEVELS	ALTERNATIVE C — FOCUS ON URBAN OPEN SPACE, URBAN ECOLOGY, RECREATION, AND HEALTHY LIFESTYLES
24.3 Access and Circulation: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Same as the no-action alternative.	• Reexamine and redesign roads and parking as separate bike lanes are provided.
Pedestrian and Bicycle Trails: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Same as the no-action alternative.	• Provide separate bike and walking trails, and emphasize recreational trail connections to East Potomac Park and Rock Creek Park, as well as the southwest waterfront.
24.4 Visitor Information, Education, and Enjoyment: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Same as the no-action alternative.	• Same as the no-action alternative plus ◦ Provide lockers for temporary personal storage. ◦ Develop children's play areas.
25. GEORGE MASON MEMORIAL See facing page.		
25.1 Historic Resources: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Same as the no-action alternative.	• Same as the no-action alternative.
26. THOMAS JEFFERSON MEMORIAL See facing page.		
26.1 Demonstrations, Special Events, and National Celebrations: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		

TOPIC OR AREA	NO-ACTION ALTERNATIVE: CONTINUE CURRENT MANAGEMENT	PREFERRED ALTERNATIVE — PROVIDE A QUALITY VISITOR EXPERIENCE, PROTECT THE HISTORIC LANDSCAPE, AND ACCOMMODATE HIGH-USE LEVELS
26.1 Demonstrations, Special Events, and National Celebrations: Actions	• Consistent with the First Amendment and federal regulations, continue to fully accommodate demonstrations. • Consistent with federal regulations, continue to permit special events on the plaza and nearby areas.	• Same as the no-action alternative plus ◦ Improve utilities on the plaza and south of the memorial for demonstrations and special events. ◦ Allow no special event stage, roof, or walls to obstruct the view to the White House from the plaza. ◦ Convert the southside parking area (now closed) to accommodate demonstrations and events; provide utilities.
26.2 Visitor Information and Education	*Opportunities, Problems, and Concerns (Existing Conditions):* There is a contact station on the chamber level, and exhibits and a short movie in the lower level.	
Actions	• Continue to provide exhibits and information about Thomas Jefferson.	• Update exhibits (focusing on Thomas Jefferson, the memorial's development, and the history of the Tidal Basin, as well as the history of the National Mall).
26.3 Visitor Amenities	*Opportunities, Problems, and Concerns (Existing Conditions):* A bookstore, retail area, and restrooms are located under the memorial.	
Actions	• Continue bookstore and restrooms inside the memorial.	• Same as the no-action alternative plus ◦ Renovate and expand the restrooms in the memorial.
27. THOMAS JEFFERSON MEMORIAL GROUNDS The memorial grounds include 19.2 acres immediately south of the Tidal Basin, with tall shade trees and cherry trees.		
27.1 Historic Resources	*Opportunities, Problems, and Concerns (Existing Conditions):* Plantings on the grounds (deciduous trees, including cherry trees) have historic integrity.	
Actions	• Preserve historic plantings.	• Same as the no-action alternative.
27.2 Access and Circulation	*Opportunities, Problems, and Concerns (Existing Conditions):* There are about 300 public parking spaces in three lots a short distance from both the George Mason and Thomas Jefferson memorials. There are 8 tour bus parking spaces and 5 spaces for visitors with disabilities.	
Actions	• Retain the present tour bus drop-off area and public parking. • Improve sign system from parking lots A, B, and C.	• Redesign the tour bus drop off to improve pedestrian circulation. • Improve sign system from parking lots A, B, and C. • Provide bicycle lanes or trails for safer or improved access near the memorial and to the I-395 bridges.
27.3 Visitor Amenities	*Opportunities, Problems, and Concerns (Existing Conditions):* A concession refreshment stand is near East Basin Drive.	
Actions	• Continue the present concession refreshment stand.	• Replace the concession refreshment stand with a new facility providing food, restrooms, and retail; consider traffic and circulation patterns, as well as views to and from the memorial, in siting the new facility.

ALTERNATIVE A — FOCUS ON THE HISTORIC LANDSCAPE AND EDUCATION	ALTERNATIVE B — FOCUS ON A WELCOMING NATIONAL CIVIC SPACE FOR PUBLIC GATHERINGS, EVENTS, AND HIGH-USE LEVELS	ALTERNATIVE C — FOCUS ON URBAN OPEN SPACE, URBAN ECOLOGY, RECREATION, AND HEALTHY LIFESTYLES
• Same as the no-action alternative. plus ◦ Allow no special event stage, roof, or walls to obstruct the view to the White House.	• Same as the no-action alternative plus ◦ Install utilities and infrastructure (e.g., power, microphones, tent anchors) on the plaza for use during demonstrations and special events.	• Same as alternative B.
26.2 Visitor Information and Education: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Same as alternative A.	• Same as the no-action alternative plus ◦ Increase ranger programs.
26.3 Visitor Amenities: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Same as the no-action alternative plus ◦ Renovate and expand the rest-rooms in the memorial.	• Same as alternative B.
27. THOMAS JEFFERSON MEMORIAL GROUNDS See facing page.		
27.1 Historic Resources: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Same as the no-action alternative.	• Same as the no-action alternative.
27.2 Access and Circulation: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Redesign the tour bus drop off to improve pedestrian circulation. • Improve sign system from parking lots A, B, and C.	• Same as alternative A.	• Same as alternative A.
27.3 Visitor Amenities: *Opportunities, Problems, and Concerns (Existing Conditions)* — See facing page.		
• Same as the no-action alternative.	• Replace the outdated refreshment stand.	• Relocate the refreshment stand closer to primary bicycle, pedestrian routes, and the tour bus drop-off.

TABLE 8: SUMMARY OF ENVIRONMENTAL CONSEQUENCES

NO-ACTION ALTERNATIVE	PREFERRED ALTERNATIVE	ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C
CULTURAL RESOURCES				
Impacts common to all alternatives: Long-term, negligible to minor, and beneficial as the result of protecting and preserving contributing features, along with actions at the Lincoln Memorial (regular preventive maintenance, renovation of the exhibit area and restrooms, and protection of associated features), protection of cherry trees at the Tidal Basin, and rehabilitation of the historic fountain at the George Mason Memorial. No impairment of cultural resources.				
Direct and indirect impacts: Long-term, negligible to minor, and either adverse or beneficial. *Cumulative impacts:* Long-term, major, and beneficial, with a very small contribution from this alternative.	*Direct and indirect impacts:* Long-term, negligible to major, and adverse; and long-term, negligible to moderate, and beneficial. *Cumulative impacts:* Long-term, major, and beneficial, with a noticeable contribution from this alternative.	*Direct and indirect impacts:* Long-term, negligible to major, and adverse; and long-term, negligible to minor, and beneficial. *Cumulative impacts:* Long-term, major, and beneficial, with a very small contribution from this alternative.	*Direct and indirect impacts:* Long-term, minor to major, and adverse; and long-term, minor to moderate, and beneficial. *Cumulative impacts:* Long-term, major, and beneficial, with a small contribution from this alternative.	*Direct and indirect impacts:* Long-term to permanent, negligible to major, and adverse, and long-term, negligible to moderate, and beneficial. *Cumulative impacts:* Long-term, major, and beneficial, with a noticeable adverse contribution from this alternative.
NHPA section 106 summary: Potential adverse effects.	*NHPA section 106 summary:* Potential adverse effects; further consultation required to make a final determination of effect and to identify appropriate mitigation measures.	*NHPA section 106 summary:* Potential adverse effects; further consultation required to make a final determination of effect and to identify appropriate mitigation measures.	*NHPA section 106 summary:* Potential adverse effects; further consultation required to make a final determination of effect and to identify appropriate mitigation measures.	*NHPA section 106 summary:* Potential adverse effects; further consultation required to make a final determination of effect and to identify appropriate mitigation measures.
NATURAL RESOURCES: WATER QUALITY				
Impacts common to all alternatives: Long-term, negligible, and beneficial impacts from addressing water quality problems and algae growth in designed water features. Continued monitoring of conditions affected by global climate change (e.g., temperature, rainfall, and sea level) and development of strategies to mitigate the effects of climate change, especially sea level rise. No unacceptable impacts or resource impairment.				
Direct and indirect impacts: Continued short- and long-term, minor to moderate, adverse impacts on potable water use, groundwater, and surface water resources. *Cumulative impacts:* Long-term, moderate, and adverse.	*Direct and indirect impacts:* Short-term, moderate, adverse impacts during construction at the Tidal Basin and along the Potomac River, but long-term, minor, beneficial impacts on potable water use and on groundwater and surface water resources. *Cumulative impacts:* Long-term, moderate, and adverse, with a slight beneficial contribution from this alternative.	*Direct and indirect impacts:* Short-term, negligible, adverse impacts during construction of new Tidal Basin seawalls. Long-term, negligible to minor, beneficial impacts. *Cumulative impacts:* Long-term, moderate, and adverse, with a slight beneficial contribution from this alternative.	*Direct and indirect impacts:* Short-term, moderate, adverse impacts during construction at the Tidal Basin and along the Potomac River. Over the long-term, both adverse and beneficial impacts on groundwater and surface water resources, with combined impacts being neutral. *Cumulative impacts:* Long-term, moderate, and adverse, with slight adverse and beneficial contributions from this alternative.	*Direct and indirect impacts:* Short-term, moderate, adverse impacts during construction at the Tidal Basin and along the Potomac River. Long-term, negligible to minor, beneficial impacts on potable water use, and on groundwater and surface water resources. *Cumulative impacts:* Long-term, moderate, and adverse, with a slight beneficial contribution from this alternative.
NATURAL RESOURCES: SOILS				
Impacts common to all alternatives: Long-term, moderate, and beneficial from restoring natural processes and functions.				
Direct and indirect impacts: Continued short- and long-term adverse impacts ranging from minor to major because of heavy daily foot traffic, recreational activities, and large events, affecting soil quality and productivity. *Cumulative impacts:* Long-term, moderate to	*Direct and indirect impacts:* Short-term, minor, and adverse from construction; and long-term, moderate, and beneficial from soil augmentation or replacement. *Cumulative impacts:* Long-term, moderate to major, and adverse, with a modest adverse and beneficial contribution	*Direct and indirect impacts:* Short-term, negligible, and adverse from construction; and long-term, moderate, and beneficial from soil augmentation or replacement. *Cumulative impacts:* Long-term, moderate to major, and adverse, with a modest beneficial	*Direct and indirect impacts:* Short-term, negligible, and adverse; and long-term, moderate, and beneficial from soil augmentation or replacement. *Cumulative impacts:* Long-term, moderate to major, and adverse, with a modest beneficial contribution from this	*Direct and indirect impacts:* Short-term, negligible, and adverse; and long-term, moderate, and beneficial from soil augmentation or replacement. *Cumulative impacts:* Long-term, moderate to major, and adverse, with a modest beneficial contribution from this

NO-ACTION ALTERNATIVE	PREFERRED ALTERNATIVE	ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C
major, and adverse, with a large adverse contribution from this alternative. Impacts considered unacceptable because they would continue to impede the attainment of the park's desired future conditions for natural and cultural resources, but no impairment of a key park resource.	from this alternative. No unacceptable impacts or resource impairment.	contribution from this alternative. No unacceptable impacts or resource impairment.	alternative. No unacceptable impacts or resource impairment.	alternative. No unacceptable impacts or resource impairment.
NATURAL RESOURCES: VEGETATION				
Impacts common to all alternatives: Long-term, moderate, and beneficial due to improved appearance of vegetation.				
Direct and indirect impacts: Continuation of short- and long-term, major, adverse impacts. *Cumulative impacts:* Long-term, moderate to major, and adverse, with a large contribution from this alternative. Impacts considered severe enough to be unacceptable because of continued impedance to the attainment of desired future resource conditions and diminished opportunities for current or future generations to enjoy or be inspired by park resources. Impairment of a key park resource could result unless successful mitigating measures employed.	*Direct and indirect impacts:* Long-term, minor, and adverse from new or widened sidewalks; and long-term, moderate, and beneficial from actions to improve growing conditions for park vegetation. *Cumulative impacts:* Long-term, minor, and adverse, with a modest adverse and beneficial contribution from this alternative. No unacceptable impacts or resource impairment.	*Direct and indirect impacts:* Long-term, negligible, and adverse due to new construction; and long-term, moderate, and beneficial from actions to improve growing conditions for park vegetation. *Cumulative impacts:* Long-term, minor, and adverse, with a small beneficial contribution from this alternative. No unacceptable impacts or resource impairment.	*Direct and indirect impacts:* Long-term, negligible, and adverse from new and widened sidewalks; potential long-term, major, and adverse from the continued use of the Mall elm tree panels if turf/root zones and soils not properly protected. Overall, long-term, moderate, beneficial impacts from improved growing conditions for park vegetation. *Cumulative impacts:* Long-term, minor, and adverse, with a slight beneficial contribution from this alternative. No unacceptable impacts or resource impairment.	*Direct and indirect impacts:* Long-term, negligible, and adverse from new and widened sidewalks; and long-term, moderate, and beneficial from improved growing conditions for park vegetation. *Cumulative impacts:* Long-term, minor, and adverse, with a small beneficial contribution from this alternative. No unacceptable impacts or resource impairment.
NATURAL RESOURCES: FISH AND WILDLIFE				
Direct and indirect impacts: Continuation of long-term, moderate, adverse impacts to native and naturalized fish and wildlife populations. *Cumulative impacts:* Long-term, moderate, and adverse. No unacceptable impacts or resource impairment.	*Direct and indirect impacts:* Long-term, minor, and beneficial from stewardship messages to visitors, a self-sustaining pond/ wetland ecosystem at Constitution Gardens Lake, higher seawalls along the Tidal Basin, and a naturalized Potomac River shoreline. Short- and long-term, negligible to moderate, and adverse from various projects throughout the National Mall. *Cumulative impacts:* Long-term, moderate, and adverse, with a slight but adverse contribution from this alternative. No unacceptable impacts or resource impairment.	*Direct and indirect impacts:* Long-term, negligible to minor, and beneficial from actions at Constitution Gardens Lake and along the Tidal Basin; and short- and long-term, negligible to minor**,** and adverse from construction projects at other sites. *Cumulative impacts:* Long-term, moderate, and adverse, with a slight adverse contribution from alternative A. No unacceptable impacts or resource impairment.	*Direct and indirect impacts:* Short- and long-term, negligible to minor, and adverse from a drainable lake at Constitution Gardens, modifications of the Tidal Basin, and various construction projects; long-term, minor, and beneficial from a more natural Potomac River shoreline in some areas. *Cumulative impacts:* Long-term, moderate, and adverse, with a small contribution from this alternative. No unacceptable impacts or resource impairment.	*Direct and indirect impacts:* Long-term, negligible to minor, and beneficial from stewardship messages to visitors, a self-sustaining pond/ wetland ecosystem at Constitution Gardens Lake, and higher seawalls along the Tidal Basin. Short- and long-term, negligible to moderate, and adverse from various projects throughout the National Mall. *Cumulative impacts:* Long-term, moderate, and adverse, with a slight but adverse overall contribution from this alternative. No unacceptable impacts or resource impairment.

NO-ACTION ALTERNATIVE	PREFERRED ALTERNATIVE	ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C
DEMONSTRATIONS, SPECIAL EVENTS, AND NATIONAL CELEBRATIONS				
Impacts common to all alternatives: No change in permit regulations under any alternative. Short- and long-term, minor to moderate, and beneficial or adverse impacts to public access depending on distance to public transportation. Short- to long-term, minor, adverse impacts on event organizers from periodic closings of areas for construction, restoration, or maintenance.				
Direct and indirect impacts: No change in impacts on demonstration and event participants and organizers from the continued use of current venues, including the Mall elm tree panels. Likely continued demand for space on the National Mall (particularly the Mall, the Washington Monument grounds, and the Lincoln Memorial) because of the status and visibility conferred on events due to the presence of national icons in the background. But long-term, moderate to major, adverse impacts because of inadequate venues and the lack of visitor facilities and amenities. *Cumulative impacts:* Long-term, moderate to major, and adverse because of increasingly inadequate venues and visitor services and amenities, with a substantial adverse contribution from this alternative.	*Direct and indirect impacts:* Long-term, major, beneficial impacts because of changes in the permitting, scheduling, and management process; equitable requirements for all organizers; additional and more sustainable venues in highly desirable locations; conveniently located civic infrastructure to facilitate event operations; permanent visitor facilities such as restrooms; a redesigned Union Square that could accommodate larger crowds; a flexible multipurpose space at the Sylvan Theater location; and a new venue at Constitution Gardens. Long-term, major, adverse impacts on the few organizers who could no longer use the elm tree panels on the Mall for temporary event facilities (such as tents and stages). *Cumulative impacts:* Long-term, major, and beneficial for all organizers and participants, with a substantial beneficial contribution from this alternative.	*Direct and indirect impacts:* Long-term, minor, and beneficial because of changes in the permitting, scheduling, and management process; somewhat improved venue conditions; and permanent small visitor facilities such as restrooms. However, no increase in user capacity of desirable venues, and fewer events in high visibility venues such as the Mall and the Washington Monument grounds because of mandated recovery time between events. Long-term, major, adverse impacts on the few organizers who could no longer use the elm tree panels on the Mall for temporary event facilities (such as tents and stages). *Cumulative impacts:* Long-term, moderate, and beneficial, with a small beneficial contribution from this alternative.	*Direct and indirect impacts:* Long-term, major, and beneficial because of changes in the permitting, scheduling, and management process; more sustainable venues in highly desirable locations; conveniently located civic infrastructure to facilitate event operations; permanent visitor facilities such as restrooms; a redesigned Union Square that could accommodate larger crowds; a flexible multipurpose space at the Sylvan Theater location; and a new venue at Constitution Gardens. *Cumulative impacts:* Long-term, major, and beneficial, with a substantial beneficial contribution from this alternative.	*Direct and indirect impacts:* Long-term, major, and beneficial because of changes in the permitting, scheduling, and management process, additional and more sustainable venues in highly desirable locations; conveniently located civic infrastructure to facilitate event operations; permanent visitor facilities such as restrooms; a redesigned Union Square that could accommodate larger crowds; a reoriented Sylvan Theater to improve viewing from the hillside; and a new venue at Constitution Gardens. Long-term, major, adverse impacts on the few organizers who could no longer use the elm tree panels on the Mall for temporary event facilities (such as tents and stages). *Cumulative impacts:* Long-term, major, and beneficial, with a substantial beneficial contribution from this alternative.
ACCESS AND CIRCULATION				
Impacts common to all alternatives: Long-term, moderate to major, beneficial impacts from adding the National Mall name to the Smithsonian Metro station, continuing to redesign tour bus drop-offs and pickups, addressing trash impacts from tour bus passengers, and working with the city and local businesses to provide an appropriate amount of convenient parking for tour buses and visitors. However, temporary to long-term, minor to major, adverse impacts from constructing previously approved projects, which could interrupt the local transportation system.				
Direct and indirect impacts: No change to access and circulation, with long-term, moderate to major, adverse impacts from more difficult visitor access with increased use; a less desirable pedestrian environment from inadequate walkway surfaces and amenities and more traffic impacts; no improved bicycling facilities; and more traffic congestion. *Cumulative impacts:* Long-term, major, and	*Direct and indirect impacts:* Long-term, major, and beneficial from a greater emphasis on a pedestrian-oriented environment; improved, safer, and more comfortable walking and bicycle environments; separate bicycle routes or lanes; improved roadway access in the southeast area of the Tidal Basin; and more options and access for people with disabilities. *Cumulative impacts:*	*Direct and indirect impacts:* Long-term, moderate, beneficial impacts from increased crosswalk timing and additional pedestrian amenities; but long-term, moderate, adverse impacts on bicycle users because of continued unsafe riding conditions. *Cumulative impacts:* Long-term, major, and beneficial largely as a result of an improved visitor transportation service, as well as pres-	*Direct and indirect impacts:* Long-term, major, and beneficial from improved access, underground parking garages, a safer pedestrian environment (including safer road crossings), and reduced conflicts with traffic. Long-term, moderate, and adverse impacts on bicycle users because of not meeting either the needs of bicyclists or local planning goals. *Cumulative impacts:*	*Direct and indirect impacts:* Long-term, major, and beneficial due to improved access and parking, a greater emphasis on safer and pleasanter pedestrian and bicycling environments, and more options for families and people with disabilities. *Cumulative impacts:* Long-term, major, and beneficial due to better wayfinding aids for pedestrians, an improved visitor transpor-

NO-ACTION ALTERNATIVE	PREFERRED ALTERNATIVE	ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C
beneficial due to improved maps and wayfinding signs, an improved visitor transportation service, and better access to the National Mall for motorists, Metro users, and bicyclists, affecting a very large number of motorists, as well as bicyclists and pedestrians and offsetting adverse impacts under this alternative.	Long-term, major, and beneficial because of better wayfinding aids, an improved visitor transportation system, future road improvements for motorists and Metro users, and more convenient access for pedestrians, bicyclists, families with children, and people with disabilities, with a substantial beneficial contribution from this alternative.	ent and future projects occurring outside the National Mall with a small beneficial contribution from this alternative because of a somewhat improved pedestrian environment on the National Mall.	Long-term, major, and beneficial from better wayfinding aids for pedestrians, an improved visitor transportation service, and future road improvements for motorists and Metro users, with a substantial beneficial contribution from this alternative.	tation service, future road improvements for motorists and Metro users, and more convenient access for pedestrians, bicyclists, families with children, and people with disabilities, with a substantial beneficial contribution from this alternative.
VISITOR EXPERIENCE				
Impacts common to all alternatives: Long-term, moderate to major, and beneficial as a result of continued educational opportunities about First Amendment rights; cooperative efforts with local tourist organizations and the tour bus industry to ensure they have accurate information and to facilitate access to areas on the National Mall (affecting 20%–30% of visitors); and applying conservation zones and standards to ensure that visitor expectations are consistently met.				
Direct and indirect impacts: Continued long-term, moderate to major, and adverse despite the fact that visitors would continue to be inspired by the National Mall and its memorials. Visitor expectations for quality experiences not met because of the degraded condition of natural resources, inadequate information and education about park resources and opportunities, insufficient facilities (such as restrooms and food service) for present user volumes, and continued public health and safety challenges. *Cumulative impacts:* Long-term, major, and beneficial, with a slight adverse contribution from the no-action alternative.	*Direct and indirect impacts:* Long-term, major, and beneficial due to well-maintained areas that would meet desired National Mall conditions, enhanced website information, a more welcoming atmosphere (including a welcome plaza on the Mall and daily interpretive program listings), more opportunities to understand core American values through expanded educational themes, well-dispersed and pleasant visitor facilities that are adequately sized to meet user needs, more food service choice, an improved pedestrian and bicycling environment, increased opportunities for informal enjoyment, additional recreational opportunities and improved playing fields, more shaded seating, additional pedestrian lighting, and an emergency notification system. *Cumulative impacts:* Long-term, major, and beneficial, with a substantial beneficial contribution from this alternative.	*Direct and indirect impacts:* Long-term, moderate, and beneficial due to substantially improved resource conditions and the appearance of the National Mall, better website information, educational themes focused on memorials and the development of the capital city, improved visitor facilities supplemented by small visitor facilities and food service at refreshment stands, a better pedestrian environment, improved playing field conditions, and an emergency notification system. But the needs of high volumes of users not met. *Cumulative impacts:* Long-term, major, and beneficial, with a modest beneficial contribution from this alternative.	*Direct and indirect impacts:* Long-term, major, and beneficial due to well-maintained areas that would meet desired conditions for the National Mall, better website information, educational themes focused on the memorials and the civic function of the National Mall, well-dispersed and pleasant visitor facilities that are adequately sized to meet user needs, more food service choice, an improved pedestrian environment, increased opportunities for informal enjoyment as well as additional recreational opportunities and improved playing fields, more shaded seating, additional pedestrian lighting, and an emergency notification system. *Cumulative impacts:* Long-term, major, and beneficial, with a substantial beneficial contribution from this alternative.	*Direct and indirect impacts:* Long-term, major, and beneficial due to improved conditions on the National Mall, better website information, educational themes focused on memorials along with stewardship and healthy lifestyles, well-dispersed and pleasant facilities that are adequately sized to meet user needs, more food service choice, an improved pedestrian and bicycling environment, increased opportunities for informal enjoyment, additional recreational opportunities and improved playing fields, more shaded seating, additional pedestrian lighting, and an emergency notification system. *Cumulative impacts:* Long-term, major, and beneficial, with a substantial beneficial contribution from this alternative.
SOCIOECONOMIC ENVIRONMENT				
Impacts common to all alternatives: Long-term, minor, and beneficial on the local and regional economy from visitation to existing monuments and memorials on the National Mall, commercial business opportunities in and around the National Mall, as well as in the metropolitan area, new business opportunities for retail and food service near the National Mall, and ongoing use of businesses in nearby areas. Short-term, minor, beneficial impacts on the local and regional economy from the construction of previously approved projects.				
Direct and indirect impacts: Long-term, negli-	*Direct and indirect impacts:* Long-term, minor,	*Direct and indirect impacts:* Long-term, minor,	*Direct and indirect impacts:* Long-term, minor,	*Direct and indirect impacts:* Long-term, minor,

NO-ACTION ALTERNATIVE	PREFERRED ALTERNATIVE	ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C
gible, and beneficial because of slightly increased visitation levels to the National Mall and related visitor expenditures at commercial businesses. *Cumulative impacts:* Long-term, minor, and beneficial due to increased visitation, plus business and construction opportunities, with a slight beneficial contribution from this alternative.	and beneficial from longer visitor stays due to better resource conditions and new and improved visitor services and facilities, increased and diversified commercial business opportunities that would meet visitor needs on the National Mall and in surrounding areas, and minor increases in construction-related expenditures. *Cumulative impacts:* Long-term, minor, and beneficial, with a slight beneficial contribution from this alternative.	and beneficial from enhanced visitor experiences due to improved conditions of the historic landscape and vistas, but only slight increases in visitation. Slight increase in commercial business opportunities on the National Mall with improved food service facilities. Minor increase in construction-related expenditures. *Cumulative impacts:* Long-term, minor, and beneficial, with a slight beneficial contribution from this alternative.	and beneficial from longer visitor stays due to better resource conditions, improved services and facilities, increased and diversified commercial business opportunities that would meet visitor needs, and minor increases in construction-related expenses. Long-term, minor, adverse impacts of parking costs for underground garages (if determined feasible). *Cumulative impacts:* Long-term, minor, and beneficial, with a slight beneficial contribution from this alternative.	and beneficial from longer visitor stays due to better resource conditions, improved services and facilities, and more year-round recreational opportunities; diversified commercial business opportunities that would meet visitor needs; and minor increases in construction-related expenses. *Cumulative impacts:* Long-term, minor, and beneficial, with a slight beneficial contribution from this alternative.
PARK OPERATIONS				
Impacts common to all alternatives: Short- and long-term, moderate to major, and beneficial due to written standards and criteria, visual quality and response teams to identify and address high-profile problems and concerns, staffing levels aligned with essential operations, less intrusive temporary fencing, a solid waste and recycling plan, and increased use of renewable energy sources and recycling practices. Construction-related impacts on the National Mall would generally be short-term, minor to moderate, and adverse.				
Direct and indirect impacts: Long-term, moderate to major, and adverse because of not meeting desired standards (including a deferred maintenance backlog; difficult-to-maintain landscapes, systems, and infrastructure; and lack of venues designed to accommodate intensive levels of use), inefficient operations, and unsustainable practices. Continued funding gap at about 54% of need. Any benefits to park operations or sustainability from past, present, and future projects overwhelmed by additional facilities and ongoing high-priority demands because of the park's highly prominent and visible location. Continued operational challenges despite the long-term, moderate to major, beneficial impacts of actions common to all alternatives. *Cumulative impacts:* Long-term, major, and adverse, with a slight adverse contribution from this alternative.	*Direct and indirect impacts:* Long-term, major, and beneficial as a result of improved park conditions, a reduced deferred maintenance backlog, increased maintainability of mechanical systems and infrastructure, improved operational access, a streamlined permitting process for demonstrations and special events, a reduced funding gap between desired conditions and park budgets, appropriate staffing levels aligned to core operations, and exceedance of sustainability standards for development, renewable energy, and water use. *Cumulative impacts:* Long-term, major, and adverse from past, present, and reasonably foreseeable actions, plus long-term, major, and beneficial from the preferred alternative, resulting in long-term, moderate, beneficial cumulative impacts.	*Direct and indirect impacts:* Long-term, moderate, and adverse because impacts of high use not fully addressed, such as developing more sustainable venues for demonstrations, national celebrations, and special events or seeking sustainable water sources for large water features. However, long-term, moderate to major, beneficial impacts from actions common to all action alternatives because of better maintenance of desired park conditions, a reduced deferred maintenance backlog, a reduced funding gap between desired conditions and park budgets, some more efficient park operations, and some use of renewable energy sources. *Cumulative impacts:* Long-term, moderate, and adverse even though park operations improved and deferred maintenance addressed; no sustainable solutions for high-use areas or water features, resulting in a considerable beneficial contribution from this alternative.	*Direct and indirect impacts:* Long-term, major, and beneficial as a result of improved park conditions, a reduced deferred maintenance backlog, increased maintainability of mechanical systems and infrastructure, improved operational access, a streamlined permitting process for demonstrations and special events, a reduced funding gap between desired conditions and park budgets, appropriate staffing levels aligned to core operations, and greater reliance on renewable energy sources. However, no measures taken to make water use more sustainable or to support local goals to encourage greater use of alternative modes of access. *Cumulative impacts:* The Long-term, moderate, and adverse as a result of treated water use and underground parking garages not meeting sustainability goals, with a large adverse contribution from this alternative.	*Direct and indirect impacts:* Long-term, major, and beneficial as a result of improved park conditions, a reduced deferred maintenance backlog, increased maintainability of mechanical systems and infrastructure, improved operational access, a streamlined permitting process for demonstrations and special events, a reduced funding gap between desired conditions and park budgets, appropriate staffing levels aligned to core operations, and exceedance of sustainability standards for development, renewable energy, and water use. *Cumulative impacts:* Long-term, major, and adverse from past, present, and reasonably foreseeable actions, plus long-term, major, beneficial impacts from alternative C, resulting in long-term, moderate, beneficial cumulative impacts.

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THE AFFECTED ENVIRONMENT

DRAFT
NATIONAL MALL PLAN /
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THE NATIONAL MALL



THE
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CONTEXT FOR PLANNING AND DEVELOPMENT OF THE NATIONAL MALL

The following discussion of planning for and development of the National Mall refers to some adjacent areas because of their common history. For example, the White House and President's Park are within the Reserve, but are not part of the National Mall.

1790–1850

L'Enfant Plan

Toward the end of the 17th century, tobacco plantations were laid out in both Virginia and Maryland in the vicinity of present-day Washington, D.C. Alexandria, Virginia, was established in 1749 as a port for the shipment of tobacco, followed shortly by Georgetown, Maryland, across the river. By 1790, when George Washington selected the site for the national capital, plantation owners were struggling to farm the exhausted tobacco fields.

President Washington selected Major Pierre Charles L'Enfant to plan the new capital, which he modeled after plans of European capitals and the royal estates of European monarchs. Using plans of European cities he borrowed from Thomas Jefferson, L'Enfant envisioned a grand city built around a great open space that would establish the relationship between important

FIGURE 24: PLAN OF THE CITY OF WASHINGTON, 1791–92



This 1792 engraving by Andrew Ellicott is based on Pierre L'Enfant's plan of 1791, with some changes. Andrew Ellicott was hired by Washington in 1791 to survey the site of the future city. L'Enfant was let go from his post in 1792.

functions of government. L'Enfant's plan shows the "Presidential Palace" and the "Congress House" on two high pieces of ground connected by a broad boulevard, what would become Pennsylvania Avenue. A mile-long Grand Avenue would run west from the Congress House — a great open space lined by the ministries and houses of statesmen, with expanses of plantings and gardens. The central garden of this area, now known as the Mall, would contain a water feature and be bordered by dense groves of trees. An equestrian statue of George Washington would be at the west end of the avenue, near today's 17th Street, on the axis south of the Presidential Palace and west of the Congress House. Tiber Creek would become the Washington Canal, with a towpath for barges to bring supplies to the city's commercial establishments.

The plan consisted of a coordinated system of radiating avenues, parks, and vistas overlaid on a grid of streets. Wide diagonal boulevards would create additional visual connections, and squares and circles where the grid system and the diagonal boulevards intersected would become the focus of residential neighborhoods and civic buildings and would provide appropriate sites for monuments to the nation and its heroes. By 1800 enough of L'Enfant's plan had been implemented that the seat of government was transferred from Philadelphia.

Changes on the National Mall

Little was done to advance the development of the Mall* for many years, and the area that was to become the Mall was much smaller in the L'Enfant plan than it is today. In 1796 the city's first commissioners advised Washington to construct an "elegant building" on the Mall to spur its use. Washington requested that streets, squares, lots, and parcels shown in the city plan be transferred to the three city commissioners for the use of the federal government. He noted that the Mall was to provide "for the health and ornament of the city." Despite Washington's urging, however, decades passed before the Mall began to take shape.

Almost nothing of L'Enfant's vision for the Mall was realized in the 19th century. In the first half of that century Congress ceded federal rights over parcels of land on the Mall to private entities. Two new roads were created to separate the new lots from the Mall — Missouri Avenue, parallel to Pennsylvania Avenue, and Maine Avenue, parallel to Maryland Avenue. Other land on the Mall was used for private purposes. People raised produce in small gardens, grazed livestock, and stored lumber, firewood, and trash. Just north of the Mall, the triangular area bounded by Pennsylvania Avenue, 15th Street, and B Street North became known during the war as Hooker's Division, home to many saloons and brothels. Just south of the Mall was a large slave market.

The Potomac waterfront was just west of what is now the Washington Monument. Tiber Creek entered the city just south and west of the White House. It later was straightened and became the Washington City Canal, connecting the Potomac River with the Anacostia River south of the Capitol.

In the early 1830s, when the Washington City Canal was connected to the newly constructed Chesapeake and Ohio Canal, a Lockkeeper's House was constructed at the connection site. Although moved from that location, the structure still exists on the Mall near the intersection of 17th Street and Constitution Avenue.

Planning for a monument to George Washington was begun shortly after Washington took office. L'Enfant had called for an equestrian monument at the cross-axis of lines south from the White House and west from the Capitol. In 1848 Congress granted the Washington Monument Society a 37-acre site encompassing the

* The first use of the name "Mall" to refer to the axis extending west from the Capitol appeared in 1802 on a map, *Washington City,* in S. S. Moore and T. W. Jones, *The Travellers' Directory . . . of the Main Road from Philadelphia to Washington* (Philadelphia: Mathew [sic] Carey, 1802; in Reps 1991:60–61). The map shows a formal Mall lined by nonexistent trees. The name "Mall" came from the French game *Paille Maille*, meaning "ball-mallet," a game that resembled a cross between golf and croquet and was played on a long, narrow lawn lined with walls or trees. Imported into England in the 17th century and renamed "Pall Mall," where it was played in St. James' Park by Charles II. A nearby road was renamed Pall Mall, and the word "mall" took on the connotation of a pleasure drive.

crossing of the two axes. The cornerstone was laid on July 4, but the location of the monument was moved to the east to provide better construction footing. Construction began the following year but was stopped by 1855 because of political agitation and lack of money; the shaft had risen to 156 feet. Construction resumed in 1876 and the monument was finally completed in 1884.

1850–1900

The Downing Plan

By the middle of the 19th century there was a renewed interest in making the Mall the nation's public park. In 1850 a group of businessmen approached President Millard Fillmore about landscaping the Mall, and the following year landscape designer Andrew Jackson Downing was hired. His objectives were threefold:

- form a federal park that would be an ornament to the capital city
- provide an example of the natural style of landscape gardening
- form a living museum of trees and shrubs

A proponent of the English romantic garden tradition, Downing prepared a plan that turned the Mall and the green south of the White House into a series of landscaped "rooms" or gardens. Downing was killed in a steamboat accident in 1852, and only his plans for Lafayette Park north of the White House, the Ellipse, and seven gardens on the Mall were completed. In subsequent years, the circles and squares were landscaped roughly following the initial principles developed by Downing. Today, only glimpses of his designs can be seen in Lafayette Park, the Ellipse, and some of the circles.

Changes on the National Mall

The Smithsonian Institution, which had been established by Congress in 1846, set the precedent for public educational and cultural institutions on the Mall. The cornerstone of the original building on the south side of the Mall, known as the Castle, was laid in 1847, and the building was completed in 1855.

In February 1835 Congress granted permission to the Baltimore & Ohio (B&O) Railroad to run its line into the city. The railroad's first depot stood by the canal, at Pennsylvania Avenue and 2nd Street NW. A later depot was built somewhat farther north, at New Jersey Avenue and C Street. In 1855, Congress allowed the Alexandria & Washington Railroad to lay tracks along First Street, at the western foot of Capitol Hill, heading to the B&O depot. Related railroad sheds and tracks crossing the Mall at about 5th Street were built during the Civil War.

One of the largest incursions on the Mall was the construction of the Baltimore & Potomac Depot in 1872. Congress gave the railroad free use of a site on the Mall itself, and construction of a temporary wooden depot allowed passenger service to begin on July 2, 1872, and a new, permanent depot was probably in use by late December 1873. Up to 30 deaths occurred annually because of the surface railroad crossing. (The station was also the site of the assassination of President James Garfield in 1881.)

An armory was constructed on the Mall near the Smithsonian Institution in 1855, and the National Museum was completed in 1881 (now the Arts and Industries Building). The Washington City Canal was covered over about 1881, with a portion becoming Constitution Avenue.

The Department of Agriculture occupied a new office building on the Mall in 1868. Later a conservatory and cultivated gardens were developed on the Mall. A successor Department of Agriculture complex was built on the south side of the mall in 1905.

Construction of a causeway and bridge over the Potomac in the 1830s had resulted in extensive mud flats and navigation shoals. Flooding required the bridge to be continually rebuilt and often caused damage to the Mall. In 1882 Congress allocated money to provide better flood control, to eliminate areas where malaria-spreading mosquitoes bred, and to create land from excessive silt that had built up along the Potomac River. Over the next 20–30 years approximately 740 acres of new land were created, one of the largest civil engineering projects of its time. This project extended the city to its current boundary on the Potomac River.

The Washington Monument was dedicated in 1885, and the monument was completed in 1888. An associated boiler house / Survey Lodge was constructed in 1885–6, and a Monument Lodge was opened in 1888.

In 1897 President Grover Cleveland signed the Potomac Park law, which was prompted by citizens' effort and stated that the land was to be "forever held as a public park for the recreation and pleasure of the people." In 1901 the Potomac Railroad Bridge was constructed by the U.S. Army Corps of Engineers and subsequently became the boundary between East and West Potomac parks. (East Potomac Park is outside the study area.)

1900–1950

The McMillan Plan

By 1900 the historic city center was in need of refurbishment. The success of the City Beautiful movement following the 1893 World's Columbian Exposition in Chicago led to a growing sentiment that the City of Washington needed to be renewed. In 1898 the American Institute of Architects (AIA) called for a redesign of the capital, whose centennial was approaching. At the 1900 AIA annual meeting, landscape architect Frederick Law Olmsted Jr. stated that a formal character for Washington, D.C., was appropriate and proposed treating the Mall as a compound, or multi-street, boulevard. There was a new appreciation of the vision in L'Enfant's plan.

In March 1901 the Senate created the Senate Park Commission, also known as the McMillan Commission. Senator James McMillan was chair of the Senate Committee on the District of Columbia. Members included architects Daniel Burnham (appointed chairman) and Charles McKim, and sculptor Augustus St. Gaudens, along with Frederick Law Olmsted Jr. The subsequent "Report of the Senate Committee on the District of Columbia on the Improvement of the Park System of the District of Columbia" (Senate Report No. 166, 57th Congress, 1st Session, 1902) included not only the printed document, but an exhibition of models, drawings, and paintings.

The commission's report, which became known as the McMillan plan, built on the L'Enfant plan. It referenced the L'Enfant plan's vision in its formality, its concept of public spaces, and its concern with spatial relationships and civic art, but the McMillan plan expanded the vision for the central public spaces of the city. The McMillan plan emphasized the Mall as the city's ceremonial core, and the Mall would be extended onto the newly reclaimed land to the west and south.

The formal vistas that L'Enfant had intended along the axes between the primary buildings around the Mall had been gradually lost during the 1800s. For example, the view along Pennsylvania Avenue between the Capitol and the White House — one of the two critical vistas in the L'Enfant plan — was soon hidden by the construction of the south wing of the Treasury Building in 1855–60. The McMillan plan sought to redesign the central Mall area, reinforcing the axes and the vistas of L'Enfant's plan. The McMillan plan incorporated a five-point kite shaped design that would create a view of fairly open parkland. Two new monuments would be built, one to the west of the Washington Monument and in line with the Capitol, and one to the south, inline with the White House; these new monuments would form the south and west points of the kite. A ceremonial bridge would extend across the Potomac to symbolically reconnect the North and South. Subsequent plans further defined and incorporated many of the McMillan plan's underlying ideas.

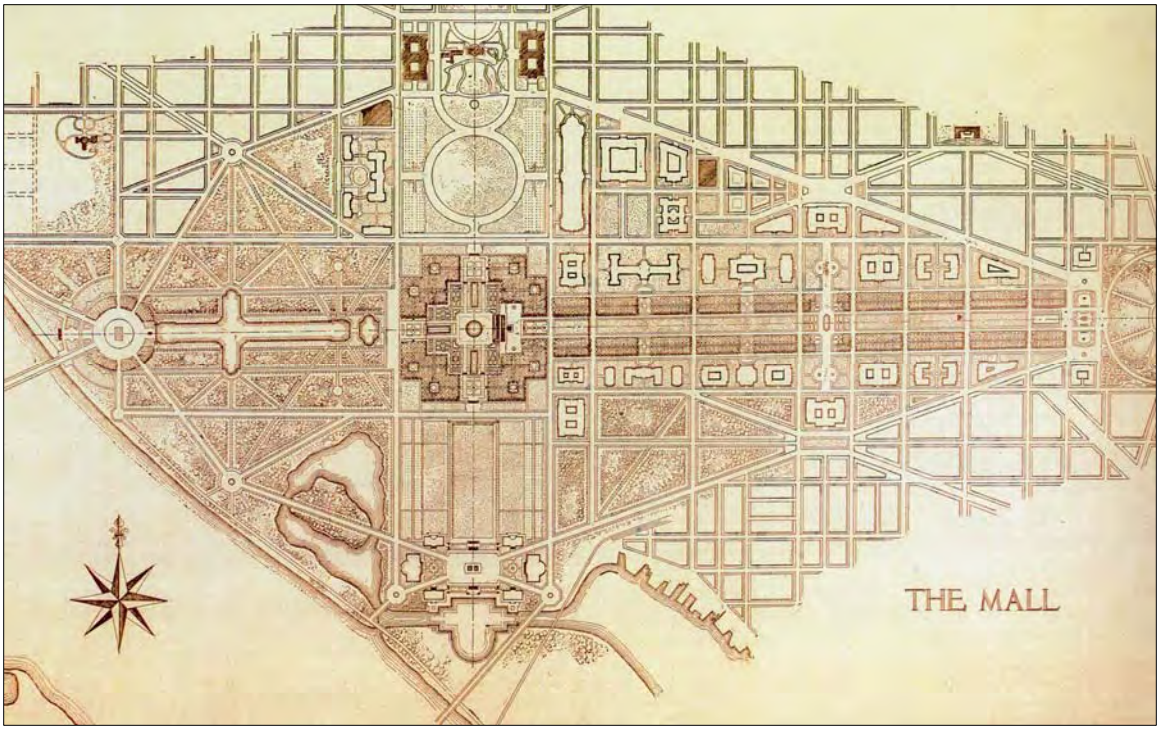
The McMillan plan called for removing the naturalistic gardens of the Downing plan and creating a more ceremonial, geometric, large-scale landscape, as favored by L'Enfant. The plan differed from L'Enfant's by replacing the grand processional avenue in the center of the Mall with a 300-foot-wide expanse of grass lined on either side by symmetrical rows of American elms.

Using the principles of the City Beautiful movement and its promotion of the Beaux Arts style of architecture, the plan recommended locations for public museums lining the Mall east of the Washington Monument and federal offices centralized within the city core. In addition to recommending that the White House be restored to its original appearance, the plan also recommended that a series of parks be developed throughout the city.

FIGURE 25: THE MCMILLAN PLAN



Oblique view of the McMillan plan, which reflected the tenets of the City Beautiful movement.



McMillan plan view, which shows locations for the future Lincoln and Jefferson memorials to complete the western portion of the National Mall.

Changes on the National Mall

One of the first actions under the McMillan plan that affected the Mall was the relocation of the railroad terminal to the new Union Station, which was constructed in 1908 north of the U.S. Capitol. Other development included the following:

- In 1912 some 1,800 cherry trees that were a gift from Japan were planted around the Tidal Basin. The Thomas Jefferson Memorial was finished in 1939, completing the view from the White House, as envisioned by the McMillan plan.
- The Sylvan Theater was constructed south of the Washington Monument in 1917 to provide a venue for plays, concerts, and other outdoor presentations.
- The Lincoln Memorial was dedicated in 1922. The proposed cruciform-shaped reflecting pool proposed in the McMillan plan was modified to a rectangular form to accommodate temporary military buildings that had been erected during World War I.
- The Ulysses S. Grant Memorial was dedicated in Union Square in 1922.
- Rows of American elms were planted on both sides of the Mall, and four boulevards were laid out down the Mall, two on either side of the center lawn.

Between 1900 and 1950 active recreational facilities were incorporated into the National Mall for the first time. During the early part of the 20th century swimming facilities, athletic fields, and other recreational amenities were provided in open spaces. National Capital Parks maintained its own recreation division until 1942, when the District Recreation Board was created. The 1949 "Memorandum of Agreement between the National Park Service and the District of Columbia" formally recognized that certain areas of the National Mall were part of the D.C. recreation system.

Federal Legislation and Administration

To ensure that the visions of the L'Enfant plan and the new McMillan plan were protected, Congress created the United States Commission of Fine Arts in 1910 to advise on the location of statues, fountains, and monuments in the public areas in the District of Columbia. Later that year President William Howard Taft signed an executive order giving the commission authority to advise on plans for public federal buildings erected in the District.

In 1924 the National Capital Park and Planning Commission (later the National Capital Planning Commission) was formed to develop a comprehensive, consistent, and coordinated plan for the parks of the national capital and its environs in Maryland and Virginia. Its mission was expanded to purchase lands for future development and to devise strategies for preventing pollution in Rock Creek and the Anacostia and Potomac rivers.

In 1930 the Shipstead-Luce Act gave the Commission of Fine Arts authority to review the designs of private construction projects within certain areas of the national capital, specifically construction that fronts or abuts the grounds of the Capitol, the grounds of the White House, the portion of Pennsylvania Avenue extending from the Capitol to the White House, and the Mall park system, as well as Rock Creek Park, the National Zoo, the Rock Creek and Potomac Parkway, the southwest waterfront, and Fort McNair.

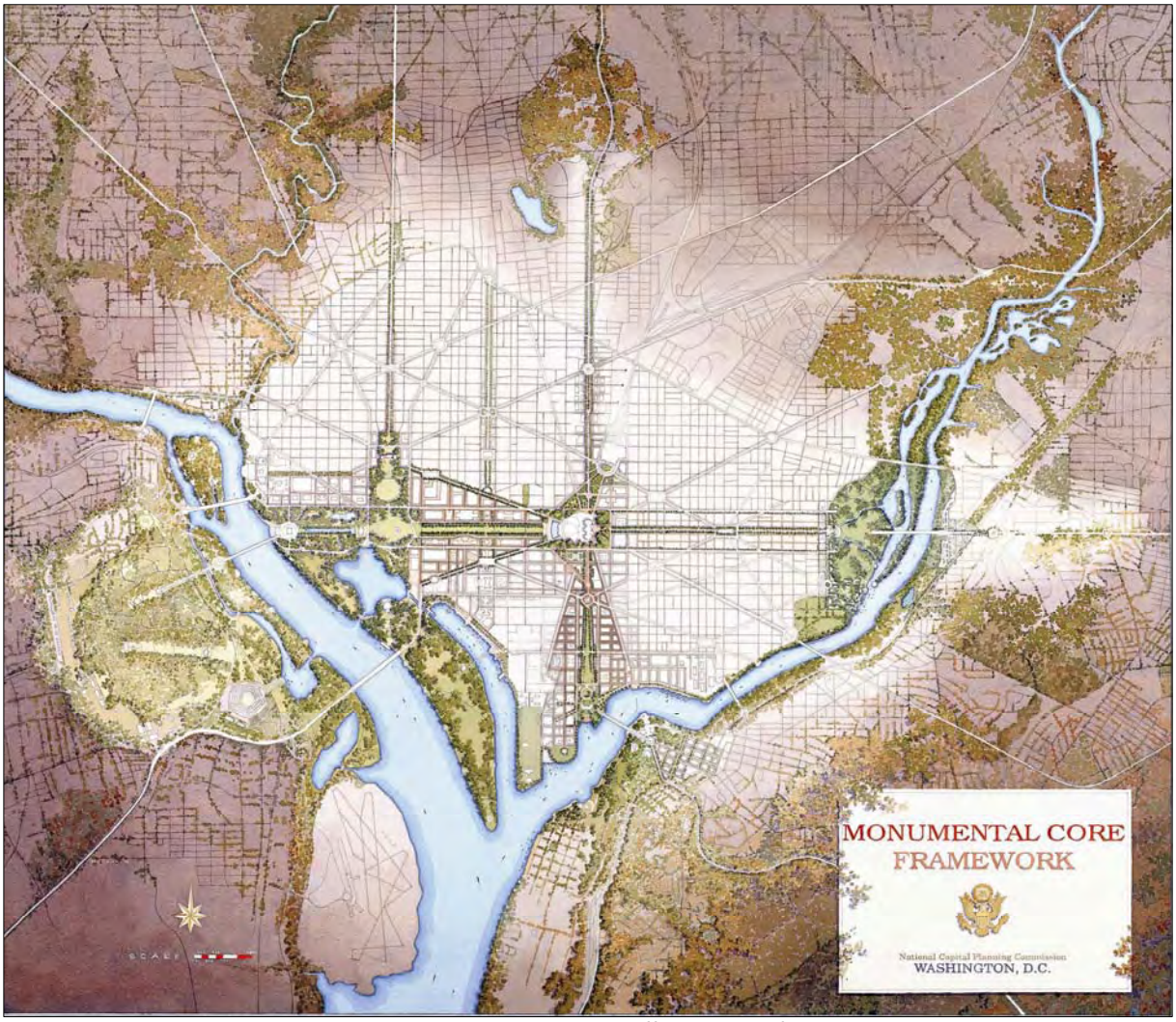
In 1933 federal parks in Washington, D.C., were consolidated under the management of the National Park Service.

1950 TO 2000

Federal Plans

No plans for the National Mall were undertaken in the 1950s. In the 1960s and 1970s master plans for the Washington Mall area were prepared by Skidmore, Owings and Merrill. They followed the general layout of the L'Enfant and McMillan plans, while attempting to accommodate national prosperity and address the congestion caused by automobile traffic. The whole National Mall area would be pedestrian friendly. Commercial and personal vehicle traffic, as well as vehicle parking, would be removed from the Mall, and all north-south roadway crossings would be tunneled under the Mall. A hop-on and -off visitor bus service would be provided on designated lanes. Bicycle use would be encouraged. Underground

FIGURE 26: EXTENDING THE LEGACY, 1997



The National Capital Planning Commission's *Extending the Legacy* plan offers proposals for transportation, community revitalization, public building, and open space in the monumental core. Courtesy of the National Capital Planning Commission.

parking would be provided at the Ellipse and Constitution Gardens.

The 1976 U.S. Bicentennial Celebration provided the motivation for planning to accommodate large numbers of expected visitors to the nation's capital. A number of major memorials were added to the National Mall throughout this period, further underscoring its importance as the home to the great symbols of our country.

The 1997 National Capital Planning Commission's *Extending the Legacy* plan provides a framework for change that builds on the past, plans for the future, and focuses on the use of transit rather than expanded automobile access.

Changes on the National Mall

Proposals that were implemented included the following:

- Roads were tunneled under the Mall at 9th and 12th streets NW/SW and I-395 (between 1st and 3rd street NW/SW). Washington and Adams drives were converted to gravel walkways as planned, but Madison Drive NW and Jefferson Drive SW were not closed to traffic, and parking was not removed as planned.

- The Capitol Reflecting Pool was constructed over the I-395 tunnel, and the Botanic Garden was relocated to the current area south of the Mall.
- Constitution Gardens was dedicated in 1976. It is an oasis in the midst of the city, but its proposed function as an area for programmed activities, restaurants, events, concerts, and celebrations was never achieved, nor was underground public parking developed.
- The temporary military buildings on the grounds of the Washington Monument and on either side of the Lincoln Reflecting Pool were removed in 1971.
- At the Washington Monument 15th Street NW/SW was redesigned as a symmetrical curve. The monument was restored in the 1990s, and physical security improvements were completed in 2005.

The Vietnam Veterans Memorial was added in 1982, the Korean War Veterans Memorial in 1995, and the Franklin Delano Roosevelt Memorial in 1997. These actions made West Potomac Park more commemorative in character and less recreational.

Federal Legislation

Congress passed the Commemorative Works Act in 1986. Its purposes are

(1) to preserve the integrity of the comprehensive design of the L'Enfant and McMillan plans for the Nation's Capital;

(2) to ensure the continued public use and enjoyment of open space in the District of Columbia and its environs, and to encourage the location of commemorative works within the urban fabric of the District of Columbia;

(3) to preserve, protect and maintain the limited amount of open space available to residents of, and visitors to, the Nation's Capital; and

(4) to ensure that future commemorative works in areas administered by the National Park Service and the Administrator of General Services in the District of Columbia and its environs—

(A) are appropriately designed, constructed, and located; and

(B) reflect a consensus of the lasting national significance of the subjects involved.

CURRENT CONDITIONS — 2000 TO 2010

Following the terrorist attacks on September 11, 2001, a new round of security planning and construction was undertaken by the National Park Service, the National Capital Planning Commission, the District of Columbia, and federal agencies. NPS perimeter security projects have been completed or are underway for the Washington Monument, the Lincoln Memorial, and the Thomas Jefferson Memorial. Museums lining the Mall also have perimeter security projects underway or completed. The new security climate has resulted in public concerns about achieving an appropriate level of protection while retaining the open access and freedom of movement expected in a democracy.

Federal Plans

The National Capital Planning Commission adopted a *Memorials and Museums Master Plan* in 2001, which stems from the *Extending the Legacy* plan and guides the selection of sites for future memorials and museums.

To relieve pressure on the National Mall, the National Capital Planning Commission and the U.S. Commission of Fine Arts have developed the *Monumental Core Framework Plan* to enhance the areas surrounding the National Mall (NCPC 2009). This plan will help provide accessible, inviting, and attractive places for public commemoration, participation, and celebration beyond the National Mall. The plan will

- provide ways to seamlessly extend desirable qualities of the National Mall to surrounding areas
- reestablish vistas of national importance, and create important new places for cultural and commemorative attractions
- improve access and connections to popular places around the city

Changes on the National Mall

Two new memorials were dedicated — the George Mason Memorial in 2002, and the World War II Memorial in 2004. The World War II Memorial on the east-west axis of the National Mall between the Washington Monument and the Lincoln Memorial was built around a reconstructed Rainbow Pool to ensure that the historic vistas between the existing memorials would be retained.

Federal Legislation

In 2003 Congress amended the Commemorative Works Act to strengthen and clarify its purpose. Congress designated the Reserve area (see Figure 27), which includes the National Mall and the White House, stating that

> (1) the great cross-axis of the [National] Mall in the District of Columbia, which generally extends from the United States Capitol to the Lincoln Memorial, and from the White House to the Jefferson Memorial, is a substantially completed work of civic art; and
>
> (2) to preserve the integrity of the [National] Mall, a reserve area should be designated with the core of the great cross-axis of the Mall where the siting of new commemorative works is prohibited.

A commemorative work is defined as

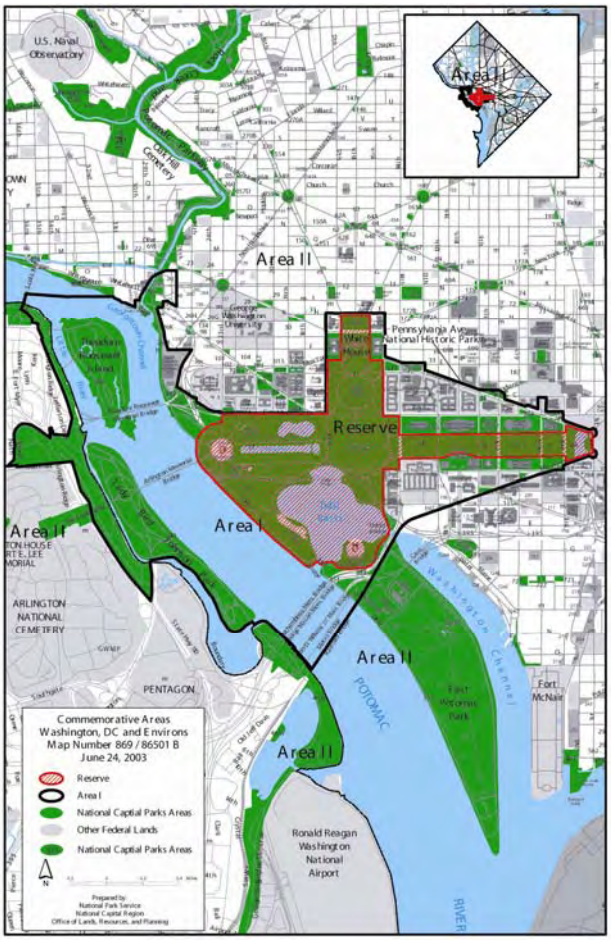
> any statue, monument, sculpture, memorial, plaque, inscription, or other structure or landscape feature, including a garden or memorial grove, designed to perpetuate in a permanent manner the memory of an individual, group, event or other significant element of American history.

Congress also redesignated Areas I and II, where additional memorials could be erected in the future (see Figure 27).

The Reserve contains parkland formerly in Area I, including the National Mall, however, the 2003 amendments to the Commemorative Works Act provided for the placement of those projects that had already been approved for the National Mall, assuming that they met the requirements of the Commemorative Works Act or other applicable laws. These final projects are

- Vietnam Veterans Memorial Center
- Martin Luther King, Jr. Memorial

FIGURE 27: COMMEMORATIVE AREAS, WASHINGTON, D.C., AND ENVIRONS



- National Museum of African American History and Culture — to be located on the northeast section of the Washington Monument, the area bounded by Constitution Avenue NW, Madison Drive NW, and 14th and 15th streets NW.

The authorization for a fourth memorial on the National Mall — Black Revolutionary War Patriots — expired before its sponsor met all the requirements of the Commemorative Works Act.

Memorials within what is now Area 1 that have been authorized include a memorial to President Dwight D. Eisenhower, which will be on the south side of Independence Avenue SW near the National Air and Space Museum. A memorial to President John Adams has been proposed, but a site has not been identified. A memorial to American Veterans Disabled for Life is planned for Area II south of the National Mall.

CULTURAL RESOURCES

Archeological resources, ethnographic resources, American Indian trust resources, and museum collections have been dismissed from further consideration. The cultural resources considered here include historic districts, historic properties, cultural landscapes, and memorials.

The resources of the National Mall and Memorial Parks are covered by numerous listings on the National Register of Historic Places in compliance with section 106 of the National Historic Preservation Act.

MEMORIALS

While several major memorials are individually listed on the National Register of Historic Places (the Washington Monument, the Lincoln Memorial, and the Thomas Jefferson Memorial), other memorial are not yet historic (that is, they are not 50 years old). These newer memorial may be listed on the national register as contributing resources to a historic district, such as the Franklin Delano Roosevelt Memorial, the Korean War Veterans Memorial, and the Vietnam Veterans Memorial. All memorials are managed pursuant to the laws and regulations that may be specific to them, and changes may require congressional authorization.

Commemorative works are otherwise generally subject to review, and in some instances approval by the National Capital Planning Commission and the U.S. Commission of Fine Arts, and possibly by the D.C. Historic Preservation Office. This would depend on whether the memorial is historic or located within the historic landscape or is affecting other historic features. The Commemorative Works Act also provides protection for existing memorials from encroachment by new memorials.

As a result of the 2003 amendments to the Commemorative Works Act, no new memorials will be added to the National Mall; however, memorials could be placed in areas I and II adjacent to the National Mall.

No structures or properties have been designated as world heritage sites by the United Nations Educational, Scientific and Cultural Organization. Additional details of the resources described below are included in appendix C.

The planning and development history of the National Mall is discussed in the previous chapter, "The Context for the Plan." Historic structures, historic districts, and cultural landscapes that could be affected by the implementation of any alternative are described in this chapter.

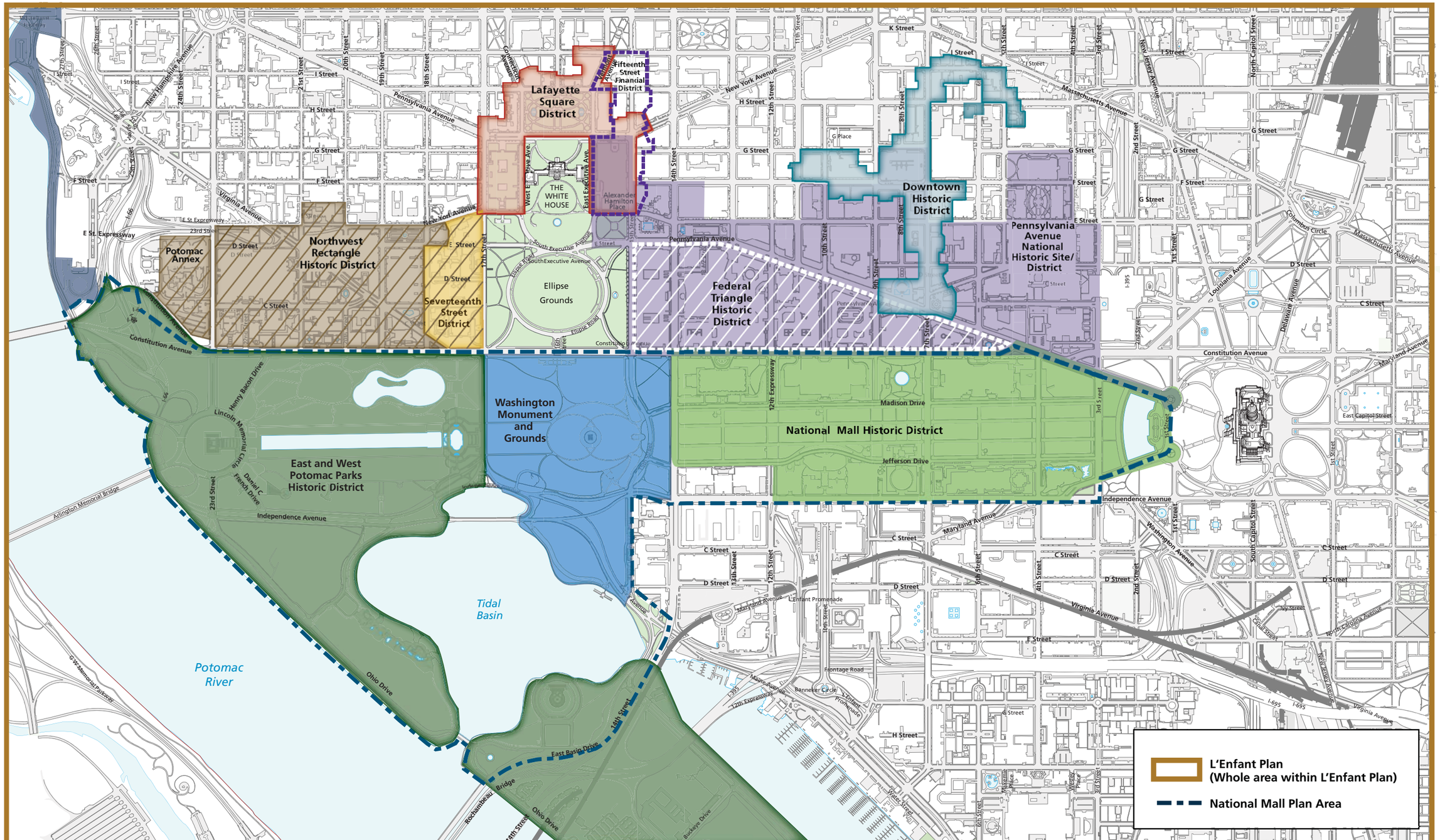
HISTORIC DISTRICTS

The following historic districts are listed on the National Register of Historic Places and are shown on the National Register Historic Districts and Properties map.

The Mall

The Mall, encompassed by Constitution and Pennsylvania avenues on the north, 1st Street on the east, Independence and Maryland avenues on the south, and 14th Street on the west, is slightly over 1 mile long and 1,500 feet wide, but narrowing to approximately 500 feet at its eastern terminus. The Mall is significant as the central axis of the city's monumental core as designed by L'Enfant in 1791. The Mall was to be the foremost avenue of the city, the so-called "Grand Avenue," running west from the Capitol to a point directly south of the President's House, where its terminus would be crowned by an equestrian statue of George Washington. According to L'Enfant's plan, the Mall was to be "four hundred feet in breadth, and about a mile in length, bordered by gardens, ending in a slope from the houses on each side." Although L'Enfant was dismissed as the capital architect in 1791, his grand plan for the city was retained.

During the 19th century L'Enfant's formal design for the Mall was largely forgotten. In 1851 Andrew Jackson Downing was hired to design a landscape plan for the Mall, but as previously discussed, his plans were never implemented. During the Civil War, the Mall grounds were used for military purposes, and

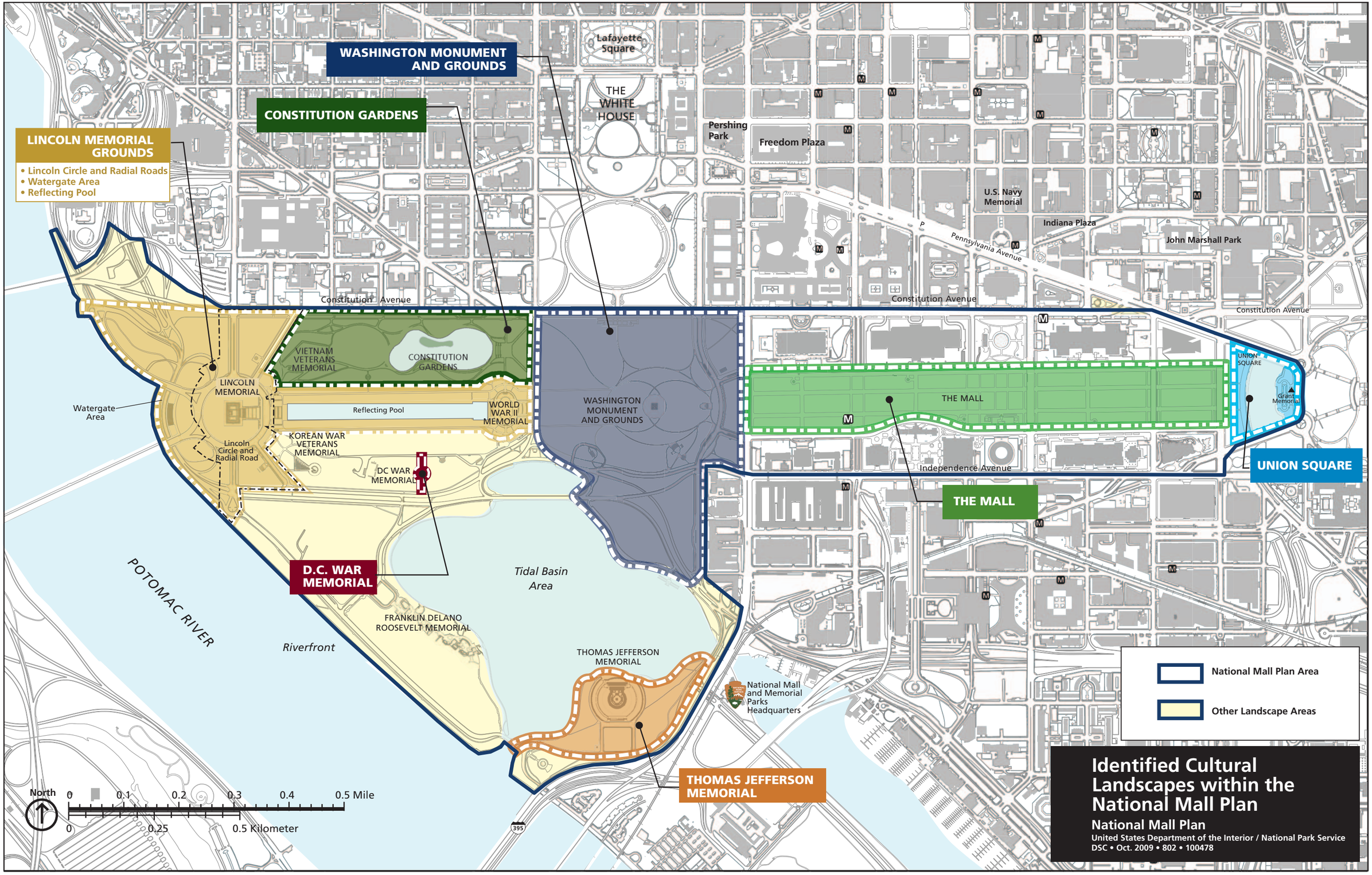


National Register Historic Districts and Properties

National Mall Plan

United States Department of the Interior • National Park Service
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Identified Cultural Landscapes within the National Mall Plan

National Mall Plan

United States Department of the Interior / National Park Service
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the Baltimore and Potomac Railroad built a depot on a 14-acre tract at 6th and B streets in 1872. The Smithsonian Castle was the earliest building on the Mall and was designed by James Renwick and built in 1847–55. The Arts and Industries Building, a national historic landmark, was designed by Cluss and Schulze, with Montgomery C. Meigs and built in 1879–81. This is a well-preserved example of 19th century "exposition" type of architecture. It was built to house the international exhibits left over from the Philadelphia Centennial Exhibition of 1876 and is a fanciful construction of polychrome brick.

By 1900 the Mall was a hodgepodge of public, private, and commercial structures loosely connected by the overgrown remnants of Downing's naturalistic design. When the Senate Park Commission submitted its report to Congress, the plan called for the restoration, development, and supplementation of the "Grand Avenue" ideal proposed by L'Enfant. The core of the Mall was to be a broad grass carpet, typical of those in Europe, 300 feet wide and running the entire length of the Mall grounds, bordered on each side by four rows of American elm trees. Public buildings were to border the whole, separated from the elms by narrow roadways. The railroad station was removed from the area in 1909.

The Department of Agriculture was built in 1905 and designed by Rankin, Kellogg and Crane. This was the first building constructed on the Mall after the issuance of the McMillan Commission report. It took the intervention of President Theodore Roosevelt to keep the building from the middle of the Mall.

The National Museum of Natural History was designed in 1911 by Hornblower and Marshall and the wings were added in 1965 (designed by Mills, Petticord and Mills). This neoclassical building is the first building on the north side of the Mall to comply with the strictures of the McMillan Commission.

The Freer Gallery of Art was designed in 1923 by Charles A. Platt and is a neoclassical building housing Charles Lang Freer's collection of the painting and sculpture of Asia and 20th century American artists.

The National Museum of American History, designed in 1964 by Steinman, Cain and White houses a fascinating variety of exhibits.

The Joseph Hirshhorn Museum and Sculpture Garden was designed in 1974 by Skidmore, Owings and Merrill. Lester Collins designed the sculpture garden in 1981. This round, concrete building, 231 feet in diameter houses one of the country's greatest collections of contemporary sculpture and painting. The garden, which is sunken, provides a pleasant oasis for viewing more of the collection.

The National Air and Space Museum was completed in 1976 and designed by Hellmuth, Obata and Kassabaum. This is a monumental glass and granite building which contains 200,000 square feet. In 1988 a restaurant designed by the same firm was added to the east side of the building.

The Quadrangle Museums Project was designed in 1987 by Shapely, Bullfinch, Richardson and Abbot. The quadrangle opens south from the Smithsonian Castle and contains two small buildings which are staging areas for two underground museums, the Sackler Gallery of Asian Art and the National Museum of African Art. Another smaller kiosk-like building provides the entrance for the S. Dillon Ripley Center. The buildings are placed in the Enid A. Haupt Garden, which is centered on a diamond-shaped 19th century parterre.

The National Gallery of Art (West Building) was designed by John Russell Pope in 1941. This neoclassical building relates well to both the Natural History Museum and the Federal Triangle. The Sculpture Garden located to the west of the Museum and designed by the Olin Partnership, opening in the spring of 1999. The National Gallery of Art (East Wing) was designed in 1978 by I. M. Pei and Partners. This elegant building is based on a triangular module. The marble used on the building is from the same quarry as the West Building.

Adjacent to the Mall along 14th Street, can be found the Auditors Main Building (now used by the U.S. Forest Service) designed in 1880 by James G. Hill. This dark red-brick building provides a strong contrast to the neoclassical buildings in the vicinity. The U.S. Holocaust

Memorial Museum, designed in 1993 by Pei Cobb Freed and Partners, is between the Auditor's Main Building and the Bureau of Printing and Engraving.

East and West Potomac Parks

The area of East and West Potomac parks, situated roughly between the Potomac River and the grounds of the Washington Monument, were created as a result of lowland areas being filled by the Army Corps of Engineers in the late 1800s. In 1897 President Grover Cleveland signed the Potomac Park law, which said this land was to be "forever held as a public park for the recreation and pleasure of the people." The parks are part of the collection of national parklands in Washington, D.C., and nearby Maryland and Virginia that are collectively referred to as the National Capital Region of the National Park Service.

The two parks have a combined area of approximately 730 acres — nearly 400 acres in West Potomac Park, and 330 acres in East Potomac Park. Together, they comprise a large portion of the city's monumental core, providing recreational space for residents and tourists alike. East and West Potomac Parks are characterized by broad expanses of open space framed by mature landscape plantings and by views of the National Mall's major memorials.

Federal Triangle Historic District

The Federal Triangle lies between Pennsylvania Avenue, Constitution Avenue, and 15th Street NW and is part of the Pennsylvania Avenue National Historic Site. It is comprised of a unified group of 10 important federal office buildings designed by different architects. Two of the structures, the Old Post Office and the District Building, were constructed between 1899 and 1908. The rest were constructed between 1926 and the 1930s except for the Ronald Reagan Building and International Trade Center, which was constructed in the 1990s.

The 1926 Public Buildings Act, which permitted the federal government to hire private architects to design federal buildings, heralded the beginning of the country's largest public buildings construction program. The planning for the Federal Triangle was one of the last City Beautiful efforts on such a monumental scale in the nation.

Northwest Rectangle

From the time of the McMillan plan the area to the west of the Ellipse was planned for monumental buildings that would frame the newly extended National Mall. The growing federal government led by the 1930s to the need for more office space, and a formal plan was conceived for a monumental complex of federal buildings that would balance the Federal Triangle on the east side of the Ellipse.

Called the Northwest Rectangle, this area soon saw a large complement of federal buildings, including the Public Health Service (1931–33), the Interior Department (1936), and the Federal Reserve (1937). Later government buildings in the area, including the Department of State (1957–60), the Civil Service Commission (1960s), and the Federal Reserve Annex (1970s), reflect modernist rather than classical designs.

Pennsylvania Avenue Historic District

Pennsylvania Avenue is among the world's most famous streets. On September 30, 1965, the Secretary of the Interior designated Pennsylvania Avenue National Historic Site, which encompasses the avenue from the Capitol to the White House and a number of blocks around it.

Congress created the Pennsylvania Avenue Development Corporation on October 27, 1972, to plan and implement the avenue's revitalization. Congress directed that the avenue be developed, maintained, and used "in a manner suitable to . . . the historic relationship to the legislative and executive branches of the Federal Government and to the governmental buildings, monuments, memorials, and parks in or adjacent to the area."

Downtown Historic District

The 800 block of F Street NW is representative of the earliest development of this area as the commercial core of Washington, D.C. Surrounded by such monumental buildings as the

old Patent Office (now the National Portrait Gallery) and the General Post Office, this block introduces a varied facade that enhances the qualities of these buildings and the L'Enfant plan itself.

Historic Properties and Cultural Landscapes

Some cultural resources are covered in multiple national register nominations — for the National Mall, East and West Potomac Parks, the L'Enfant Plan of the City of Washington, D.C., Civil War Monuments in Washington, D.C., and American Revolution Statuary. Historic districts and properties listed on the National Register of Historic Places are shown on the National Register Historic Districts and Properties map. Documented cultural landscapes within the National Mall are shown on the Cultural Landscapes map.

Buildings facing the Mall and belonging to the National Gallery of Art, the Smithsonian Institution, and the U.S. Department of Agriculture are all individually listed on the National Register of Historic Places. Two Smithsonian Institution buildings on the National Mall — the Smithsonian Castle and the Arts and Industries Building — have also been designated by the Secretary of the Interior as national historic landmarks. The United States Capitol and the White House were also designated national historic landmarks on December 19, 1960.

In compliance with section 110 of the National Historic Preservation Act, the National Park Service maintains inventories of it cultural resources. The List of Classified Structures is the inventory for all structures and objects of historic significance under NPS jurisdiction. These resources are listed, or have been determined to be eligible for listing on the National Register of Historic Places, either as a part of a larger district or multiple resource nomination, or as individual listings. Some resources on the List of Classified Structures have not yet been evaluated for listing on the national register, but are managed as a historic resource. Cultural landscapes are documented on the NPS Cultural Landscapes Inventory. All resources listed below are included in the List of Classified Structures or the Cultural Landscape Inventory (unless otherwise noted).

The following discussion first focuses on the National Mall in its entirety, followed by descriptions for each area (presented in the same order as for the alternatives):

- the Mall (1st to 14th Streets), including Union Square from 1st to 3rd streets, and the Mall from 3rd to 14th streets
- the Washington Monument and grounds
- West Potomac Park north of Independence Avenue, including the World War II Memorial, Constitution Gardens, the Vietnam Veterans Memorial, the Lincoln Memorial, the Korean War Veterans Memorial, the D.C. War Memorial, and Ash Woods
- West Potomac Park south of Independence Avenue, including the Tidal Basin, the Franklin Delano Roosevelt Memorial, the West Potomac Park riverfront, the George Mason Memorial, and the Thomas Jefferson Memorial

The National Mall

The National Mall is essentially a large-scale cultural landscape in the nation's capital, made up of smaller, nationally significant cultural landscapes, such as Union Square, the Mall, the Washington Monument grounds, the Thomas Jefferson Memorial, the Lincoln Memorial, and Constitution Gardens. The character-defining features of the National Mall cultural landscape include:

- ***Views and Vistas*** — Views and vistas date from the L'Enfant plan, which laid out the great cross axes, with east-west and north-south vistas, and the McMillan plan, which added to the L'Enfant plan by extending views to the west and south, thus creating the kite-shaped character of the National Mall today, extending from the U.S. Capitol to the Lincoln Memorial, and from the White House to the Thomas Jefferson Memorial, with the Washington Monument in the center (see the Important Vistas map).
- ***Spatial Organization*** — The spatial organization of the National Mall is derived

directly from the L'Enfant and MacMillan plans, and modified by later plans.

- ***Circulation Patterns*** — Circulation patterns originated in the L'Enfant plan and were enlarged and modified first by the McMillan plan and then by highway and mass transit construction for the nation's Bicentennial.
- ***Vegetation Patterns*** — Vegetation patterns originated in the L'Enfant plan and were modified by designs by Frederick Law Olmstead Jr. in the early 20th century.
- ***Constructed Water Features*** — Constructed water features originated in the McMillan plan and were expanded in later plans. They include the Tidal Basin, the Lincoln Reflecting Pool, the Capitol Reflecting Pool in Union Square, the Rainbow Pool, Constitution Gardens Lake, and various fountains and water features.
- ***Land Use Patterns*** — Land use patterns originated in the L'Enfant plan and were modified in the McMillan plan.
- ***Monuments, Memorials, and Plaques*** — Presidential monuments and memorials include the Washington Monument, the Lincoln Memorial, the Thomas Jefferson Memorial, the Ulysses S. Grant Memorial,

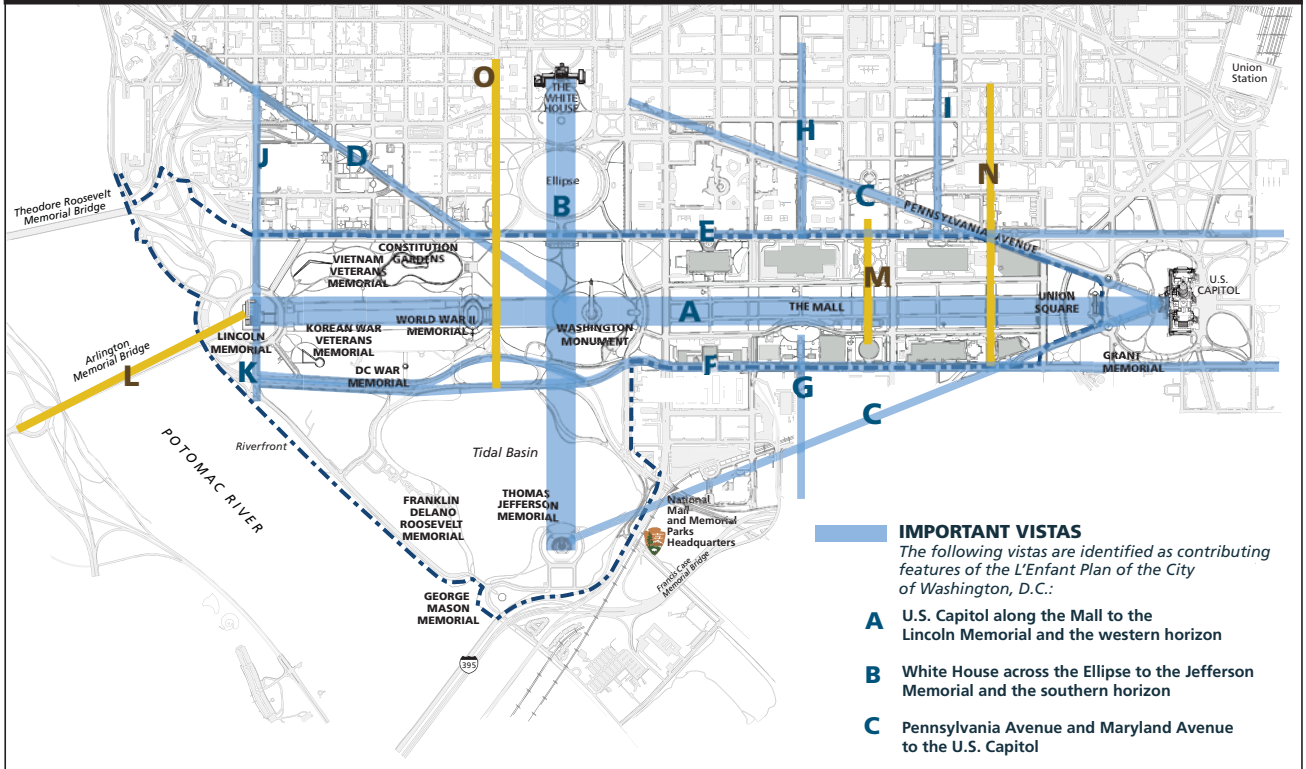
Important Vistas

Important Vistas

National Mall Plan

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National Mall Plan Area

OTHER IMPORTANT VISTAS

- **L** Lincoln Memorial to Arlington House in Arlington Cemetery
- **M** 8th Street Axis–National Archives to Hirshhorn Museum
- **N** 4th Street NW to National Building Museum
- **O** 17th Street

IMPORTANT VISTAS

The following vistas are identified as contributing features of the L'Enfant Plan of the City of Washington, D.C.:

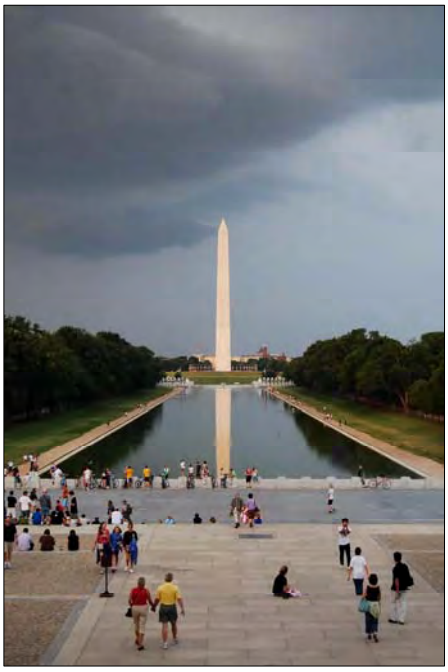
- **A** U.S. Capitol along the Mall to the Lincoln Memorial and the western horizon
- **B** White House across the Ellipse to the Jefferson Memorial and the southern horizon
- **C** Pennsylvania Avenue and Maryland Avenue to the U.S. Capitol
- **D** Virginia Avenue to the Washington Monument
- **E** Capitol grounds, Mall, and Potomac Parks along Constitution Avenue
- **F** Capitol grounds, Mall, and Potomac Parks along Independence Avenue
- **G** 10th Street SW to the Smithsonian Castle
- **H** 10th Street NW to the Museum of Natural History
- **I** 6th Street NW to the National Gallery of Art
- **J/K** 23rd Street to the Lincoln Memorial

FIGURE 28: THE GREAT CROSS AXES ON THE NATIONAL MALL





Looking west from the U.S. Capitol toward Union Square and the Washington Monument (above) and east from the Washington Monument (right).



Looking east from the Lincoln Memorial (left) and west from the Washington Monument to the World War II Memorial and Lincoln Memorial (below).



Looking north to the White House from the Washington Monument grounds and south to the Thomas Jefferson Memorial.





and the Franklin Delano Roosevelt Memorial. War memorials include the World War II Memorial, the Vietnam Veterans Memorial, and the Korean War Memorial. Memorials to individuals include the John Paul Jones Memorial the John Ericcson Memorial, and the George Mason Memorial. There are a number of plaques and other commemorative markers.

- ***Topography*** — The topography of the National Mall reflects the L'Enfant design for the city on two hills — one for the White House and the other for the Capitol, with a knoll constructed for the Washington Monument.
- ***Small-scale Features*** — Small-scale features include lighting, benches, the Japanese pagoda, and other furnishings originating in the Olmstead plan and subsequent plans.
- ***Building and Structures*** — Building and structures include the Lockkeeper's House, Monument Lodge, and the Survey Lodge.
- ***Cluster Arrangement*** — The cluster arrangement of the National Mall was influenced by the McMillan plan. Elements include the Smithsonian Institution buildings, the National Gallery of Art, and other adjacent monumental buildings that frame and define the character of the National Mall's cultural landscape.
- ***Archeological Features*** — Archeological features, such as Tiber Creek, the train station, and other earlier features exist on the present site of the National Mall.

The Mall

Union Square (1st to 3rd Streets)

The focal point of Union Square is the Ulysses S. Grant Memorial, with the Capitol Reflecting Pool and plaza to the west. The following description of resources is based on the "Cultural Landscape Inventory" for Union Square (NPS 2006b).

Grant Memorial

The Ulysses S. Grant Memorial overlooks Union Square, below the west grounds of the Capitol. The memorial is a large sculptural grouping consisting of three elements: On the north is a cavalry grouping of seven horsemen in a dramatic charge (erected in 1912), in the center an equestrian statue of General Grant protected by four lions at each corner (erected in 1922), and on the south is an artillery grouping depicting three soldiers and a horse-drawn limber carrying cannon (erected in 1916). The Grant statue is the second largest equestrian statue in the world. The memorial is listed on the National Register of Historic Places as a contributing feature of Civil War Monuments of Washington, D.C., and on the National Mall national register nomination. It is also on the NPS List of Classified Structures.

Spatial Organization

The Capitol Reflecting Pool is a 6-acre wedge-shaped pool with stone coping west of the Ulysses S. Grant Memorial. Occupying over half of Union Square, the pool was built in 1969–71 when the center leg of the Inner Loop Freeway was constructed, which passes underneath Union Square along the axis of 2nd Street. Sunken walks flank the north, west, and south sides of the pool, and a wide plaza lies to the west. Three broad steps lead down to walks, which are sunk about a foot below ground level; the pool's coping rises to about this height, so that the surface of the pool is near ground level. North and south of the Grant Memorial are narrow flights of steps leading down to the pool.

In plan view the pool's longer west end has a convex curve, and the shorter east end has a concave curve that is broken by a rectangular recess in the center, on line with the Grant Memorial and the center line of the Mall. The pool's angled sides parallel the axes of Pennsylvania and Maryland avenues. The pool's footprint is actually somewhat asymmetrical, probably to compensate for the fact that the Grant Memorial was centered on the Capitol's west facade, rather than on the dome, with the result that the memorial is several feet off the true center line of the Mall. Further consultations are needed with the D.C. Historic Preservation Office to determine the reflecting pool's eligibility for listing on the National Register of Historic Places.

Views and Vistas

From Union Square the view to the north is of large, modern office and governmental buildings, and to the northeast the Taft Carillon is visible above the trees of the Capitol grounds. To the southeast, the Botanic Garden Conservatory dominates the view, and beyond it the huge Rayburn House Office Building. Southwest of the conservatory is a fenced-off staging area and across Independence Avenue the massive concrete 1960s Health and Human Services Building. These buildings create a framework for the square that is similar, except in architectural style, to the surroundings envisioned by the McMillan Commission.

Pennsylvania and Maryland avenues are critical in defining views from Union Square. The major vista down Pennsylvania Avenue to the White House, an essential feature of the L'Enfant plan, was lost when the south wing of the Treasury Building was constructed in the 1850s. However, the vista from the Capitol down the avenue to the Treasury remains one of the most important vistas in the city, if not the country. This view is severely compromised by the discordant visual clutter of the parking lot that occupies the avenue for its entire extent between 1st and 3rd streets.

Constructed Water Features

L'Enfant had planned to divert the waters of the Tiber Creek into a canal falling into a cascade and pool at the foot of Capitol Hill; this would have been the most important among the numerous water effects with which the designer intended to embellish the city. The cascade and pool were planned in the area that is now Union Square. Andrew Ellicott simplified this design somewhat but retained it.

When the Washington Canal was built in 1815, none of L'Enfant's basins or cascades was incorporated. The canal ran down 3rd Street and crossed over the Botanic Garden site, but it soon became a notorious sewer and was channeled into a sewer line in the early 1870s. The first Botanic Garden, 1820–37, had one or more artificial ponds, which no long remain.

The concept of the McMillan plan, inspired by European cities, particularly Rome and Versailles, was a Mall that would be amply furnished with reflecting pools and splashing fountains to cool visitors during summer. The plan depicted eight fountains in Union Square, all placed off the center axis, and a large pool along the Mall's center panel from 3rd to midway between 4th and 5th streets.

Frederick Law Olmsted Jr.'s final plan for Union Square in the 1930s did not include any pools or other water features. However, the plans of Skidmore, Owings and Merrill, from 1966 to 1974, revived the McMillan plan's concept of a Capitol Reflecting Pool to complement the Lincoln Reflecting Pool.

Vegetation

Most or all of the larger trees growing in Union Square probably date from the Botanic Garden planting. Specimens include a variety of exotics and rare native species, as well as typical eastern trees. Frederick Law Olmsted Jr. designed the lines of trees in Union Square to connect with the Mall elms and to visually merge with the trees growing on the west Capitol grounds, where the landscape design by Frederick Law Olmsted Sr. focused views on the Capitol's west facade. In Union Square Olmsted Jr. lined walks and roads with elms, clustered trees closely around the Meade (which was later relocated to Pennsylvania Avenue) and future Navy memorial sites, and placed groups of trees behind the Grant Memorial to frame it, while leaving the central vista open.

The construction of the Capitol Reflecting Pool in 1969–71 affected the integrity of the Olmsted design. Many trees were removed from the middle of the site, and the continuity of the lines of trees was interrupted. Today, isolated groups of trees occupy the square's four corners. Many large horse chestnuts and buckeyes grow in the northwest panel and an old, rare zelkova and an old gingko can be found in the southwest. When trees die in Union Square, they are typically replaced in kind and in the same location.

Olmsted's original landscape plan included six beds arranged symmetrically in three identical pairs around the Grant Memorial, and a 1935 plan depicts shrubs (boxwood and yews) massed in all the beds. Currently, large, spreading yews are massed with a few small boxwoods at the

northeast and southeast corners of the Grant Memorial. They frame the monument and soften the transition between the structure and its surroundings, and they also help block views of traffic on 1st Street. In the southeast huge yews overshadow smaller boxwoods. Young oak trees have been planted within the inside edges of the south and north hedges. Though overgrown, these shrubs are remnants of the Olmsted planting and retain historic integrity.

The lawns flanking the Grant Memorial curve to the north and south around the west plaza. Along the east side of 3rd Street is a grass planting strip between the walk and the street curb. No street trees are growing here.

Small-Scale Features

Union Square has only a few types of small-scale features. Contributing features include benches, streetlights, and curbs. Except for the curbs, these features conform to the standards published in the *Streetscape Manual* (Interagency Initiative for National Mall Road Improvement Program 1992), which covers benches, trash receptacles, light standards, drinking fountains, fire hydrants, post-and-chain fencing, and bike racks. It also discusses standards for curbs, sidewalks, and wheelchair ramps.

The benches used in Union Square are the same as those used on the Mall. They are black and have cast-iron frames and wood-slat backs and seats.

All of the streetlights in Union Square are the double lamp designed by Henry Bacon (architect of the Lincoln Memorial) in 1923 to provide a standard street light for the city and known as the Bacon Twin or Twin-Twenty lights. The *Streetscape Manual* designates these lights for major thoroughfares in the District, and they are placed around the entire perimeter of the paved area in Union Square.

A row of cylindrical concrete bollards stands at the west end of the plaza in front of the reflecting pool. Single bollards are located at the northeast and southeast corners of the pool at the top of the steps.

Two low semicircular retaining walls are located northwest and southwest of the Grant Memorial, where the low rise in the ground is cut back for the walk along the east side of the pool. The walls curve from the steps on one side into the sloping ground on the other.

Low, flat curbs of both granite and concrete with square end blocks surround the plaza. The planting beds at the ends of the memorial have curved concrete copings with corner blocks. There are granite curbs and brick gutters along 1st Street.

Nearby Memorials

James Garfield Monument. The James Garfield Monument stands on the grounds of the United States Capitol in the circle at 1st and Maryland Avenue SW. It consists of a standing figure of the assassinated president on a pedestal surrounded by three figures representing his careers as scholar, soldier, and statesman. The monument is under the jurisdiction of the Architect of the Capitol.

Naval Peace Monument. The Naval Peace Monument, which sits in the circle at 1st and Pennsylvania Avenue NW, is dedicated to the naval personnel who died during the Civil War. It consists of two allegorical female figures and a large fountain. It is listed on the National Register of Historic Places as a contributing feature of the Civil War Monuments in Washington, D.C. The monument is under the jurisdiction of the Architect of the Capitol.

The Mall (3rd to 14th Streets)

The Mall extends from Union Square on the east to the Washington Monument on the west. It is framed on either side by lines of elm trees. The landscape of the Mall and the views along it are integral to its spatial organization, and all elements are interdependent. This interdependence defines the fundamental integrity of the design. The following information is from the "Cultural Landscape Inventory" (NPS 2006a).

Spatial Organization

The Mall encompasses 135 acres, between 3rd and 14th Streets, and Madison and Jefferson drives. The landscape is composed of flat grass panels, which are bordered on the north and south sides by four rows of American elms,

which delineate the vista between the Capitol and the Washington Monument.

Behind the rows of elm trees are the museum buildings of the Smithsonian Institution and the National Gallery of Art, which represent Victorian, Beaux-Arts, classical, and modern styles. Along the Mall beneath the elms is a more filtered space, regularly defined by the ranks of trunks but permeable, allowing physical passage between the trees and filtered views of the buildings.

The 8th Street cross-axis was given particular importance in the L'Enfant plan, where a site for a national church was shown several blocks north of the Mall and a large turning basin was located at the canal. The significance of the axis was retained in the McMillan and the 1930s Olmsted plans. This importance is noted now in the landscape by the omission of elms and the resulting open views of the Hirshhorn and National Gallery of Art sculpture gardens, as well as the National Archives. The Smithsonian Castle is only 300 feet from the Mall's centerline, and the section of Jefferson Drive in front of the Castle intrudes into the tree panel, narrowing it so that in front of the Castle there is only one row of elms.

Views and Vistas

The Mall is defined by its primary view — the grand vista between the Capitol and the Washington Monument. This vista was integral to L'Enfant's plan for a Grand Avenue or promenade extending west from the Capitol building to the proposed equestrian monument to George Washington, which would have been placed near the Potomac River, at the point where the east-west Capitol axis intersected the north-south White House axis. L'Enfant placed other features — residences, buildings, walks, and gardens — along this promenade to frame and reinforce the visual corridor.

The McMillan plan adapted this idea of the visual corridor reinforced by larger buildings and landscaping. Retaining L'Enfant's axial promenade, the McMillan plan placed institutional buildings in near symmetry on each side of the central corridor. The essential features of the 1930s version of the McMillan plan — the grass panels or *tapis verte,* the four rows of elm trees along the north and south sides, and the orthogonal disposition of walks and buildings — all direct the eye to and from the Capitol and the Washington Monument. There are also important views from the east end of the Mall to Union Square and the Grant Memorial at the foot of Capitol Hill.

The McMillan Commission members and the planners in the 1930s had to work with the Washington Monument, which had been placed southeast of the actual intersection of L'Enfant's original axes, making it out of alignment with the cardinal directions. They adjusted the axis of the Mall, canting it to the southwest so that the Washington Monument would be directly in line with the Capitol. The Mall as a result is slightly off a true east-west alignment.

Topography

The generally level topography of the present-day Mall is a result of much grading that was done in the 1930s, especially between 9th and 14th streets, under the direction of Frederick Law Olmsted Jr. Today the Mall grade rises slightly from east to west. Between 12th and 14th streets there is a discernible downward slope from south to north, with a particularly steep slope at the northwest corner. The land north of the Mall, beyond Madison Drive and its north sidewalk, slopes down to Constitution Avenue, and the National Museum of American History (1964) and the National Museum of Natural History (1904) were built into this slope, so that their entrances on Madison Drive on the Mall are higher than the exposed basement stories on Constitution Avenue.

Vegetation

Currently, there are 585 elm trees on the Mall, planted 50 feet on center. At any point in time a few tree spaces may be vacant as dead trees are replaced. A few dozen elms remain from an early planting in the 1920s, and some portion of the rest date from the major planting in 1935. Others are replacements planted since the 1930s, and there are a few other cultivars or varieties as well, plus several trees of other species. The trees are now of various sizes because the total number of original trees was planted over a period of about 40 years, and also because of the periodic replacement of dead or diseased trees.

Original designs by Frederick Law Olmsted Jr. and others likely anticipated greater uniformity.

The American elm tree was specified for use in the McMillan plan and in the 1930s revised plans because of its growth habit. The columnar trunks of this native species and the arching, spreading branches were believed to form a natural equivalent of an architectural arcade, giving a pleasing combination of formal regularity and a picturesque openness. Even though other tree species or a combination of species was suggested in the 1930s, Olmsted strongly defended the original choice of the American elm. Elms are also drought tolerant and able to withstand urban conditions and limited soil compaction.

Some of the Mall elms are a cultivar of the American elm called 'Augustine Ascending.' These trees have an upright, fan-shaped form, distinctly different from and taller than the surrounding elms. They were replacement trees purchased in the 1960s or earlier; it was probably not known what their ultimate form would be. They are highly susceptible to Dutch elm disease, and when they die, they are replaced with *Ulmus americana* or disease-resistant cultivars such as 'Jefferson' or 'Princeton.' Along the alignment of 12th Street are four rows on each side of European elms. These were installed as part of the construction of the 12th Street underpass, probably to plant elms on the Mall that were less susceptible to Dutch elm disease. They have a rounder crown than American elm trees.

The rows of elms are broken along the 8th Street axis, in front of the Smithsonian Castle, in front of the National Museum of Natural History, at the Mall's southwest corner along 14th Street, and at the base of the Joseph Henry statue. Five bald cypress trees grow in front of the Natural History Museum, in an irregular pattern, somewhat interrupting the regularity of the tree lines. The only other planting variation occurs at the end of the Mall, in the grass strip along 14th Street, where two red oak trees grow. Based on historic photographs and surveys, these oaks do not appear to have been retained from the original Mall planting, but were probably planted by the city as street trees in the 1940s. They will not be replaced when they die.

Each building or site facing the Mall has its own landscaping scheme. Many of the landscapes were designed in relation to the Mall landscape. The Department of Agriculture landscape, designed by Frederick Law Olmsted Jr., was conceived to complement the Mall design. Similar intentions motivated the original landscape plan of the National Gallery of Art West Building.

Constructed Water Features

The concept of the McMillan plan, inspired by European cities, particularly Rome and Versailles, was a Mall that would be amply furnished with reflecting pools and splashing fountains to cool visitors during summer. In addition to eight fountains in Union Square, the plan also depicted a large pool along the Mall's center panel from 3rd Street to midway between 4th and 5th streets. This pool was never constructed.

Circulation

The Mall landscape is overlaid with a grid of walks and crosswalks. Four asphalt-paved roadways mark the Mall's boundaries — 3rd Street on the east (two-way traffic), Madison Drive on the north (one-way going west), 14th Street on the west (two-way traffic), and Jefferson Drive on the south (one-way going east). Each drive is 35-feet wide on average and provides access to many museums. Single or paired gravel and concrete walks follow the routes of most cross-axial streets, except 11th Street. Two streets — 4th and 7th — cross the Mall on the surface, while 9th and 12th streets are tunneled beneath it. Because 9th and 12th streets are tunneled, the entire area stretch of the Mall from 7th to 14th streets is unbroken. All streets have granite curbs; handicap curb cuts are also granite. Cross streets such as 3rd, 4th, and 7th streets have D.C. parking meters, and parked vehicles affect the vistas (see NPS 2006a).

The current Mall walk system dates from the 1930s. The original walks were concrete. Wide sidewalks run along all the streets. Those along the north-south streets are exposed aggregate concrete, and grassed tree planting strips separate the sidewalk from the street. Jefferson and Madison drives have wider sidewalks, paved for half their width in gravel, half in exposed aggregate concrete. The former Adams and Wash-

ington drives, which ran parallel to Jefferson and Madison drives, were closed to traffic in 1975 and replaced with wide graveled walkways that run along the inner edges of the rows of American elms. Walks also follow the alignments of all cross axes created by the city's grid of numbered streets, except for the 11th Street axis, which has no walk.

In front of the Smithsonian Castle are two curved gravel walks, leading from concrete aprons at the sidewalks that run down the slope to the Mall walk. On each side of the Joseph Henry statue are triple flights of steps leading from the sidewalk down to the Mall walk. The stairs, and the area of sidewalk immediately behind the statue, have a polychrome design made of red granite diamonds and bands on a field of buff limestone. Several eroded social trails also cross this slope in front of the Castle. In some areas, other social trails run through the grass or tree panels immediately parallel to the east-west walks. The corners and edges of many of the grass panels are worn and eroded, particularly near the Metro entrance on the 12th Street alignment. In these places the gravel has spread into the lawns, eroding the formal distinction between walks and panels.

Buildings and Structures

The Mall itself has no contributing buildings or structures. Large buildings help define the edges, but within the park's boundaries, the only buildings are small utilitarian structures. The Joseph Henry statue stands in front of the Smithsonian Castle, and the carousel is in front of the Arts and Industries Building. Other structures include the Metro entrance, four food service stands, Tourmobile ticket booths, the carousel ticket booth, and the Hirshhorn Sculpture Garden.

Small-Scale Features

The Mall has only a few types of small-scale features, including benches and streetlights. These features conform to the standards published in the *Streetscape Manual* (Interagency Initiative for National Mall Road Improvement Program 1992). The manual covers benches, trash receptacles, light standards, drinking fountains, fire hydrants, post-and-chain fencing, and bike racks. It also discusses standards for

FIGURE 29: THE NPS WASHINGTON BENCH



curbs, sidewalks, and wheelchair ramps. Other features include four small food service stands, tables and chairs, and short sections of post-and-chain fencing. A few constructed areas interrupt the continuity of the lines of elms, but they do not detract from the monumental landscape.

All benches used on the National Mall are the same as those used at Union Square and reflect the standard developed for the National Capital Parks in 1934–35. The black cast-iron benches with wood-slat backs and seats are located along the Mall's east-west axes (along the outer walks beside Madison and Jefferson drives and along the inner walks next to the inner row of elms). All benches face the center of the Mall, except for those on either side of the carousel food pavilion grouping, which is perpendicular to the main axis. No benches are located on the 8th Street axis.

The Mall streetlights were designed especially for this area as part of the 1930s reconstruction.* The lights have cast-iron bases, with a 21-foot steel fluted post topped by a cylindrical cast-iron luminaire suspended from two supports attached to either side of the domed cap. The streetlight is on the NPS List of Classified Structures.

Street lights were to be aligned with the Mall lights, and no lights were to have been directly in

* Although commonly referred to as "Olmsted lights," the design is by J. W. Gosling, a designer employed by General Electric laboratories. The design was approved by the Commission of Fine Arts.

the vista. Some posts along Madison and Jefferson drives have cross arms attached for hanging banners.

The existing lighting system consists of high-pressure sodium lamps and mercury bulbs on the outside roads (multi-vapor type lamps), as well as incandescent on the inside walks. New lamps on the Madison and Jefferson drives consist of fluorescent lamps; incandescent lamps are still used on the inside walks.

Few barriers of any kind are used on the Mall. Varying lengths of post-and-chain fencing (black vinyl-coated steel posts topped by acorn caps, with vinyl-coated steel chains between the posts) are erected in certain areas to discourage crossing turf areas, for example, at the corners of some grass panels, along the walk leading to the Metro station entrance from Jefferson Drive, along walks leading to food service stands, and along the parking strip on 14th Street. Temporary fencing is sometimes used to protect newly seeded or sodded lawns or to channel pedestrian traffic.

Signs on the National Mall are generally confined to the edges of streets and walks or are set within the elm panels so as not to disrupt views and vistas. A Metro pylon stands near the station. A location map of the National Mall area is being replaced.

One of the few anomalous features on the Mall is a small bronze plaque on a granite base set on the west side of 4th Street. The 1951 plaque marks the historic Department of Agriculture propagating gardens, where the National Grange of the Patrons of Husbandry was founded in 1867.

Circular edgings of tan-colored bricks flush with the ground are used around some elm trees growing in gravel walks rather than lawn. Handicap-accessible drinking fountains that conform to the *Streetscape Manual* standards are placed along Madison and Jefferson drives.

Some metal bicycle racks were installed in 2008 by street curbs on the Mall sides of Madison and Jefferson drives. Movable metal café tables and chairs are placed along the wide concrete walks leading to refreshment stands.

FIGURE 30: BULFINCH GATEPOST



One of the eight remaining Bulfinch gateposts.
Historic American Buildings Survey, Library of Congress.

Other Cultural Resources

Carousel. A carousel has occupied a location on the Mall near the Smithsonian Castle since 1967, when Smithsonian Secretary S. Dillon Ripley arranged for the placement of a portable carousel. In 1981 a larger carousel (an additional 10 feet in diameter) replaced the previous one. The present carousel has an extra row of horses. The carousel's 60 horses were built in 1947 by the Allan Herschell Company of North Tonowanda, New York. Unlike the earlier one, the current carousel is covered with a canvas top and sides (Smithsonian Institution Research Information System).

Bulfinch Gatepost. This gatepost was one of only 8 remaining of the 24 original gateposts of the Capitol. Located at 1st Street and Constitution Avenue, it was moved from its original location in 1874. The Bulfinch gateposts are listed on the National Register of Historic Places. The gateposts also contribute to the cultural landscape of the Mall.

Downing Memorial Urn. A white Carrara marble urn was designed to honor Andrew Jackson Downing, landscape designer who in the 1850s began a redesign of the Mall. The memorial was moved off the Mall to the Enid A. Haupt Garden south of the Smithsonian Castle. It is a contributing element of the L'Enfant Plan of the City of Washington, D.C., and the national register nomination for the National Mall.

Joseph Henry Memorial. The Joseph Henry Memorial honors the first secretary of the Smithsonian Institution, who was also widely recognized for his scientific achievements in the field of electromagnetic and inducted current. The bronze statue in front of the Smithsonian Castle is a contributing feature of the L'Enfant Plan of the City of Washington, D.C., as well as the national register nomination for the National Mall.

FIGURE 31: JOSEPH HENRY MEMORIAL



The Joseph Henry Memorial stands in front of the Smithsonian Castle.

Washington Monument and Grounds

The Washington Monument grounds is a cultural landscape within National Mall. It comprises U.S. Reservation 2. Containing approximately 106 acres, the inventory unit is bounded by 14th Street to the east, Constitution Avenue to the north, 17th Street to the west, and the Tidal Basin to the south.

According to the recently completed "Cultural Landscape Inventory" (NPS 2009b), contributing landscape characteristics identified for the Washington Monument grounds are views and vistas, buildings and structures, circulation, vegetation, topography, land use, spatial organization, and small-scale features.

Spatial Organization

Before the Washington Monument was constructed, the site (U.S. Reservation 2) was designated by L'Enfant for an equestrian statue of George Washington. The statue was to have been at the intersection of the White House to the north and the Capitol to the east, effectively establishing the location as the symbolic center of the city.

The 1901 McMillan plan reemphasized and expanded the role of the monument grounds as the center of the city's monumental core. The plan expanded the central axis west to the Lincoln Memorial and south to what would be the Thomas Jefferson Memorial.

The south monument grounds (south of Independence Avenue) have served as a continuation of park grounds, as well as a connection between the Washington Monument, the Thomas Jefferson Memorial, and the Tidal Basin.

Views and Vistas

The views that connect the Washington Monument to prominent buildings, landscapes, monuments, and memorials in the city are defining aspects of the Washington Monument grounds. L'Enfant's 1791 plan for the new city included open vistas from the U.S. Capitol and the White House to the intersection of their respective axes. L'Enfant designed an open promenade between the Capitol and what would be the monument grounds, with buildings on both sides of the promenade to reinforce the visual corridor. President's Park was placed between the monument grounds and the White House, leaving a view unobstructed by buildings along the north-south axis. The eventual construction of the Washington Monument, begun in 1848, placed the obelisk just southeast of the cross-axis.

The McMillan plan expanded the monumental core to include park land and locations for

memorials to the south and west of the Washington Monument. The plan also called for unobstructed views of the Washington Monument and the U.S. Capitol across the Mall. The McMillan plan vistas emphasized the great cross axes between the U.S. Capitol and the site of the Lincoln Memorial, and between the White House and the site of the Thomas Jefferson Memorial, with the Washington Monument serving as a pivotal element in the design.

Eventually, the hallmark emphasis on the main axes of the McMillan plan was achieved. Planning for the Lincoln Memorial took into consideration the fact that the Washington Monument had been constructed to the southeast of the axial crossing, and the axis of the Mall was adjusted so that the Washington Monument would align with the U.S. Capitol and the same axis would continue to the Lincoln Memorial. The completion of the Lincoln Memorial in 1921 and the reflecting pool in 1924 added the western focal point for the east-west axis envisioned by the McMillan Commission. The World War II Memorial, constructed on the site of the Rainbow Pool and completed in 2004, was design to frame rather than block the view between the two monuments.

The construction of the Thomas Jefferson Memorial from 1939 to 1943 completed the cross-axial plan envisioned by the McMillan plan. The Thomas Jefferson Memorial was not built on axis with the Washington Monument, but with the original north-south alignment of the White House and the Jefferson Pier Marker. To the north, the White House is visible from the Washington Monument plaza. The designed vista along the north-south axis — between the White House, the Jefferson Pier Marker, and the Thomas Jefferson Memorial — is unobstructed.

The views from the city and the vistas looking outward from the Washington Monument have been faithfully maintained, retaining the strong visual corridors established by the L'Enfant and McMillan plans.

Buildings and Structures

The Washington Monument is constructed of white marble ashlar blocks backed by blue gneiss. The obelisk stands 555 feet, 5-1/8 inches high. The base is 55 feet wide, with 13-foot-thick masonry walls at the base and one-foot-thick walls at top. The interior lobby is 23 feet wide and the elevator cab is 9 feet wide. The interior wall contain 193 commemorative stones that were placed starting at the 30-foot level and continuing to the 450-foot level.

Two buildings constructed on the Washington Monument Grounds during the 19th century — Monument Lodge and Survey Lodge — survive, although their uses have been modified.

Monument Lodge

Monument Lodge is rectangular, constructed of rusticated ashlar stone, approximately 25 feet by 30 feet. It is flat roofed, with one story and a partial basement. The building was opened to the public in January 1889 as a point of arrival for visitors. It was to be used as a waiting room for tours of the monument, with public restrooms. The restrooms were enlarged in 1931 to include an area formerly occupied by the office and store room. In 1942 the interior was again

FIGURE 32: MONUMENT LODGE AND SURVEY LODGE



Monument Lodge is east of the Washington Monument.



Survey Lodge is southwest of the Washington Monument.

remodeled to house a display featuring materials related to George Washington's life, and to provide space for concessioner operations. It is listed on the National Register of Historic Places as a contributing element of the Washington Monument nomination; it is also on the NPS List of Classified Structures.

Survey Lodge

Survey Lodge was originally designed as a boiler house to supply power to the Washington Monument elevator. The two-story structure was built in 1885 of waste stock granite and white marble that was used to construct the monument. The building acquired the name Survey Lodge after its use by NPS survey crews in the 1930s. The building was rehabilitated, including a complete renovation of the interior, from 1989 to 1993 (NPS 2009b). It is listed on the Washington Monument's national register nomination and on the NPS List of Classified Structures.

Bulfinch Gateposts

Several pairs of gateposts, once located on the west grounds of the U.S. Capitol, were moved to a series of intersections along Constitution Avenue (then B Street North) in 1874, including a pair that was placed to flank the 15th Street entrance to the monument grounds. The design of the gateposts is generally attributed to Charles Bulfinch, who was commissioned to do the U.S. Capitol restoration in 1814. The gateposts, which are approximately 11 feet tall by 4 feet wide, are constructed of Aquia Creek sandstone.

Seawall

The Tidal Basin seawall, including the portion within the Washington Monument grounds, was constructed from April 1895 through September 1896, the last portion to be completed. The seawall around the other portions of reclaimed land was completed in 1894. The wall was built on a footing that was already in place, and it was 6 feet high from that footing, 4 feet wide at the base, and 2.5 feet wide at the top. The portion of seawall along the south monument grounds has remained relatively unchanged, even though walks and safety rails (similar in design to those in place today) were constructed by 1919.

FIGURE 33: SYLVAN THEATER



The Sylvan Theater is south of the Washington Monument.

Sylvan Theater

The Sylvan Theater is located 150 yards southeast of the Washington Monument. The theater began as an earthen stage in 1917. A 1931 plan of the theater and its landscaped surroundings shows a stand of trees behind the stage and steps leading down either side of the front of the stage. The significance of Sylvan Theater, recognized in the national register listing for the Washington Monument and grounds, is in its continued use as an event and public gathering space.

Circulation

Circulation features of the Washington Monument grounds include most of the perimeter roads, the Independence Avenue extension through the south monument grounds, a few walks, and one set of steps. Two graphic sources indicate circulation features associated with the Washington Monument. The interior curvilinear roadways present when the site opened to the public are thought to have been inspired by A. J. Downing's mid-19th century design for the Mall. Some of these continued to exist after the adoption of the more formal McMillan plan in the beginning of the 20th century, but most were removed in the 1930s and 1940s. By the 1890s the old 14th Street entrance near the Agriculture Department had been abandoned and new entrances to the grounds were in place at 15th Street and 14th Street along the northeastern edge of the grounds. Several of the planned carriage roads were in place by this time as well. Curving drives surrounding the knoll highlighted the monument's object-like quality.

Circulation within the grounds remained little altered until the 1930s. Although road widening and regrading have occurred, Constitution Avenue and 14th Street have anchored the northern and eastern boundaries of the grounds since they were first delineated in the 19th century. Likewise, a paved plaza has existed at the base of the Monument since 1889. In 1931 Constitution Avenue was widened and its original flagstone sidewalks displaced.

The north end of 15th Street appears to have provided an entry to the Washington Monument grounds by 1889. While B Street (Constitution Avenue), 14th Street, and 17th Street are shown lined with trees on the 1901 McMillan plan, 15th Street apparently never received the same treatment, indicating that it may have been considered a secondary roadway. The alignment and function of 15th Street has shifted perhaps more than any other associated with the site. In 1936, in conjunction with the Mall plan proposed by Frederick Law Olmsted Jr., connections to Madison and Jefferson drives were established from 15th Street.

During the early 1940s a new road system was constructed through the south monument grounds and West Potomac Park. Independence Avenue was extended to the Lincoln Memorial while Maine Avenue was extended to 17th Street. The dual highway system was designed to preserve the northern neck of the Tidal Basin, views of the area, and as many trees as possible; all roads were one-way. The design included a bridge (later named Kutz Bridge) carrying eastbound Independence Avenue traffic over the north end of the Tidal Basin. Westbound traffic on Independence Avenue passed north of the Tidal Basin on a separate roadway. An overpass was constructed where eastbound lanes of Independence Avenue passed over the westbound lanes of Maine Avenue.

There has been a level paved area at the base of the Washington Monument since the completion of its construction, although the plaza has evolved over the years. Formal paving was added after 1906 to address complaints of wind-blown dust. The plaza remained without significant changes, although access roads to the plaza changed.

Most of the pedestrian circulation system on the site today has been added in recent years. While some existing circulation follows the general alignment of historic paths, the grading and materials of the walks have changed and been replaced numerous times. The many changes to pedestrian circulation in the western portion of the grounds reflect the various uses of the area.

Vegetation

The defining vegetative feature of the Washington Monument grounds is the open lawn that defines the ground plane of the site. Other predominant types of vegetation are street trees that delineate the perimeters of the grounds, groves of canopy and cherry trees, cherry trees along the Tidal Basin, and foundation plantings. The use of street trees on the monument grounds dates to the 19th century, during the early monument construction period. Groves of canopy trees appear to have been planted on the north grounds since the mid 20th century. Beginning in the early 20th century, trees were planted south of Independence Avenue. The construction of the Independence Avenue extension was planned to minimize the removal of trees there.

Mulberry trees southwest of the monument may be the only naturally occurring vegetation on the site. Ornamental vegetation was planted on the grounds as early as 1886. The first extensive planting of cherry trees along the Tidal Basin did not occur until 1912.

The German-American Friendship Garden was designed by Wolfgang Oehme and installed in 1987–88. The garden plantings originally flanked the entrance to the 16th Street oval parking lot. When the 16th Street parking lot was removed during grounds improvements in 2004–5, the former entrance to the lot between the two sections of the garden was seeded with grass. The garden continues to be characterized by the same plants as in the original planting plan. It is managed as a cultural resource and is listed on the NPS List of Classified Structures.

Topography

The existing topography of the Washington Monument grounds is the result of massive and numerous manipulations of the natural ground

plane. Thousands of cubic yards of fill have transformed the site and resulted in a man-made ground plane. The most significant feature resulting from this manipulation, the knoll that serves as a base for the monument, was designed to stabilize it and provide an attractive approach. This gentle rise in grade has undergone a number of minor alterations since 1889 as circulation patterns have been changed.

Land Use

The primary land use for the Washington Monument grounds has always been commemorative. In 1848 President Polk officially designated the same site as the location for a monument to be built by the Washington National Monument Society. Construction began later that year, and the monument has been a popular commemorative icon since its completion in 1884.

Since the late 1800s the monument grounds have been used extensively for commemorative events, including a ceremony for Abraham Lincoln after he died and a celebration after Charles Lindbergh completed the first trans-Atlantic flight in 1927. Independence Day festivities have been held there annually since before the Washington Monument was completed. Groups have been gathering on the site since the 1920s. Notable events include the Bonus March of 1932, the 1963 Civil Rights March, anti-Vietnam War marches in the 1970s, the Million Man March in 1995, and protests against war in Iraq during the 2000s.

From the early to mid 20th century, recreation facilities for swimming, tennis, baseball, basketball, soccer, football, archery, and golf were located on the grounds. Most of these major building facilities were removed by 1936. While none of the constructed recreational features established during the period of significance remain, a rugby field was constructed along Raoul Wallenberg Place sometime after the propagating garden buildings were removed in 1962. In addition to rugby, recreational activities that take place on the grounds today on designated recreational fields include kickball and softball. Other non-competitive recreation or passive uses include Frisbee, jogging, dog-walking, kite-flying, and sun-bathing. Residents and visitors use the lawns and parklike setting to relax and enjoy the outdoors.

Established in 1917, the Sylvan Theater provides a permanent public performance space on the site.

Small-Scale Features

Most of the small-scale features on the monument grounds appear to be of relatively recent origin. A few features, such as the cobblestone gutters near the Survey Lodge and a few bench and lightpost types, may survive from the period of significance. Other features, such as the flagpoles that ring the memorial plaza, while not historic, are consistent with the site's historic character and design intent.

The elevation obelisk, placed on the site in 1898 by the Coast and Geodetic Survey, was intended to serve as a benchmark for the Washington Monument. It was placed in a manhole 150 feet south of the monument for the purpose of calculating the settlement of the monument.

West Potomac Park (North of Independence Avenue)

West Potomac Park was created as a result of dredging to improve navigation on the Potomac River, and 739 acres of land were added to the south of the Washington Monument grounds. In 1897 Congress passed legislation making the entire area a public park. The McMillan plan incorporated this area into designs for the Mall and identified locations for the future Lincoln Memorial and Thomas Jefferson Memorial.

The addition of the Vietnam Veterans Memorial (1982), the Korean War Veterans Memorial (1995), and the Franklin Delano Roosevelt Memorial (1997), West Potomac Park has become more commemorative in character and less recreational. Constitution Gardens, dedicated in 1976, is an oasis in the midst of the city, but its proposed function as an area for programmed activities, restaurants, events, concerts, and celebrations was never fully achieved, nor was underground public parking developed.

World War II Memorial

The World War II Memorial honors the service of 16 million members of the U.S. Armed Forces, the support of countless millions on the home front, and the ultimate sacrifice of 405,399 Americans. Granite, bronze, and water elements harmoniously blend with the lawns, trees, and shrubbery of the surrounding landscape. The spirit of the L'Enfant Plan for the City of Washington is reflected through successful integration of the memorial into the openness of the National Mall. Great vistas endure toward the Washington Monument, the Thomas Jefferson Memorial, and the Lincoln Memorial. The 24 bronze bas-relief panels flanking the ceremonial entrance illustrate the human experience of war at home and overseas. A wall of 4,048 Gold Stars silently pays solemn tribute to those who sacrificed their lives.

Fifty-six granite columns, split between two half-circles that frame the rebuilt Rainbow Pool with its celebratory fountains, symbolize the unprecedented wartime unity among the 48 states, 7 federal territories, and the District of Columbia. Bronze ropes tie the columns together, while bronze oak and wheat wreathes represent the nation's industrial and agricultural strengths. Two 43-foot tall pavilions proclaim American victory on the Atlantic and Pacific fronts — on land, at sea, and in the air. Several hidden treasures appear as well, such as representations of the famous "Kilroy was here" graffiti familiar to every veteran of the Second World War.

Constitution Gardens

The 43.1-acre Constitution Gardens was completed in 1976 for the nation's Bicentennial. The park's rolling topography and its relative seclusion encourage recreational activities, and there is a small food service pavilion. The following description is based on the "Cultural Landscape Inventory" for the gardens (NPS 2008a).

Spatial Organization

Constitution Gardens was designed by the architectural firm Skidmore, Owings and Merrill in the early 1970s to provide a pleasant walking environment between the Lincoln Memorial and the Washington Monument, contrasting with the formal elm walks along the Lincoln Memorial reflecting pool. The park is somewhat hidden from view by grade changes and vegetation. The flood control levee for the city, an earthen berm constructed in the 1930s and 1940s, runs along the park's south boundary. A low berm runs along Constitution Avenue on the north and was maintained in the Skidmore, Owings and Merrill design. The Vietnam Veterans Memorial was built in a meadow at the west end of Constitution Gardens.

Topography and use divide the space of Constitution Gardens into east and west sections. On the east, the ground slopes to a low plane at the central lake. On the west, the Vietnam Veterans Memorial occupies a large central clearing. In both areas, trees massed thickly around the perimeter define interior space, with openings between massings to allow views of structures and areas beyond the boundaries. The tree massings become thinner and more open as they move towards the site's interior, their inner line advancing and retreating down the slopes. The trees are arranged to create several large clearings down the central spine of the park. Lines of trees along the outside edges of walks create a linear element curving throughout the park, an open, porous wall that defines the act of passage through the site and highlights its importance as a route between two important monuments. The landscape treatment associated with the memorials was designed to coordinate with the existing Skidmore, Owings and Merrill design.

FIGURE 34: POTOMAC PARK LEVEE



The Potomac Park levee (seen here from near the Lincoln Memorial) runs along the south boundary of Constitution Gardens.

The eastern half of Constitution Gardens gently slopes down to a 6.75-acre lake that has a continuously curving shoreline. The lake is visible from most areas within the gardens, and it forms the dominant feature of the eastern section of the gardens. Overlooking the lake at its east end is a large paved terrace. Three stone-walled terraces, designed for outdoor restaurant seating, descend the slope from the plaza to the lake and are the only components that were built for an approved restaurant.

At the northeast corner of the site stands the historic Lockkeeper's House, built when the Washington City Canal was joined to the Chesapeake & Ohio Canal in the 1830s.

Topography

Constitution Gardens has an entirely constructed topography that consists of gently rolling slopes and long berms surrounding a central depressed area occupied by a small lake and a slope descending to the partially sunken Vietnam Veterans Memorial. The highest elevation is 26 feet above mean sea level, the height of the crown of the knoll, and the flood control levee has a design height of 19.1 feet. The lake lies below the level of the park's surroundings. The flood control levee was incorporated into the design of Constitution Gardens and generally forms the southern boundary of the gardens.

Views and Vistas

Constitution Gardens is a pastoral landscape, designed to offer a series of more varied, intimate, and restful views than is typical for the Mall landscape. Views of the Washington Monument, in particular, are prominent throughout the gardens, and other structures, including the Lincoln Memorial, the Old Post Office tower, the Thomas Jefferson Memorial, the U.S. Capitol dome, and the buildings of Federal Triangle, are visible. Landmarks are partly glimpsed between trees or rising above the tree line. The Washington Monument is the only structure serving as the focal point of a dominant vista. It is prominent to the east from throughout Constitution Gardens, usually seen across the lake and mirrored in its reflective surface. One of the most striking views of the monument occurs from the walk ascending the eastern arm of the Vietnam Veterans Memorial, which is aligned with the monument, and from which it is seen rising above the prominent central knoll of Constitution Gardens.

Similarly, the Vietnam Veterans Memorial comes into view from the crown and western side of the knoll. This reciprocity of views between important monuments was a key theme of the L'Enfant and McMillan plans. The *Three Servicemen* statue and the Vietnam Women's Memorial were situated to provide sightlines to the Vietnam Veterans Memorial and link it with Constitution Gardens.

Similar views of the park's landscape can be seen from the island in Constitution Gardens Lake, where visitors are first led to the plaza that forms the central feature of the memorial. This vantage point offers perhaps the most dramatic vista of the Washington Monument. Visible to the south is the Atlantic archway into the World War II Memorial. Visible from walks on the south, and from the levee, are filtered views to the elms along the Lincoln Reflecting Pool, the pool itself, and glimpses of the Lincoln Memorial.

Vegetation

Almost 2,000 trees grow in Constitution Gardens. A large percentage of the original trees died because of poor soil conditions, and many of the existing trees are replacements. Trees are planted regularly around the park's perimeter, creating a gradual transition from the formal lines of trees surrounding the park (the European elms along the reflecting pool on the south, and the American elms lining the streets on the north and east).

Buildings and Structures

56 Signers of the Declaration of Independence. On a 0.5-acre island near the north shore of the lake and accessible by a wooden pedestrian bridge is a memorial landscape dedicated to the 56 Signers of the Declaration of Independence. A granite walk leads to a paved semicircular plaza that opens to the south shore and is lined on the north side by 56 granite blocks inscribed with the signatures of the signers of the Declaration of Independence. The blocks are organized into 13 groups, representing each of the original states. The island is landscaped with

FIGURE 35: LOCKKEEPER'S HOUSE



The Washington City Canal Lockkeeper's House, built in 1832–33, predates the development of West Potomac Park and is a remnant of early 19th century Washington, D.C.

trees and plantings. The memorial is on the NPS List of Classified Structures.

Lockkeeper's House. The Lockkeeper's House, built in 1832–33, is the only remnant of the Chesapeake and Ohio Canal extension, which connected the C&O Canal to Washington City, leading from the Potomac River at 17th Street to the Anacostia River. The extension was intended to ensure that the city would benefit from commerce along the major canals. The structure was converted for park purposes in 1903, and it was moved 49 feet west and 6 feet north from its original location in 1915 to accommodate the extension of 17th Street. It is listed on the National Register of Historic Places, and it is a contributing element of the East and West Potomac parks nomination. It is also on the NPS List of Classified Structures.

Circulation

In contrast to the formal, rectilinear system comprising the majority of the National Mall's circulation, Constitution Gardens is laid out with a network of winding, curving walks (see NPS 2008a). About 2 miles of meandering walks through the park are designed for use by pedestrians and bicyclists. The walks connect Constitution Gardens to other areas of the National Mall, as do views and vistas. The park's location off the central visual axis between the Washington Monument and the Lincoln Memorial, and its partial screening from view of the Lincoln Memorial grounds by the flood control levee, allowed greater freedom in design.

The circulation system has three major features: two loop walks and a large paved plaza, known as the overlook terrace. Narrower subsidiary walks run across lawns and slopes, linking different areas within the park and leading to adjoining sites. The two major walks of the park are long loops having the general shape of a figure eight. They are oriented east to west, and each occupies roughly half of the site. The eastern loop walk is immediately adjacent to the lake and thus follows its contours. The western loop curves around the large knoll and then circles the Vietnam Veterans Memorial.

Walks lead from the 17th Street sidewalk to the overlook terrace's northeast and southeast corners and along a north-south line to the midpoint of the terrace on the north and south. The north walk runs between the Constitution Avenue sidewalk and the terrace; the south walk, slightly offset to the west from the alignment of the north walk, runs between the terrace and the World War II Memorial. On the west side of the terrace, three walled stone terraces flanked by broad stairways descend the slope to the lake, where they join with the lake's perimeter walk. Narrow walks parallel to the stairs lead from the north-south axial walk to the lake walk.

Numerous social trails have been cut across the lawns of Constitution Gardens, especially over the flood control levee, leading to the Lincoln Memorial grounds and the reflecting pool, and over the north boundary berm to the Constitution Avenue sidewalk. Social trails also run immediately parallel to many of the walks. Two walks run parallel to Constitution Avenue, both under NPS jurisdiction. A narrow concrete "step out" runs immediately adjacent to the curb of Constitution Avenue. South of this, separated by planting areas planted with grass and American elms, a wide asphalt sidewalk was built in 2003 to replace the Tourmobile access road.

Small-Scale Features

The benches in Constitution Gardens are of the standard 1930s style, with black cast-iron frames and wood-slat backs and seats.

Constitution Gardens was the first area located within the National Mall to have interior pedestrian lighting. All the lights along walks in Constitution Gardens are the variety known as the Washington Standard. The fluted classical post has a flared, molded base and capital, and supports a single Washington Globe lamp.

Vietnam Veterans Memorial

The main feature of this memorial, completed in 1982, is a black granite wall on which the names of those who gave their lives, or who remain unaccounted for, are carved. Later, two sculpture groups with additional landscaping were added south of the memorial: the *Three Servicemen* in 1984, which includes a flagpole as part of its design, and the Vietnam Women's Memorial in 1993. The "In Memory" plaque was added adjacent to the *Three Servicemen* in 2004. These statues were placed to provide views from specific locations of the Vietnam Veterans Memorial. The memorial is listed on the National Register of Historic Places and the NPS List of Classified Structures.

A large-diameter bronze flagpole bearing an exceptionally large American flag is set within the walk a short distance southwest of the *Three Servicemen* statue. The flag is lit so that it can be flown at night.

Lighting at the memorial consists of lights set flush in the granite directly in front of the wall. Five bronze "locators" (stands to hold directories that give the locations of names on the wall) are placed at either end of the walk leading past the memorial. The locators were designed to match the look and character of the other sculptural objects at the site.

The Vietnam Veterans Memorial attracts large numbers of daily visitors. Numerous annual ceremonies take place on Memorial Day, Veterans Day, Mothers Day, Fathers Day, and when new names are added to the wall.

The Lincoln Memorial

The Lincoln Memorial was conceived as the formal terminus of the Mall under the McMillan plan. The memorial opened in 1922 and rises above monumental steps. It is on the National Register of Historic Places, is listed on the national register nominations for East and West Potomac parks, and is on the NPS List of Classified Structures.

FIGURE 36: VIETNAM VETERANS MEMORIAL



The *Three Servicemen* and the Vietnam Women's Memorial (below) were located to provide views of the Vietnam Veterans Memorial.



Spatial Organization

Three distinct landscapes compose the Lincoln Memorial grounds overall, as documented in the NPS *Cultural Landscape Report* (NPS 1999a). They include the reflecting pool area, the Lincoln Circle and radial roads, and the Watergate area. In addition, the relationship between the buildings and structural features within the landscape cannot be separated. Therefore, the

Lincoln Memorial, Arlington Memorial Bridge, Watergate plaza and steps, Parkway Drive, the reflecting pool, and the Rainbow Pool are also considered contributing features to the historic landscape. The landscaping for the Lincoln Memorial grounds was designed and planted between 1921 and 1932.

Constructed Water Feature

The Lincoln Reflecting Pool was constructed in 1922 to be an important feature of West Potomac Park between the Lincoln Memorial and Washington Monument. The landscape plan called for two rows of elm trees to be planted in parallel lines along the north and south sides of the reflecting pool. At the Rainbow Pool, elm trees were designed in a curved line to complement the circular sections of the geometric outline. The reflecting pool is listed as a contributing feature of the national register nomination for East and West Potomac parks and is on the NPS List of Classified Structures.

Vegetation

The planting plan for the Lincoln Memorial circle and radial roads featured a double row of elm trees planted in opposite positions on both sides of the radial roads. When the plan was implemented, the proposed double row of oppositely planted trees on the radial roads were scaled back to planting in alternative positions. The circular band of trees was followed for the eastern half of the circle. The western half of the outer circle consisted of the single circular band of trees that edged the curb, but the rest of the circle, outside the sidewalk, was completed with a double band of elms.

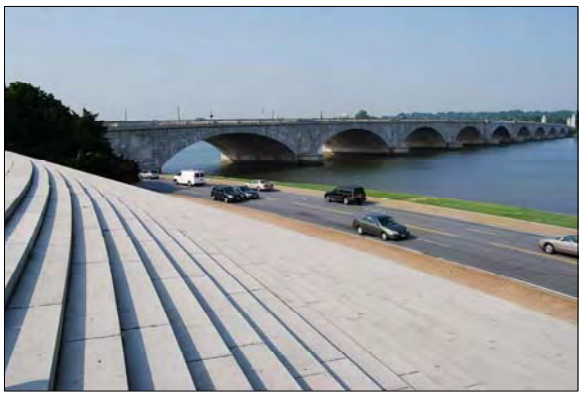
The landscape plan for the inner circle was designed to contrast the radial roads and consisted of two plans. The first plan consisted of two rectangular planting beds with various plants lining the outer edges of the pavement along the entire length of the approachway. At the base of the raised terrace wall, groups of boxwood and yews were planted. Some dwarf boxwoods were planted in front of some of these groupings. At the corners of the terrace walls, plantings extend out from the wall into the grass lawn of the circular terrace. Specimens of American holly, common boxwood, and English yew were added to the north and south sides.

The second plan depicted plantings for the west side of the memorial. Plantings consisted of broadleaf evergreen trees, American holly, and southern magnolia. This arrangement projected the landscape from the corners of the terrace walls, as done on the east side. The distinct formal landscaped grounds were initially envisioned by the McMillan plan based on its adaptation of the L'Enfant plan.

Other Features

Watergate Area and Steps. The Watergate steps are a broad curved flight of steps descending from the Lincoln Memorial Circle to the Potomac River. Designed as a ceremonial river entrance to the Lincoln Memorial and the city, they are contributing features of the national

FIGURE 37: THE WATERGATE STEPS



Looking south from the Watergate Steps to Ohio Drive SW and Arlington Memorial Bridge.

FIGURE 38: CONSTITUTION AVENUE BELVEDERE



The belvedere overlooks the Potomac River north of the Lincoln Memorial.

register nominations of the Lincoln Memorial and East and West Potomac parks. The Constitution Avenue belvedere, Parkway Drive, and the Potomac River walls, as well as the Watergate Steps, are on the NPS List of Classified Structures.

Arlington Memorial Bridge. The Arlington Memorial Bridge marks the western terminus of the Mall and symbolically links the two parts of the Union — the North, symbolized by the Lincoln Memorial, and the South represented by Arlington House (Robert E. Lee Memorial). Two gilded bronze equestrian statues depict *The Arts of War*. The bridge is listed individually on the National Register of Historic Places and is a contributing feature in the East and West Potomac Parks Historic District and the L'Enfant Plan of the City of Washington, D.C.

Rock Creek Parkway Terminus. The Rock Creek and Potomac Parkway terminus was constructed at the same time as the Arlington Memorial Bridge and Lincoln Memorial Circle. Two sculptures depicting *The Arts of Peace* are on the NPS List of Classified Structures.

John Ericcson Memorial. The John Ericcson Memorial commemorates the Swedish immigrant and designer of the U.S.S. *Monitor*. It was sculpted by Charles Fraser and installed in 1926. It sits south of the Lincoln Memorial on Ohio Drive. The memorial is listed on the National Register of Historic Places as a contributing feature of the East and West Potomac Parks Historic District.

FIGURE 39: KOREAN WAR VETERANS MEMORIAL



The reflecting pool at the apex of the Korean War Veterans Memorial.

FIGURE 40: JOHN ERICCSON MEMORIAL



The John Ericcson Memorial sits on a parcel in the middle of Ohio Drive SW.

Korean War Veterans Memorial

The Korean War Veterans Memorial, southeast of the Lincoln Memorial, honors the patriotism, devotion to duty, and courage of Korean War veterans. Nineteen larger-than-life stainless steel sculptures stand silently under the watchful eye of a sea of faces upon a granite wall. At the upper end of the memorial is a flagpole, quotations, and a Pool of Remembrance, with shade trees and bench seating. Low walls list all the international participants, and casualties are listed near the pool. Along the south side of the memorial are polished granite walls with laser photo images that define the edge of the memorial and help create a quiet setting. The memorial, which opened in 1996, is listed on the National Register of Historic Places.

D.C. War Memorial

The D.C. War Memorial was constructed of Vermont marble in 1931 to honor D.C. citizens who served in World War I. It was originally designed to function as both a memorial and a bandstand. A domed roof is supported by 12 fluted Doric columns (NPS 2009a). The memorial is listed on the National Register of Historic

FIGURE 41: JOHN PAUL JONES MEMORIAL



The John Paul Jones Memorial is at the intersection of 17th Street and Independence Avenue SW.

Places as a contributing feature of the East and West Potomac Parks Historic District.

Ash Woods

Ash Woods is a densely wooded area between Independence Avenue and Ash Road. It was planned to be a naturalized, thickly wooded area with little understory vegetation. The U.S. Park Police stables, a restroom, and recreation fields are located in the area. Ash Woods currently is not listed as a contributing element on any national register nomination. However, it is within the viewshed of the Lincoln Memorial and other resources of the National Mall. Additional study will be conducted on this site.

Other Cultural Resources in West Potomac Park (North of Independence)

John Paul Jones Monument

The John Paul Jones Monument to the naval hero of the Revolutionary War is listed as a contributing feature of the national register nominations for East and West Potomac Parks and American Revolution Statuary. It is also on the NPS List of Classified Structures.

West Potomac Park (South of Independence Avenue)

Tidal Basin

The Tidal Basin was constructed in 1885 as part of the reclamation of the Potomac Flats and the creation of Potomac Park. Water enters the Tidal Basin from the Potomac River under Inlet Bridge (1909) and exits through tidal gates at the Outlet Bridge (1889) to the Washington Channel, helping to flush the channel of silt. Historically recreation around the Tidal Basin included swimming, boating, and especially riding, driving, and parading around circular walk. During the Independence Avenue extension project Kutz Bridge was constructed (1943) to carry eastbound traffic over the north bay of the Tidal Basin. The Tidal Basin, and Inlet, Outlet, and Kutz bridges, are listed on the National Register of Historic Places as contributing to the East and West Potomac Parks Historic District.

First Cherry Tree Planting Plaque

The plaque commemorating the first cherry trees planted as a gift from Japan in 1912 is on the NPS List of Classified Structures.

Japanese Lantern and Japanese Pagoda

A 300-year-old Japanese lantern was given to the United States by Japan in 1954 to commemorate the visit of Commander Perry to Japan. The same year a stone pagoda was given to the U.S. in commemoration of the Treaty of Yokohama. Both are listed on the National Register of Historic Places as contributing features of the East and West Potomac parks nomination, and they are also on the NPS List of Classified Structures.

First Airmail Flight Marker

The marker commemorates the airfield that once existed in West Potomac Park and the first airmail flight from Washington, D.C. The marker is a contributing feature of East and West Potomac Parks Historic District.

Franklin Delano Roosevelt Memorial

The Franklin Delano Roosevelt Memorial (dedicated in 1997) is a series of four outdoor galleries, each representative of one of the president's four terms in office. Red granite walls, plantings, water cascades, and pools define the spaces. Quotations from the president are carved into the walls. Sculptural groupings and bronze panels depict aspects of each term in office. After the memorial was completed a sculpture of the president in a wheelchair was added to the forecourt. The memorial is listed on the National Register of Historic Places and the NPS List of Classified Structures.

George Mason Memorial

The George Mason Memorial honors Mason's advocacy for the addition of the Bill of Rights to the U.S. Constitution. Dedicated in 2002, the memorial is located near the Thomas Jefferson Memorial. The memorial consists of a bronze sculpture of George Mason seated on a marble bench beneath a pergola, along with inscriptions of quotations by George Mason or about his legacy related to the Bill of Rights. The memorial was designed around a historic fountain – (Fountain 4) and planting beds. The fountain, constructed in 1906, is the last of four fountain basins built in an evergreen nursery and garden established in 1905. The fountain is listed on the National Register of Historic Places.

West Potomac Park Riverfront

The West Potomac Park riverfront was created as a result of dredging the Potomac River in the late 1800s. The plant species that would have grown on the banks and the Potomac River floodplain before reclamation do not occur in the vicinity today. The dry-laid stone walls along the river are a contributing feature of the West Potomac Park national register nomination.

Thomas Jefferson Memorial

The Thomas Jefferson Memorial on the south shore of the Tidal Basin anchors the south end of the north-south axis developed by the McMillan plan. Designed by noted architect John Russell Pope, the memorial is constructed of Vermont white marble in a Neoclassical style, with a rotunda. It rests on a granite terrace. The memorial is listed on the National Register of Historic Places and as a contributing feature of the East and West Potomac parks nomination. It also is on the NPS List of Classified Structures. The following information is from the "Cultural Landscape Inventory" (NPS 1998a).

The Memorial

The Jefferson Memorial, located on the southeast shore of the Tidal Basin, was constructed between 1939 and 1943, and was dedicated in 1943. A circular open-air structure modeled after the Roman Pantheon, the memorial features a shallow dome, a circular peripheral colonnade composed of 26 un-fluted Ionic columns, 12 additional Ionic columns supporting the north portico, and 4 identical columns in each of memorial's four monumental openings. A flight of granite and marble stairs and platforms, flanked by granite buttresses, leads from the Tidal Basin.

The interior of the memorial features a bronze statue of Jefferson that is centered in the chamber on a black Minnesota granite pedestal, which is inscribed with the dates of Jefferson's birth and death (1743–1826). The dome's interior is divided into two parts; the lower section has a coffered surface containing lights that illuminate the statue, and the upper section has a smooth, uninterrupted surface. The only other structure on the memorial grounds is an octagonal refreshment kiosk with a tent-like copper, standing seam roof. The stand is southwest of the memorial at East Basin Drive.

Spatial Organization

The Jefferson Memorial occupies the fifth and last of the cardinal sites as detailed in the McMillan plan. The memorial is situated on the south bank of the Tidal Basin at the southeast corner of West Potomac Park. The distance between the memorial and the other elements of the city give the memorial a feeling of openness and informality to the north and west, far removed from the rigidity of the axial location on which it is actually sited. On the south side the proximity of I-395 detracts from the parklike setting. The highway corridor and bridges not only block the visual link with the river, but create a physical barrier to the open access of East Potomac Park.

Within the memorial grounds themselves, the composition of the immediate ground plan becomes less rigid farther from the memorial. The surrounding architectural plantings of shrubs and trees within the circular roadway, together with the rectangle of grass, give way to the informal parkland composition of trees set in grass.

The Jefferson Memorial is situated within a completely engineered landscape. No natural plant species exist in the vicinity today, due to the hard edge of the Tidal Basin wall and depth of water.

Topography

The original topography of the site was the Potomac River and its edge wetlands. Since the land was created through dredging, the memorial site is essentially flat with two rings of retaining walls supporting two terrace levels that make the memorial feel like it is located on a knoll. Some minor grading has been done for the roads and to facilitate drainage. The graphics of the topography before construction in 1938 show the modeling that took place to create the memorial site. They also illustrate the alterations made to the edge of the Tidal Basin to place the memorial directly on axis with the White House. Sometime after the dedication in 1943 a 3- to 4-foot berm was added along the west side of the Tidal Basin, approximately 25 feet from the sidewalk. It is used to channel water to a drop inlet and has been planted with cherry trees. Settling has been a problem since the construction of the memorial and has been addressed at various times over the years

Views and Vistas

L'Enfant first conceived the initial inspiration for the dominant axial arrangement of buildings of primary importance around the Mall (and therefore the formal vistas between them) in his 1792 plan of the Capital City. The gradual departure from his plan in subsequent years brought about the necessity to develop a new plan for the city center in order that it might regain some cohesive structure.

The departure from the L'Enfant plan, together with the newly created lands reclaimed from the dredging of the river, influenced the McMillan Commission to redesign the central area, reinforcing the axes and the vistas. Its plan displayed the familiar five-point composition regulating the formal linkage and views of these cardinal points. The perspective view illustrated the intended vistas between them, despite the southernmost still being a vacant plot of land. Once the site for the Jefferson Memorial was chosen, there was never any question about its visual relationship with the White House. In fact, President Roosevelt ordered trees to be cut so the view of the memorial from the White House would be enhanced.

The visual relationship between the Lincoln and Jefferson memorials was discussed by the Thomas Jefferson Memorial Commission and the Commission of Fine Arts in January 1943. The vista was opened up to the Lincoln Memorial following detailed discussion as to the line of the vista and whether it should run from portico to portico or from the center masses of the two buildings. The vista between the memorials was opened up by the pruning of trees at the end of January 1943, allowing a narrow view of one memorial from the other.

Today the Lincoln Memorial is barely visible from the Jefferson Memorial. In summer, the top of the Lincoln Memorial can be seen above the trees. The view is slightly more apparent in the winter. The location of the wall at the Korean War Veterans Memorial emphasizes the line between the Lincoln and Jefferson memorials; however, this connection is only visible from the air.

The vista to the White House is clearly visible from the steps of the Jefferson Memorial. Similarly, Jefferson's statue is clearly visible from the Truman Balcony of the White House.

The construction of the Franklin Delano Roosevelt Memorial in West Potomac Park and the removal of selected trees in 1997 created another framed view of the Jefferson Memorial from the bank of the Tidal Basin. This vista was also part of the McMillan plan. There are some flowering crab and cherry trees in this vicinity today, but the narrow vista toward the west side of the memorial is still maintained. The vista looking toward the east side of the memorial is also apparent.

Dominating the view to the south from the memorial is the elevated I-395, which leads up to the 14th Street Bridge and parallels the railroad bridge. The highway structure considerably foreshortens the original view southward, and the noise and sight of the traffic has a seriously deleterious effect on visitor enjoyment of the memorial. The intrusion of the road is intensified when standing higher up inside the memorial, or on the stylobate mall. The road as viewed from the memorial is not well screened with trees. The rectangular grassed area immediately south of the memorial is similarly dominated by the presence of automobiles. Parking to the rear of the memorial was part of the original plan.

The open view across the Tidal Basin to the north has not changed dramatically since the 1940s in terms of structural changes to the landscape. However, the view due north is interrupted by the parking lot opposite the plaza along the north edge of the Tidal Basin. While this parking area has been in existence since the memorial's construction, the increase in the number of vehicles has made it a conspicuous intrusion in an otherwise pleasant and uncluttered view across the water.

Today the historical integrity of the views and vistas dating to the period of significance remains high. To the north, vistas to the White House and Washington Monument, and the view across the Tidal Basin all remain, along with vistas to the east and west of the memorial. Only the vista to the Lincoln Memorial has been compromised.

Circulation

The circular drive and plaza, originally designed for vehicular use, are now meant to be used exclusively by pedestrians. Some pedestrians arrive at the memorial from the east around the Tidal Basin, others from the Franklin Delano Roosevelt memorial to the west. The path adjacent to the Tidal Basin on the west side is made up of sections of asphalt and concrete; the one to the east is largely asphalt. On both sides the paths abut the concrete cap on the seawall. A temporary asphalt path was added south of the Tidal Basin path on the west side in 2008. This temporary path stabilizes active erosion behind the seawall and provides a safe pedestrian walkway between Inlet Bridge and the memorial.

To access the memorial from the south, visitors may walk on sidewalks parallel to the approach roads or take the asphalt circular roadway and then climb the north steps to enter the chamber. Others, including visitors with disabilities, take the ramp on the south side to the terrace mall level and around the memorial to the west. From there they either climb the north stairs or enter the building and take the elevator to the chamber level.

Due to the continual settlement since the memorial's construction, sections of the circular roadway were at a considerably lower grade than the main plaza. When the current plaza was installed in the 1970s a transition section had to be constructed so the plaza would meet the circular road section. The north plaza, replaces the original macadam road, curbing, gutters, and sidewalk, and the small concrete plaza, forms the base of the front steps. At the same time vehicles were prohibited from driving around the memorial.

In 1999–2000 a number of repairs to the circulation system were made. The north plaza was redone in the same colored aggregate concrete as the circular drive. The original curb-line of the circular driveway was marked with granite pavers. The north main steps were reset and repaired. The granite steps along the edge of the Tidal Basin leading to the northwest corner of the plaza were repaired, and the asphalt ramps bypassing both sets of steps adjacent to the Tidal Basin were widened and resurfaced.

A sidewalk parallels East Basin Drive for most of its length within the memorial grounds. To the west an asphalt path added in 1986 runs from the Tidal Basin, starting approximately halfway to the Inlet Bridge, across the lawn to the northwest corner of the parking area. On the east four asphalt paths merge before crossing Outlet Bridge.

The various surfacing materials throughout the memorial area create a patchwork effect of different colors and textures, detracting from the landscape setting and the grandeur of the memorial itself.

Vegetation

After reclamation and before the memorial was built, the area of newly created parkland was planted with trees and lawn. Japanese cherry trees were planted on the site in 1912 when the mayor of Tokyo presented 3,000 cherry trees to the city. They have been supplemented by subsequent plantings. The Olmsted planting plan that was installed at the time of construction featured a simple design within the circular driveway that was predominantly evergreen with limited flowering trees and shrubs. It featured clustered groups of trees and shrubs to the north and south of the memorial on both sides of the north steps and on both sides of the south view line. The plan included yews, American hollies, Japanese hollies, abelias, osmanthus, firethorns, and cotoneasters, with dogwoods and winter jasmine added for color. Because the planting was perceived as "too thin," white pines were added to the stylobate mall, and some other replantings and additions took place before the dedication.

Outside of the circular drive, the planting featured small flowering trees, with taller shade trees underplanted with grass and limited shrub and ground cover. The taller trees edged the circular drive and approach driveways, except on the north and east vistas. Other plantings are clustered at the four cardinal points outside of the circular drive, and where the approach roads intersect with East Basin Drive. The plantings focused on dogwood, crabapple, cherry, and elm, plus maple, hawthorn, plane, oak, holly, pine, yew, and periwinkle.

The planting around the memorial today no longer reflects what was specified in the original plans, although vegetation on the stylobate mall has been restored based on the 1942 additions to Olmsted's original planting plan, which included the addition of pine trees to fill in the original "thin planting" for which Olmsted was criticized.

The major designed change occurred in the 1970s, when additional yews were planted on the stylobate mall. The ring of zelkovas was planted inside the circular road, where none existed originally. These have grown to maturity and have become an accepted part of the current landscape. Also, an evergreen layer of American hollies has been added along East Basin Drive since the 1970s.

Additional yews were the focus of the landscape restoration work that took place in 1993. This work removed the historically incorrect planting, which restricted the established vistas, especially those east and west. Original yews, which had been affected by the repeated addition of fill over the years to combat settlement, were removed and replaced. Today, some of the original planting remains historically correct in terms of species and location. However, the flowering shrubs and tree species (abelia, dogwood, winter jasmine, and osmanthus) that were planted on the lower terrace have been lost. In their place are several yews and a few hollies. Many of the yews have grown to such an extent that they have to be pruned severely to keep them back from the paths. This makes the yews look more formal than intended on the path side, while on the other side the yews grow in their more natural form.

To the south of the memorial, the cotoneasters have been lost, leaving yews and firethorns. The original periwinkle, which was planted beneath the groups of three pines at the north of the memorial, was replaced with grass fairly early in the memorial's history. In 1986 the dwarf inkberry hedge along the terrace walk was replaced with a hedge of the cultivar 'Shamrock,' which exists today. While these plants are generally in good condition, their form is becoming less compact. Elm trees to the southwest of the memorial that were there at the time of construction were the victims of regrading that took place to raise the ground levels due to settling. In 2000 the Bicentennial planting of hollies was removed. More flowering dogwoods and yews were planted, going back to the original Olmsted plan for the site.

Constructed Water Features

While the Thomas Jefferson Memorial is located on the Tidal Basin, which is integral to its setting and the visitor's experience of the memorial, the water is not considered part of the Jefferson Memorial grounds, but part of West Potomac Park.

Small-Scale Features

Many styles of site furniture exist on the site today. Different components within the general landscape setting appear to have been added in a piecemeal fashion to suit the immediate needs of the time rather than fit into a structured management plan for the area.

A metal trash receptacle with a fluted top is used throughout the memorial. Two round receptacles made of marble are located on the north plaza steps. There are wooden storage bins along the edge of the kiosk pad for use by the concessioner.

There are 12 Washington globe lights along East Basin Drive between the Inlet and Outlet bridges. There are also eight tall metal poles with floodlights around the memorial; the poles to the southeast and southwest are masked by mature trees. Around the stylobate mall are eight shorter poles, each with a single floodlight. There are 3-foot-high lighted bollards along the edge of the Tidal Basin walk, but none to the east. There are also no lights on the walks through the greater site. At-grade flush-mounted lighting was installed in late summer of 2000, at the seawall at the end of the plaza.

Signs at the memorial focus on regulations. Parking restriction signs are placed at close intervals around the grass rectangle. The only interpretive information is at an information kiosk on the south plaza.

Roadways Contributing to National Register Listings

The following avenues, drives, and streets are contributing features of the L'Enfant Plan of the City of Washington, D.C.:

Constitution Avenue NW
Independence Avenue SW
Jefferson Drive SW
Madison Drive NW
17th Street NW
Louisiana Avenue NW
Maryland Avenue SW
Pennsylvania Avenue NW
Virginia Avenue NW
1st Street NW
3rd Street SW and NW
4th Street SW
6th Street SW and NW
7th Street SW and NW
9th Street SW and NW
10th Street SW and NW
12th Street SW and NW
14th Street SW and NW
15th Street SW and NW
17th Street NW
18th Street NW
19th Street NW
20th Street NW
21st Street NW
22nd Street NW
23rd Street NW

NATURAL RESOURCES

As an urban oasis, the National Mall contributes substantially to the open, expansive landscaped character of Washington, D.C. The primary land use in the study area is institutional and includes museums, galleries, memorials, and other cultural uses. Nearby destinations include the Smithsonian Institution facilities, the National Gallery of Art facilities, the U.S. Holocaust Memorial Museum, and the U.S. Botanic Garden.

The District of Columbia "Generalized Land Use" map categorizes the entire area as "parks, recreation and open space." In addition to their cultural importance, these areas provide both passive and active recreational open space, including softball fields, a polo field, and fields for other sports. The adjacent East Potomac Park contains a public swimming pool, a golf course / driving range, a miniature golf course, tennis facilities and courts, picnic areas, a food service facility, restrooms, office and maintenance buildings, a visitor transit operations facility, and a U.S. Park Police substation.

WATER RESOURCES

Surface Water

Washington, D.C., lies within the Potomac River basin and in the Middle Potomac-Anacostia-Occoquan watershed, a part of the greater Chesapeake Bay watershed. The District of Columbia contains two rivers — the Potomac and Anacostia — and several streams, such as Rock Creek.

All surface waters in the District of Columbia flow to the Potomac River either directly or through tributaries such as Rock Creek and Anacostia River. These rivers comprise the second largest tributary watershed flowing into Chesapeake Bay. The Potomac River provides about 75% of the municipal water supply for domestic use in the Washington metropolitan area. The river also receives effluent discharged from a number of wastewater systems. Other than the Potomac River, no perennial streams or other natural surface waters remain in the planning area.

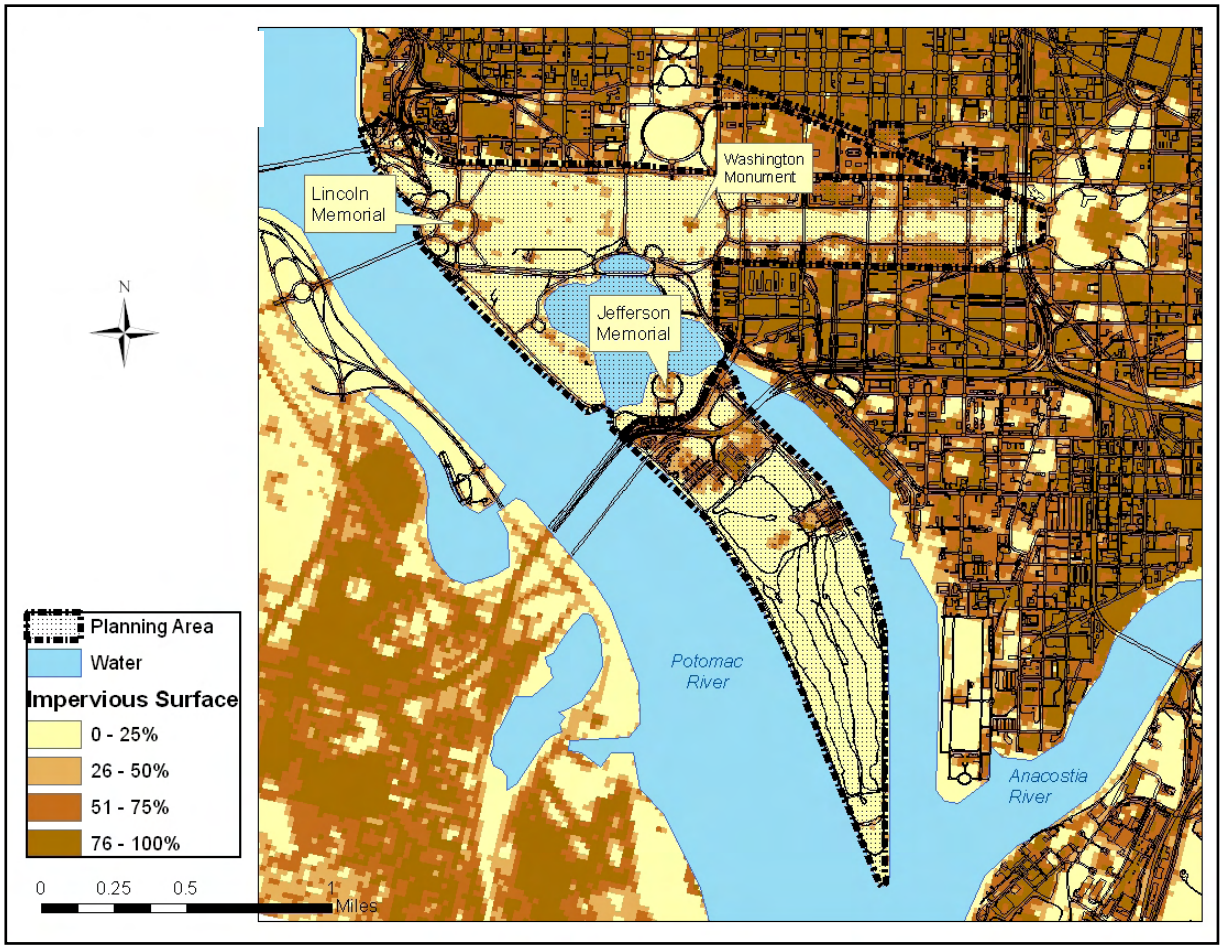
At one time natural streams ran through the area, including Tiber Creek, which flowed into the Potomac River north of the Washington Monument. The creek was converted into the Washington City Canal in 1815, running along the north side of the Mall before turning south and emptying into the Anacostia River. The canal operation failed financially, and the canal was filled in or covered over in 1871 and became Constitution Avenue. Tiber Creek still flows through artificial conduits beneath Constitution Avenue and out to the Potomac River.

The planning area is in an urban location and a large percentage is impervious. Impervious surfaces are areas that prevent the saturation of water into the surface of the soil (e.g., roads, parking lots, sidewalks, and rooftops), resulting in water running off the surface in greater quantity. Soil compaction is so great in some areas of the National Mall that the soil surfaces are considered impervious.

The Potomac River is a jurisdictional water of the United States, subject to the regulatory control of the U.S. Army Corps of Engineers (USACE). The District of Columbia, the federal government, and the states of Pennsylvania, Maryland, and Virginia are parties to the 1983 Chesapeake Bay Agreement. The goals of this program include fostering stewardship and protecting water quality through managing pollutants and land use, and also managing fisheries and habitat. Actions that could be taken to fully comply with the goals of the Chesapeake Bay Program could include upgrading the stormwater systems to retain more stormwater and reduce runoff into waterways. Upgrading the system would address some water quality and quantity issues. The park maintains the vegetation in accordance with the integrated pest management system to protect the Chesapeake Bay as well as minimizing toxicants.

The District of Columbia has ordinances for erosion, sediment control, and stormwater management that support the mission of the Chesapeake Bay Program by protecting surface runoff to the Potomac River. Although the National Park Service is not responsible for the

FIGURE 42: IMPERVIOUS SURFACES, NATIONAL MALL AND MEMORIAL PARKS



water column of the Potomac River, it is responsible for managing the bed of the Potomac River within the District of Columbia (opinion rendered July 20, 1976, USDI Office of the Solicitor).

The Tidal Basin is a 107-acre, 6-foot-deep man-made basin built originally at the mouth of Tiber Creek in 1885. It was designed by U.S. Army Major Peter C. Hains to mitigate flooding from the Potomac River. It was first dredged in 1885 and re-dredged in 1907. The basin was designed to serve a practical function of preventing stagnation by flushing waters into the Washington Channel. This self-flushing feature had stopped functioning for several years but was restored in 2006. The water in the 107-acre Tidal Basin is slightly brackish due to tidal inflows from Chesapeake Bay, but it supports a variety of native and nonnative fish. Stormwater runs off from the surrounding land and enters the Tidal Basin by way of a system of storm drain inlets and pipes.

The Tidal Basin is connected to the Potomac River at its south end and the Washington Channel on the east side. The basin is lined with retaining walls, or seawalls, that prevent the earth fill from eroding into the water. The Tidal Basin seawall was completed in 1896. The seawalls are capped by a concrete walk, intended to provide safe access to the riverfront for recreation, including sightseeing, strolling, and fishing.

Constructed pools such as the Constitution Gardens Lake, the Lincoln Reflecting Pool, the Capitol Reflecting Pool, and other pools and fountains are artificial, concrete-lined waters. They are filled with treated, potable water supplied by the District of Columbia. The current capacity of the Capitol Reflecting Pool is 2.5 million gallons, Constitution Gardens Lake

5.5 million gallons, and the Lincoln Reflecting Pool 5 million to 6.75 million gallons. The latter pool has a leaking problem. These pools often become stagnant and must be drained annually to clean out accumulated debris from the bottom. Draining and refilling these pools one time uses up to 14.75 million gallons of treated water.

The growth of algae in pools throughout the National Mall is a management concern. This growth adversely affects aesthetics and the quality of water for other aquatic life. Treatments to control the algae include the use of fountains to aerate the water, mechanical removal, and the application of chemical algicides. The National Park Service has rules about which chemicals can be added to the water. Currently, only organic products certified by the Organic Materials Review Institute are used in all pools that are periodically drained in the Tidal Basin or another natural water body.

Shorebirds and other waterfowl are frequently seen using the larger pools. The lake contains self-maintaining game fish populations and aquatic vegetation in planters.

Floodplains and Stormwaters

The 100-year floodplain elevation is about 13.5 feet above mean sea level according to USACE studies, which are the base for the current Federal Emergency Management Agency flood maps (FEMA 2007). The area between the Thomas Jefferson Memorial and the Lincoln Reflecting Pool, as well as all of West and East Potomac parks, are within the 100-year floodplain of the Potomac River. The Lincoln Memorial and Washington Monument are built on elevations and are above the floodplain. The 100-year floodplain also includes the eastern end of the National Mall and the area between Madison Drive and Pennsylvania Avenue. The 500-year floodplain is only slightly larger but includes Constitution Gardens.

The water surface elevation of the Tidal Basin is also influenced by daily tides moving up the Potomac River. The high tide in this area may be 3 feet above mean sea level, and water overflows the subsiding southern rim of the Tidal Basin during most high tides, inundating walkways and some cherry trees.

As a result of severe flooding in the 1930s, flood controls were built in Washington, including the Potomac Park levee, a raised berm extending from 23rd Street NW to the Lincoln Memorial Circle and along the north side of the Lincoln Reflecting Pool across 17th Street to the Washington Memorial grounds. During flood warnings in the past, NPS staff erect a temporary dike composed of earth fill and sandbags across 17th Street to complete the levee and protect downtown Washington. This was intended to provide protection from floods of the Potomac River up to 19 feet above sea level, but the Army Corps of Engineers has recently determined that the current design is no longer adequate, so a new flood control solution for 17th Street is being developed. The National Park Service will cooperate with the District of Columbia and Army Corps of Engineers to implement flood control measures under all of the alternatives in this plan.

In June 2006 several buildings in Washington's Federal Triangle flooded following torrential rains, resulting in significant damage and the temporary closure of several federal agencies. In response, the National Capital Planning Commission undertook a study to examine the various causes of flooding in the District, particularly in the low-lying National Mall, Federal Triangle, and downtown areas and to recommend protective measures. This study found that Washington is susceptible to both overbank flooding and urban drainage flooding (NCPC 2007, 2008). While the Potomac Park levee protects against overbank flooding from the Potomac River, urban drainage flooding occurs as a result of heavy precipitation, such as prolonged rain or sudden snowmelt. Many of the buildings located along the original creek beds experience frequent basement flooding as water flows tend to follow the original drainage patterns.

None of the alternative actions proposed in this plan would affect natural floodplains or cause a meaningful change in development or use of existing floodplains, so this topic has been dismissed from further analysis.

Groundwater

Fluctuations in the level of the water table result from seasonal variations in precipitation, surface runoff, and evaporation. Based on the area's topography, the natural direction of groundwater flow is to the west/southwest (toward the Potomac River). Localized groundwater flow can be affected by subsurface structures. The groundwater level at the National Mall ranges from being very near the surface along the southern edges (near the Tidal Basin and Potomac River) to 35 feet below existing grades along the northern side (NPS 2007a).

Soils

On the north side of the National Mall two soil mapping units have been identified — the Beltsville-Urban land complex and Udorthents (SCS 1976). The western and southern areas are composed of Lindside type loam immediately adjacent to the Tidal Basin, and Udorthents (largely heterogeneous fill material) on the remainder (USGS 1965).

The Beltsville-Urban land complex is composed of soils formed in the parent material of a silty layer most likely deposited by wind. They are on 0%–8% slopes and are moderately well-drained. About 20% of the complex is comprised of relatively undisturbed Beltsville soils. Another 20% has been disturbed by urbanization and covered with up to several feet of fill material. Urban land comprises about 40% of the complex and underlies areas covered by asphalt, concrete structures, or other impervious surfaces. The remaining 20% of the complex includes fine sandy loam, silt loams, and sandy loam (SCS 1976).

Udorthents formed in parent material that has been deposited or disturbed by humans as a result of cuts and excavations. Udorthents can be found on poorly drained to somewhat excessively drained soils on floodplains, terraces, and uplands. In many areas, this mapping unit is covered by structures, asphalt, concrete, and other impervious surfaces, along with material that was imported to facilitate development. Some of the mapping unit contains organic and inorganic waste from human activity, such as bricks, trash, wire metal, lumber, cinders, industrial waste, incinerator ash, and pieces of concrete and stone. The diverse composition of this unit has resulted in highly variable permeability, water capacity, run-off, and internal drainage. Uncovered and nearly level areas of Udorthents are usually high in fertility and available water capacity, thereby offering high potential for trees, lawns, and ornamental shrubs (SCS 1976).

Lindside loam, which occurs on nearly level floodplains, consists of very deep, moderately well-drained soils formed in alluvium washed mainly from lime-influenced soils on uplands. They offer moderate permeability with slow runoff and little to no hazard for erosion. Due to the wetness and flooding hazards, the soil has poor potential for building sites (SCS 1976). Both the Lindside and the Udorthent soils have general tendencies to be used for human-deposited dredged material and cuts, fills, or otherwise disturbed land (USGS 1965).

General characteristics of urban soils include extreme heterogeneity from area to area, variability in organic matter percentages, variability in fertility and pH, a wide variability in texture, and a tendency for the compacted soils to repel moisture (NPS 1975).

Fill

About half of the 684 acres of the planning area is fill dredged from the Potomac River to create the Tidal Basin and Washington Channel and to raise the original land elevation. The fill is over 100 feet deep in some places. Most of West and East Potomac parks were created from fill material dredged from the Washington Channel and originally called the Potomac Flats. The area south and west of the Washington Monument was mostly created when the Tiber Creek valley was drained and filled.

The Jefferson Memorial was built atop pilings and caissons sunk into an artificial mud flat that is about 100 feet deep. A problem of subsidence seems to be occurring where a section of the seawall is breaking from the memorial's plaza and settling into the Tidal Basin. The western section of the seawall, which separates the memorial complex from the Tidal Basin, is currently about 6 inches below the adjoining plaza. The "ring road," which wraps around the memorial, has

also dropped several inches in spots and has been patched.

The nearby Lincoln Memorial, Franklin Delano Roosevelt Memorial, and Korean War Veterans Memorial are also built on pilings atop fill. The Lincoln Memorial's pilings go down about 40 feet; the Roosevelt Memorial's, 80 feet; and the Korean War Veterans Memorial's, 30–60 feet (Ruane 2007). No settlement problems have been observed at these memorials.

Soil Conditions

Soils throughout the National Mall have been subjected to major impacts from heavy daily foot traffic, recreational activities, and special events, which may include impacts from vehicles. These uses have severely compacted soils, resulting in compressed pore space between soil particles and increased bulk density.

National Mall soil compaction studies were done by various researchers in 1975, 1976, 1978, 1986, 1990, 1991, 1994, 2006, and 2008. The studies utilized a variety of bulk density assessment methods (clod, core, nuclear probe, and cone penetrometer). Six of the studies confirmed severe compaction on the Mall. A study done in 1978 at sites on the Mall found the mean bulk density to be 1.61 grams per cubic centimeter (g/cm^3) on the surface and 1.74 g/cm^3 at 30 cm, a depth spanning much of the root zone of the elm trees (Short et al. 1986). The maximum acceptable bulk density for silt loams is 1.3 g/cm^3 and for loams, 1.4 g/cm^3 (American Society of Landscape Architects et al. 2008).

One report prepared by the Alabama Agricultural Experiment Station at Auburn University for the Smithsonian Institution in 1991 had very limited parameters (the top 1–3 inches of soil) and used the clod method, which is more likely to identify less compaction than actually exists. In 1992 the NPS Center for Urban Ecology (CUE) undertook additional studies of soil compaction, sampling both at the surface and at a 12-inch depth outside the drip line and using the clod method. This study verified previous findings that soils with high bulk densities at the 12-inch depth occur throughout the Mall. This is critical when considering that the minimum soil depth for providing adequate growth support for elm trees is 18 inches (NPS 1992a, 1992b).

Generally, soil pore space should be about 50% to allow diffusion of oxygen, water, and minerals. Reduction of the pore space restricts the movement of water and oxygen, resulting in premature death of trees and other vegetation by suffocation. Compacted soils also physically restrict root growth.

One study of soil in test pits on the National Mall has been found to be "as dense as concrete" when density and pore space were calculated (NPS 1975). The mean surface pore space on the Mall ranged from 37% at the surface to 33% at 30 cm (Short et al. 1986). Soil compaction may be the largest factor affecting vegetation in the park (Sherald, pers. comm., 2007).

VEGETATION

Vegetation within the National Mall has been highly manipulated for over 200 years, and there is no resemblance to the native vegetation patterns of the Atlantic Coastal Plain and Piedmont provinces. The entire area is considered a designed historic landscape, and landscapes in the project area have been individually designed and manipulated to establish desired settings, such as commemorative spaces, events space, recreational fields, and gardens. Perennial gardens and flowerbeds are enjoyed by visitors in several park areas. A fundamental resource of the park is open lawns that provide settings for buildings and memorials, as well as space for recreational activities, demonstrations, and special events. Most lawns are bordered by trees intended to define specific viewsheds. Trees in Union Square may have been planted when the area was the original site of the Botanic Garden, and a number of these trees are considered "witness" trees.

Washington, D.C., is a good example of an "urban forest" composed of a combination of native and introduced tree species. The U.S. Forest Service (USFS) has developed the Urban Forest Effects model to better understand the urban forest resource and its numerous values, including air pollution removal, air temperature reduction, improved water quality, reduced noise, increased property values, aesthetics, and

community cohesion (USFS 2006). Park vegetation is composed of turfgrass and ornamental trees, shrubs, hedges, and ground covers. In addition to elms and cherry trees, there are hedge maple, star magnolia, bald cypress, oaks, mulberry, hackberry, and Japanese pagoda trees, along with American lindens and various evergreens.

Many tree groves and rows are historic, include specimen-quality trees, or are intrinsic to the visitor experience or landscape of specific areas of the park. The National Park Service maintains a database of the location and species for all trees in the park. There are 18,500 trees throughout the National Mall.

Over the last two decades, there has been a substantial loss of tree cover within the District of Columbia, including the National Mall, affecting not only air quality and temperature, but quality of life (NPS 2008f). Stressors on trees and shrubs include soil compaction, insects, disease, salt and other chemicals used for deicing, and vandalism. Tree cover in the District is currently estimated to be 28.6% (Nowak et al. 2006.) The National Park Service supports a Metropolitan Washington Council of Governments initiative to increase the overall tree canopy in the city.

Elm Trees

There are approximately 2,700 elm trees throughout the monumental core. Nearly 600 elms (predominantly American elms, *Ulmus americana*) border the area of the Mall in four rows on either side of center grass panels between 3rd and 14th streets. Double rows of European elms (*Ulmus* × *hollandica* spp.) line the walkways along the north and south sides of the Lincoln Reflecting Pool. Both of these groups of trees are defining features within the McMillan plan landscape.

Most of the elms are under stresses caused by soil compaction, root constraints, abrasion on exposed roots, cutting of roots during construction, and air pollution/acid precipitation. In addition, Dutch elm disease continues to claim some trees every year. Leaf scorch caused by *Xylella fastidiosa* was found to affect approximately 25% of the American elms in a study conducted by the National Park Service in 1990. The National Park Service has taken the lead in developing disease-resistant elms and is working with the District of Columbia, the General Services Administration, the Department of Defense, the Architect of the Capitol, and the Smithsonian Institution to implement a management program for elm trees. Disease-tolerant strains such as the "Washington," "Princeton," and "Jefferson," as well as wild-type American and other elms, are used as replacement trees.

Cherry Trees

Over 3,000 cherry trees line the Tidal Basin and East Potomac Park, are in several groves on the Washington Monument grounds, as well as along the Washington Channel in East Potomac Park. They are considered a major character-defining component of the National Mall and are a protected feature. The Japanese government presented 3,020 flowering cherry trees (or 'Sakura') as a gift to the United States in 1912. Of the original 12 varieties shipped, the white Yoshino and pink Kwanzan varieties represented the largest portion and have persisted as they are best adapted to the climate of Washington, D.C. Most of the remaining 10 varieties did not prove to be cold-hardy enough for this area.

Most of the trees from the original shipment in 1910 were destroyed due to insect/disease infestation, but 15 trees in East Potomac Park are believed to be from the original shipment. Definitive identification of trees growing around the Tidal Basin cannot be made because planting records were not kept. It is well-documented that many trees died the first few years after transplanting and were replaced with trees purchased from commercial nurseries in the United States. Trees that were replaced in the first 20 years cannot be distinguished from an original tree based on visual observation of age alone and could easily be mistaken for an original tree.

Correspondence in the National Archives documents that trees from the original shipment were transplanted in 1922 to the Library of Congress grounds and the Washington Aqueduct. Nine of these trees still remain. The National Park Service, in cooperation with the National Arboretum, vegetatively propagated from these trees to

ensure that the genetic lineage of the original witness trees would be preserved.

The National Arboretum conducted a study to compare the DNA from these documented trees with the suspected original trees around the Tidal Basin. The study found that while there is genetic variability within *Prunus* × *yedoensis*, eight of the older (presumed original) trees from which cuttings were taken were very similar to each other and to the 1912 plantings.

Many trees are adversely affected by root trampling during the National Cherry Blossom Festival when thousands of visitors come to view the trees. High tides often cause an overflow at the south end of the Tidal Basin rim, which inundates nearby cherry trees and other vegetation in that area. As a result, on the south side of the Tidal Basin cherry trees have been planted in raised soil berms.

Turfgrass

Although usually not a native plant, turfgrass is a natural resource that is a substantial component of the desired landscape and settings throughout the National Mall. Grassy areas are very important to the visitor experience in this area. The "transition zone" climate of Washington, D.C., with its hot, humid summers and cold winters, is stressful to most turfgrass species. Only the most cold-tolerant warm-season turfgrasses (selected zoysia and Bermuda grass cultivars) and the most heat- and drought-tolerant cool-season turfgrasses (principally tall fescue) can survive from year to year. New research on native (North American) grass seed mixtures may result in more sustainable mixes than the park currently uses.

The National Park Service maintains approximately 112 acres of turf on the Mall for general public use and 50 acres on various athletic fields. The following are the selections/blends commonly used in the park. The selection is based on the best time of the year that seeding takes place, as well as shading and other environmental factors.

- *Turf Type Tall Fescue Mixture:* A 90% certified mixture of turf-type tall fescue (*Festuca arundinacea*) consisting of three varieties, of which no variety exceeds 40% or is less than 20%, and 10% Kentucky Bluegrass (*Poa pratensis*). Recommended seeding dates: April 1 to May 15, September 1 to November 1.
- *Bermuda Grass Blend:* A certified blend of three hybrid Bermuda grasses (*Cynodon dactylon*), of which no variety exceeds 40% or is less than 20%. Recommended seeding dates: March 15 to August 15.
- *Perennial Ryegrass Blend:* A certified blend of perennial ryegrass (*Lolium perenne*), consisting of three varieties, of which no one variety exceeds 40% or is less than 20%. Recommended seeding dates: April 1 to December 15.
- *Perennial Ryegrass / Kentucky Bluegrass Mixture:* A certified mixture containing 60% Kentucky bluegrass, which consists of three varieties with no one variety exceeding 25% of the total mixture, and 40% perennial ryegrass, which consists of two varieties with no one variety exceeding 25% of the total mixture. Recommended seeding dates: April 1–30, August 16 to October 15.

Healthy turf provides many physical and social benefits and reduces nutrient runoff into waterways. However, turfgrass on the Mall has been and continues to be adversely impacted by demonstrations, special events, recreational activities, and the development of social trails (user-created trails off paved paths) and jogging paths. These uses have resulted in areas of destroyed turf (see the aerial photo of the Mall), broken sprinkler systems, and soil compaction. Soil compaction may be the largest factor affecting vegetation in the park (Sherald, pers. comm., 2007). The condition of the lawn on the Mall (from 3rd to 14th streets) is chronically in fair to poor condition (NPS 2006d). Reseeding attempts after large events have been prone to failure due to soil compaction, nonfunctioning irrigation systems, and continued heavy use. The National Park Service uses two approaches to turf maintenance — turf recovery and turf renovation. If the grass is 50% or more destroyed, then a complete renovation is conducted that involves killing all remaining vegetation and replanting. Turf renovation consists of aeration, overseeding, fertilization, and thatching.

Proper irrigation and fertilization practices, including regular applications of nutrients (based on soil tests), are essential for turfgrass survival and recovery. The timely provision of nitrogen-based compounds increases turfgrass growth and density. Annual applications of lime may also be needed to maintain the soil pH in an acceptable range (6.0–6.5) for adequate nutrient availability to the turfgrasses (Turgeon 2006). Soil-amendments with light-weight materials (e.g., expanded slate and sintered fly-ash) increased soil pore space in long-term tests at Hains Point in East Potomac Park (NPS 1975).

One way to reduce impacts on turfgrass is to control the level of traffic over a certain area. Proper traffic circulation management involves controlling both pedestrian and vehicular traffic on or around the turf so that traffic thresholds (i.e., maximum tolerable traffic intensities) are not exceeded. This can be done by reducing traffic intensity to a level below the damage threshold by various cultural interventions (Turgeon 2006). Another method might include seeding with more resilient Bermuda grass. However, this grass turns brown in the winter. Annual or perennial ryegrass could be planted in the fall to provide green lawns in winter, which would be replaced with the Bermuda grass when it comes back in spring.

The park maintains all vegetation, including turfgrass, trees, and other plantings, by using the NPS integrated pest management system. Goals of this system include protecting the Chesapeake Bay watershed by minimizing toxicants.

FIGURE 43: LANDSCAPE CONDITIONS, APRIL 2002



Grass on the Mall in front of the Smithsonian Castle has been affected by intense use.

Photo courtesy of U.S. Geological Survey.

The National Park Service closes half of the Mall area every winter for a half year of rest and rehabilitation. In fall 2007 rehabilitation efforts on the east end of the Mall included trial approaches in different areas that included more intense restoration. The most intensively treated area had a visibly healthy stand of predominantly weed-free turf until the first events took place.

FISH AND WILDLIFE

Most of the National Mall has been disturbed and landscaped, resulting in relatively poor quality habitat for terrestrial or aquatic animals when compared to undisturbed habitat. The D.C. Department of the Environment has classified some of the National Mall as "Pond and Pool" and to a lesser extent "River and Stream" habitats (DC 2007). There are no undisturbed native habitat types in the planning area.

The Potomac and Anacostia rivers and several streams provide habitat for 62 species of greatest conservation need, making these areas a high priority habitat (DC 2006). All wildlife species use the rivers and streams in some way, and the health of the rivers and streams affects most fish and wildlife species.

Fish species in nearby Rock Creek include two anadromous species that migrate from salt water to spawn in Rock Creek — the blueback herring and the alewife. The American eel is the only species found locally that lives in either fresh or brackish water. Eels migrate to the Sargasso Sea to spawn (catadromous). Other native fish that inhabit the area include shiners, catfish, sunfish, and bass. Nonnative species include carp and snakehead.

Constitution Gardens Lake has self-maintaining populations of largemouth bass, black crappie, bluegill, and yellow perch. Catch-and-release fishing is allowed. Some filamentous algae species in the lake provide food, shelter, and shade for the fish, but the uncontrolled growth of these species and blue-green algae can be detrimental to fish and water quality.

Recreational fishing is allowed in the Tidal Basin and Potomac River. However, urban pollution has adversely affected regional fish diversity and population numbers (NPS 2005f). PCBs and

other chemical contaminants continue to be found in some fish caught in the Potomac and Anacostia rivers and their tributaries, including Rock Creek (DC Department of Health 2002).

Common urban species of small birds include native songbirds as well as nonnative house sparrows, pigeons, and starlings. Larger native species include crows, common grackles, cormorants, loons, grebes, and gulls. Many birds of prey, such as bald eagles, osprey, peregrine falcons, and several species of hawks, are seen regularly. Great blue herons are also common, and a great egret is seen occasionally. Roaches Run Waterfowl Sanctuary, across the Potomac River from East Potomac Park, attracts many migratory waterfowl species.

Two species of birds are a management concern — Canada geese and ducks. The birds have adapted to human presence and have become year-round, non-migratory residents. Large groups of Canada geese are present year-round near the Potomac River, Constitution Gardens Lake, and the reflecting pools. Ducks were introduced to the area for recreational hunting purposes. Bird droppings foul waters and make lawns unattractive to human uses.

Resident wildlife includes mammals such as gray squirrels, bats, Eastern chipmunks, and Norway rats. They have become adapted to life in an urban environment and utilize nonnative vegetation for habitat needs. To some extent they have come to rely on human leftover food. When rats and squirrels are too numerous or aggressive, they become a management problem.

The open lawns and trees provide foraging habitat for several species of bats. During a recent bat inventory conducted by the National Park Service, an eastern red bat was caught in a net and three other species were heard using bat detectors — big brown bats, hoary bats, and eastern pipistrelles.

Other species that may be seen in the area include raccoons, beavers, red foxes, and white-tailed deer. Deer are infrequently seen swimming across the Potomac River from Virginia. River otters and muskrats may also be in the area.

In 1985 gray squirrels were so numerous in President's Park that they were damaging trees and flowering plants, so the National Park Service started a relocation program (Manski et al. 1981). Congregations of pigeons and gulls result in large accumulations of droppings that cover benches, statues, walkways, and plantings, causing aesthetic problems for visitors, corroded metal, and damaged painted surfaces.

DEMONSTRATIONS, SPECIAL EVENTS, AND NATIONAL CELEBRATIONS

BACKGROUND INFORMATION

The Importance of the Venue

The National Mall is a place where Americans have gathered for generations to celebrate, make their opinions known, and commemorate significant events. Popularly known as America's front yard, it is a place where citizens come together to organize events that celebrate achievements, bring focus to important issues, and provide opportunities for education. Lying between the U.S. Capitol, the Washington Monument, the national museums of the Smithsonian Institution and the National Galley of Art, it is the nation's foremost people's space. There is no other place that conveys an equal sense of national purpose or belonging.

First Amendment demonstrations, special events, and national celebrations, and such events are permitted by the National Park Service in accordance with the *Code of Federal Regulations* (see page 16). The NPS *Management Policies 2006* define these uses, as well as fireworks displays, filming, and photography, as special park uses (NPS 2006e, sec. 8.6).

Special events and demonstrations are generally open to the public. Participation is limited only by the numbers of people that can be safely accommodated. Locations that are closer to the subway system may facilitate access and participation. The Mall, Union Square, and the Washington Monument are the areas with the easiest access to public transportation and the most popular locations for special park uses.

Regulations

Reasonable time, place, and manner regulations have evolved, and some of them have been tested, upheld, or modified through judicial proceedings. As previously described, the *Code of Federal Regulations* addresses public use limits (36 CFR 1.5; see page 16).

Specific requirements of the National Capital Region as they apply to the National Mall are stated in 36 CFR 7.96. The regional director may impose reasonable restrictions on the use of temporary structures in the interest of protecting park areas, traffic, and public safety. This has resulted in *Requirements for Special Events Held on Parkland in the National Capital Region,* supplemented by *Standard Public Health Requirements for Temporary Food Establishments Operating in Conjunction with a Special Event Held on Parkland in the National Capital Region*. These two documents set requirements for submittals, resource protection, site plans, first aid, portable restrooms, signs, food, onsite supervision and security, liabilities, prohibition of glass containers, media, and other necessities. Within the National Mall and Memorial Parks, the 2009 *Guidelines for Special Events and Demonstrations* for the Lincoln Memorial establish procedures to protect resources at the memorial, and the 2006 "Record of Decision for Partial and Temporary Closure of a Portion of the National Mall (the Mall) for Turf Renovation" schedules the annual fall/winter closure of half the Mall for turf renovation.

NPS and NCR requirements and restrictions applying to all activities on the National Mall have not been consistently followed. For example, tent stakes are not to be installed any more than 18 inches into the ground, and no structures or parking, or equipment operated, within tree root zone areas.

Number and Size of Events

Thousands of special events take place annually on the National Mall. The event size and complexity determine the need for additional planning, submittals, and the need to provide facilities and services. The majority of demonstrations and special events are smaller, with expected attendance of 5,000, but more than 500,000 people can come to a major national celebration, such as the Fourth of July. Each year about two dozen events exceed 25,000 people. Attendance estimates are inaccurate on some permit applications; for example, organizers for large annual events (such as the Fourth of July

and the American Folklife Festival) may list expected attendance in the thousands, while hundreds of thousands of visitors usually attend; while for other events attendance falls short of estimates.

To provide a sense of the level of use that the National Mall receives, the National Park Service analyzed data for 2008 and 2009 related to permitted special events. This includes national celebrations and First Amendment activities, but not permits for commercial filming or for organized sporting activities, which are permitted either through the D.C. Department of Parks and Recreation or the National Park Service. The data show that more than 30 events are permitted every day throughout the National Mall. Table 9 shows the number of permits issued each year was similar (1,155–1,160), while total permit-days and event-days decreased by about 1,500; however, estimated participation in 2009 increased by 1.2 million.

TABLE 9: EVENT DATA FOR THE NATIONAL MALL — 2008 AND 2009

	Number of Permits	Total Permit-Days*	Total Event-Days*	Total Estimated Participation
2008	1,160	13,319	13,254	2,059,349
2009	1,155	11,815	11,723	3,270,090

SOURCE: National Mall and Memorial Parks.
* Permit-days include setup and takedown time; event-days include only the days an event actually takes place.

Special use permits are issued for some 48 locations throughout the National Mall, and some permits (such as those for marathons or triathlons) are for multiple locations. For each location, the National Park Service tracks the number of permits, which shows the relative popularity of, and demand for, specific venues. Sometimes an event may be connected to a specific site, such as wreath laying at a memorial, or fishing day at Constitution Gardens Lake. Some venues may not be as desirable because iconic symbols are not present in views, their size is limited, or they are too far from transit. The top venues used in 2008 and 2009 are shown in Table 10.

An analysis of the statistics for 2009 shows the following:

- While the Lincoln Memorial Reflecting Pool had the most permits (138), each event averaged only about 3,000 participants.
- The Mall had the second highest number of permits (115), and each event averaged about 13,750 participants.
- Of the top sites, the Washington Monument grounds actually sustained the largest average event size (21,000).
- Places like Henry Bacon Drive and the JFK hockey fields had large average event sizes (14,000–36,000), but relatively few permits.
- Underused areas include the D.C. War Memorial (235 estimated participants), Constitution Gardens (about 2,800 participants), and the Franklin Delano Roosevelt Memorial (5,000 participants).

Comparing permit data for 2008 and 2009, 70.2% of events had 100 or fewer estimated participants, about the same number as in 2009

TABLE 10: TOP VENUES FOR PERMITTED EVENTS — 2008 AND 2009

Area	Number of Permits		Number of Permit-Days		Total Estimated Participants	
	2008	2009	2008	2009	2008	2009
1. Mall	112	115	630	821	1,033,000	1,582,000
2. Washington Monument Grounds	65	74	241	471	310,000	1,565,000
3. Lincoln Reflecting Pool	58	138	301	203	55,000	418,650
4. Multiple Areas	1	2	160	14	100,000	370,000
5. Roads and sidewalks	22	19	42	48	152,000	259,000
6. JFK Hockey Fields	5	7	32	254	11,800	252,700
7. Union Square	39	28	149	178	84,000	129,000
8. Henry Bacon Drive (Lincoln Memorial)	na	8	na	12	na	113,000
9. Lincoln Memorial	27	9	92	54	10,000	111,000
10. West Potomac Park	27	20	70	58	32,000	95,000

Total estimated participation rounded to the nearest thousand.
na — not available.

Figure 44: First Amendment Demonstration at the U.S. Capitol and Flowing over to Union Square and the Mall





Attendance at events may fall short of estimated participation or exceed estimates.

(71.3%). In 2008, 9.8% of events had 1,000 or more estimated participants, which was similar to 2009 (9.9%). However, the number of estimated participants may not reflect the actual attendance. For example, the estimate for the 2009 Presidential Inauguration was 370,000, but actual attendance was estimated at 1.8 million, including those along Pennsylvania Avenue. An event permit for September 12, 2009, for Freedom Plaza listed an estimated attendance of 5,000 people. However, several times that number of people marched from Freedom Plaza to the west side of the U.S. Capitol for a rally (see Figure 44). These examples underscore the difficulty in finding ways to protect resources as well as accommodate high levels of visitor use.

The National Park Service also mapped 2009 special events that were estimated in advance to attract more than 1,000 participants and were taking place on the Mall (Mall and Union Square) and on the Washington Monument grounds. These locations were selected because they received the majority of use that takes place primarily on turf. The maps do not include participants for the 2009 Presidential Inauguration. The maps show the number of people, the total number of days, and the total number of estimated participants by season.

- *Total number of permit-days* — The number of permit-days illustrates that the length of events on the Mall (33–119 days) was much higher than at Union Square (10 days) or the Washington Monument grounds (10–52 days).
- *Total number of estimated participants* — The highest levels of event participation occurred on the Mall from 4th to 7th streets and from 9th to 14th streets (south side of the Mall) and included national celebrations (the Fourth of July celebration and the Smithsonian Folklife Festival), as well as the Public Employees Roundtable, the Solar Decathlon, and the Library of Congress Book Festival. The second highest levels of use were from 7th to 9th streets and from 9th to 14th streets (north side of the Mall), and these levels of use were comparable to the southwest quadrant of the Washington Monument grounds, where an annual Fourth of July concert takes place.
- *Total number of estimated participants by season (spring, summer, and fall)* — During every season the Mall from 4th to 7th streets consistently attracted more than 60,000 people to events (more than 80,000 in spring and summer). During summer all of the Mall from 7th to 14th streets attracted more than 80,000 event participants, while in fall most use was concentrated on the south side of the Mall. (Winter use was not tracked because, with the exception of the Presidential Inauguration, no events attracted more than 1,000 participants.) On the Washington Monument grounds summer event participation exceeded 60,000.

Comparing summer use levels on the Washington Monument grounds with the number of permit-days illustrates two points: (1) large volumes of people attend events that are of shorter duration; and (2) permits for special

events on the Washington Monument grounds are concentrated at the Sylvan Theater.

Time Frame

Demonstrations and special events are limited to four months (36 CFR 7.96(g)(4)(ii)). Demonstrations may be extended unless another applicant's use precludes double occupancy. Time limits listed for specific special events are

- Lighting of the National Christmas Tree and Christmas Pathway of Peace — 4 weeks, plus setup and takedown between October 1 through February 1
- Cherry Blossom Festival — 2 weeks, plus 2 weeks for setup and takedown
- Fourth of July Celebration — 3 weeks, including setup and takedown
- Smithsonian Folklife Festival — 2 weeks, plus 8 weeks for setup and takedown

Other national celebrations that require lengthy setup and takedown times include inaugural ceremonies. The Lighting of the National Christmas Tree and Christmas Pathway of Peace (formerly the Pageant of Peace) takes place on the Ellipse in President's Park.

FIRST AMENDMENT ACTIVITIES

First Amendment demonstrations comprise an essential democratic right of citizens on the National Mall. As previously mentioned, the Mall's "location in the heart of our nation's capital makes it a prime location for demonstrations. . . . As the court has stated before, 'It is here that the constitutional rights of speech and peaceful assembly find their fullest expression'" (*Friends of Vietnam Memorial v. Kennedy,* 116 F.3d 495, 496 (D.C. Cir. 1997), quoting *ISKCON of Potomac v. Kennedy,* 61 F.3d 949, 952 (D.C. Cir. 1995)).

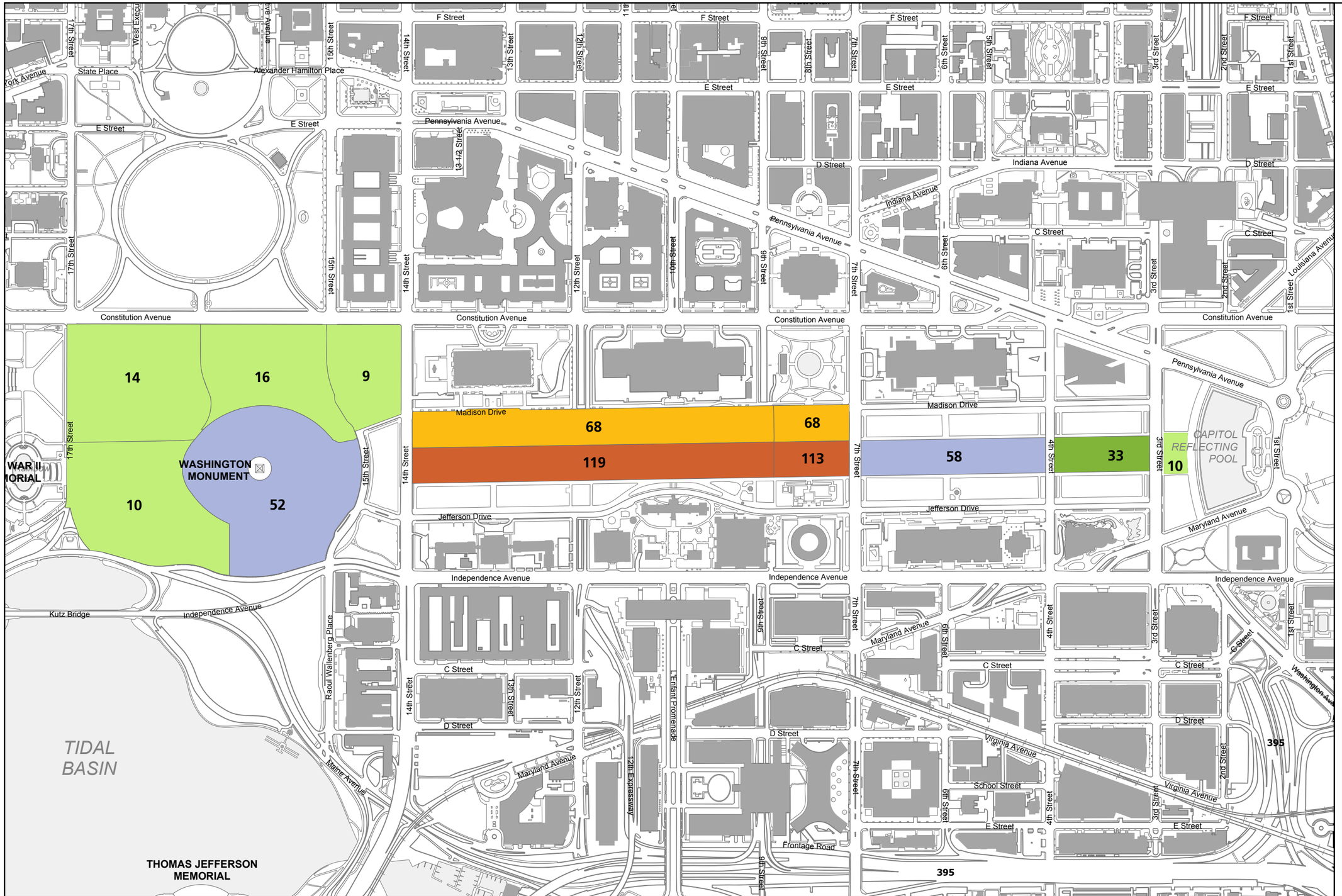
Demonstrations are usually thought of as political protests; however, they can address or support virtually any side of any issue. The National Mall accommodates over 1,000 First Amendment demonstrations annually. Demonstrations in 2008 included prayer vigils, peace vigils, religious activities and services, anti-war demonstrations, rallies to support the military troops, support for Latin American citizens, the Longest Walk II, Children's Defense Fund, saving the salmon fishery, Amnesty International, support for Falun Gong, Greek unity, march for the U.S. Constitution, Guantanamo prisoners, march for life, vegetarian benefits, concern about torture, and Million DJ march.

While demonstrations generally last for a short time, are attended by a few hundred people, and require few temporary facilities, attendance can range up to 10,000, and some demonstrations can attract hundreds of thousands and even spawn counter demonstrations. Participants typically hand out literature in support of their cause.

Demonstrations are permitted in most areas of the National Mall, and areas can be reserved on a first-come, first-served basis. Demonstrations of less than 25 people generally do not require a permit. To protect the sanctity of visitor experiences in memorials, demonstrations are not allowed inside the ring of flagpoles at the Washington Monument, inside the Lincoln Memorial and the Thomas Jefferson Memorial, and near the Vietnam Veterans Memorial (36 CFR 7.96(g)(3)(ii)).

The Mall and Union Square are popular venues because visual backdrops include symbols of power (the U.S. Capitol) and symbols of our nation (the Washington Monument). The Washington Monument grounds also include visible backdrops or symbols of the nation — the Washington Monument, the White House, the Lincoln Memorial, the Thomas Jefferson Memorial, and a layered view of the World War II Memorial, the Lincoln Reflecting Pool, and the Lincoln Memorial. These areas are conveniently accessible to the Metro system.

The Lincoln Memorial is a prime location for demonstrations related to freedom, equality, or civil rights because of its commemoration of the Great Emancipator, and it has been the site of several historic events, including the 1939 concert by Marian Anderson, the 1963 "I Have a Dream" speech by Dr. Martin Luther King Jr., and the 1968 Poor People's Campaign.



Special Event Intensity

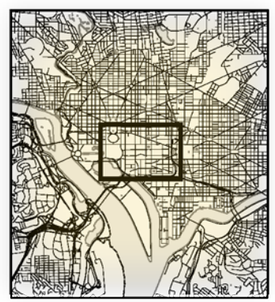
Total Days

- < 20
- 21 - 40
- 41 - 60
- 61 - 80
- > 80

Building

Water

Note: A large-scale event is defined as more than 1,000 participants. Based on estimated numbers of participants listed on permit application by event sponsor; actual number of participants not counted. Does not include 2009 inauguration.



0 500 1,000 1,500 2,000 Feet

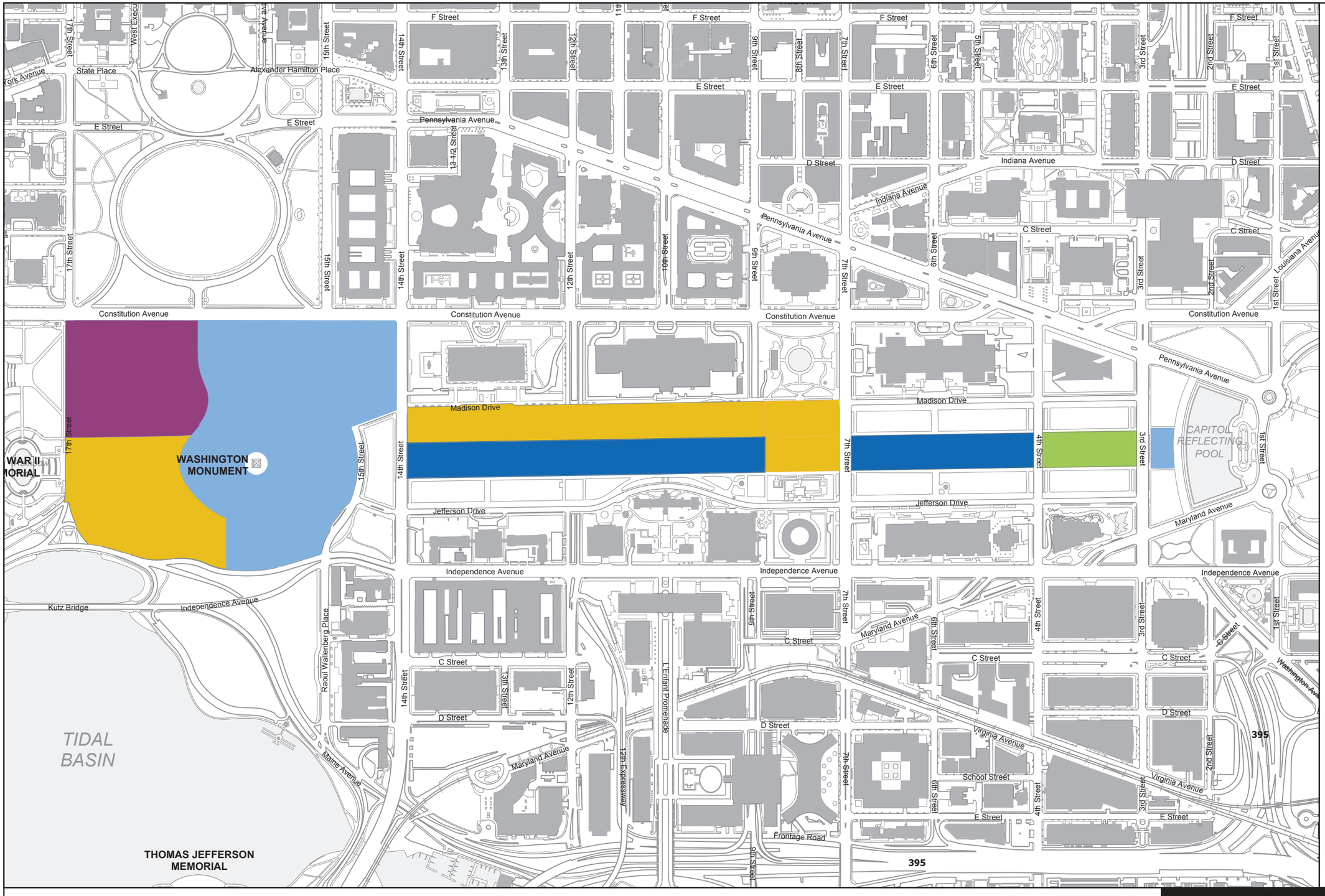
North

2009 Large-Scale Permitted Activities: Total Number of Permit-Days

National Mall Plan

United States Department of the Interior • National Park Service
DSC • April 2010 • 802 • 100480

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Special Event Intensity

Total Participants

- < 60,000
- 60,001 - 120,000
- 120,001 - 180,000
- 180,001 - 240,000
- > 240,000

- Building
- Water

Note: A large-scale event is defined as more than 1,000 participants. Based on estimated numbers of participants listed on permit application by event sponsor; actual number of participants not counted. Does not include 2009 inauguration.



0 500 1,000 1,500 2,000 Feet

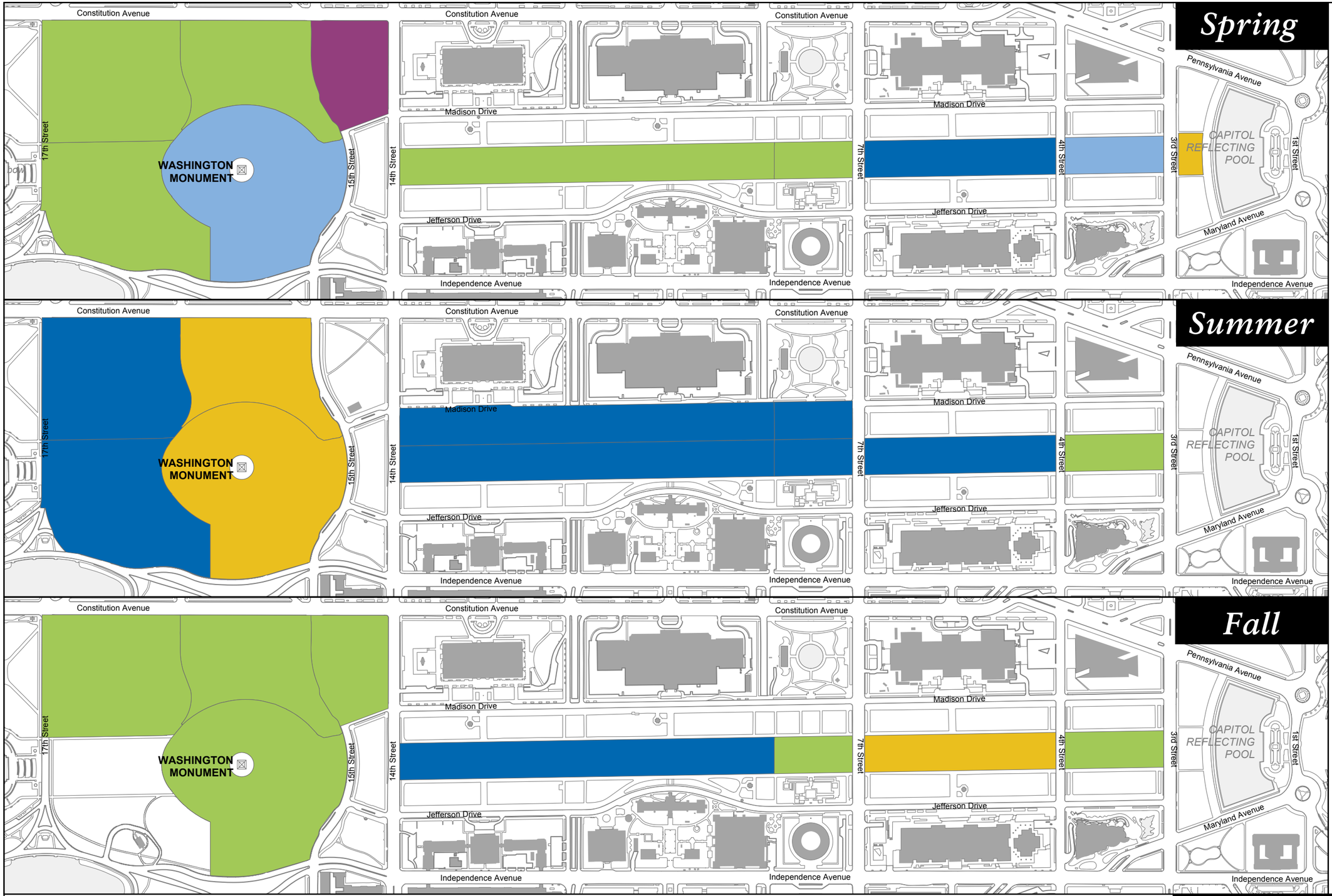
North

2009 Large-Scale Permitted Activities: Total Number of Estimated Participants

National Mall Plan

United States Department of the Interior • National Park Service
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Special Event Intensity

Participants

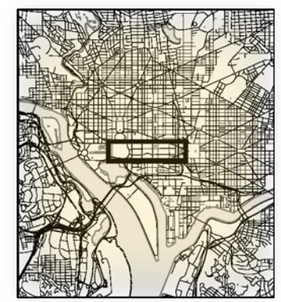
- < 20,000
- 20,001 - 40,000
- 40,001 - 60,000
- 60,001 - 80,000
- > 80,000

Building

Water

There were no special events with over 1,000 participants during the winter months of 2008/2009 with the exception of the Presidential Inauguration which was excluded from this analysis.

Note: A large-scale event is defined as more than 1,000 participants. Based on estimated numbers of participants listed on permit application by event sponsor; actual number of participants not counted. Does not include 2009 inauguration.



0 500 1,000 1,500 2,000 Feet

North

2009 Large-Scale Permitted Activities: Total Number of Estimated Participants By Season

National Mall Plan

United States Department of the Interior • National Park Service
DSC • April 2010 • 802 • 100480

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Small structures related to the Vietnam Veterans Memorial, previously located near the west end of the Lincoln Reflecting Pool, are First Amendment demonstrations related to the military, the memorial, and those missing in action. These structures were relocated to complete construction on the Lincoln plaza.

National Celebrations

National celebration events on the National Mall, which are generally very well attended, include the National Cherry Blossom Festival, the Fourth of July celebration, the Smithsonian Folklife Festival, and inaugural activities. In 2007 the National Mall and Memorial Parks undertook independent operational assessments of two national celebrations, the National Cherry Blossom Festival and the Fourth of July celebration. As a result of these assessments, a number of operational changes were made in 2008, including the location of portable restrooms and frequency of service, as well as public parking and circulation.

The National Cherry Blossom Festival is synonymous with spring in the nation's capital, and an estimate 2–4 million people annually attend the approximately two-week festival. The narrow walks around the Tidal Basin are overwhelmed and people trample the roots of the cherry trees they have come to admire. Performances take place daily on a stage on the Thomas Jefferson Memorial plaza; food, portable restrooms, and information are provided in several areas around the Tidal Basin. In 2008 the Tidal Basin parking lot (141 spaces) was closed and many temporary facilities relocated to the paved parking lot to reduce the impact of the celebration. Additional post-and-chain fencing reminded many visitors to stay away from tree roots. A free shuttle bus provided access to and from nearly 800 parking spaces in East Potomac Park, and parking for bicycles was increased.

The Fourth of July celebration attracts around a half a million people during a single day and evening and requires a great deal of logistical preparation. Some roads are closed during the entire day (Madison and Jefferson drives) and others (14th, 15th, and 17th streets, and Independence and Constitution avenues) are closed during the evening. Visitor services are supplemented with portable restrooms, mobile food carts, and first-aid and information stations.

For the Fourth of July there are two evening concerts (one on the west lawn of the Capitol and the other on the Washington Monument grounds) that are timed so the finale is highlighted by the fireworks display. Fireworks are staged from the reflecting pool, so nearby areas are closed for public safety, and the World War II Memorial is closed in the afternoon. In 2006 and 2007 there were weather-related evacuations that tested emergency preparedness, shelter procedures, and effectiveness of mass notification. The typical Fourth of July celebration results in nearly 30 tons of trash that must be removed by the next morning.

The midsummer Smithsonian Folklife Festival has been taking place since 1967 and coincides with the Fourth of July celebration. Sponsored primarily by the Smithsonian Institution, with assistance from the National Park Service, the festival has been expanded to include international as well as American folklife. Temporary event facilities, such as tents and stages, are located in the elm tree panels to take advantage of shade (approximately a 10 degree cooling effect), even though no such facilities are allowed within any tree canopy by NPS National Capital Region requirements. Some utilities have been developed for festival use.

Special Events

In accordance with NPS regulations at 36 CFR 7.96(g), special events may be permitted "when (1) there is a meaningful association with the park area and the event, and (2) the event will contribute to understanding of the significance of the park area" (NPS 2006e, sec. 8.6.2.1). They will be denied when they would result in unacceptable impacts, such as impeding the ability to achieve desired natural and cultural resource conditions, diminishing opportunities for current or future generations to enjoy, learn about, or be inspired by park resources or values; or unreasonably interfering with park programs or activities, an appropriate use, the atmosphere of peace and tranquility, or NPS concessioner or contractor operations (NPS 2006e, sec. 1.4.7.1). The park has discretionary

authority to allow and manage authorized uses that will not cause impairment or unacceptable impacts, and should consider presidential and congressional interest and enabling legislation or proclamation (NPS 2006e, sec. 1.4.3.1).

Numerous special events take place annually on the National Mall. Some special events have an association with the National Mall, such as annual commemorative ceremonies related to park areas or memorials, including Veterans Day commemorative ceremonies and birthday ceremonies for George Washington, Thomas Jefferson, Abraham Lincoln, and Franklin Delano Roosevelt. Ceremonies generally take place in or near memorials on pavement, and the impact of these events is limited. Military concerts and performances of patriotic music by visiting school groups also take place at the Lincoln Memorial, the Thomas Jefferson Memorial, the Sylvan Theater, and other areas.

Some cultural or educational events are associated with nearby federal facilities, such as the Library of Congress Book Festival (estimated attendance 50,000), or simulcasts with the Kennedy Center for the Performing Arts. The Library of Congress Book Festival, held in the autumn, is a more recent tradition and has grown annually for more than five years. Kennedy Center simulcasts are held at various locations on the National Mall. The National Park Service also supports three annual National Symphony Orchestra concerts on the west lawn of the U.S. Capitol, each of which attract many tens of thousands of people.

The Solar Decathlon, which has been held every two years, brings together national and international institutions of higher learning to compete in the design and operation of small solar houses they have built offsite. Each spring the Public Employees Roundtable is a recognition and recruitment event with information and education, with displays by federal agencies on the National Mall. Large tents cover the entire center grass panel, and vehicles and military equipment are on display. There are no accurate estimates for these events, but tens of thousands of people usually attend.

Some events celebrate or honor a group's identity, such as Black Family Reunion (annual two-day weekend, with the permit listing 100,000). Other events honor rites of passage or significant individual celebrations, such as college graduations, weddings, enlistments/reenlistments, and citizenship ceremonies. Other events provide information about various conditions (cancer, diabetes, HIV) and offer opportunities for interested people to gather.

Inauguration Day 2009 — Lessons Learned from a Unique National Celebration

For the inauguration of Barack Obama on January 20, 2009, preparations were made for unprecedented crowds on the National Mall. The Lincoln Memorial was used for pre-inaugural concert on Sunday, when it is estimated that over 500,000 people attended and were concentrated from the Washington Monument west to the Lincoln Memorial. The inauguration ceremony took place on the west side of the Capitol on Tuesday, and an estimated 1.8 million people attended, including those along Pennsylvania Avenue. On the National Mall people were concentrated east from the Washington Monument grounds.

Resource Protection

United States Park Police, with assistance from local, state, and federal agencies, provided law enforcement services. The National Park Service increased the number of uniformed park rangers and guides in anticipation of large crowds. There were no arrests. Jumbotrons were strategically placed throughout the National Mall, but a small percentage of the attendees did climb trees to get better views.

Steps taken to protect memorials included temporary fencing to guide pedestrian flow, additional staffing to monitor resource preservation issues, and temporary environmental monitoring equipment in the Lincoln Memorial for the effects of additional lighting for the opening ceremonies. Staging on the National Mall and near the Lincoln Memorial used hardscape as much as possible, and the primary east-west viewshed was maintained. Staging at the Lincoln Memorial was installed with protection for the memorial steps and plaza.

Public Access and Wayfinding

Advance media notices were made about access, openings, and closures of roads and subway stations. Public access was by subway, bus (public or tour), walking, and bicycle. On January 20 Metro provided about 1,120,000 rail trips, 423,000 bus trips, and 1,721 MetroAccess trips (for people with disabilities who cannot use public transportation), for a total of 1,544,721 trips, the highest ridership day ever in WMATA's history (WMATA 2009). Subway announcements provided information about locations, but because of the crowds and talking, the announcements may not have been widely heard.

On inauguration day crowds began arriving by 4 a.m., and the Mall area had to be closed by 9:15 a.m. because crowds had reached unsafe levels. While many law enforcement and military staff were present to guide people to and from the National Mall, coordinated information to help pedestrians find available space was insufficient, as was accurate information about the status of Metro stations. Hundreds of pedestrians holding tickets to restricted areas on the east end of Mall were unable to reach their destinations. Areas west of 15th Street could have accommodated more people during the inaugural ceremony.

Attended bike valet parking was provided, but use was not required. In some areas people locked bikes to any structure they found, which affected pedestrian circulation.

While arrivals were staggered over many hours, crowds left on both Sunday and Tuesday in one concentrated mass, proving very difficult to manage. More electronic signs would have helped guide people to open subway stations. The Smithsonian Institution museums were very crowded after the ceremony, with people sitting and sleeping under exhibits.

Visitor Experience

Numerous media broadcast from mobile studios on the Mall. More than 20 jumbotrons were dispersed around the National Mall to accommodate expected attendance. However, more large screens would have facilitated viewing both the concert and the inauguration.

The National Park Service printed cards with educational information about the inaugurations of the five presidents with memorials on the National Mall — George Washington, Thomas Jefferson, Abraham Lincoln, Ulysses S. Grant, and Franklin Delano Roosevelt. Commemorative buttons were also handed out.

Visitor Amenities

Restrooms — About 5,000 portable restrooms were dispersed throughout the area expected to receive the greatest use. These facilities were sufficient, and they were kept well stocked (toilet paper, hand sanitizer dispensers) and clean. However, long lines at restrooms in adjacent museums and at the Washington Monument grounds indicated that people preferred not to use portable restrooms.

Food Service — In addition to 10 refreshment stands, there were 12 tents selling food and or souvenirs. A total of 140,000 hot dogs were sold, 170,000 sodas, along with hot cocoa, Italian sausages, coffee, water bottles, and candy bars.

Retail — While the NPS concessioner was authorized to sell official Presidential Inaugural Committee souvenirs, there appeared to be many impromptu sellers of souvenirs without permits.

Public Health, Safety, and Security

Only 30 children were reported lost and reunited with their parents. First-aid tents provided service to hundreds who were not prepared for the cold weather. No arrests were reported.

Vision and breathing for some visitors on the Mall was affected by dust whipped up by winds after the inaugural ceremony.

Park Operations

Between 95 and 100 tons of trash and debris were picked up by the next morning. In addition to permanent trash containers, 300 special recycling containers were provided, and numerous cardboard boxes were available. Attendees used many of the boxes for insulation from the frozen ground.

The turf on the Mall and in other areas was destroyed, and the lack of turf cover throughout large areas contributed to windblown dust.

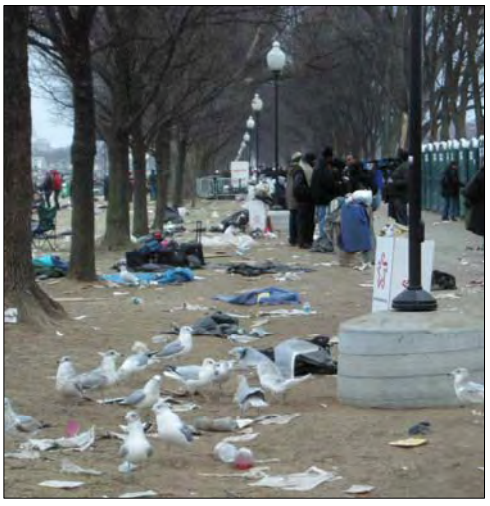
FIGURE 45: THE 2009 PRESIDENTIAL INAUGURATION AND ITS AFTERMATH











Between 95 and 100 tons of trash were removed.

About 5,000 portable restrooms were brought in.



ACCESS AND CIRCULATION

The National Mall is located in the midst of Washington, D.C.'s, urban circulation network. This network affects all users — whether they are pedestrians, motorists, transit users, tour bus users, or bicyclists and regardless of whether the purpose of their access is to visit the National Mall, commute to work, or travel between urban destinations.

PUBLIC ACCESS

Road Network

The road system in Washington, D.C., is an irregular grid overlaid by diagonal avenues. Along with the great civic open space of the National Mall, the road system defines the form of the capital city. Primary commuter routes that link to principal arterial entrances into the city include both park and city roads. Roads under NPS jurisdiction within the National Mall include 15th Street / Raoul Wallenberg Place, Maine Avenue, portions of 17th and 23rd streets, and Independence and Constitution avenues west of 15th Street. Roads under city jurisdiction include portions of Independence and Constitution avenues east of 15th Street, and 3rd, 4th, 7th, and 14th streets, which cross the Mall. Roads under the full jurisdiction of the National Park Service include Ohio Drive, East Basin Drive, West Basin Drive, and Jefferson and Madison drives.

The eastern half of the National Mall is shaped by the formal road patterns associated with the historic L'Enfant plan. Principal diagonal arterials converge near Union Square, where Maryland and Pennsylvania avenues terminate near 1st Street. Other roads, like 23rd Street, connect the National Mall to the city road system. A few road sections introduce a new form and include symmetrical curves or help emphasize important structures, such as the Washington Monument or the Smithsonian Castle.

The western half of the National Mall is largely the result of mid-20th century efforts to accommodate automobile traffic, with vehicular access by way of various bridges and a series of principal arterials. As a result, the McMillan plan's Constitution Avenue, which originally terminated at a belvedere near the Potomac River, was reconfigured to connect to the Theodore Roosevelt Memorial Bridge / I-66.

Commuter Routes

Roads around the National Mall provide access to critical commuter routes into Washington, D.C., including I-395, US 1 (14th Street through the Mall), I-66, and US 50, as well as Rock Creek Parkway, Canal Road / Whitehurst Freeway / I-66, George Washington Memorial Parkway, and Maine Avenue. Three heavily used bridge corridors across the Potomac River feed traffic into the vicinity of the National Mall. From north to south these include the Theodore Roosevelt Memorial Bridge, the Arlington Memorial Bridge, and the I-395/14th Street Bridge corridor. The latter corridor consists of five bridges; three of the bridges (the George Mason, Rochambeau, and Arland D. Williams Jr. memorial bridges) are four-lane automobile bridges that carry I-395 and US 1 traffic. These three roadways merge in East Potomac Park and split into two 2-way bridges — the 14th Street bridge carries northbound traffic onto 14th Street, and the Francis Case Memorial Bridge carries I-395 (and southbound US 1) traffic onto the Southwest Freeway. Two additional bridges across the Potomac River at this location carry rail traffic, one the Metro Yellow Line and the other a main line railroad. The Metro line enters a tunnel in East Potomac Park, and the main line railroad passes over I-395 and runs over the Washington Channel just downstream of the 14th Street approach before turning northeast along Maryland Avenue.

In 2007 the three bridge corridors that feed traffic into the vicinity of the National Mall carried over 374,000 vehicles on the average weekday — approximately 104,000 vehicles on the Theodore Roosevelt Memorial Bridge, 68,000 on the Arlington Memorial Bridge, and 202,000 on the I-395/14th Street bridges (see Table 11; DDOT 2008c). Nearly 32,000 vehicles used the Potomac River Freeway on a daily basis, and 16,000 the Rock Creek and Potomac Parkway. The section of 14th Street within the National Mall carries

TABLE 11: AVERAGE ANNUAL WEEKDAY TRAFFIC VOLUMES IN AND AROUND THE NATIONAL MALL — 2002, 2006, AND 2007

(expressed in thousands, rounded to the nearest 100)

Area	2002	2006	2007
Bridges			
Theodore Roosevelt Memorial Bridge	100.0	105.1	103.6
Arlington Memorial Bridge	73.0	69.3	68.3
I-395/14th Street Bridge Corridor	250.0	213.4	202
Total	**423.0**	**387.8**	**373.9**
Parkway / Freeway			
Rock Creek & Potomac Parkway	NA	16	15.8
Potomac River Freeway	NA	30.4	31.6
Streets within the National Mall			
North-South Streets			
3rd Street	17.0	15.8	15.6
4th Street	7.5	7.8	7.8
7th Street	16.1	16.7	16.5
14th Street	37.2	44.3	45.8
15th Street	21.8	14.2	14
17th Street	25.1	25.7	25.4
23rd Street	22.6	22.9	22.6
Henry Bacon Drive	17.4	13.1	12.9
Subtotal	164.7	160.5	160.6
East-West Streets			
Jefferson Drive	7.0	7.3	7.3
Madison Drive	9.7	10.1	10.1
Lincoln Circle — North	NA	58.2	57.3
Lincoln Circle — South	NA	7.8	7.6
Constitution Avenue — 17th–23rd Streets	47.0	48.9	48.2
Independence Avenue in West Potomac Park	34.1	22.1	21.8
Independence Avenue to Maine Avenue	44.1	43.7	40.5
Subtotal	141.9*	198.1	192.8
Total All Surface Streets (Highest Segments)	**306.6***	**358.6**	**353.4**
Mall Tunnels			
2nd Street/I-395	117.7**	98.9	107.1
9th Street	17.4	17.6	17.4
12th Street	20.9	18.2	17.9
Total	**156.0**	**134.7**	**142.4**
Adjacent Streets			
Constitution Avenue east of 15th Street (highest segment)	32.7	37.6	37.1
Independence Avenue east of 15th Street (highest segment)	23.4	23.8	29.3

SOURCE: DDOT 2003b, 2008c. 2008d.
NOTE: Traffic volumes are given for segments of streets; the highest segment traffic volume was used for the purposes of calculating total traffic volume.
NA — Not available.
* Counts for Lincoln Circle not available.
** I-395 headed into tunnel.

approximately 46,000 vehicles on a daily basis (DDOT 2008c). The highest used segment of Independence Avenue west of 15th Street carried about 22,000 vehicles and the highest used segment east of 15th about 28,000 vehicles. The highest used segment of Constitution Avenue west of 15th Street carried more than 48,000 vehicles, and the highest used segment east of 15th Street carried nearly 30,000 vehicles (DDOT 2008c). Altogether average annual daily traffic on surface roads traversing the National Mall in 2007 was about 300,000 vehicles. In addition, three tunnels — at 2nd, 9th, and 12th streets — go under the National Mall and provide freeway or expressway connections to I-395. In 2007 the average annual daily traffic for these tunnels was more than 142,000 vehicles.

Commuter Mode of Access

In 2007 the Washington Metropolitan Council of Governments published the *2007 State of the Commute Survey Report*, which showed modes of access used by commuters (Commuter Connections 2008). As shown in Table 12, more than

two-thirds of commuters drive private vehicles or motorcycles, followed by trains, including the Metro, car or van pools, bus, and biking or walking. Between 2001 and 2007, driving has decreased slightly, while use of mass transit (rail and bus) has increased. Studies by WMATA show the present system can accommodate more passengers.

TABLE 12: REGULAR MODE USE — PERCENTAGES OF WEEKLY COMMUTER TRIPS

	2001	2004	2007
Drive Alone / Motorcycle	72.6%	74.1%	71.0%
Car Pool / Van Pool	7.6%	6.1%	7.6%
Bus	4.6%	4.7%	5.2%
Train / Metro	12.7%	12.8%	13.5%
Bike / Walk	2.4%	2.3%	2.7%

SOURCE: Commuter Connections 2008.

Visitor Access

The 2008 visitor study asked how visitors traveled to the National Mall from overnight accommodations. Respondents used multiple forms of transportation to travel between their overnight accommodations and the National Mall (see Table 13). With multiple responses allowed in a selection of 10 forms of transportation, the most used were public transportation (52.0%), followed by walking (39.3%) and private vehicles (36.7%). Those selecting other (4.1%) were most likely to indicate a hotel shuttle.

TABLE 13: FORMS OF TRANSPORTATION VISITORS USED BETWEEN THEIR ACCOMMODATIONS AND THE NATIONAL MALL

Form of Transportation	Response Frequency	Percentage
Public transportation	328	52.0
On foot	246	39.3
Private vehicle	230	36.7
Taxi / limousine	70	11.2
Sightseeing bus	67	10.8
Tour motorcoach / bus	57	9.1
Rental vehicle	41	6.6
Other	25	4.1
Bicycle	13	2.1
School bus	0	0.0

SOURCE: NPS 2009.

Driving Conditions

First-time National Mall visitors who are driving may be traveling at slower speeds because they are unfamiliar with the area and are looking for landmarks, and they may expect a more relaxed park driving experience instead of a highly congested urban traffic experience.

Speed limits on park roads are most frequently posted at 25 mph, with some sections of Independence Avenue posted at 30 mph; Jefferson, Madison, East Basin, and West Basin drives are posted at 15 mph. Speed limits on park roads are typically exceeded by 8–14 mph (DDOT 2007). City arterials such as 3rd, 4th, and 7th streets, and adjacent city arterials such as 14th, Constitution, and Independence, are posted at 25 mph (Brudis & Associates 2006).

Visitor Parking

In the spring and summer of 2003 the National Park Service conducted a survey to assess the preferences and needs of visitors regarding transportation in the Washington, D.C., metropolitan area (NPS 2003d). The survey revealed that 25% of visitors preferred to drive to the National Mall and wanted to park their vehicles. There are 1,183 public parking spaces on and near the National Mall, plus 132 spaces for visitors with disabilities (see Table 14). There are also 56 tour bus loading/unloading spaces and 9 2-hour tour bus parking spaces.

The numbers of visitor parking spaces for people with disabilities is approximately 10% of total public parking, which exceeds the 4% percent standard in the Americans with Disabilities Act. Except in very high use times visitors can usually find parking, but not necessarily close to where they want to be. The city has metered parking along the Mall cross streets (3rd, 4th, and 7th streets); however, free parking provided by the National Park Service is more desirable, and motorists may drive around until they find a free parking space. There are time limits on some parking spaces, and no parking is allowed on major commuter routes during rush hours. When cars are not moved in time, they are moved onto the boulevards and sidewalks and out of the traffic right-of-way. Some free public parking appears to be used by office workers, making it less available to visitors.

On Independence Day most parking is eliminated, and some roads are closed. The subway system provides the primary mode of travel to get more than half a million people to the

TABLE 14: NATIONAL MALL PARKING LOCATIONS

Location	Public Parking	Parking for Visitors with Disabilities	Tour Bus Loading/ Unloading	Tour Bus Parking
Parkway Drive	70			
Henry Bacon Drive			9	
Daniel French Drive		8	6	
Constitution Avenue	156	10	6	
Homefront Drive		5	3	
Madison Drive	192	22	10	
Jefferson Drive	127	27		
Independence Avenue		8		9
Tidal Basin (paddleboat area)	132	9		
Homefront Drive		5	3	
12th Street (Constitution to Madison Drive)	48			
Ohio Drive SW (Arlington Memorial Bridge to I-395)	150	5		
West Basin Drive	48	5	12	
East Basin Drive	8	5		
Raoul Wallenberg Place		6	7	
South of the Thomas Jefferson Memorial				
•Lot A	98	6		
•Lot B	72	4		
•Lot C	63	4		
Survey Lodge		2		
Ohio Drive SW (East Basin to Ohio Drive)	19			
Total	**1,183**	**132**	**56**	**9**

National Mall. In the past the National Park Service explored underground parking in the park and concluded it would never be able to provide sufficient parking to meet demand.

More than 20 years ago public underground parking was closed at several Smithsonian Institution museums. About 350 public parking spaces were closed at the National Air and Space Museum in 1983 as a result of security concerns. About 150 spaces were closed at the National Museum of Natural History in 1985. Only staff parking was provided at the National Museum of American History. While up to 550 spaces are no longer available for public parking, they and some additional parking spaces have been available to staff.

Transit Access

Since the late 1960s the Washington, D.C., metropolitan area has emphasized mass transit as the preferred means of public access and transportation to and within the city, which would reduce vehicle pollution and congestion. According to the 2003 visitor survey, 60% of visitors use the Metro rail and bus system and 75% are comfortable using public transit (NPS 2003e).

The Washington Metropolitan Area Transit Authority operates the second largest rail transit system and the fifth largest bus network in the United States (WMATA 2008b). Metrorail serves 86 stations and has 106 miles of track. Metrobus serves the nation's capital 24 hours a day, seven days a week with more than 1,500 buses, all of which are accessible to people with disabilities (WMATA 2008b). Five distinct rail lines radiate out from the downtown core, and Metrobuses feed into the Metrorail stations, creating a comprehensive mass transit network.

The Smithsonian Metro station (serving the Orange and Blue lines) is directly on the National Mall, but the station name does not tell people they have arrived at the National Mall. The accessible elevator entrance is farther away, just north of Independence Avenue. Within a 5-minute walk are four other Metro stations serving four lines (Yellow, Green, Orange, and Blue), and within a 7- to 10-minute walk three additional subway stops serving five lines (Red, Yellow, Green, Orange, and Blue).

Use at the Smithsonian Metro station, which is on the Mall, was analyzed for 2008, when 439,375 people exited through this station. (The station has two exits, one north of Jefferson

TABLE 15: EXITS AT THE SMITHSONIAN METRO STATION BY TIME OF DAY — 2008

	Morning (opening to 9:30 a.m.)		Midday (9:30 a.m. to 3 p.m.)		Afternoon (3 to 7 p.m.)		Evening (7 p.m. to closing)		Total	
	Exits	Percentage	Exits	Percentage	Exits	Percentage	Exits	Percentage	Exits	Percentage
Weekdays	61,697	41%	68,138	45%	17,271	11%	3,888	3%	151,020	34.4%
Saturdays	11,282	7%	123,429	72%	32,027	19%	5,728	3%	172,495	39.3%
Sundays	9,974	9%	85,873	74%	17,398	15%	2,583	2%	115,860	26.3%
Total Exits	**82,953**	**19%**	**277,440**	**63%**	**66,696**	**15%**	**12,199**	**3%**	**439,375**	**100%**

Drive and directly on the National Mall, and the other south of Independence Avenue.) This station receives more use on Saturdays (172,495 exits, or more than 30% of the total) than on weekdays (151,020 exits, 34%), and the least amount of use on Sundays (115,860 exits, 26%). The majority of use is between the hours of 9:30 a.m. and 3 p.m., when use varies from 45% on weekdays to 72%–74% on Saturdays and Sundays (see Table 15). It is assumed that these are the hours when most visitors to the National Mall, the Smithsonian Institution, and the National Gallery of Art would arrive.

Figure 46 shows the combined monthly exits for weekdays, Saturdays, and Sundays between 9:30 a.m. and 3 p.m. Peak usage months were March and April, which coincides with the Cherry Blossom Festival, with an average of 17,380 exits each month. The next highest months are July and June.

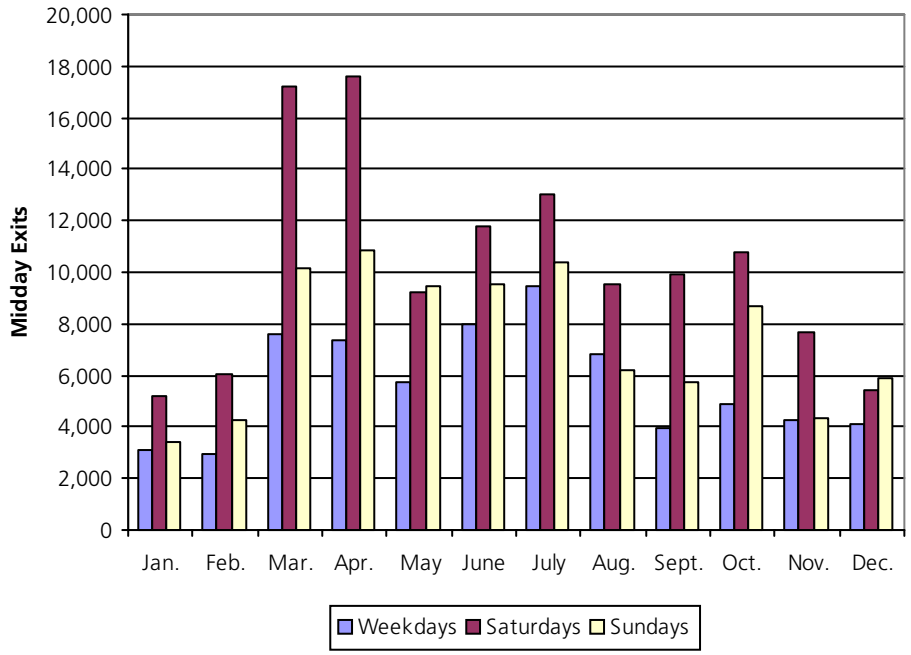
Several public bus routes cross the National Mall. The Circulator bus service goes around the Mall and the Washington Monument on weekends, and also provides north-south service along 7th Street. Seven taxi or pedicab pickup locations have been designated on the National Mall. Water taxis have been proposed and tried at various times since the 1960s.

Tour and Sightseeing Bus Access

Tour Buses and School Buses

According to the local tour bus industry, up to one-third of the visitors to the National Mall

FIGURE 46: MONTHLY MIDDAY EXITS AT THE SMITHSONIAN METRO STATION — 2008
9:30 a.m. – 3 p.m.



arrive on planned bus tours. Tour buses are defined as vehicles holding more than 15 passengers; however, the vast majority of tour buses are over-the-road coaches. The D.C. Office of Planning estimates there are 1,200 tour buses on a peak-season day. School buses are typically used by local and regional school groups.

Several companies operate sightseeing services around the National Mall, and it has been estimated that up to 1,200 tour buses travel in the District on a daily basis (D.C. Office of Planning). Through a concession contract the National Park Service offers Tourmobile, an interpretive transportation service with stops throughout the National Mall and service to Arlington National Cemetery. Tour bus pickup and drop-off locations convenient to the memorials and museums can accommodate up to 56 buses at one time. Other sightseeing buses, which include trolleys and double-decker buses, can pick up and drop off customers on the National Mall, but because of contract issues money cannot be exchanged on the National Mall. At each memorial and along Madison and Jefferson drives curb space is allocated for tour buses, parking for visitors with disabilities, taxi cab stands, and public parking. Little to no curb space is unallocated on the National Mall.

Tour bus parking is provided in East Potomac Park, and tour buses frequently park along Ohio Drive. Some buses use Independence Avenue for drop-offs and pickups. Outside the National Mall there are 8 off-street parking locations throughout the city and 11 curbside areas. During high-use times these locations can see a great number of people. If there are 1,200 tour buses in the District daily, major attractions do not have adequate space to accommodate loading/unloading without causing traffic backups.

Tour bus operators frequently provide meals for their patrons, and the resulting large quantities of trash from meal boxes, bottles, etc. may exceed the capacity of trash containers near tour bus stops, detracting from the appearance of the National Mall. Trash attracts birds and squirrels, which toss garbage around, as well as vermin.

Tour Bus Parking

Based on estimates by the D.C. Office of Planning, there are 1,200 tour buses in the city daily during the peak season. Most, if not all, tours to Washington visit the National Mall, in addition to sites throughout the city, such as the National Cathedral, Georgetown, and the U.S. Capitol. There are 9 tour bus parking spaces on the National Mall along Independence Avenue (see Table 14), and an additional 10 spaces at Hains Point in East Potomac Park. Other current bus parking locations include the southwest waterfront, downtown areas, and in Virginia. The National Park Service receives numerous comments about the visual impact of tour buses affecting views on the National Mall.

To provide parking for an additional 1,180 tour buses on and the near the National Mall, the only option would be to reallocate all private vehicle parking to tours buses, including 770 spaces on Madison and Jefferson drives and on Constitution and Independence avenues.

TABLE 16: MAXIMUM STREET PARKING CAPACITY — NATIONAL MALL AND EAST POTOMAC PARK

Parking Locations	Two-Hour Turnover	Three-Hour Turnover	Four-Hour Turnover	Six-Hour Turnover
National Mall				
•Private Vehicles — 770	4,620	3,080	2,310	1,540
•Tour Buses — 255	1,530	1,020	765	510
East Potomac Park				
•Private Vehicles — 400	2,400	1,600	1,200	800
•Tour Buses — 130	780	520	390	260
Total				
Private Vehicles	7,020	4,680	3,510	2,340
Tour Buses	2,310	1,540	1,155	770

NOTE: Only street parking is included, not parking areas at the Tidal Basin or in East Potomac Park.
ASSUMPTIONS: The operating day during the peak season would be 12 hours. All private vehicle parking on National Mall roads (770 spaces) and East Potomac Park (398 spaces) would be reallocated to tour bus parking, displacing these drivers. A tour bus would require approximately 60 feet of parking space, or three vehicle spaces, so the maximum number of buses that could be accommodated at one time would be approximately 385.

Assuming that each tour bus would need 60 feet to park and that each vehicle parking space is approximately 20 feet, one tour bus would occupy three vehicle parking spaces. Therefore, approximately 255 tour buses could park on the National Mall at one time, and an additional 130 in East Potomac Park. Table 16 shows the parking capacity for turnover rates ranging from two hours to six hours, assuming a 12-hour operating day. A four-hour turnover rate would allow an estimated 1,155 tour buses to be accommodated on and near the National Mall during a peak-season day, while approximately 3,510 private vehicles would be displaced. The National Park Service will continue to work with the District of Columbia, Destination DC, and other visitor industry stakeholders to identify tour bus management solutions that would meet the needs of all regional destinations, both public and private. Many initiatives, such as tour bus parking at Union Station and at RFK Stadium, have been explored, and additional collaborative efforts are needed to resolve this issue beyond the boundaries of the National Mall

NPS Interpretive Visitor Transportation

Tourmobile, the NPS concession-run interpretive visitor transportation service, has provided a range of bus services on and around the National Mall since the late 1960s. There is all-day hop-on / -off service on the National Mall route (12 stops) plus a one-way route between Arlington National Cemetery and Union Station. There is also a supplementary special visitor route at Arlington National Cemetery. In 2006 the National Park Service completed the *Visitor Transportation Study*, as described in "Interrelationships with Other Plans and Projects."

THE PEDESTRIAN ENVIRONMENT

According to a Brookings Institution Survey, Washington, D.C., ranked as the most walkable urban metropolitan area in the nation. The National Mall provides several of the components of a walkable urban environment since it is generally accessible by multiple modes of transportation. Nearly every destination can be reached on foot, and the National Mall provides a fairly level and easily walkable environment with one prominent elevation rising to the Washington Monument. While the terrain is quite level between destinations, memorials and museums frequently have staircases, and accessible entrances may be farther away and less convenient. Snow, ice, or rain can make stairs or some surfaces slippery.

The overall distance between the Lincoln Memorial and the U.S. Capitol is about 2 miles. A person walking at a very brisk pace without stopping could cover its length in 45 to 60 minutes. While walking is the most common and preferred way of getting around, up to 25% of the public indicated in the 2003 visitor survey that they have difficulty walking long distances (NPS 2003e).

Studies have shown that visitors typically go to up to five destinations a day, generally by walking. The result is that visitors traversing the National Mall may walk more than 5 miles to get back to their starting place. Exhaustion is a frequent complaint. Vehicle traffic affects the pedestrian experience in most areas of the National Mall because of the convergence of a number of high-volume commuter routes.

Roads and pedestrian routes intersect frequently, and most crosswalks are striped and have traffic lights and lighted crossing symbols, while in a few areas there are crosswalk buttons or audio warning announcements. Crosswalks signals are timed more to accommodate traffic flows than pedestrian movements, so people typically have long waits at crosswalks and crossing times are short. At some locations pedestrians must push a button for a crossing light. D.C. law requires vehicles to stop for pedestrians in crosswalks; however, both motorists and pedestrians engage in risky and potentially dangerous behaviors. Jaywalking or crossing against red lights may be intentional or due to inattention, visual distractions, the size of a group, or an assessment that there is adequate time to cross before a vehicle comes.

In many areas pedestrian walks are too narrow for groups or current levels of use, resulting in choke points or areas of pedestrian congestion or gridlock. Pedestrian volumes exceed walkway capacities in locations such as the Tidal Basin, near some intersections, and near the entrance to the Korean War Veterans Memorial. Extremely narrow walks on the Kutz Bridge cannot

comfortably accommodate two people, much less a stroller or bicycle.

During peak times of national celebrations, such as the National Cherry Blossom Festival, pedestrian conditions around the Tidal Basin could be described as two slowly moving masses of people going in opposite directions. Because there are few alternatives, one person stopping to take a photograph can halt hundreds of people.

Additional pedestrian challenges include varied and irregular surface materials, walking surfaces in need of repair, and lack of lighting in some locations. Some areas are without pedestrian amenities, such as sufficient seating or shaded seating, and facilities such as restrooms may be difficult to find. Outdated orientation maps are being replaced in phases and will be supplemented by pedestrian guide signs.

Pedestrians and bicycle riders share the same walks through much of the National Mall. Because bicyclists travel at different speeds and pedestrians may be distracted by sightseeing, there is a potential for accidents.

Nine wheelchairs are available at no cost for use at five memorials — Thomas Jefferson (1 wheelchair), Franklin Delano Roosevelt (2), World War II (4), Korean War Veterans (1), and Vietnam Veterans (1). Wheelchairs can only be used in the memorial where they are picked up; however, the wheelchairs at the Vietnam and Korean War veterans memorials can also be used at the Lincoln Memorial.

BICYCLING

The relatively flat terrain of the National Mall makes it conducive to bicycling, which offers a pleasant, healthy, and nonpolluting means of transportation. Bicyclists and pedestrians share walkways, creating conflicts between uses. Between 2000 and 2002, 37.3% of bicycle crashes (296) occurred in the D.C. ward that includes the National Mall. Both commercial and NPS bicycling tours of the National Mall are offered. Bicycles must be left outside memorials or walked through them.

Bicycles can be rented in the nearby downtown area, at the Old Post Office Tower near Pennsylvania Avenue, and near Thompson's Boat Center in Rock Creek Park.

The Washington Area Bicyclist Association (WABA) is an organization dedicated to promoting bicycling and has an extensive website providing information, maps, and bicycle safety programs. WABA volunteers frequently host popular bicycle parking during special events.

In addition to recreational biking, there is a large population of bicycle commuters. The National Capital Planning Commission estimated in 2005 that there were 20,000 bicycle commuters, many of whom traverse the National Mall. In 2007 and 2008 the National Park Service installed 110 additional two-bike racks on the National Mall to supplement the 22 existing bike racks. This project was partially funded by D.C. Department of Transportation. The District of Columbia has recently embarked on a bike-sharing program, with 120 bikes available to members at 10 self-service racks in the downtown area. At this point, the program is not available to short-term users such as tourists.

Bicycling routes within other national park units, such as George Washington Memorial Parkway, Rock Creek Park, and the Chesapeake and Ohio Canal, have connections to the National Mall. The East Coast Greenway, a long-distance bicycle trail, goes through the National Mall. Midday is a popular time for competitive training rides, and East Potomac Park sees a great many of these riders.

Pedicabs, which are treated as taxicabs, are an increasingly common form of transportation on the National Mall.

VISITOR EXPERIENCE

The National Mall provides an essential American experience for citizens and guests from around the world. Located in the heart of the nation's capital, this space was originally planned to epitomize our democratic form of government, and its great memorials commemorate our history as a nation. However, the symbolic landscape has also become the nation's front yard and its premier civic forum, where citizens come to exercise their First Amendment rights, to take part in national celebrations like the inauguration of a president or the Fourth of July, and to attend various special events. In addition, recreational activities have taken place here since the late 1800s, when Congress created Potomac Park for the "recreation and pleasure of the people." All of these purposes — symbolic, commemorative, civic, and recreational — are integral to present-day visitor experiences on the National Mall.

In accordance with the NPS Organic Act and *Management Policies 2006,* one of the mandates of the National Park Service is to provide visitor enjoyment opportunities that are uniquely suited to the superlative natural and cultural resources found within the national park system, which includes the National Mall.

The types of experiences that visitors have on the National Mall depend on their backgrounds, expectations, available opportunities and facilities, needs, and desires. Specific topics discussed in this chapter include elements of the visitor experience (destinations, visual experiences, and sounds), information and education, recreational opportunities, visitor facilities and amenities, and health and safety. Visitor use trends are discussed to give an idea of future use levels at memorials on the National Mall. (Experiences of participants in demonstrations, national celebrations, or special events are described beginning on page 309, and experiences related to visitor access or circulation are discussed beginning on page 323.)

VISITOR USE CHARACTERISTICS

Visitor information was obtained in multiple ways. NPS staff annually distribute a visitor survey. Several recent detailed surveys have provided a great deal of visitor information. Also, public comments have been solicited on the National Mall planning effort.

The annual "Visitor Satisfaction Survey," which complies with the Government Performance and Results Act, measures each park unit's performance. Visitors are asked to indicate their level of satisfaction in topic areas such as park facilities, visitor services, and recreational opportunities. The analysis of survey results over a period of several years indicates that 96% of the respondents were satisfied with their visits. However, from a facilities standpoint, restrooms need improvement, and from a visitor services standpoint, commercial services (such as food and retail) could be improved.

The 2003 *Washington, D.C., Visitor Transportation Survey* profiled the findings of visitor surveys conducted in the spring and summer of 2003 (NPS 2003d). While the focus of the report was on transportation planning in and around the central visitor core of downtown Washington, most of the information describes general visitor characteristics that are applicable to this planning effort.

In September 2008 another visitor survey was undertaken related to the socioeconomic impact of the National Mall and visitor destinations in the monumental core, which encompasses the National Mall. The survey was conducted by the School of Recreation, Health, and Tourism at George Mason University. Several questions were similar to those in the 2003 transportation survey and allowed the National Park Service to examine the impact of new destinations, such as World War II Memorial, the Newseum, and the National Museum of the American Indian.

As part of National Mall plan, a planning website (www.nps.gov/nationalmallplan) was established, and public comments were requested on three of the four newsletters that have been issued for this planning project. Newsletter 1, which was released in fall 2006, included 15 scoping topics for visitors to comment on, and the results were published in the April 2007

Public Scoping Comments Report. Comments on the preliminary range of alternatives that were presented in newsletter 3 (fall 2007) were also solicited and were summarized in *Newsletter 3 Comment Report*. Comments were analyzed by the George Mason University School of Recreation, Health, and Tourism. Comments on the preliminary preferred alternative, which was presented in newsletter 4 (winter 2009), were also solicited.

Visitor Profiles

Visitor surveys were conducted in 2003 and 2008 to identify characteristics of visitors and to identify needs to be addressed. Visitors come to experience and learn more about our national capital and its well-known memorials and the iconic symbols of our country. For many visitors, a trip to Washington, D.C., is an opportunity to learn about our government, the history of our nation, and our way of life — a shared historical journey often made with family and friends.

Most visitors come with family and friends. In the 2008 survey the six states with the highest number of respondents were Virginia, California, Maryland, New York, Florida, and Pennsylvania. International visitors were primarily from Europe, with the most visitors from the United Kingdom, followed by Australia.

Visitor Activities

The visitor study conducted in the fall of 2008 for the National Park Service presents an overview of what visitors do when they come to the National Mall (NPS 2009e). Table 17 highlights some of the trip and visitor characteristics from this study.

TABLE 17: TRIP AND VISITOR CHARACTERISTICS — 2008 NATIONAL MALL VISITOR STUDY

Questionnaire Item	Finding
Average length of stay (day-trippers)	7.2 hours (18.9% of sample)
Average length of stay (overnight guests)	4.4 days (81.1% of sample)
Average group size	2.7 people
Average respondent age	49.7 years
Average number of visits	3.7 visits

SOURCE: NPS 2009.
Number of survey respondents = 644.

The 2008 visitor study also asked respondents to indicate their primary reason for visiting the National Mall. For this question they were asked to select only one of eight responses. The most common response was the desire to visit the monuments and memorials on the National Mall (31.7%; see Table 18). Those who indicated "other" (16.4%) were asked to write out their primary reason for visiting; the most common responses were meeting/convention, reunion, a family member was visiting them, an event or concert, they were on a stopover en route to a different destination, or they had multiple reasons and could not select one response. Nevertheless, visiting the monuments and memorials far outpaced any other reason for visiting the National Mall.

TABLE 18: PRIMARY REASON FOR VISITING THE NATIONAL MALL

	Frequency	Percentage
Visit Monuments and Memorials	190	31.7
Other	98	16.4
Visit Friends/Relatives	71	11.9
Resident	63	10.5
Business	61	10.2
Visit Museums	55	9.2
Visit Federal Sites	54	9.0
Total	**599**	**100**

SOURCE: NPS 2009.

Most Important Activity

Visitors were asked to list all of the activities in which they participated and then to write out the one activity that was the most important to their visit. They were requested to list only one, and they also were given the option to indicate that no activity was most important (see Table 19). The most frequent response (67.2%) was visiting the National Mall monuments and memorials, followed by visiting museum sites (16.6%). The most common response for those indicating "other" (7.6%) was visiting the White House, either for work or family-related reasons.

Visitor study respondents were also asked to indicate from a list of 54 options which sites they visited during their entire stay. Table 20 shows the top 15 sites, the top 5 of which are monuments and memorials.

TABLE 19: MOST IMPORTANT ACTIVITY

Activity	Response Frequency	Percentage
Visit National Mall monuments and memorials	365	67.2
Visit museum sites	90	16.6
Exercise or athletics	8	1.5
Charter bus or sightseeing tour	7	1.3
Learn/research history	9	1.7
Ranger talks/walks	1	0.2
Entertainment/special events	10	1.8
Relaxing	8	1.5
Eating and drinking at restaurants/bars	4	0.7
Other	41	7.6
Total	**543**	**100.0**

SOURCE: NPS 2009.

TABLE 20: TOP 15 DESTINATIONS FOR NATIONAL MALL VISITORS

Destination	Percentage Who Visited
Lincoln Memorial	83.2
Washington Monument	81.9
World War II Memorial	81.4
Vietnam Veterans Memorial	72.1
Korean War Veterans Memorial	61.2
U.S. Capitol	54.8
The White House	52.0
Thomas Jefferson Memorial	48.5
National Air & Space Museum	48.2
Arlington National Cemetery	43.9
Downtown Restaurants	40.5
Franklin Delano Roosevelt Memorial	34.6
Union Station	33.7
National Museum of Natural History	32.6
Smithsonian Castle	31.6

Source: NPS 2009.
NOTE: The National Museum of Natural History was closed for renovation during this period, and the U.S. Capitol Visitor Center was not yet open.

The visitor survey showed that overnight guests visited on average 13.4 sites, while day-trippers visited 7.7 sites.

VISITATION

This section only looks at visitor use at certain monuments and memorials on the National Mall. It does not take into account attendance at demonstrations, national celebrations, or special events, when hundreds of thousands of people may come. For example, the Fourth of July celebration may attract 500,000–700,000 people to the National Mall, and Barack Obama's inauguration attracted 1.8 million people. See "Demonstrations, Special Events, and National Celebrations" (page 309) for more information.

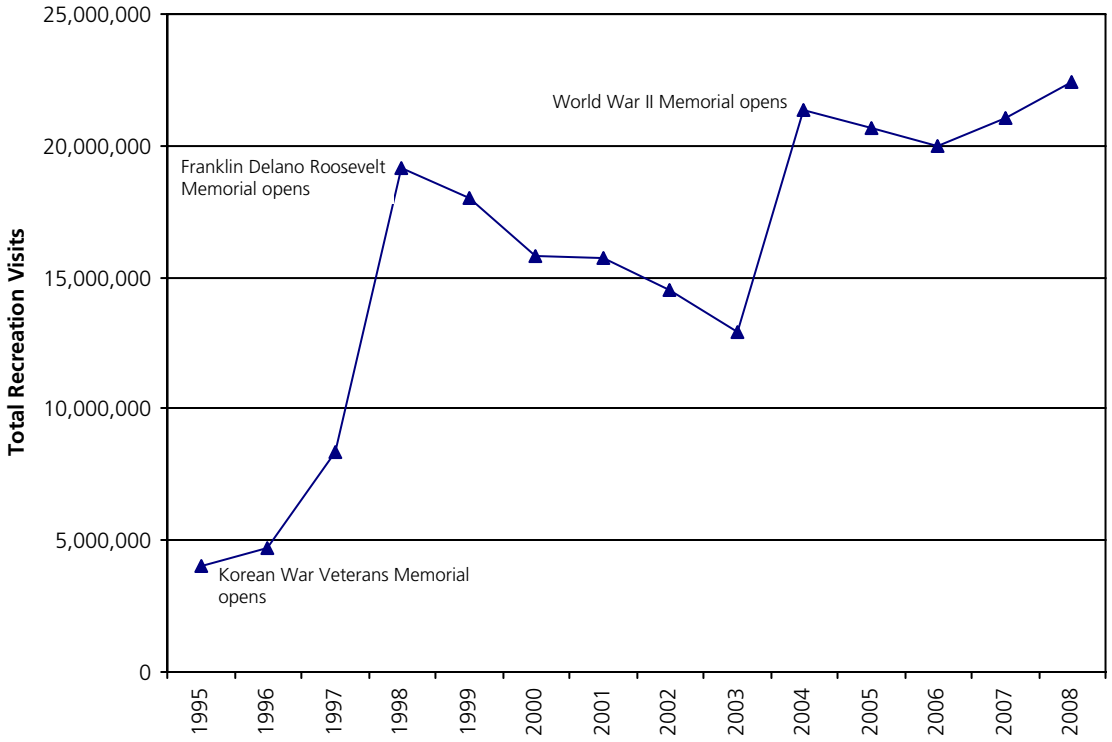
Past Visitor Use Trends

The National Park Service has policies and procedures for estimating visitation at seven sites on the National Mall — Washington Monument, World War II Memorial, Vietnam Veterans Memorial, Lincoln Memorial, Korean War Veterans Memorial, Franklin Delano Roosevelt Memorial, and Thomas Jefferson Memorial. However, there are no policies or procedures for estimating the total amount of use at First Amendment demonstrations, national celebrations, permitted special events, or daily recreational use; no NPS statistics are kept for these events. Event organizers state expected attendance levels, but these estimates have sometimes been highly inaccurate.

Figure 47 shows total visitation for four memorials on the National Mall dating back to 1995 — the Washington Monument, Vietnam Veterans Memorial, Lincoln Memorial, and Thomas Jefferson Memorial; visitation in 1995 at these four sites totaled just a little over 4 million visits. After the Korean War Veterans Memorial opened in 1995, total visitation increased by about 700,000 visits (a 17% increase). After the Franklin Delano Roosevelt Memorial opened in 1997, total visitation increased by about 3.6 million visits (a 75% increase). In 1998 visitation more than doubled, from 8.3 million to 19.1 million visits, then gradually dropped to 12.9 million visits by 2003. When the World War II Memorial opened in 2004, total visitation increased to 21.4 million (a 65% increase). Visitation since 2004 has remained fairly stable, averaging about 21.1 million visits per year (see Table 21).

At the World War II Memorial visitation declined from about 5.4 million visits in 2004 to 3.6 million in 2006, then rose to over 4 million in 2007 and 2008. Visits at the Washington Monument were low in 2004 and 2005 because the monument was closed from October 2004 through March 2005 so the grounds could be rehabilitated and security provided. In July and August 2008 hours were extended until 10 p.m., resulting in 671,081 visits in 2008, an increase of about 13.5% from 2005.

FIGURE 47: TOTAL VISITATION AT NATIONAL MALL SITES — 1995–2008



SOURCE: NPS Public Use Statistics Office (http://www.nature.nps.gov/stats/).

NOTE: Recreational visits include Washington Monument, Vietnam Veterans Memorial, Lincoln Memorial, and Thomas Jefferson Memorial since 1995; plus Korean War Veterans Memorial since 1996; plus Franklin Delano Roosevelt Memorial since 1997; plus World War II Memorial since 2004. It is assumed that one person will visit multiple sites, and there is no way to estimate the total number of people.

It is important to remember that these numbers are only the number of visits recorded by the National Park Service, not the number of people, and according to visitor surveys most visitors go to multiple sites per day. As previously mentioned, these numbers do not include visits by people who do not go to one of these seven sites, including participants in demonstrations, national celebrations, or special events. There are currently no user capacity limits for any areas of the National Mall.

TABLE 21: RECREATIONAL VISITS TO NATIONAL MALL SITES — 2004–2008

	2004	2005	2006	2007	2008	Average Annual Visits
Washington Monument[a]	378,416[b]	467,550[b]	586,603	591,081	671,031[c]	538,936
World War II Memorial	5,382,498[d]	4,410,379	3,865,430	4,079,606	4,153,749	4,378,332
Vietnam Veterans Memorial	3,789,889	3,799,968	3,629,739	3,633,793	4,243,573	3,819,392
Lincoln Memorial	2,988,650	3,638,806	3,810,347	4,214,167	4,678,861	3,866,166
Korean War Veterans Memorial	3,610,796	3,214,467	3,248,757	3,433,663	3,654,976	3,432,532
Franklin Delano Roosevelt Memorial	3,038,046	2,852,565	2,662,016	2,751,725	2,622,806	2,785,432
Thomas Jefferson Memorial	2,200,371	2,312,726	2,219,255	2,327,254	2,363,263	2,284,574
Total	**21,388,666**	**20,696,461**	**20,022,147**	**21,031,289**	**22,388,259**	**21,105,364**

SOURCE: NPS Public Use Statistics Office (http://www.nature.nps.gov/stats/).

NOTE: The National Park Service collects visitation data only for these seven sites on the National Mall. No estimates are made for demonstrations, national celebrations, or special events. The totals only represent the number of visits, not the total number of people. It is assumed that one person will visit multiple sites, and there is no way to estimate the total number of people. Impacts of use are based on the number of site visits.

a. The number of visitors inside the Washington Monument is limited to 80 people.
b. Washington Monument closed from October 2004 to March 2005 for landscaping of the surrounding grounds.
c. Visitor hours extended to 10 p.m. during July and August.
d. First year World War II Memorial opened.

Projected Visitor Use Trends

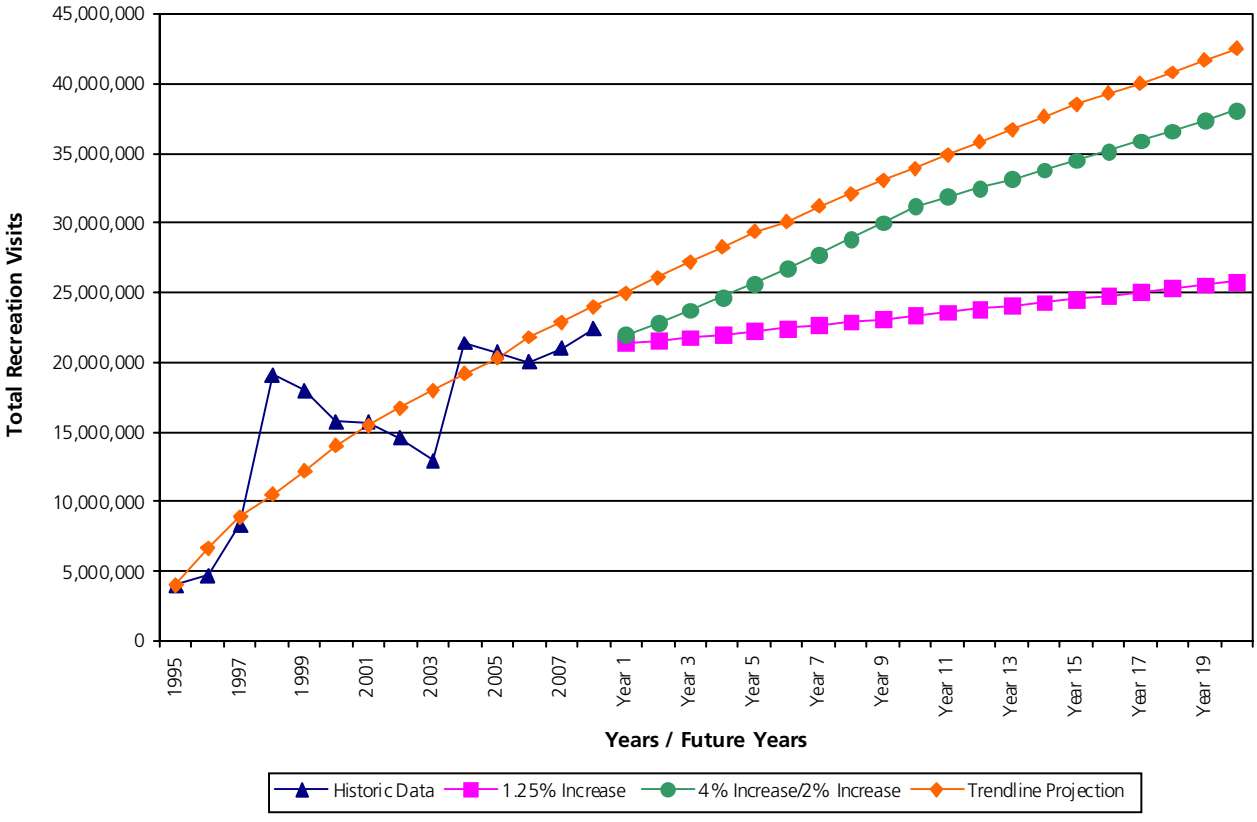
Future visitation projections to memorials on the National Mall are based on an analysis of recreational visits since 1995. As previously described, three new memorials opened during this period, and each time visitation surged and then leveled off (visitation increased by 75% after the Franklin Delano Roosevelt Memorial opened in 1997, and by 65% after the World War II Memorial opened in 2004).

Two of the three projects that Congress has authorized — the Vietnam Veterans Memorial Center and the Martin Luther King, Jr. Memorial — will be on the National Mall and will be managed by the National Park Service. The third project, the National Museum of African American History and Culture, will be managed by the Smithsonian Institution. These projects will bring more people to the National Mall, just as previous projects have. Visitation to the Smithsonian Institution museums has not been considered in projecting future visitation for the National Mall.

Three future visitation scenarios were developed, as described below and shown in Figure 48:

1. Over the past five years (since the World War II Memorial was opened) total average annual visitation has grown at about 1.25% per year. This scenario assumes that this rate of growth would continue. Using average annual visitation during this period as the baseline (21.1 million annual visits), a 1.25% growth rate would result in total annual use of 25.8 million visits in 20 years.
2. The second scenario takes into account likely visitation increases once the Martin Luther King, Jr. Memorial and the Vietnam Veterans Memorial Center open in the future. Once these memorials have opened, it is expected that visitor use would increase initially (conservatively figured at a 4% average annual increase for 10 years), but would then level off (decreasing to a 2% average annual increase for the next 10 years). Using average annual visitation over

FIGURE 48: 20-YEAR VISITATION PROJECTIONS AT NATIONAL MALL MEMORIALS



the past five years as the baseline (21.1 million visits), total annual use in 20 years would be about 38 million visits.

3. The third scenario is a trend line based on a regression analysis of historical data since 1995. Under this scenario total annual use in 20 years would be about 42.5 million visits.

These projections are only for visits to memorials on the National Mall where visitor use is tracked. It is important to remember that the number of visits does not equal the number of people. Based on survey information, visitors go to multiple sites while they are on the National Mall, so if visitors went to all seven memorials where numbers are monitored, then the number of people would be one-seventh of total recreation visits (that is, 42.5 million would correspond with approximately 6.1 million people).

ELEMENTS OF THE VISITOR EXPERIENCE

Monuments and Memorials

Some memorials, like the Washington Monument, the Lincoln Memorial, and the Thomas Jefferson Memorial, are internationally known symbols of our nation, while others are less well known. The major memorials are the primary attractions that make the National Mall the place where Americans and others contemplate our past and our ideals and values. There are five presidential memorials (George Washington, Thomas Jefferson, Abraham Lincoln, Ulysses S. Grant, and Franklin Delano Roosevelt), and four war-related memorials (the Vietnam Veterans, Korean War Veterans, the World War II, and the D.C. War memorials).

Lesser known memorials honor national heroes such as the 56 Signers of the Declaration of Independence, George Mason, John Paul Jones, and John Ericcson. Other memorials, plaques, or areas commemorate events or cultural resources (such as the First Air Mail Flight, the Jefferson Pier Marker, the former location of a canal), or international friendship (the German-American Friendship Garden, the Japanese pagoda and lantern, and the cherry trees around the Tidal Basin).

The memorials are lit at night and contribute to the special nighttime character of the National Mall. Several memorials have related extensive water features or reflecting pools nearby. Many of the monuments and memorials are outdoor facilities. The public is free to enter and walk around memorials at any time of the day or night, which is authorized by 16 USC 6802(d)(3)(C). Staffed facilities, such as bookstores and information stations associated with particular monuments and memorials, are generally open from 9:30 a.m. to 8:30 p.m.

In all visitor surveys respondents have said that they valued the National Mall as a respectful place and a place for quiet reflection, peace, and meditation. They mentioned their enjoyment of and desire to keep the open and unobstructed green space in the center of the Mall, with expansive views to the river. They also mentioned the cultural and historical ideas associated with a public cultural space to remember those who have contributed much to the country, the preservation of American history, and a place of pride, inspiration, and patriotism. Additional comments provided in response to newsletter 3 focused on the value of the National Mall as our national civic gathering space and the importance of First Amendment rights within this space.

The Washington Monument, the Lincoln Memorial, and the Thomas Jefferson Memorial are recognized as symbols of the nation, and they contribute to the unique and recognizable day- and nighttime character of Washington, D.C. Together with the White House and the U.S. Capitol, they comprise five significant icons for our nation. These visually prominent symbols are within important vistas or are the visual terminus of planned vistas. Special lighting ensures that these icons dominate the nighttime character of Washington, D.C. Activities with these symbols as backdrops help make the National Mall one of the most photographed places in our country.

Washington Monument

The Monument. The Washington Monument, the most prominent visual feature in Washington, D.C., provides a visual orientation point for people on the ground, as well as air travelers.

The monument is on the top of a hill, and its large granite plaza is encircled by 50 American flags and limestone benches. Here visitors wait for a tour or enjoy vistas in all directions.

After visitors enter through a security checkpoint (the current checkpoint on the east side is temporary), they see several exhibits and a statue of George Washington before taking the elevator to the top of the monument. From that vantage point they can look out windows in all directions. To the north the view focuses on the White House and the city beyond; to the east, the Capitol, with the symmetrically planted rows of elm trees and a wide panel of turf on the Mall in the foreground; to the south, the Thomas Jefferson Memorial and the Tidal Basin; and to the west, the World War II Memorial, the Lincoln Memorial and the reflecting pool, and Arlington National Cemetery across the Potomac River.

Guides and exhibits at the ground and upper levels provide a variety of educational content. In addition, the elevator pauses in several locations on the way down so that visitors can see some of the nearly 200 carved commemorative stones that line the interior walls. Beginning in the summer of 2008 tour hours were extended to 10 p.m., which almost doubled the number of people going to the top of the memorial. Visitation is limited to approximately 80 people within the monument at any one time because of safety codes, so visitors must get free, timed tickets on the day they visit. Tickets are obtained at Monument Lodge and for a small fee are available on the internet. Frequently there is a visitor queue waiting for tickets, and most tickets are issued by 9 a.m. when the office opens. When hours were extended until 10 p.m., tickets were available until about noon.

The Grounds. Within the last six years new walkways and walls have been constructed, changing use patterns at the Sylvan Theater. Small men's and women's restrooms are also available near the Sylvan Theater on the southwest corner of 15th Street and Independence Avenue. Recreation fields used by teams are north of the monument, but visitors may enjoy all of the grounds for various activities, from concerts to kite flying, and from demonstrations to the Fourth of July celebration. A recreation field is also located south of Independence Avenue.

Monument Lodge is a short distance to the east of the monument and offers restrooms, a ticket window, and a bookstore. Survey Lodge is southwest of the monument and is used as the park ranger office, with an information desk and two public restrooms; this building is not easily found or identified by the public.

Lincoln Memorial

The Memorial. The Lincoln Memorial on the west end of the National Mall is approached by a series of wide stone stairs from the east. Near the top of the steps is an inscription marking the location where Martin Luther King Jr. gave his "I Have a Dream" speech during the 1963 March on Washington. From the top of the steps, visitors enter the chamber, lit by alabaster skylights and dominated by the larger than life seated statue of Abraham Lincoln. The atmosphere is generally respectful and hushed as people photograph the statue, read the Gettysburg Address or the Second Inaugural Address, or enjoy murals in the side chambers. There is no seating for visitors inside the chambers. The memorial is staffed from 8 a.m. to midnight, and no entrance tickets are required.

Visitors looking east from the memorial see a classic view of the U.S. Capitol, with the World War II Memorial and the Washington Monument in the foreground. The memorial steps also form an informal amphitheater for enjoying the Fourth of July celebration or views of the capital city. Looking west from the memorial visitors can enjoy views of Arlington Memorial Bridge and Arlington National Cemetery, with Arlington House located above the Women in Military Service to America Memorial and the Kennedy gravesites.

The Grounds. The long, narrow reflecting pool extends to the World War II Memorial and is the most visually prominent part of the grounds around the Lincoln Memorial. From the ground the Washington Monument dominates the view looking east. A narrow stone edge flanks the reflecting pool and is insufficient for the numbers of people who desire to walk along the edge of the pool and enjoy the views. Resulting social trails have made it impossible to maintain the

turf. Visitors have voiced concerns about the lack of grass and the pool's water quality and appearance. Walks to both the north and south of the reflecting pool are pleasantly shaded by elms in the summer, but the walks do not have a strong visual relationship to the memorials at either end of the pool.

To the west and north of the memorial are a number of historic elements — Arlington Memorial Bridge, the ceremonial Watergate steps, and the Constitution Avenue terminus belvedere. There are sand volleyball courts and ballfields in the area. Ohio Drive passes under Memorial Bridge and Parkway Drive adjacent to the Potomac River.

Thomas Jefferson Memorial

The Memorial. The main entrance to the Thomas Jefferson Memorial is from the north staircase. From the rotunda visitors have views in four directions, and they can use benches to rest and contemplate Jefferson and his contributions to our nation. Looking across the steps to the north, visitors can see the White House and the Washington Monument, with the Tidal Basin in the foreground. Visiting the memorial does not require an entrance ticket.

The front stairs of the memorial are frequently used for informal seating during the National Cherry Blossom Festival and at other times. The wide plaza at the base of the stairs and the wide curved walks around the memorial accommodate many people and can be flexibly used for national celebrations. The wall at the north edge of the plaza, which has been sinking, will be stabilized and repaired.

The Grounds. The Thomas Jefferson Memorial is surrounded by temporary concrete security barriers that are visually out of character with the memorial's setting. Perimeter security is to be built that would be in keeping with the memorial's historic character. South of the memorial, a rectangular turf area is surrounded by a road that was at one time a parking lot, but now provides limited maintenance access. Elsewhere the grounds are generally informal in layout, and vegetation is characterized by large shade trees and groupings of flowering cherry trees. Walks in the area are asphalt and exposed aggregate concrete.

Ulysses S. Grant Memorial / Union Square

The Ulysses S. Grant Memorial is in Union Square at the east end of the National Mall, just west of the Capitol grounds. The National Park Service has provided several wayside exhibit signs with information about President Grant and the memorial.

Looking east, the memorial is a prominent foreground for the U.S. Capitol building, and it is frequently the location for group photographs. Looking west across a 4.3-acre reflecting pool, the Washington Monument dominates the vista, with the towers of Smithsonian Castle to the south. The reflecting pool's size is an obstacle to pedestrian circulation, and its water quality frequently generates comments about smell or appearance.

World War II Memorial

The World War II Memorial is within the major east-west axis between the Lincoln Memorial and the U.S. Capitol. Many visitors to this memorial are war veterans. The layout of the memorial is formal and symmetrical. An electronic World War II database contains the names of those who submitted information about their service.

Vietnam Veterans Memorial

At the Vietnam Veterans Memorial visitors walk along the memorial wall quietly and with reverence, frequently pausing to look at the remembrances left at the wall. Some visitors look through catalogs at both ends of the wall that list where names can be found. Nonperishable items left at the wall are collected and curated by the National Park Service; the collection has now exceeded 100,000 items. Some of these items are on a rotating display at the Smithsonian's National Museum of American History.

Korean War Veterans Memorial

The design of the Korean War Veterans Memorial offers a contemplative setting to commemorate this international conflict. The polished granite wall along the south edge of the memorial helps create a quiet setting.

D.C. War Memorial

The classical D.C. War Memorial was designed as a bandstand, 40 feet in diameter and large enough to hold the 80-member U.S. Marine Corps Band. The memorial is in a grove of trees (Ash Woods) and is north of Independence Avenue between the World War II and Korean War Veterans memorials.

George Mason Memorial

Located south of Outlet Bridge and east of Ohio Drive, the George Mason Memorial was built around a historic fountain (Fountain 4) and is surrounded by a landscaped perennial garden and flowering trees.

Franklin Delano Roosevelt Memorial

The Franklin Delano Roosevelt Memorial, along the west side of the Tidal Basin, takes a landscape approach, with shade trees, waterfalls, statuary, and quiet alcoves to create the feeling of a secluded garden. The memorial's outdoor rooms entice visitors to stroll and learn more about Roosevelt's four terms as president. There are several viewpoints of the Tidal Basin under flowering cherry trees. Presidential images and sculpture are much closer to life scale than at the four other presidential memorials on the National Mall. Seating is provided in several areas, and the last room was designed to be used for programs and lectures. Water is used effectively to muffle the noise of aircraft at the nearby Ronald Reagan Airport.

Other Visitor Destinations

In addition to the iconic memorials on the National Mall, there are hundreds of visitor destinations in the metropolitan area. Nearby are the museums of the National Gallery of Art and the Smithsonian Institution, the National Archives, the U.S. Capitol, the Library of Congress, the U.S. Botanic Garden, the Supreme Court, the Bureau of Engraving and Printing, and the U.S. Holocaust Memorial Museum. Several privately owned museums or exhibitions (Newseum, Spy Museum, Crime and Punishment, Madame Tussauds) also contribute to the rich tourist environment adjacent to the National Mall. Visitor comments frequently note that they were surprised at how much there is to do, or that they needed to plan much more time for their next visit.

Future Projects on the National Mall

As previously described, three future projects that have been authorized by Congress for the National Mall would expand visitor opportunities:

- ***Martin Luther King, Jr. Memorial*** — The Martin Luther King, Jr. Memorial is planned for the northwest area of the Tidal Basin. The memorial would increase opportunities for visitors to understand American history and the civil rights movement, and it would be likely to increase the number of African-Americans visiting the National Mall. The memorial will have restrooms, a bookstore, and an information area. After completion, the memorial will be managed by the National Park Service.
- ***Vietnam Veterans Memorial Center*** — A Vietnam Veterans Memorial Center will be constructed northwest and across the street from the Vietnam Veterans Memorial. The underground facility will include exhibits, restrooms, information, and a bookstore. It can be expected to increase opportunities for those wishing to learn more about the Vietnam War era. After completion, the center will be managed by the National Park Service.
- ***National Museum of African American History and Culture*** — The National Museum of African American History and Culture is to be built south of Constitution Avenue between 14th and 15th streets NW. The land has been transferred from the National Park Service to the Smithsonian Institution. Like the Martin Luther King, Jr. Memorial, the museum is likely to increase the numbers of African-Americans visiting the National Mall.

Demonstrations, Special Events, and National Celebrations

As previously discussed, demonstrations and special events take place nearly continually on the National Mall, and general visitors are affected to varying degrees. When tents and

stages are erected for national celebrations and special events, views to the memorials and buildings that are symbols of our nation may be periodically blocked, and recreational pursuits and league play may have to be temporarily suspended. Visitors' ability to cross streets or to use the visitor transportation system may also be occasionally disrupted.

Music, speeches, and rallies also affect visitor experiences. The sounds of an event are more evident the closer one is to an event. Sounds may interrupt visitors' desired experiences for contemplation, or they may provide education and enjoyment through stirring speeches, music, or engaging entertainment.

Visitors to the National Mall may not be aware in advance that such permitted activities are taking place and they may need to adjust their plans. Depending on why people are visiting the National Mall, they may find special park uses serendipitous, fun, and interesting, or an annoyance that affects their ability to move between planned destinations and activities.

Visual Experiences

The National Mall is one of the most photographed, visually recognizable, and symbolic locations in the United States. Visual experiences range from the monumental and formal to intimately scaled, informal areas. Visitors' experiences are dominated by this interplay of formal and informal elements of the historic landscape. The formal landscapes typically align with the east-west vista of the great cross axis of the National Mall; the informal landscapes are generally at the west end of the National Mall and lying north and south of the east-west vista. The most prominent visual features are symbols of our country, with the Washington Monument at the center, and formally placed memorials or buildings including the White House, the U.S. Capitol, the Lincoln Memorial, and the Thomas Jefferson Memorial.

Visitors have said that they expect to be proud of the nation's front yard, where citizens and guests can feel welcome. Visitors have commented that the visual appearance of landscaped areas throughout the National Mall is unacceptable. Deteriorated conditions are the result of very high levels of use, with the most noticeable impacts being to the turf. Before planning began, social trails were found in most places where the public walks — through trees, along paved walkways, and across lawn corners. New measures such as post-and-chain fencing around lawn areas impede social trails and help protect turf conditions, improving the appearance. Visitors are also concerned about algae in water features, the appearance and odor of water, and the volume of resident duck and Canada geese droppings on walks and turf.

The Great Cross Axis

Dominating the visual experience is the planned east-west vista between the U.S. Capitol and the Lincoln Memorial and the shorter north-south vista between the Thomas Jefferson Memorial and the White House. The vistas intersect near the Washington Monument. Today visitors greatly appreciate these vistas and their symbolism.

The East-West Vista

The east-west vista has a formal feeling because of its linear layout, stretching nearly 2 miles from Union Square to the Lincoln Memorial. For much of its length multiple rows of regularly spaced trees define the view corridor. Pedestrian circulation generally aligns with the vista and draws visitors along its length. Visual and commemorative points or widened areas include Union Square, the Washington Monument grounds, the World War II Memorial, and the Lincoln Memorial.

- ***Union Square*** — Union Square visually connects the National Mall to the U.S. Capitol. At the east end of Union Square is the Ulysses S. Grant Memorial, a prominent foreground to the Capitol building and grounds and symbolically connecting to the Lincoln Memorial at the west end. Looking west from the Grant Memorial the vista is immediately dominated by the large curved Capitol Reflecting Pool with the Washington Monument in the distance; the Lincoln Memorial is not easily visible from this location. As visitors walk around the pool, they can see the diagonal vistas along Maryland Avenue SW and Pennsylvania Avenue NW. From Union Square looking

to the north is the open space planned for the U.S. Senate Youth Park and U.S. Botanic Garden Education and Outreach Center, and to the south the U.S. Botanic Garden.

- ***The Mall*** — The Mall, with broad central turf panels bordered by formal rows of American elm trees, extends from 3rd to 14th Street. Four wide parallel walkways run the length of the Mall and are crossed by north-south walks that provide visual and physical access to museums, the National Archives, and the downtown area. Thirteen buildings and two sculpture gardens flank the north and south sides of the Mall; most of the buildings are open to the public and are managed by either the Smithsonian Institution or the National Gallery of Art. Looking north on 4th Street visitors can see the red brick Pension Building/National Building Museum. At the location where 8th Street would cross the Mall, visitors can look through the National Gallery of Art Sculpture Garden to see the National Archives, and to the south the sunken Hirshhorn Sculpture Garden.

  Visitors taking the Metro to the National Mall emerge at 12th Street, where they have their first view of the Mall, with the Washington Monument to the west, the National Museum of Natural History to the north, the U.S. Capitol to the east, and Smithsonian Castle to the south. The simple formal landscape continues to 14th street and the Washington Monument grounds.

- ***Washington Monument and Grounds*** — From the grounds of the Washington Monument, the city's most prominent visual symbol and orientation point, visitors have 360 degree views of the National Mall. The east-west vista widens into a large, open turf area edged by street trees, with the Washington Monument rising on a knoll. To the east visitors see the tree-lined Mall and the U.S. Capitol, with Union Square and the Grant Memorial subordinate features from this vantage point. To the south is the Thomas Jefferson Memorial, and to the north the Ellipse and the White House. To the west, the World War II Memorial around Rainbow Pool, the Lincoln Reflecting Pool, and the Lincoln Memorial dominate the vista.

- ***World War II Memorial*** — The World War II Memorial continues the formal, symmetrical design around the Rainbow Pool to maintain the vista to the Lincoln Memorial. The 17th Street entry is flanked by flagpoles and walls with bas-relief sculptures that step down to the elliptically shaped Rainbow Pool. On the west side of the memorial the wall of honor with gold stars becomes foreground for views to the Lincoln Memorial. For visitors making their way to the Lincoln Memorial, they leave to the north or south through the Pacific and Atlantic entries.

- ***Lincoln Memorial Reflecting Pool*** — The Lincoln Memorial reflecting pool, flanked to the north and south by double rows of American elms with shaded walkways, dominates the central foreground to the Lincoln Memorial. To keep the memorial in view as they approach, visitors usually walk along the sides of the reflecting pool, which has resulted in a packed-earth social trail on each side. Visitors who use the elm walkways do not have clear views of the memorial.

- ***Lincoln Memorial*** — The west end of the reflecting pool is the lower approachway to the Lincoln Memorial. Stone and cobble paving and wide side staircases are the foreground to the elevated view of the memorial and the statue of Abraham Lincoln. The broad central staircase is a prominent visual feature and also provides space for visitors to sit and enjoy the vista back to the east. This east vista at this location is enjoyed by many on the Fourth of July for the stunning display of fireworks with the background of the Washington Monument and the Capitol.

From adjacent areas the Washington Monument, the Lincoln Memorial, and the Thomas Jefferson Memorial can be readily seen from Arlington National Cemetery, the Marine Corps Memorial, and the Air Force Memorial, as well as from points along George Washington Memorial Parkway. As previously discussed, the Washington Monument is visible for miles, espe-

cially on roads leading into the city, visually drawing people toward the National Mall.

The North-South Vista

The planned vista between the Washington Monument and the White House was extended to the Thomas Jefferson Memorial when the Potomac River flats were reclaimed. Less formal in character than the east-west vista, the prominent visual features of the north-south vista are the Washington Monument, the White House, the Tidal Basin, and the Thomas Jefferson Memorial. Unlike the east-west axis, vistas along the north-south axis do not align with pedestrian circulation. Vistas can be glimpsed through planned openings in trees.

- ***Washington Monument and Grounds*** — The central point in the north-south axes is the Washington Monument, which sits just to the east and helps define the vista. To the north are the monument grounds, the symmetrical but informal German-American Friendship Garden, and the White House. The view to the south is defined by the monument knoll and trees, with the Thomas Jefferson Memorial visible through openings in the trees. Sometimes this vista is blocked by buses and traffic.
- ***The White House and President's Park*** — The view from the White House to the Thomas Jefferson Memorial is well known from photographs, even though it is not generally available to visitors. Openings in the trees on the south grounds of the White House and on the north and south sides of the Ellipse maintain the north-south vista. Visitors near the south fence of the White House may not be aware of that the Thomas Jefferson Memorial is visible to the south.
- ***Thomas Jefferson Memorial*** — The south terminus of the planned vista is the classical Thomas Jefferson Memorial. The memorial's center broad staircase is where many visitors sit and enjoy views of Tidal Basin, the Washington Monument, and the White House, with the top of the Lincoln Memorial visible above the trees. The memorial and the Washington Monument are reflected in the waters of the Tidal Basin.

Informal Landscapes

Visual experiences in the more informal landscapes of the National Mall are as rewarding as views along the great cross axis, but they are more intimate in character. These visual experiences are provided in more human-scale memorials such as the Vietnam Veterans Memorial, the Franklin Delano Roosevelt Memorial, the Korean War Veterans Memorial, and the George Mason Memorial, as well as around the Tidal Basin, in Constitution Gardens and all along the Potomac River. The visual informality is reinforced by meandering pedestrian pathways. Smaller memorials, such as those to John Ericcson and John Paul Jones, are located within road intersections.

- ***Constitution Gardens*** — Constitution Gardens is characterized by rolling, wooded terrain around the 6.75-acre artificial lake, providing a visual sense of separation from the city and an intimacy defined by terrain. From Constitution Gardens visitors have pastoral views of the lake and gardens, with the Washington Monument dominating views near the lake.
- ***The Tidal Basin*** — The asymmetrical 107-acre Tidal Basin is the setting for the Thomas Jefferson Memorial, the Franklin Delano Roosevelt Memorial, several small commemorative markers, and the future Martin Luther King, Jr. Memorial. The informal character of the basin is prized by photographers during the spring and fall, when blossoms and color are reinforced by the spreading and overhanging tendencies of the Japanese cherry trees. Views and reflections around the basin are dominated by the Washington Monument and the Thomas Jefferson Memorial. Seasonal visual interest is provided by the tulip and annual flower displays east of Kutz bridge. Bridge railings provide immediate visual interest, with long views of the basin and memorials.
- ***George Mason Memorial*** — The visual character of the George Mason Memorial is informal, intimate, and gardenesque, with flowering trees and plants surrounding a round pool. The statue of George Mason,

in an informal pose located under an arbor, reinforces the relaxed visual character.

- ***Franklin Delano Roosevelt Memorial*** — At the memorial to Franklin Delano Roosevelt visitors experience a series of four landscaped, outdoor rooms featuring quotations, stone, walls, plants, sculpture, and water features. Many of the sculptural elements were designed to encourage interaction and photography.
- ***Vietnam Veterans Memorial*** — The visual experience of walking along the highly polished black granite wall is highly emotional for many visitors, as they view the names and items left at the wall. Additional visual interest is provided away from the wall by two sculptures and a flagpole. The open area around the wall is surrounded by more wooded terrain.
- ***Korean War Veterans Memorial*** — The visual experience at the Korean War Veterans Memorial is defined by the 19 soldiers moving up a hill. Visitors walk on each side of the patrol, and can look at photographs etched in black granite or read inscriptions in the walkway.
- ***Arlington Memorial Bridge, Watergate Steps, Constitution Avenue Belvedere*** — West of the Lincoln Memorial visitors see Arlington Memorial Bridge, flanked by large gilded sculptures representing the *Arts of War,* and the entrance to George Washington Memorial Parkway, flanked by statues representing the *Arts of Peace*. The Watergate steps lead down to Ohio Drive and the Potomac River. Arlington National Cemetery and the Robert E. Lee House are visible from these areas. The Constitution Avenue belvedere is to the north. The organization and visual setting is informal within a simple landscape of shade trees and turf highlighting views to and across the Potomac River.
- ***Potomac Riverfront*** — South of Arlington Memorial Bridge the visual experience is informal, with the Potomac riverfront characterized by informal groupings of flowering trees closer to the river and taller shade trees nearer Ohio Drive. River views are dominated by a serene, vegetated parklike setting, with views of recreational boating. Visitors also enjoy views across the river toward George Washington Memorial Parkway, Arlington National Cemetery, and the U.S. Air Force Memorial.

Sounds on the National Mall

The urban environmental surrounding the National Mall brings with it the sounds of people and traffic. The location of the National Mall on the flight path of Ronald Reagan Washington National Airport contributes to noise levels. Because this is the national capital, the sounds of helicopters and police escorts are also frequent. While sounds of crowds can be energizing for people, unwanted sounds can interfere with visitor opportunities for contemplation.

To balance the noise aspects, several memorial designs have made use of waterfalls and jets, terrain changes, orientation, walls, and vegetation to muffle the undesirable urban sounds. The Franklin Delano Roosevelt Memorial and the World War II Memorial effectively use the sound of active water to muffle urban noises. The primary entrances to the Thomas Jefferson, Lincoln, Korean War Veterans, and Franklin Delano Roosevelt memorials are oriented away from major thoroughfares. Sounds of traffic on 3rd Street next to Union Square contribute to a somewhat unfriendly pedestrian environment in this area.

Information and Education

Orientation and Information

Advance Information

NPS websites are available for the National Mall as a whole and for specific units within it (such as the Lincoln Memorial). The websites receive about 11 million users a year. Web pages for each site contain basic information on operating hours, parking, public transportation, bicycle use, contact phone numbers, and climate; additional links are provided for trip planning, fees, and reservations. The web pages also refer visitors to public transportation and Tourmobile websites. The most popular web pages are for the Washington Monument and the National Mall and Memorial Parks.

The visitor survey conducted in 2008 found that while 20% of visitors got no advance planning information, the visitors who did get pretrip information used several sources. The most popular information sources were friends (58%) and guidebooks or tour providers (45%), while 17% looked at park websites, and 30.5% checked other websites. Visitors were also asked what sources they would check for future visits; 60% said they would check park websites, and 30% would continue to check other websites.

Onsite Information

Orientation, Maps, and Brochures

Washington: The Nation's Capital is the NPS map that shows all kinds of visitor destinations in central Washington and Arlington National Cemetery, including museums, government buildings, and memorials. It also lists general hours of operation, programs, and contact information. The National Park Service has individual brochures for the following locations through the internet, at the sites, or at NPS offices: the Mall, Washington Monument, Lincoln Memorial, Thomas Jefferson Memorial, Franklin Delano Roosevelt Memorial, World War II Memorial, Vietnam Veterans Memorial, Korean War Veterans Memorial, and the Ulysses S. Grant Memorial.

Staff

Uniformed park rangers and staff, volunteers, nonprofit partners and concession employees provide visitors with basic information, directions, and orientation.

Directional Signs and Display Boards

Free-standing pedestrian maps and interpretive signs are located throughout the National Mall. These outdated, uncoordinated signs are being replaced throughout the park area.

Educational Information and Programs

Staffed Sites and Exhibits

NPS park rangers provide interpretive programs to thousands of U.S. and international visitors at the Washington Monument and six memorials (Lincoln, Thomas Jefferson, Vietnam Veterans, Korean War Veterans, Franklin Delano Roosevelt, and World War II). However, the volume of visitors at an area like the Lincoln Memorial may mean that there is only one ranger for every 9,000 visitors. Seven interpretive wayside exhibits are provided at various locations to deepen visitor understanding of our national heritage. Roving rangers on bicycles also answer questions

Cell phone tours have been provided since 2008, and more than 12,000 users have participated.

NPS Programs

NPS interpretive and educational programs are based on current scholarship, and various means are used to convey educational information to diverse visitors and to encourage support for resource stewardship and protection. Regular programs are scheduled at staffed memorials. The Junior Ranger Program offers specialized activities and programs for children. One very popular educational offering is the "I Have a Dream" program during the winter months when students can recite Dr. King's famous 1963 speech from the same location on the steps of the Lincoln Memorial. Educational programs for special events are also presented during annual presidential birthday commemorations, the birthday of Martin Luther King Jr., and the National Cherry Blossom Festival, as well as presidential inaugurations.

Park programs, events, and activities are publicized through the media and the park radio station, posted on signs at memorials, and listed on park websites. Living history programs portray portions of American military heritage. Guided bicycling tours provide visitors with different ways to learn about the National Mall's cultural and natural history.

Ranger staff provide educational information about history and resources to area teachers through annual teacher workshops, share current information about park sites with the local tour guides, and assist and/or train concessioners with accurate park information. Curriculum-based programs are scheduled onsite and as outreach visits to schools in the District of Columbia, Virginia, and Maryland.

ENJOYMENT AND RECREATION

Gardens

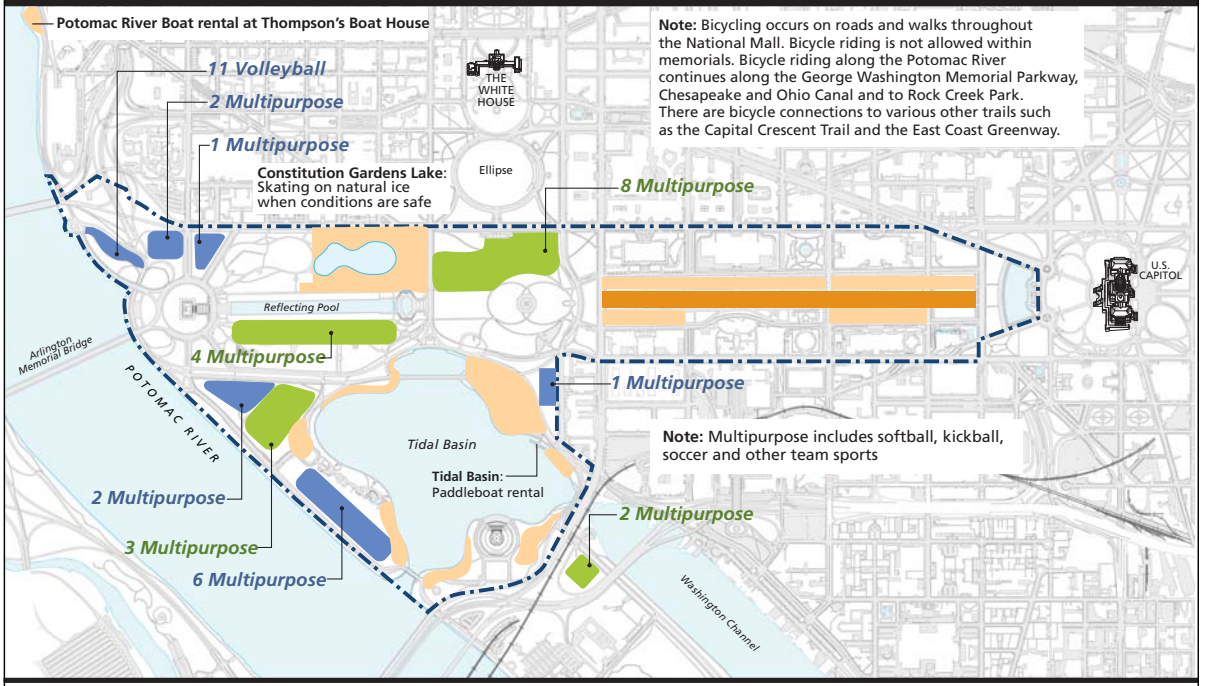
Seasonal and perennial gardens include those at the George Mason Memorial, Constitution Gardens, the World War II Memorial, and the Ulysses S. Grant Memorial. The floral library and perennial beds are on the south side of Maine Avenue north of the Tidal Basin. Other flowerbeds include those at the Constitution Avenue belvedere and the German-American Friendship Garden.

Recreational Activities

A variety of informal and active recreational opportunities are available. The National Mall has historically been the site for numerous local recreational activities, and these activities have changed over time to reflect current recreational interests. Swimming and tennis have been replaced by turf spaces that can be used for picnicking, strolling, and sunbathing, as well as informal or organized active recreation (e.g., pickup ballgames and amateur league sports). Few facilities are provided for recreation; some backstops are provided near the Potomac River, and there are sand volleyball courts northwest of the Lincoln Memorial. Athletic fields are well used and worn, and many fields lack an irrigation system. Most active recreation takes place on open turf areas, and groups supply needed equipment, such as goals or bases. Activities include softball, soccer, football, kickball, Frisbee, kite flying, rugby, and catch. Bicycle riding and in-line skating generally take place on roads. Paddleboats can be rented and used at the Tidal Basin. The National Park Service will continue to work with the National Capital Planning Commission on the best method of mitigating the loss of one ballfield at the Vietnam Veterans Memorial Center site.

Recreational Opportunities

Recreational Opportunities
National Mall Plan
United States Department of the Interior / National Park Service
DSC • April 2010 • 802 • 100476A



National Mall Plan Area

Passive Recreation / General Enjoyment

Active Recreation

Fields / Courts permitted by National Mall and Memorial Parks

Fields permitted through D.C. Parks and Recreation

Under a memorandum of agreement with the D.C. government, the city issues permits for field use (DC Recreation Board 1972). NPS special regulations restrict use in case of wet grounds (36 CFR 7.96). Activities are permitted at the discretion of the superintendent. Bathing, wading, and swimming are prohibited in all commemorative water features.

The National Mall is conveniently located to fill the recreation demand of the federal and local workforce. Many workers take advantage of park areas to lunch, read, visit, or jog. Agencies and branches of government have recreational sports teams; for example, many of the approximately 200 teams of the congressional softball league, which has existed since the 1970s, practice on the National Mall.

Walking

Washington, D.C., is one of the most walkable cities in the nation. While there are some grade changes on the National Mall, primarily near the Washington Monument and east of Union Square, all areas are accessible to people with disabilities. The distance between the Capitol and the Lincoln Memorial is about 2 miles, but most visitors find that as they explore memorials or museums they walk far more than they planned. Pedestrian amenities such as lighting and seating contribute to the enjoyment of visits. Based on the 2003 *Visitor Transportation Survey*, most visitors walk to their destinations. However, nearly 25% said they had an individual in their party who could only walk a limited distance because of age, youth, discomfort, breathing difficulties, or disabilities that required use of a wheelchair, walker, or cane.

Many walkways need to be replaced. The two center walkways on the Mall are gravel, and the two outer walkways are paved with exposed aggregate that resembles the gravel center walks. The gravel surfaces make it difficult for people with disabilities or those pushing strollers to maneuver; the surface can also be slippery, and the public has complained about the dusty conditions created by the gravel.

Jogging

Individuals, military units, and local running clubs use the National Mall for jogging. Joggers prefer softer surfaces and frequently run next to sidewalks, resulting in dirt jogging trails. Over time these paths have hardened, making it difficult to reestablish turf. The 2-mile length of the National Mall makes it easy to measure jogging routes.

Bicycling

Bicycle rentals or tours are available at several locations off the National Mall and are used by visitors. The flat terrain and moderate distances between sites make visiting the National Mall by bicycle convenient and attractive. Park staff schedule and lead bicycle tours, generally meeting near the Thomas Jefferson Memorial. Bicycles are permitted on sidewalks. Bicycle racks are provided, and bicycle parking is provided during some special events.

Because bicyclists and pedestrians share walkways, during busy periods, particularly rush hours and lunch time, use conflicts are more likely as pedestrians, people with baby strollers and in wheelchairs, and bicyclists all try to use the same rights-of-way.

Entertainment

Three areas on the National Mall are designed for performances — the Sylvan Theater on the Washington Monument grounds, which hosts a variety of performances; the D.C. War Memorial, which was designed as a bandstand; and Room 4 at the Franklin Delano Roosevelt Memorial, which was designed for programs and lectures. In addition the lower approachway to the Lincoln Memorial and the plaza at the Thomas Jefferson Memorial are used for special events, but no utility connections or other infrastructure is provided. The steps at both of these memorials are used for seating.

Lawn areas on the Mall and the Washington Monument grounds are also used during entertainment events. Organizers bring in stages or video screens for events such as the Fourth of July, Screen on the Green movies, Kennedy Center simulcasts, the Tchaikovsky's *1812 Overture,* the World War II series on PBS, and the Smithsonian Folklife Festival.

VISITOR FACILITIES AND AMENITIES

Visitor facilities and amenities include food service, retail locations, information stations, bookstores, and restrooms. Frequently, food and retail facilities are combined. Park furniture includes seating and tables, light fixtures, and trash and recycling containers. NPS facilities on the National Mall are described briefly below by type and also by area, and they are summarized in Table 22. Facilities in adjacent buildings (such as the Smithsonian Institution and the National Gallery of Art) are summarized in Table 23.

Types of Facilities

Restrooms

The National Park Service maintains just over 100 stalls or urinals at 10 locations on the National Mall (Monument Lodge, Survey Lodge, and the Sylvan Theater at the Washington Monument; at the World War II Memorial and Constitution Gardens; inside the Lincoln Memorial; at Ash Woods; at each end of the Franklin Delano Roosevelt Memorial; and inside the Thomas Jefferson Memorial). There are no NPS restrooms east of 15th Street. Restrooms are available at Smithsonian Institution museums, the National Gallery of Art facilities, and the U.S. Holocaust Memorial Museum (see Table 23). Comments noted by the public include inadequate and outdated facilities that are poorly maintained, and the lack of facilities near food service locations.

For national celebrations (e.g., the National Cherry Blossom Festival and Fourth of July), up to 500 portable restrooms are provided. For the 2009 inauguration 5,000 portable restrooms were provided.

Seating

Seating is distributed throughout the National Mall and depending on the time of day and the season can easily be found in both sunny and shaded locations. Most seating is inadequate for large groups. Stone seating is provided at the Ulysses S. Grant Memorial, the Washington Monument, the Thomas Jefferson Memorial, the World War II Memorial, the George Mason Memorial, the Franklin Delano Roosevelt Memorial, and the Korean War Veterans Memorial. No seating is provided in the Lincoln Memorial chamber or near the Vietnam Veterans Memorial. The steps of the Lincoln and Thomas Jefferson memorials are frequently used for informal seating, as well as for groups.

The 1930s park bench, consisting of a metal frame with wood slats, is most frequently used for seating, and each bench seats two to three people. Of the more than 800 benches on the National Mall, over 70% are the NPS standard Washington benches. Benches are placed along walks, but they are not located for people to enjoy views and vistas. The simple form of the bench, without arms, does not meet standards for accessibility. Other styles of wood benches include some with no backs and others that have been designed specifically for certain areas.

Tables and Chairs

Tables and chairs are most frequently found around food and picnicking locations. Metal tables and chairs are generally provided near refreshment stands. Wood or concrete picnic tables are provided in a few locations.

TABLE 22: NPS PUBLIC FACILITIES ON THE NATIONAL MALL

	Public Restrooms							
Area	Men's Toilets/ Urinals	Women's Toilets	Family/ Assisted Companion	Seating	Visitor Services / Information	Food Service	Bookstore / Retail Sales	Notes
Union Square	0	0	0	Built into Grant Memorial	None	None	None	No visitor facilities or services
Mall	0	0	0	Benches	Information	4 year-round refreshment stands; tables and chairs	Limited souvenirs, convenience items at 4 refreshment stands	

Area	Public Restrooms			Seating	Visitor Services / Information	Food Service	Bookstore / Retail Sales	Notes
	Men's Toilets/ Urinals	Women's Toilets	Family/ Assisted Companion					
Washington Monument	0	0	0	Stone benches	Programs, interpretive rangers	Food items available seasonally at temporary facility; seating at picnic tables	Souvenirs, convenience items at temporary facility	Temporary facilities must be relocated; recreation fields
•Monument Lodge	4	6	0	Stone benches and wall	Ticketing, interpretive rangers Exhibits	None	Bookstore	Passport to Your National Parks© stamping location
•Survey Lodge	0	0	2		Information desk, interpretive rangers	None	None	Difficult to find; Passport to Your National Parks© stamping location
•Sylvan Theater	4	4	0	No	None	None	None	Performance space
World War II Memorial	4	6	1	Stone seating	Information, programs, computers, wheelchairs	None	None	Passport to Your National Parks© stamping location
Constitution Gardens	4	4	0	Stone-walled terraces	None	1 seasonal refreshment stand; limited bench seating	Limited souvenirs, convenience items at refreshment stand	Restroom outdated
Vietnam Veterans Memorial	0	0	0	None near wall; benches	Information station northeast of Lincoln Memorial; programs, wheelchair	None	None	
Lincoln Memorial	7	8	0	None in memorial Memorial steps used for seating Benches along elm walks	Exhibit area in memorial, interpretive rangers, programs	2 year-round refreshment stands, with large outdoor seating areas	Bookstore; souvenirs, convenience items at north and south refreshment stands	Passport to Your National Parks© stamping location
Korean War Veterans Memorial	0	0	0	Stone seating	Information, interpretive rangers, programs, wheelchair	None	None	
D.C. War Memorial	0	0	0	No	Bandstand; no utilities	None	None	
Ash Woods	4	4	0	None	None	None	None	Recreation fields
Tidal Basin	0	0	0	None	Seasonal	1 seasonal refreshment stand; limited bench seating		Paddleboat rental facility
Franklin Delano Roosevelt Memorial	12	11	0	Stone seating	Information, interpretive rangers, programs, wheelchair	None	Bookstore, souvenirs	
West Potomac Park Riverfront	0	0	0	Limited	None	None	None	Recreation fields
George Mason Memorial	0	0	0	Stone seating	None	None	None	

Area	Public Restrooms			Seating	Visitor Services / Information	Food Service	Bookstore / Retail Sales	Notes
	Men's Toilets/ Urinals	Women's Toilets	Family/ Assisted Companion					
Thomas Jefferson Memorial	6	9	1	Memorial steps used for seating	Exhibit area in memorial, information, interpretive rangers, programs, wheelchair	1 year-round refreshment stand; limited bench seating	Bookstore; souvenirs, convenience items	Refreshment stand difficult to find
Total	**45**	**52**	**4**			**10 refreshment stands, 6 with outdoor tables, 4 with nearby benches; no indoor seating**		

NOTE: All NPS locations have wheelchair accessible restrooms.

TABLE 23: PUBLIC FACILITIES ADJACENT TO THE NATIONAL MALL

Facility and Location	Restrooms				Visitor Services	Public Food Service — Seating Capacity	Retail Sales	Notes
	Men's Toilets/ Urinals	Women's Toilets	Wheelchair Accessible	Family/ Assisted Companion				
Bureau of Engraving & Printing, 14th and C St., SW	4	4	8	0			Educational items, souvenirs, convenience items,	Only open during public tours.
Capitol Visitor Center, East Plaza	8	8		10	Information desk, exhibit halls, programs, tours, films	Dining facility – 550 seats	Two gift shops, site-specific items	Opened Dec. 2, 2008
National Archives Building, 700 Pennsylvania Ave. NW (Rotunda on Constitution Ave.)	37	29		0	Wheelchairs, public lockers, coatrooms	Café/food court — 56 seats	Site-specific items, educational items, convenience items, souvenirs	
National Gallery of Art, 6th St. and Constitution Ave., NW	51	40	22	4	Wheelchairs, strollers, coatrooms	Café/food court — 619 seats Restaurant — 135 seats Outdoor café/ seating areas — 136 seats Seasonal outdoor carts (drinks, ice cream)	Site-specific Items, educational Items	Rental audio tours/ downloads available
Smithsonian Institution								
•Castle, 1000 Jefferson Dr. SW	4	4	2	0		Café/food court — 48 seats Outdoor café/ Seating Areas — 60 seats Seasonal outdoor carts (drinks, ice cream)	Site-specific Items, educational items, souvenirs	
•Freer Gallery of Art, Jefferson Dr. and 12th Street, SW •Arthur M. Sackler Gallery, 1050 Independence Ave., SW	16	5	1	1	Wheelchairs, public lockers, coatrooms	NA	Site-specific Items, educational Items, souvenirs	
•Hirshhorn Museum and Sculpture	3	5	4	2	Wheelchairs, public lockers, coatrooms	Seasonal outdoor carts (drinks, ice cream, popcorn, other)	Site-specific items, educational items,	

Facility and Location	Restrooms				Visitor Services	Public Food Service — Seating Capacity	Retail Sales	Notes
	Men's Toilets/ Urinals	Women's Toilets	Wheel-chair Accessible	Family/ Assisted Companion				
Garden, 7th St. and Independence Ave., SW							convenience items, souvenirs	
•National Air and Space Museum, 6th St. and Independence Ave., SW	32	44	12	2	Wheelchairs	Café/food court — 900 seats Restaurant — 100 seats Outdoor café/ seating area — 35 seats Seasonal outdoor carts (drinks, ice cream, popcorn, other)	Site-specific items, educational items, convenience items, souvenirs	
•National Museum of American History, 14th St. and Constitution Ave., NW	28	26	54	0	Wheelchairs, strollers, public lockers	Café/food court — 450 seats Restaurant — 100 seats Seasonal outdoor carts (drinks, ice cream, popcorn, other)	Site-specific items, educational items, convenience items, souvenirs	
•National Museum of Natural History, 10th St. and Constitution Ave., NW	56	55	1	1	Wheelchairs, public lockers, coatrooms	Café/food court — 100 seats Restaurant — 500 seats Year-round outdoor carts (drinks, ice cream, popcorn)	Site-specific items, educational items, convenience items, souvenirs	Rental audio tours/ downloads available
•National Museum of the American Indian, 4th St. and Independence Ave., SW	31	49	18	4	Wheelchairs, strollers	Café/food court — 360 seats	Site-specific items, educational items, souvenirs	
•National Museum of African Art, 950 Independence Ave., SW	26	16	7	2	Wheelchairs, public lockers	NA	Site-specific items, educational items, souvenirs	
U.S. Holocaust Memorial Museum, 100 Raoul Wallenberg Pl., SW	22	22	10	2	Wheelchairs, coatrooms	Café/food court — 80 seats	Site-specific items, educational items, souvenirs	
Total	**318**	**307**	**129**	**745**		**Cafés/food courts — 1,303** **Restaurants — 1,345** **Outdoor cafés — 136** **Outdoor carts — 5 locations** **Total food service seating — 2,794**		

NOTE: All Smithsonian Institution museums, the National Gallery of Art, and the U.S. Holocaust Memorial Museum are generally open to the public everyday and have security checkpoints.

Food Service

There are 10 permanent refreshment stands on the National Mall that offer snacks, sandwiches, and salads. They are supplemented by seasonal pushcarts that are used primarily to sell drinks and ice cream. During events, particularly those on the Mall, these stands may provide additional food service to meet demand. However, for a very large event, such as the 2009 inauguration, food service was increased at temporary facilities throughout the National Mall. Public comments indicate desires for more food choices and support for restaurant-type facilities.

Retail

Most refreshment stands offer souvenirs and retail items related to National Mall destina-

tions. Retail locations stock convenience items such as batteries, aspirin, film, and rain ponchos. Bookstores are provided at several memorials and offer thematic educational materials.

Trash/Recycling Containers

Trash containers have been replaced in recent years with metal containers, similar to those used throughout the city. In a few locations the former container types (wood, wire basket, plastic, metal, and concrete) may remain. Custom-designed trash containers are used at the Thomas Jefferson Memorial (marble) and Franklin Delano Roosevelt Memorial (granite). Some recycling containers were part of an early recycling program in the 1990s.

Most trash containers do not have lids, so squirrels and birds scavenging for food may spread trash around the immediate area. Trash containers near tour bus drop-offs and pickups frequently overflow when bus passengers and operators deposit large amounts of trash. Public comments indicate that visitors expect the National Mall to be clean, and for the National Park Service to be a leader in recycling practices.

Lighting

The night lighting of memorials and water features creates a special nighttime ambience at the National Mall that is more intimate or evocative. Light fixtures in some areas contribute to the historical character of the National Mall, but the lack of lighting in areas such as the Tidal Basin makes some visitors uncomfortable.

Facilities in Specific Areas

Union Square

No facilities are provided at Union Square.

The Mall

The National Park Service has authorized four small refreshment stands and a visitor contact station; however, no public restrooms are provided. Benches facing north and south line the east-west walkways, but they are not oriented to take advantage of views and vistas toward the important monuments, memorials, or major buildings. Light fixtures have been designed specifically for the Mall, but the distance between fixtures creates intervening dark areas. Visitors have said that this makes them feel uncomfortable because they cannot clearly see their surroundings or other people.

Washington Monument

Monument Lodge has restrooms, a ticket window, and a bookstore. Survey Lodge has an information desk and two public restrooms. There are 26 parking spaces nearby for government vehicles and staff parking; no public parking is available.

Food and retail services have been provided for years in a temporary facility north of Madison Drive between 14th and 15th streets. This facility, while unattractive, is popular and serves visitor needs. It must be relocated to allow for the construction of the National Museum of African American History and Culture.

World War II Memorial

There is a nearby restroom, a staffed information station, and parking and access for people with disabilities at the World War II Memorial. There are frequent complaints about insufficient parking. Tour bus access is provided on Constitution Avenue and along Homefront Drive. Wheelchairs are available for visitors to use.

Constitution Gardens

Outdated facilities (restrooms and a refreshment stand) are located on the west end of the lake at Constitution Gardens. A series of stone-walled terraces on the east end of the lake were planned to provide outdoor seating for a restaurant that was not built.

Vietnam Veterans Memorial

There is an information station. Rangers are available to answer questions and give talks from 8 a.m. to midnight. A wheelchair is available.

Lincoln Memorial

The Lincoln Memorial has a bookstore, exhibit area, and two small restrooms. Ramps and an elevator make it accessible to people with disabilities.

Two refreshment stands (one to the north and one to the south of the memorial) offer both food and retail services. They are currently the largest visitor facilities on the National Mall; however, neither has public restrooms. Both have large outdoor seating areas.

Staffed visitor contact stations are located diagonally from the steps, toward the Korean War Veterans and Vietnam Veterans memorials, and information is generally geared toward those memorials.

Korean War Veterans Memorial

There is an information station at the Korean War Veterans Memorial, with educational materials and computer databases. Rangers are available to answer questions and give talks from 8 a.m. to midnight. A wheelchair is available.

Tidal Basin

Visitors enjoy the picturesque, shaded path around the Tidal Basin. The asphalt walkway is 8–10 feet wide. West of the Thomas Jefferson Memorial the walkway was frequently under water due to sinking seawalls; this walkway has been replace by a walk farther from the basin. These walkways are often inadequate to handle current pedestrian volumes, resulting in people walking on tree roots where there is no post-and-chain fencing to control access.

Three bridges around the Tidal Basin — Kutz, Inlet, and Outlet bridges — are too narrow to accommodate both pedestrians, visitors with strollers, and bicycles.

A small seasonal refreshment stand and paddle-boat rental facilities are located near the Tidal Basin parking area on the east side of the basin, but there are no restrooms.

Franklin Delano Roosevelt Memorial

Rangers are on duty to answer questions. An information area and bookstore at the north entrance are open daily. Restrooms are available near the north and south entrances. No food service is available, but wheelchairs are available.

West Potomac Park Riverfront

Dry-laid stone seawalls south of Arlington Memorial Bridge, constructed in the 1880s, have deteriorated, and the river edge is stabilized by rip-rap. This area contains highly used recreation fields.

George Mason Memorial

There are no visitor services. Public parking is available nearby, and the tour bus drop-off is at the Thomas Jefferson Memorial.

Thomas Jefferson Memorial

A bookstore, retail space, exhibits, and restrooms are located inside the memorial, and it is accessible by elevator. A wheelchair is available. An older, small, outdated refreshment stand is located on the access road, where many visitors may not find it. The stand is near the visitor transit stop and tour bus drop-off/pickup areas, and there is limited bench seating. There are no other nearby restrooms, but a wheelchair is available.

Adequacy of Visitor Services and Amenities

A 2007 analysis of public scoping comments for this planning project showed that visitors to the National Mall wanted improved services and higher quality of the landscape (NPS 2007d). Based on close to 3,000 comments from the general public, 6 categories and 18 associated themes of needs were identified (see Table 24). The public comment analysis showed a clear desire for increased services, such as bathroom access, information, transportation, walkway improvements, and food access, as well as a significant need for greenspace improvements.

In the 2008 visitor study respondents were asked to indicate, from a list of options, the desired services and activities they would like to have available on a future visit to the National Mall. Table 25 shows the frequency of responses (from 644 respondents) in the order that services and activities were desired.

TABLE 24: VISITOR NEEDS FOR SERVICES AND AMENITIES IDENTIFIED DURING PUBLIC SCOPING

Grouping/Theme	Count	Percentage
I. Facilities	**909**	**31.33**
1. Bathrooms*	275	9.48
2. Monuments / Memorials	212	7.31
3. Walkways	153	5.27
4. Furniture	133	4.58
5. Water	75	2.58
6. Lighting	33	1.14
7. Museums	28	0.97
II. Services	**731**	**25.20**
8. Information*	294	10.13
9. Transportation*	261	9.00
10. Food*	163	5.62
11. Retail	13	0.45
III. Landscape	**505**	**17.41**
12. Greenspace*	460	15.86
13. Sustainable Practices	45	1.55
IV. Activities	**333**	**11.48**
14. Events	196	6.76
15. Recreation	114	3.93
16. Entertainment	23	0.79
V. Vision	**328**	**11.31**
17. Purpose of National Mall	328	11.31
VI. Regulation	**95**	**3.27**
18. Safety and Security	95	3.27
Total	**2,901**	**100.00**

SOURCE: NPS 2007d.
* Area where needed improvements were noted.

TABLE 25: DESIRED SERVICES AND ACTIVITIES FOR FUTURE VISITS

Service / Activity	Frequency Indicating Interest	Percentage Indicating Interest
Roving Rangers Available to Answer Questions	371	61.3
Self-guided Audio Tours	315	51.9
Historian/Expert Lecture/Talks	248	40.8
Ranger Talks/Programs	240	39.6
Living History Programs and Dramatic Presentations (people in costumes)	190	31.5
Outdoor Exhibits	183	30.1
Indoor Exhibits	141	23.2
Interactive Exhibits (displays on computers/PDAs, etc.)	130	21.4
Special Events	110	18.2
Movies/Films	108	17.8
Children's Programs	96	15.9
Recreation Rentals (e.g., boats)	75	12.3
Other	69	11.5

SOURCE: NPS 2009.
NOTE: Sample size = 644,

The results were also analyzed to determine if there were any statistically significant differences in desired services / activities when comparing day-trippers and overnight guests (see Table 26), where day-trippers stayed in the area less than 24 hours and overnight guests stayed 24 hours or more. Analyses were also conducted to see if there were any differences when comparing local visitors and nonlocal visitors (see Table 27). Locals are defined as those living in Washington, D.C.; Charles, Montgomery, and Prince George's counties, Maryland; and Arlington, Fairfax, Loudoun, and Prince William counties, Virginia, as well as the independent cities adjacent to these areas.

TABLE 26: DESIRED SERVICES / ACTIVITIES FOR FUTURE VISITS — DAY-TRIPPERS COMPARED TO OVERNIGHT GUESTS

Service /Activity	Percentage of Day-Trippers Indicating Interest	Percentage of Overnight Guests Indicating Interest
Roving Rangers Available to Answer Questions	60.7	61.4
Self-guided Audio Tours	47.7	52.8
Historian / Expert Lectures / Talks	38.3	41.3
Ranger Talks / Programs	35.5	40.5
Living History Programs and Dramatic Presentations	40.2	29.6
Outdoor Exhibits	32.7	29.5
Indoor Exhibits	26.2	22.6
Interactive Exhibits	20.6	21.6
Special Events	20.6	17.7
Movies / Films	19.6	17.4
Children's Programs	22.4	14.5
Recreation Rentals	14.0	12.0

SOURCE: NPS 2009.
NOTE: Sample size: day-trippers = 112, overnight guests = 482.

TABLE 27: DESIRED SERVICES / ACTIVITIES FOR FUTURE VISITS — LOCALS COMPARED TO NONLOCAL VISITORS

Service /Activity	Percentage of Locals Indicating Interest	Percentage of Nonlocals Indicating Interest
Roving Rangers Available to Answer Questions	55.7	61.9
Self-guided Audio Tours	45.5	52.7
Historian / Expert Lectures / Talks	51.1	39.9
Ranger Talks / Programs	46.6	38.4
Living History Programs and Dramatic Presentations	34.1	31.4
Outdoor Exhibits*	42.0	27.1
Indoor Exhibits*	34.1	20.6
Interactive Exhibits*	30.7	19.2
Movies / Films	22.7	16.9
Special Events*	31.8	15.1
Children's Programs*	28.4	13.9
Recreation Rentals*	23.9	10.7

SOURCE: NPS 2009.
Sample size: local visitors = 90, nonlocal visitors = 525.
* Indicates a statistical difference when comparing the two groups.

When comparing day-trippers and overnight visitors, the only statistically significant difference was that day-trippers were more interested in living history programs and dramatic presentations for future visits than overnight guests.

When comparing local and nonlocal visitors, the desire for six services / activities was statistically different, including interactive exhibits, recreation equipment rentals, indoor exhibits and outdoor exhibits, children's programs, and special events. In all cases locals were more interested in these services and activities than nonlocal visitors. Because the average number of visits to the National Mall is radically different when comparing the two groups (18.3 visits for locals versus 1.1 visits for nonlocals), it is not surprising that locals would want more specialized services / activities, while nonlocals would be more likely to be content with current activities.

HEALTH AND SAFETY

Security

Perimeter security work remains to be completed at the Lincoln and Thomas Jefferson memorials. Lighting along streets, walks, and at crosswalks helps visitors safely find their way during the evening. Light fixtures are provided in many areas of the National Mall, generally along walks on the Mall, near memorials, and within Constitution Gardens. Temporary lighting has been provided along the elm walks north and south of the Lincoln Reflecting Pool. There is no pedestrian lighting around the Tidal Basin.

Public comments indicate that some areas, such as the Mall and the Tidal Basin, are too dark. On the Mall light fixtures are spaced too far apart, leaving darker areas between pools of light. This situation causes many visitors to feel uncomfortable because they cannot see walkway surface conditions or other people in the area.

Access for People with Disabilities and the Elderly

Free wheelchairs are available in several areas; however, they cannot be taken to other sites. Some surfaces (gravel and exposed aggregate) may be difficult for people with disabilities to move on.

Other modes such as bicycles and Segway® Human Transporters (HTs) are used by some visitors unable to walk long distances or people with disabilities, even though these devices were not designed for this purpose. The policy of the National Mall and Memorial Parks is to permit the use of these devices for mobility access within all park sites where pedestrians are allowed.

Weather

Many people visit Washington, D.C., during the summer months when weather is frequently hot and humid. Temperatures during these months, particularly in July and August, can be 90°F and more and very humid. This can cause heat-related illnesses, such as headaches, dizziness, and confusion. Visitors most susceptible to heat-related illness are those with disabilities, seniors, and children. Staying cool, drinking plenty of water, and having places to rest are critical to the health of visitors. Occasionally the National Park Service uses sprinklers to help cool people. Some visitors, particularly children, do take advantage of the interactive fountains at the German-American Friendship Garden.

Both tents and fans are used in temporary event facilities during hot and humid weather to provide a cooling effect. Rain, snow, and ice can occasionally affect the experiences of people on the National Mall. Areas can be slippery, and park staff put out warning signs.

Drinking Water

More than 40 drinking fountains are dispersed throughout the National Mall. However, most function on a delay, so visitors may assume that they do not work. Bottled water is for sale at all refreshment stands and push carts, as well as at museums, and from street vendors.

Shade

The National Mall has many mature trees with branches that span sidewalks and provide large shaded areas. During the hot and humid summer, these trees provide welcome protection from the sun, and visitors enjoy sitting, picnicking, jogging, walking, resting under the trees. The health of the trees is directly tied to visitor health and safety.

SOCIOECONOMIC ENVIRONMENT

While the United States as a whole is facing a recessionary period, the business economy of the Washington, D.C., area has remained comparatively robust, with strong current and projected performance in the following sectors of the local economy: local and federal government, tourism (hotels, restaurants, arts and entertainment), retail trade, and transportation (Downtown Business Improvement District 2007). The parks managed by the National Mall and Memorial Parks are almost exclusively contained within the District of Columbia; however, tourist resources are readily accessed in counties in adjacent states. Therefore, the commercial and economic influence of park areas, while centered in Washington, D.C., extends west to Arlington County and Fairfax County in Virginia, and east to Montgomery County and Prince George's County in Maryland. The first part of this description of the socioeconomic environment focuses on Washington, D.C., and the latter part on the regional communities.

WASHINGTON, D.C., DEMOGRAPHIC CHARACTERISTICS

Population

Between 1990 and 2000 population declined by 5.7% in Washington, D.C.; however, growth slowly increased by 1.7% between 2000 and 2006 (see Table 28). In 2006 the District of Columbia had a higher percentage of female residents (53.1%) than the national percentage (50.7%).

The racial composition of the city is distinct from that of the United States as a whole. In 2006 the percentage of African-American residents was 55.4%, while the national percentage was 12.8%. The percentages for other races were lower than the national average: white residents — 34.5% in D.C., 66.4% nationally; Hispanic/Latino — 8.2% in D.C., 14.8% nationally; and Asian — 3.4% in D.C., and 4.4% nationally.

TABLE 28: POPULATION CHARACTERISTICS OF WASHINGTON, D.C.

		1990	2000	2006
Total Population		606,900	572,059	581,530
Median Age		*	34.6	35.0
Sex	Male	46.6%	47.1%	46.9%
	Female	53.4%	52.9%	53.1%
Race	Black/African-American	65.8%	60.0%	55.4%
	White	29.6%	30.8%	34.5%
	Hispanic/Latino	*	7.9%	8.2%
	Other	2.5%	3.8%	4.8%
	Asian	1.9%	2.7%	3.4%
	Two or more races	*	2.4%	1.5%
	Native American	0.2%	0.3%	0.3%
	Pacific Islander	**	0.15%	0.0%

SOURCE: U.S. Census Bureau.
*Information not determined in 1990.
**Combined with Asian in 1990.

Income

Total personal income increased by 44.2% between 1990 and 2000, and it further increased by 44.4% between 2000 and 2006. The influence of the housing market on income is evidenced by the median home value increasing by 178% from 2000 to 2006 (see Table 29). While housing values have more recently fallen dramatically in some of the outlying counties, values in the District have remained comparatively stable.

TABLE 29: INCOME CHARACTERISTICS

	1990	2000	2006
Population in Labor Force (16 and over)	606,900	298,225	320,402
Average Wage	$33,529	$52,634	$69,114
Total Personal Income	$16,024,876	$23,102,223	$33,355,583
Median Home Value	$123,900	$157,200	$437,700

SOURCE: Bureau of Economic Analysis and U.S. Census Bureau.

Employment

Major Industries by Earnings

Earnings in Washington, D.C., are driven largely by government, which accounted for two-fifths (40%) of the overall industry earnings in 2007 (see Table 30). The strong role of professional and technical services, which encompass about a fourth of District earnings, is indicative of the urban core status of the District. Tourist- and hospitality-related sectors, including contributions from industries such as retail trade; trans-

portation; arts, entertainment, and recreation; accommodation and food services; and other services have a combined influence that supports the functioning of this economic area.

TABLE 30: EARNINGS BY INDUSTRY, 2007
(in thousands of dollars)

Industry Sector	Earnings	Percentage
Forestry, Fishing and Related	$958,883	1.31
Mining	$10,352	0.01
Utilities	$282,993	0.39
Construction	$880,173	1.23
Manufacturing	$181,532	0.25
Wholesale Trade	$572,614	0.78
Retail Trade	$668,374	0.92
Transportation and Warehousing	$347,033	0.48
Information	$2,692,433	3.83
Finance and Insurance	$2,849,239	3.90
Real Estate and Rental and Leasing	$1,157,953	1.59
Professional and Technical Services	$17,398,117	23.83
Management of Companies and Enterprises	$463,576	0.64
Administrative Support / Waste Management	$2,145,826	2.94
Educational Services	$2,282,093	3.13
Health and Social Services	$3,681,552	5.04
Arts, Entertainment and Recreation	$441,151	0.60
Accommodation and Food Services	$1,799,193	2.46
Other Services, except Public Administration	$4,876,346	6.68
Government and Government Enterprises	$28,177,502	39.97
Total	**$72,997,483**	**100.00**

SOURCE: Bureau of Economic Analysis, 2007 North American Industry Classification System (NAICS) data.

Major Industries by Employment

In 2007 the Washington, D.C., economy supported over 800,000 full- and part-time positions (see Table 31), with the government sector providing almost one-third (33.6%). Various service industries, including those related to administration, education, health, lodging, food and other services, also provided about one-third of the district's positions. These employment figures support the notion that Washington, D.C., like most of the nation, has almost completely shifted away from manufacturing and agriculture to a service-based economy.

TABLE 31: EMPLOYMENT BY INDUSTRY, 2007

Industry Sector	Full- and Part-time Jobs	Percentage
Forestry, Fishing and Related	9,829	1.21
Mining	322	0.04
Utilities	2,422	0.30
Construction	15,567	1.88
Manufacturing	2,111	0.26
Wholesale Trade	5,760	0.71
Retail Trade	21,737	2.67
Transportation and Warehousing	6,901	0.85
Information	24,568	3.02
Finance and Insurance	21,478	2.64
Real Estate and Rental and Leasing	22,631	2.78
Professional and Technical Services	128,530	15.80
Management of Companies and Enterprises	1,744	0.21
Administrative Support / Waste Management	49,737	6.11
Educational Services	52,289	6.43
Health and Social Services	62,138	7.64
Arts, Entertainment and Recreation	12,075	1.48
Accommodation and Food Services	51,820	6.37
Other Services, except Public Administration	73,385	9.02
Government and Government Enterprises	248,990	36.60
Total	813,734	100.00

SOURCE: Bureau of Economic Analysis; 2007 NAICS data.

Unemployment

As shown in Table 32, unemployment rates since 2004 in Washington, D.C., have ranged from a low of 5.5% in 2007 to a high of 10.7% in 2009, substantially exceeding national percentages. Therefore, while the business economy remains strong, unemployment is high.

TABLE 32: UNEMPLOYMENT RATES

	2004	2005	2006	2007	2008	2009
District of Columbia	6.9	6.5	5.8	5.5	7.0	10.7*
Fairfax County, VA	2.7	2.5	2.2	2.1	2.8	NA
Loudoun County, VA	2.6	2.4	2.1	2.1	2.8	NA
Prince William County, VA	2.9	2.7	2.4	2.4	3.3	NA
Montgomery County, MD	3.2	3.1	2.8	2.7	3.2	NA
Prince George's County, MD	4.5	4.5	4.1	3.7	4.5	NA

SOURCE: Bureau of Labor Statistics.

* May 2009 data for District of Columbia; 2009 data not available at the county level.

Regional Communities

The Washington, D.C., metropolitan area, as previously described, encompasses the four adjacent counties —Fairfax and Arlington counties in Virginia and Montgomery and Prince George's counties in Maryland. Commuting patterns radiate beyond these counties and branch into Pennsylvania and West Virginia. Similar to other urban cores, the citizens in the regional communities often reap the benefits of the district more so than its own residents. For example, unemployment rates in what is commonly referred to as Northern Virginia, including the city of Alexandria, Arlington County, Fairfax County, and more recently, Prince William County and Loudoun County, have held steady at around 3% for the past several years, which is roughly half of the unemployment rate in Washington, D.C. These gateway areas offer an abundance of supply resources pertaining to retail trade, accommodations, cultural resources, dining establishments, and other services.

Visitor Spending Characteristics

According to the 2008 visitor study, 96.9% of visitors spent time at monuments and memorials on the National Mall, but only 64.5% ate and drank at the restaurants and bars (and fewer still in the downtown locales based on primary destinations, see Table 33), and just 22.7% indicated shopping activity (NPS 2009e). It is important to note that all monuments and memorials on the National Mall are free of charge, so once visitors arrive, they are not paying admission fees (16 USC 6802(d)(3)(C)).

Table 33: Activities that Visitors Completed during their Visits to National Mall

Activity	Percentage Completing Activity
Visit National Mall monuments and memorials	96.9
Visit museum sites	74.6
Eating and drinking at restaurants/bars	64.5
Relaxing	72.1
Shopping	22.7
Learn/research history	22.6
Charter bus or sightseeing tour	21.6
Ranger talks/walks	14.3
Entertainment/special events	14.3
Other (results were primarily work/business)	12.2
Exercise or athletics	11.3

SOURCE: NPS 2009.

Table 34 shows the percentage of visitors to the National Mall who made purchases during their stays within Washington, D.C., or the metropolitan area (within a one-hour drive). The percentage of people staying in Washington, D.C., and making purchases was higher in every category that those making purchases within the metropolitan area. Presumably these percentages would grow under any alternative where the number and variety of services and activities would be enhanced, which would be projected to increase the average length of stay.

Table 34: Percentage of Visitors Reporting Expenditures by Category and Area

Category	Percentage of Visitors Who Made Purchases while at the National Mall and in Washington. D.C.	Percentage of Visitors Who Made Purchases outside Washington, D.C., but within the Metropolitan Area (1-hour drive)
Lodging (hotels, camping, B&B, etc.)	45.5%	36.3%
Restaurants and Bars	88.5%	52.0%
Food Stands / Refreshment Stands	71.8%	16.0%
Gas and Oil (auto, RV, boat, etc.)	25.2%	39.1%
Public Transportation (subway, bus, taxi)	65.4%	23.9%
Other Transportation Fees (rental cars, auto repairs, but NOT airfare)	14.6%	11.2%
Admissions, Recreation, and Entertainment Fees (e.g., tour guide fees, sightseeing tours, movies)	44.7%	19.8%
Other Services (e.g., barber / beauty shops, laundry)	8.8%	4.2%
Retail Purchases Related to Sites Visited (souvenirs, books, t-shirts, etc.)	59.6%	22.5%
All Other Retail Purchases Not Site-Specific (books, groceries, sporting goods, clothing, etc.)	33.1%	22.2%
Other Expenses	9.9%	4.2%

SOURCE: NPS 2009.

TABLE 35: AVERAGE PER PARTY EXPENDITURES — ALL VISITORS

Category	Average per Party Expenditures during Entire Stay in Washington, D.C.	Average per Party Expenditures during Entire Stay outside Washington, D.C., but within the Metropolitan Area (1-hour drive)
Lodging (hotels, camping, B&B, etc.)	$340.52	$181.29
Restaurants and Bars	$178.82	$93.04
Food Stands / Refreshment Stands	$27.75	$7.72
Gas and Oil (auto, RV, boat, etc.)	$13.56	$31.34
Public Transportation (subway, bus, taxi)	$28.06	$10.76
Other Transportation Fees (rental cars, auto repairs, but NOT airfare)	$22.53	$16.10
Admissions, Recreation, and Entertainment Fees (e.g., tour guide fees, sightseeing tours, movies)	$37.74	$12.61
Other Services (e.g., barber / beauty shops, laundry)	$5.94	$1.21
Retail Purchases Related to Sites Visited (souvenirs, books, t-shirts, etc.)	$52.75	$21.97
All Other Retail Purchases Not Site-Specific (books, groceries, sporting goods, clothing, etc.)	$32.86	$23.69
Other Expenses	$19.39	$2.40
Total	**$759.92**	**$402.13**

SOURCE: NPS 2009.
Note: Sample size = 644.

Table 35 summarizes average expenditures per party during their entire stay in Washington, D.C., and in the metropolitan area (within a one-hour drive). In Washington, D.C., average expenditures totaled $759.92, while average expenditures within the metropolitan area totaled $402.13. As expected, the highest expenditure category was lodging, followed by restaurants and bars. Retail purchases related to sites visited totaled $52.75 per party during the entire stay within Washington, D.C.

Per party expenditures by day-trippers, defined as people who spent less than 24 hours in the metropolitan area (with an average stay of 7.2 hours), averaged $109.28 in Washington, D.C., and $150.56 in the metropolitan area (see Table 36). The highest expenditure categories for these visitors were food service (restaurants and bars, food stands and refreshment stands) and retail purchases related to sites visited.

Per party expenditures by overnight guests (who stayed an average of 4.4 days) spent an average

TABLE 36: AVERAGE PER PARTY EXPENDITURES — DAY-TRIPPERS ONLY

Category	Average per Party Expenditures during Entire Stay in Washington, D.C.	Average per Party Expenditures during Entire Stay outside Washington, D.C., but within the Metropolitan Area (1-hour drive)
Lodging (hotels, camping, B&B, etc.)*	$4.66	$58.25
Restaurants and Bars	$32.88	$31.03
Food Stands / Refreshment Stands	$16.13	$1.62
Gas and Oil (auto, RV, boat, etc.)	$8.60	$16.08
Public Transportation (subway, bus, taxi)	$8.96	$3.84
Other Transportation Fees (rental cars, auto repairs, but NOT airfare)	$3.17	$11.82
Admissions, Recreation, and Entertainment Fees (e.g., tour guide fees, sightseeing tours, movies)	$10.17	$3.75
Other Services (e.g., barber / beauty shops, laundry)	$1.15	$0.68
Retail Purchases Related to Sites Visited (souvenirs, books, t-shirts, etc.)	$15.03	$10.91
All Other Retail Purchases Not Site-Specific (books, groceries, sporting goods, clothing, etc.)	$2.03	$12.57
Other Expenses	$6.50	$0.01
Total	**$109.28**	**$150.56**

SOURCE: NPS 2009.
Note: Sample size = 112.
* Lodging expenditures are included for day-trippers because a few may stay overnight in the city.

TABLE 37: AVERAGE PER PARTY EXPENDITURES — OVERNIGHT GUESTS ONLY

Category	Average per Party Expenditures during Entire Stay in Washington, D.C.	Average per Party Expenditures during Entire Stay outside Washington, D.C., but within the Metropolitan Area (1-hour drive)
Lodging (hotels, camping, B&B, etc.)	$422.65	$180.31
Restaurants and Bars	$214.90	$107.64
Food Stands / Refreshment Stands	$32.41	$9.67
Gas and Oil (auto, RV, boat, etc.)	$14.72	$35.28
Public Transportation (subway, bus, taxi)	$33.50	$12.25
Other Transportation Fees (rental cars, auto repairs, but NOT airfare)	$29.11	$17.98
Admissions, Recreation, and Entertainment Fees (e.g., tour guide fees, sightseeing tours, movies)	$45.92	$14.11
Other Services (e.g., barber / beauty shops, laundry)	$7.71	$1.12
Retail Purchases Related to Sites Visited (souvenirs, books, t-shirts, etc.)	$63.65	$25.78
All Other Retail Purchases Not Site-Specific (books, groceries, sporting goods, clothing, etc.)	$41.43	$24.66
Other Expenses	$24.35	$3.11
Total	**$930.35**	**$431.91**

SOURCE: NPS 2009.
NOTE: Sample size = 482.

of $930.35 in Washington, D.C., and $431.91 in the metropolitan area (see Table 37). The highest expenditure categories within Washington, D.C., were lodging, restaurants and bars, and retail purchases related to sites visited.

For day-trippers an average of $34.26 per person per day was spent in Washington, D.C., while for overnight guests an average of $94.37 was spent per person per day (with nights configured for lodging). Therefore, every 1,000 new day-trippers are estimated to bring $34,260 per day into the Washington, D.C., economy, while every 1,000 new overnight guests are estimated to bring $94,370 per day/night into the Washington, D.C., economy in direct spending. In terms of the metropolitan area (outside Washington, D.C., but within a one-hour drive), day-trippers spent an average of $47.20 per person per day, while overnight guests spent an average of $43.39 per person per day (with nights configured for lodging). Therefore, every 1,000 new day-trippers are estimated to bring $47,200 per day into the metropolitan area, while every 1,000 new overnight guests are estimated to bring $43,390 per day/night into the metropolitan area in direct spending.

Visitor expenditures by nonlocal and local residents were also analyzed. Local residents were defined as those living in Washington, D.C.; Charles, Montgomery, and Prince George's counties in Maryland; and Arlington, Fairfax, Loudoun, and Prince William counties in Virginia, as well as the independent cities adjacent to these areas.

Total expenditures on the National Mall and in Washington, D.C., by nonlocal visitors averaged about $849 per party, compared to $163 for local visitors. As would be expected, nonlocal visitors spent the most for lodging, then restaurants and bars; retail purchases related to sites visited was the third highest spending category (see Table 38). The highest expenditure category for local visitors was restaurants and bars, followed by admission, recreation, and entertainment fees (e.g., tour guide fees, sightseeing tours) and retail purchases related to sites visited (see Table 39).

Transportation-related expenditures show that nonlocal visitors within Washington, D.C., spent more on public transportation than on gas and oil or other transportation fees (such as rental cars), while parties staying outside Washington, D.C., but within a one-hour drive of the city, spent 25% more on gas and oil and other transportation fees.

Comparing transportation-related expenditures for local visitors shows higher public transportation expenditures for local visitors within Washington, D.C., than for those coming from outside the District (within a one-hour drive). Visitors coming from outside the District also spent 60% more on gas and oil than visitors within the District.

TABLE 38: AVERAGE PER PARTY EXPENDITURES — NONLOCAL VISITORS ONLY

Category	Average per Party Expenditures during Entire Stay at the National Mall and in Washington, D.C.	Average per Party Expenditures during Entire Stay outside Washington, D.C., but within the Metropolitan Area (1-hour drive)
Lodging (hotels, camping, B&B, etc.)	$387.51	$211.94
Restaurants and Bars	$195.83	$104.71
Food Stands / Refreshment Stands	$30.15	$9.28
Gas and Oil (auto, RV, boat, etc.)	$14.44	$34.34
Public Transportation (subway, bus, taxi)	$31.01	$12.51
Other Transportation Fees (rental cars, auto repairs, but NOT airfare)	$25.87	$19.29
Admissions, Recreation and Entertainment Fees (e.g., tour guide fees, sightseeing tours, movies)	$41.22	$14.20
Other Services (e.g., barber / beauty shops, laundry, etc.)	$7.01	$1.39
Retail Purchases Related to Sites Visited (souvenirs, books, t-shirts, etc.)	$58.89	$24.37
All Other Retail Purchases That Were Not Site Specific (books, groceries, sporting goods, clothing, etc.)	$34.02	$24.48
Other Expenses	$23.04	$2.12
Total	**$848.99**	**$458.63**

SOURCE: NPS 2009.
NOTE: Sample size = 525.

TABLE 39: AVERAGE PER PARTY EXPENDITURES — LOCAL VISITORS ONLY

Category	Average per Party Expenditures during Entire Stay at the National Mall and in Washington, D.C.	Average per Party Expenditures during Entire Stay outside Washington, D.C., but within the Metropolitan Area (1-hour drive)
Lodging (hotels, camping, B&B, etc.)*	$14.47	$21.21
Restaurants and Bars	$69.48	$37.46
Food Stands / Refreshment Stands	$12.48	$0.34
Gas and Oil (auto, RV, boat, etc.)	$8.90	$15.08
Public Transportation (subway, bus, taxi)	$7.81	$2.32
Other Transportation Fees (rental cars, auto repairs, but NOT airfare)	$3.29	$1.02
Admissions, Recreation and Entertainment Fees (e.g., tour guide fees, sightseeing tours, movies)	$19.06	$5.47
Other Services (e.g., barber / beauty shops, laundry, etc.)	$0.68	$0.45
Retail Purchases Related to Sites Visited (souvenirs, books, t-shirts, etc.)	$15.10	$8.18
All Other Retail Purchases That Were Not Site Specific (books, groceries, sporting goods, clothing, etc.)	$9.80	$16.25
Other Expenses	$1.81	$3.92
Total	**$162.88**	**$111.70**

SOURCE: NPS 2009.
NOTE: Sample size = 90.
* Lodging expenditures are included for locals because while locals live in the area, they could have guests in town and all could choose to stay overnight in a D.C. hotel.

PARK OPERATIONS

The National Mall and Memorial Parks (NAMA) has a staff of around 330 people, who are organized in five divisions — park programs, administration, resource management, maintenance, and interpretation and education — and the superintendent's office. In addition to caring for the National Mall's historic landscape and commemorative works, the National Mall and Memorial Parks operate 156 reservations, parks, circles, and triangles throughout a large area of north-central Washington, D.C. These areas include the Law Enforcement Officers Memorial, Dupont Circle, McPherson Square, and Columbus Circle, as well as Pennsylvania Avenue National Historic Site and East Potomac Park. Ford's Theatre National Historic Site, a separate national park system unit, may continue to rely on NAMA staff for some tasks. President's Park, also a separate national park system unit, also relies on NAMA staff, primarily for special events and maintenance.

PARK ORGANIZATION

The Office of the Superintendent provides management and planning leadership. The office has six to nine employees, including the superintendent, two deputy superintendents, a special assistant, a management and program analyst, and support staff. A partnership office typically has three to four staff members and deals with wide-ranging partnerships, transportation, business services, and volunteer programs. The volunteer office coordinates more than 29,000 donated hours of labor annually for activities such as painting, weeding, and river cleanup.

The Park Programs Division handles special events and demonstrations for the National Capital Region of the National Park Service. This small division of about five people processes more than 6,000 permits annually, which result in about 3,000 events, including commercial filming and recreation field use, as well as First Amendment gatherings and national celebrations, plus permits for other national park system units in Washington, D.C. Because of the limited staff, only limited onsite monitoring of events can be provided. Depending on the number of people expected to attend an event, different levels of advance planning, logistical preparation, requirements, and monitoring are necessary.

The Administration Division includes a chief and staff who address financial/budget management, human resources, communications, contracting, and computer/information technology. The division averages around 20 staff members.

The Resource Management Division includes a chief, cultural and natural resource specialists, and preservation staff who work on memorials and statues. The division ranges from 15 to 20 employees.

The Division of Maintenance recently changed its name to the Division of Facility Management. The division, which includes the East Potomac Park and the NPS Brentwood facilities, is responsible for facility maintenance, grounds and trees, roads and trails, and transportation. In 2008 this division, the largest in the park, had 177 permanent employees and 25 seasonal employees; there are an additional 20 maintenance employees for the Centennial Initiative. Over the last 12 years annual staffing in this division has averaged 248 employees, with a high of 301. The staff at park headquarters is small, consisting of a chief of maintenance, deputy, civil engineer, landscape architect, facility assessment IT specialist, facility management specialist, and an administrative assistant.

The Division's Facility Maintenance Branch includes trades and specialties such as carpentry, electrical, masonry, metal craft, painting and signs, plumbing, and special events. Staff also provide technical craft and trade support for other national park system units.

The Division of Facility Maintenance has a number of contracts to perform the following types of work:

- elevator maintenance
- heating, ventilating, and air conditioning (HVAC) maintenance

- mowing of East Potomac Park and areas north of Constitution Avenue
- catch-basin cleaning
- tree services (tree removal, stump grinding, trimming, etc.)
- security system maintenance
- maintenance of the World War II Memorial water features, including the electrical systems and pool cleaning
- pool cleaning for the U.S. Navy Memorial and Korean War Veterans Memorial
- street light maintenance (PEPCO)

The Division of Interpretation and Education provides interpretation, education, and informational programs and helps provide visitor safety as well as first-line response for medical emergencies. The division currently has 79 people, who are organized in three work shifts. Over the last 10 years the division has remained fairly constant, with an average of 80 employees and a high of 93.

OPERATIONS BACKGROUND

Operating Budget

The park's operating budget in 2006 was $29.8 million; in 2007, $30.4 million; and in 2008, $31.1 million.

Staffing Levels

The National Park Service is conducting a process known as core operations planning to align staffing with the core or essential operations that are performed in a park unit. Core activities are linked to legislative mandates, the park purpose, and significant park resources. This core operations planning process is coordinated with the foundation statement that was developed for the National Mall plan (see page 9).

Since 1996 the park staff has averaged 378 full time equivalent employees (FTEs) annually, with a high of 450 and a current near low of 330. (The park has operating increase requests for technical and trade, engineering, xxx). The greatest impact of staff reductions has been in the Maintenance Division, and contracts have been used to make-up the shortfall.

Law enforcement is provided by the United States Park Police (USPP) rather than park rangers. The Park Police are not part of the park staff, but they work closely with all national park system units in the National Capital Region.

Park Asset Management Planning

All national park system units are required by NPS *Management Policies 2006* to have a program of preventive and rehabilitative maintenance and preservation (NPS 2006e, sec. 9.1.4.1). For the last few years national park system units have been converting to new computer databases for tracking park facilities, which are referred to as assets. The asset management process is being used to identify current assets, their condition and management priority, and deferred maintenance needs throughout the national park system. The data are then used to identify projects that will be submitted for implementation funding.

As previously described, the National Mall and Memorial Parks (NAMA) is the managing entity for the National Mall. According to its "Park Asset Management Plan," the National Mall and Memorial Parks maintain 311 assets valued at $2.1 billion, with $508 million of deferred maintenance. New memorials that will be managed by the National Mall and Memorial Parks include the Martin Luther King, Jr. Memorial and the Vietnam Veterans Memorial Center, both of which will be on the National Mall, and the Americans Disabled for Life Memorial and the Dwight D. Eisenhower Memorial, which will be adjacent to the National Mall.

On the National Mall there are 126 separate assets distributed throughout the following areas — the Mall, Washington Monument, World War II Memorial, Constitution Gardens, Vietnam Veterans Memorial, Lincoln Memorial, Korean War Veterans Memorial, Franklin Delano Roosevelt Memorial, and Thomas Jefferson Memorial. Assets on the National Mall account for more than three-quarters of the total park current replacement value for the National Mall and Memorial Parks, but deferred maintenance amounts to 93.7% of the total. Table 40 shows assets as of December 2008 for the National Mall and Memorial Parks.

TABLE 40: NAMA PARK ASSET MANAGEMENT PLAN (DECEMBER 2008)

	Assets	Total Deferred Maintenance	Current Replacement Value	Facility Condition Index
NAMA Total	311	$508.1 million	$2.1 billion	0.24
National Mall	126	$475.9 million	$1.7 billion	0.25
Percentage of Total	40.5%	93.7%	78.5%	NA

NOTES: The facility condition index is calculated by dividing the deferred maintenance by the current replacement value. This index is used by facility managers to better understand the relative condition of park assets. The closer the score is to zero, the better the condition of the asset.

Deferred maintenance shows the total before projects were funded by the American Recovery and Reinvestment Act of 2009.

Nearly 60% of the assets managed by the National Mall and Memorial Parks were built before 1960. Construction occurred in waves (e.g., pre-1901, 1910s, and 1970s), indicating that component renewal needs will follow a similar pattern in future years.

In 2008 the National Park Service examined the deferred maintenance and capital improvement requirements for the National Mall and ensured that these deficiencies and needs were captured in projects in the project management information system (PMIS). For the National Mall the deferred maintenance backlog totaled $476 million, and capital improvement needs totaled $122 million. Additional capital improvement needs are identified in the alternatives.

A substantial portion of the deferred maintenance need is attributed to the repair and rehabilitation of seawalls, including the West Potomac Park seawall (south of Arlington Memorial Bridge), the Tidal Basin seawall, and the East Potomac Park seawall (outside the National Mall). Emergency repairs to address settlement at the Thomas Jefferson Memorial plaza seawall are currently funded. These projects added up to $419.5 million in total NAMA project costs.

Identified capital improvement projects, before completion of the National Mall plan include installation of a vehicle barrier system around the Jefferson Memorial ($16.2 million) and enhanced and improved visitor screening at the Washington Monument ($5.1 million).

Operations and Maintenance and Deferred Maintenance

Operations and maintenance (O&M) benchmarks, which are based on standardized industry data, are used to help the National Park Service fully account for and address maintenance needs or deferred maintenance. Proper maintenance of any asset requires a mix of operational, recurring, and preventive maintenance. A standardized plan is similar to a manufacturer's recommended guidelines and might include:

- ***operational activities*** — trash removal, mowing, basic utility costs, etc.
- ***recurring maintenance*** — regularly scheduled repairs such as exterior painting, fence repair, road patching or re-grading, and masonry repointing
- ***preventive maintenance*** — tasks undertaken at least once a year and including activities, such as visual inspecting assets, water quality testing, replacing filters, lubrication of equipment
- ***corrective maintenance*** — unplanned or unscheduled maintenance accomplished by shifting resources from other areas

TABLE 41: DIFFERENCE BETWEEN ANNUAL MAINTENANCE REQUIREMENTS AND BUDGETS, NATIONAL MALL AND MEMORIAL PARKS

Asset	Requirement	Budget	Difference	Percent Funded
Road Assets*	$833,513	$250,619	($582,894)	30%
Maintained Landscapes	$4,732,278	$1,817,619	($2,914,659)	38%
Buildings**	$11,353,514	$4,651,790	($6,701,724)	41%
Waterfront Assets	$644,605	$140,793	($503,812)	22%
Unique Assets	$7,411,667	$6,363,934	($1,047,733)	86%
Other***	$737,681	$641,028	($96,653)	87%
Total	**$25,713,258**	**$13,865,783**	**($11,847,475)**	**54%**

* Includes all roads, parking areas, bridges, and one FHWA-inspected trail bridge

** Includes large monuments (e.g., Washington Monument, Lincoln Memorial, Thomas Jefferson Memorial).

*** Includes water, wastewater, and electrical systems (from World War II Memorial), IT system, fuel system, and the Sylvan Theater.

The current gap between NAMA's budget and estimated total O&M benchmark is $11.8 million per year. Table 41 characterizes parkwide asset types and funding gaps between what industry standards indicate is needed and current park budgets.

Additional Park Responsibilities and Special Demands

Since 1995 three new memorials have been built on the National Mall — the Korean War Veterans Memorial, the Franklin Delano Roosevelt Memorial, the George Mason Memorial, and the World War II Memorial. When completed, the Martin Luther King, Jr. Memorial and the Vietnam Veterans Memorial Center will be two additional park responsibilities.

The National Mall and Memorial Parks has additional responsibilities outside the National Mall that affect work load. In 1996 what was then referred to as Pennsylvania Avenue National Historic Park was transferred to park management. Additional memorials have included the African-American Civil War Memorial, the Gandhi Memorial, the Masaryk Memorial, the National Japanese American Memorial to Patriotism, and the Victims of Communism Memorial. The Dwight D. Eisenhower Memorial, which will be constructed south of the Mall, will be a future park responsibility, as will as the Veterans Disabled for Life Memorial.

The parks and facilities managed by the National Mall and Memorial Parks also complement the D.C. park system. Because of the National Mall's prominent location in the center of Washington, D.C., park staff are frequently called on to quickly undertake unscheduled or special work. As a result, scheduled and regular maintenance is often postponed. To help address this situation, in 2008 the park established a visual quality team and a response tem to quickly identify and address problems and concerns to improve the park's appearance. This approach is similar to best practices that are used at other sites where teams are used for special situations or to address special but infrequent maintenance needs.

Annual national celebrations, such as the Fourth of July and the National Cherry Blossom Festival, require significant staff time among various divisions to plan, as well as provide programs, visitor services, and maintenance. Presidential inaugural activities, formal state functions, and visits by foreign heads of state also alter or place additional demands on day-to-day park operations.

Park staff also manage or support annual events that occur outside park boundaries but still affect park operations. These include managing three annual concerts on the Capitol west lawn and providing support for the annual Lighting of the National Christmas Tree and Christmas Pathway of Peace in President's Park (support is provided for construction, special events management, and maintenance). Considerable support is provided to President's Park because that park has limited maintenance resources. The NAMA Division of Facility Management provides a variety of support services, including special events, tree work, plumbing, electrical, paint, sign, masonry, carpentry, and metal work.

ENERGY AND WATER USE

National Mall and Memorial Parks

The National Park Service completed a required initial energy and water audit in July 2009. Each unit of the more than 390 units of the national park system was included. Audit findings will be used to develop energy conservation measures to meet NPS and federal goals for reduced energy and water use. The National Park Service requires sustainable, energy-efficient facilities, and new facilities must meet the LEED silver standard (NPS 2006e, sec. 9.1.1.6). The NPS *Management Policies 2006* also require that water be used efficiently and sustainably (NPS 2006e, sec. 9.1.5.1).

According to the July 2009 audit, the National Mall and Memorial Parks was first throughout the national park system for energy and water use. As previously described, the National Mall and Memorial Parks is larger than the focus of this planning effort, which focuses only on the National Mall. The ranking is for all park areas managed by the National Mall and Memorial Parks, which includes the National Capital Regional Office, park headquarters, two maintenance yard areas, and a visitor transportation bus facility, as well as numerous small parks

throughout central Washington, D.C., some with designed water features.

NPS facilities in Washington, D.C., are generally older, and many use energy and water inefficiently because of out-of-date systems. Power requirements in buildings have increased with computer use, lighting systems may need to be updated, and heating, ventilation and air conditioning (HVAC) systems replaced.

National Mall

Energy Use

Energy consumption on the National Mall is largely due to lighting systems, water feature pump operations, and HVAC systems, as well as small-scale visitor and park facilities, several with elevator systems. Two visitor facilities constructed in 2006-7 north and south of the Lincoln Memorial have been designed to be energy efficient and sustainable. These facilities use a closed-loop geothermal system in their cooling and ice-making operations, reducing energy consumption, improving air quality, and saving millions of gallons of water.

The largest energy use on the National Mall is from lighting streets, memorial areas, and walkways. The lighting of the Lincoln Memorial, the Washington Monument, and the Thomas Jefferson Memorial on the National Mall, along with the U.S. Capitol and the White House, establish the nighttime character of the monumental core in Washington, D.C. In addition to memorial lighting, there are over 20,000 light fixtures throughout the National Mall, including street lights, pedestrian pole lights, in-ground lights, wall-mounted lights, bollard lights, spotlights, landscape lights, and underwater lights in water features.

Street lights generally use metal halide lighting; compact fluorescent lights are being used where feasible; and the park is experimenting with LED lights. Some types of light systems have not proven suitable for outdoor locations. Park rangers and the U.S. Park Police report lighting outages. The park stocks a wide variety of replacement parts and bulbs because of different fixtures and requirements.

Water Use

The high level of water use is primarily the result of designed water features, which use potable water; other uses such as irrigation, restrooms, and drinking fountains make a smaller contribution. Designed water features on the National Mall include the Lincoln and Capitol reflecting pools, Constitution Gardens Lake, the World War II Memorial, the Franklin Delano Roosevelt Memorial, the Korean War Veterans Memorial, the George Mason Memorial, and the John Paul Jones Memorial. Between 100 million and 110 million gallons of water are used annually in just three designed water features — Constitution Gardens Lake, the Capitol Reflecting Pool and the Lincoln Reflecting Pool (see discussion of water resources under “Natural Resources”). Water features on the National Mall are subject to evaporation and leakage, and they need to be emptied, cleaned, and refilled, generally twice a year. With the exception of the reflecting pools and lake, most water features are winterized and drained. Permanent irrigation systems are supplemented occasionally by temporary irrigation when needed. The park has successfully used nonpotable Potomac River water for irrigation, and the low saline levels have not adversely affected plant materials.

General Maintenance

Written grounds maintenance standards for the National Mall are out of date and do not address issues related to facilities, buildings, or memorials. Based on the best practices information collected during this planning effort, the park has four projects at the World War II Memorial, the Lincoln Memorial, the Korean War Veterans Memorial, and the Vietnam Veterans Memorial to explore implementing more comprehensive operations and maintenance standards.

Signs

There are more than 400 visitor signs within the National Mall (not including road signs). Signs are not coordinated or consistent, resulting in confusing information for visitors and sign clutter. More than 40% of the signs (185) regulate activities to protect the visitor experience or provide necessary warnings. New, coordinated regulatory and operational signs are included in

a 2008 Centennial Project for improved signs. The National Park Service requires a sign plan that reflects the character of the park and meets servicewide standards for consistency (NPS 2006e, sec. 9.3.1.1).

Sites and Facilities

Many National Mall facilities such as restrooms, paving, and Tidal Basin seawalls, have exceeded their life expectancies. Also, they were built to accommodate far fewer visitors than the park currently serves. Facilities were not designed to withstand vandalism, so doors to some restrooms have been repeatedly damaged. Ease of maintenance and ergonomic designs were not considered, so floor-mounted toilets are more difficult to clean around. Circulation routes do not provide operational access in all locations; for example, Constitution Gardens does not have operational access for maintenance or delivery vehicles. Around the Tidal Basin, walks are too narrow to accommodate the electric carts used by park rangers.

Special Events

Frequent special events and associated high levels of use result in wear and tear on park facilities and infrastructure that is difficult to immediately address, resulting in negative public comments about the appearance of the National Mall. During major events like the Fourth of July, staff work overtime through the night to remove more than 30 tons of trash by the next morning, and during some events contract staff supplement park staff.

Vehicle routes are identified for heavy delivery trucks for special events, but due to insufficient staffing, special events are not consistently monitored for compliance. Vehicles of all kinds park on turf areas and contribute to soil compaction.

The installation of large amounts of temporary fencing for presidential inaugural activities, the Fourth of July celebration, and some First Amendment demonstrations is a time-consuming activity that reduces time spent on other maintenance activities. Complaints have been received about the use of snow fencing, and the park has been trying different products.

Waste Management and Recycling

The Division of Facility Management now operates on two work shifts (6 a.m.–3 p.m., and 1:30 p.m. to 10 p.m.) to better align with hours of visitation. Currently, waste containers are emptied throughout the day and problems are addressed in a timely fashion, thus improving conditions for visitors.

Repeated frequent cleanings at memorials can adversely affect these resources, and park regulations prohibit food and drinks within memorials to protect them from damage, stains, spills, and difficult-to-remove gum.

There are between 650 and 700 trash receptacles within the National Mall, and the park has been consolidating styles as it replaced more 555 on the National Mall in the last year. The park empties trash containers by hand, and lifting heavy trash bags from containers may result in staff injuries. The mechanized emptying of trash requires side-loading trash containers and modified trucks for lifting and dumping.

A recycling program conducted by a corporate donor in the early 1990s was successful because the donor paid to have the trash removed and the different types of recyclables sorted. Since then, recyclable materials have been frequently mixed with trash, which is not acceptable to recycling centers. The National Park Service, the Trust for the National Mall, the Environmental Protection Agency, and others have been working on a number of recycling programs as well as solid waste (garbage) management studies and recommendations.

Today lightweight plastic bottles have replaced glass as the most common drink containers. Currently well over 90% of drink containers are plastic, and around 40% of trash is comprised of food packaging. While glass breakage is no longer a major concern, a large amount of plastic containers blow around, spill out of trash containers, and float in water features. Solid waste and recycling containers are not concentrated near areas where trash is generated (such as food service facilities), so litter is not confined to specific areas. NPS *Management Policies 2006* support solid waste management practices to reduce trash and to encourage reuse and recycling (NPS 2006e, sec. 9.1.6.1).

The National Park Service has recently signed a contract with Urban Service Systems Corporation for transfer station waste disposal. The company is advertised as a "Going Green" company that collects solid waste, which is then burned to generate up to 23 megawatts of electricity and sold to Dominion Virginia Power Company. Contracts for single-stream recycling, florescent bulb recycling, and composting of food waste are being studied to further improve recycling efforts.

Communication Infrastructure

There is no comprehensive communication infrastructure on the National Mall. Temporary telephones and communications are provided as needed for events. Mass notification is undertaken by police and park rangers through personal contact, announcements on stages, bullhorns, and electronic message signs. These means are also used to provide directions during events like the Fourth of July celebration. Mass communication and fiber optic lines run near the National Mall boundaries.

Partnership, Business, and Jurisdictional Issues

Partnerships

Partnerships are vital to the operation, preservation, and enjoyment of the National Mall. Partnership agreements detail the requirements, limits, and extent of the activities. Partnership activities must not (1) violate legal or ethical standards, (2) reflect adversely on the NPS mission or image, or (3) imply an unwillingness to perform an inherently governmental function.

As of fall 2006 the park's partnership office has 23 written agreements on a range of subjects. The Trust for the National Mall is the authorized NPS fundraising partner, and Eastern National is the cooperating association that operates bookstores. There are partner groups for specific memorials, such as the Washington Monument, the World War II Memorial, the Korean War Veterans Memorial, and the Vietnam Veterans Memorial. There are also partner groups for certain activities, such as the National Cherry Blossom Festival.

Public and other activities and programs such as Fourth of July celebrations, inaugural activities, the Smithsonian Folklife Festival, and the National Cherry Blossom Festival involve facilities and locations under multiple jurisdictions. The Smithsonian Institution and the National Park Service co-sponsor the Folklife Festival on the Mall each summer. The National Park Service also works with the Architect of the Capitol on annual concerts and support for state events.

The National Park Service has consultation partnerships with the Commission of Fine Arts, the National Capital Planning Commission, the D.C. Historic Preservation Office, the Advisory Council on Historic Preservation, the Interagency Workgroup for the Mall, and the American Battle Monuments Commission.

Under a memorandum of agreement with the D.C. government, the city issues permits for the use of some athletic fields on the National Mall.

The U.S. Park Police have primary law enforcement jurisdiction on the National Mall, but also work with the U.S. Capitol Police, U.S. Secret Service, D.C. Metropolitan Police, and others to provide safety and security within the area.

Lawn care services and irrigation improvements at the Vietnam Veterans Memorial have been funded by the Vietnam Veterans Memorial Fund, as an extension of their ongoing preservation work at the memorial. Overall, the Memorial Fund's efforts will improve approximately 13.5 acres on the National Mall, including the knoll east of the memorial. The Memorial Fund has been a partner with the National Park Service in memorial preservation from the beginning, taking an active role in the physical needs of the wall, *The Three Serviceman* statue and flagpole, and the rest of the memorial site. Services routinely provided by include insurance of the wall against damages, provision of copies of the names directory to assist visitors, and wall maintenance. The Memorial Fund also adds names to the wall and makes status changes for those whose remains have been returned home.

Volunteers-in-Parks

Volunteers-in-Parks supplement NPS staff in many areas managed by the National Mall and Memorial Parks. While the statistics for 2009 are

TABLE 42: VOLUNTEER HOURS, OCTOBER 2008–JULY 2009

2008 Volunteer Category	2008 Volunteer Hours
Cultural Resource Management	1,503
Interpretation	13,969
Maintenance	12,251
Natural Resource Management	662
Protection/Operations/Law Enforcement/Public Health	2,159
Training	130
Total Hours	**30,674**
Number of Volunteers	3,265
Value of Volunteer Hours at $20.25/hour	$621,148
Program Costs	$36,430

incomplete, for the 10 months of the fiscal year beginning October 2008, more than 30,000 hours of labor have been donated to the park. The National Park Service values contributions at $20.25 per hour. The volunteer contribution thus far in fiscal year 2009 is valued at over $621,000 (see Table 42).

More than half of volunteer hours fall under maintenance types of work, including staining park benches, painting post-and-chain fencing, weeding, raking and bagging leaves, pruning, picking up trash, picking up river debris, general cleanup, and summer student help in the paint and carpentry shops. Volunteers also support special events and provide a variety of services ranging from recycling to staffing first-aid facilities. Volunteers support interpretation and education by staffing information kiosks and by putting on programs at World War II Memorial, at the Vietnam Veterans Memorial, and during the National Cherry Blossom Festival.

Commercial Visitor Services

In accordance with NPS *Management Policies 2006* (sec. 10.2.2), commercial visitor services that are necessary and appropriate for visitor use and enjoyment are provided on the National Mall. Two businesses have contracts with the National Park Service to operate on the National Mall. Guest Services, Inc., (GSI) provides refreshments, gifts, and recreation equipment rentals (paddleboats). Landmark Services, Inc., operates the Tourmobile service, an interpretive visitor transportation service. Both contracts are nearing the end of their contract time periods.

Other businesses, such as taxis or pedicabs, and guided tours (walking, bicycling, sightseeing, or Segway® HTs), can operate within the National Mall in compliance with laws and federal regulations for the National Park Service. Areas of operation and stops related to these services are designated by the superintendent.

Jurisdictional Issues

Various jurisdictions overlap on the National Mall. The National Park Service and Washington, D.C., each maintain different roads within the National Mall, and city roads run through or tunnel under the park. A mix of NPS, city, federal highway, and downtown D.C. Department of Transportation signs provide information. The city has some maintenance facilities in the Watergate area, and city parking meters provide income to the city. The Washington Metropolitan Area Transit Authority (WMATA) Metrobus lines run through and stop on the National Mall, and four Metrorail (subway) lines run beneath it. An interagency working group of federal and local agencies addresses streetscape issues (Interagency Initiative for National Mall Road Improvement Program 1992).

There are some uniquely federal coordination concerns, such as the condition of the GSA steamlines that traverse the park, or the security needs of federal office and museum buildings on or adjacent to the National Mall.

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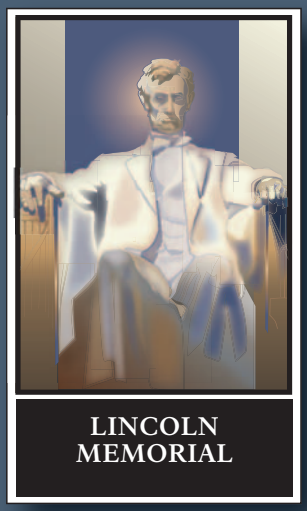
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ENVIRONMENTAL CONSEQUENCES

DRAFT
NATIONAL MALL PLAN /
ENVIRONMENTAL IMPACT STATEMENT

THE NATIONAL MALL



LINCOLN
MEMORIAL

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METHODOLOGY FOR IMPACT ANALYSIS

Impacts of the alternatives are analyzed in accordance with the guidelines of the Council on Environmental Quality (CEQ) for implementing the National Environmental Policy Act (40 CFR Part 1500) and the National Historic Preservation Act. The impact analysis for all topics is qualitative and is based on research, knowledge of park resources, and the best professional judgment of planners and resource specialists. Federal laws, regulations, and policies that have a bearing on the impact analysis are summarized for each topic. The methodology for cumulative impacts is presented below.

The impact analysis considers direct, indirect, and cumulative impacts. Direct impacts are caused by an action and occur at the same time and place as the action. Indirect impacts are caused by the action and occur later or farther away but are still reasonably foreseeable.

Impacts are also analyzed as their context, intensity, duration, and type. Context generally refers to the geographic extent of the impact (e.g., site-specific, localized, regional). Intensity is the magnitude or degree to which a resource would be affected. The impact intensity is described in terms of negligible, minor, moderate, or major, with threshold definitions for these terms presented individually for each impact topic. Statements of impact intensity assume implementation of identified mitigation measures. Impact duration refers to how long an impact would last (i.e., short- or long-term), and the type of impact refers to whether the effect would be beneficial or adverse. These terms are also defined individually under each impact topic.

Impacts of the action alternatives are determined by comparing their effects to those of the no-action alternative. Impacts of the no-action alternative are determined by comparing current impacts of continuing present management with those projected at the end of the planning period.

CUMULATIVE IMPACTS

CEQ regulations to implement the National Environmental Policy Act require the assessment of cumulative impacts in the decision-making process for federal projects. A cumulative impact is defined as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions" (40 CFR 1508.7). A cumulative impact can result from individually minor, but collectively significant actions, taking place over a period of time.

Cumulative impacts are analyzed and disclosed for all alternatives, including the no-action alternative, under each impact topic. Current projects that were discussed under "Interrelationships with Other Plans and Projects" beginning on page 42, and that are also considered in the analysis of cumulative impacts include the following:

Architect of the Capitol
- *Capitol Complex Master Plan*

District of Columbia
- *City Center Action Agenda*

National Capital Planning Commission
- *Extending the Legacy*
- *Memorials and Museums Master Plan*
- *Monumental Core Framework Plan*

National Park Service
- *Visitor Transportation Study for the National Mall and Surrounding Park Areas*
- *Comprehensive Design Plan for the White House and President's Park*
- *Design Guidelines for the White House and President's Park*

Interagency Planning Efforts
- *CapitalSpace* — District of Columbia, National Capital Planning Commission, and National Park Service
- *Planning Together for Central Washington* — Architect of the Capitol, Commission of

Fine Arts, District of Columbia, National Capital Planning Commission, and National Park Service

Because some of these cumulative actions are in the early planning or project development stages, the evaluation of cumulative effects was based on a general description of the project. Additional plans and projects are discussed below.

The locations of ongoing and proposed projects are shown on three different plan maps for NPS projects, NCPC *Monumental Core Framework Plan* opportunities, and recent and ongoing projects.

Interagency Planning Efforts

Interagency Initiative for National Mall Road Improvement Program. In 1992 the *Streetscape Manual* was developed to provide guidelines for a coordinated and consistent streetscape in the vicinity of the National Mall (Interagency Initiative for National Mall Road Improvement Program 1992). The manual identifies and provides specifications for streetscape components such as curbs, gutters, and step outs; curb cuts; bus pads; street lighting; tree planting areas, lawn curbs, and post-and-chain fencing. Updates and related issues are addressed during regularly scheduled interagency meetings. Other interagency efforts are underway to discuss signs, information, and technology.

Architect of the Capitol

United States Botanic Garden. The 7-acre Botanic Garden, which lies at the foot of the U.S. Capitol on the National Mall. The Botanic Garden is a living plant museum that demonstrates the ecological, economic, therapeutic, cultural, and aesthetic importance of plants. It includes outdoor ornamental gardens and greenhouses, including the Conservatory, Bartholdi Park, and the National Garden (which opened in October 2006).

Capitol Visitor Center. The Capitol Visitor Center opened in December 2008. Expanded space for the House and Senate will be completed later (Architect of the Capitol 2005).

Library of Congress. The library reopened renovated permanent history exhibits in 2008.

U.S. Senate Youth Park and U.S. Botanic Garden Education and Outreach Center. Future projects are envisioned for the area north of Union Square and Pennsylvania Avenue.

District of Columbia

The 14th Street Bridge Corridor. The 14th Street bridge corridor is essential in connecting the traffic systems of northern Virginia and the District of Columbia. In December 2000 the Federal Highway Administration, in cooperation with the D.C. Department of Transportation (DDOT), the National Park Service, and the Virginia Department of Transportation, initiated studies and actions to address congestion in the 14th Street bridge corridor (DDOT 2008). With increasing commuters, travelers, public transit users, pedestrians, and bicyclists; the safety and mobility of this link has become a priority (DDOT 2008). An environmental impact statement is now being prepared to address current and future needs. Among the objectives that the alternatives are intended to address are the following:

- improve safety and mobility for all modes of transportation
- minimize long travel times and delays
- minimize driver confusion and distraction
- improve traveler information
- improve transportation system efficiency/enhance mobility
- protect/maintain parklands, wetlands, and the Potomac River
- enhance gateway corridor features, aesthetics, and appearance.

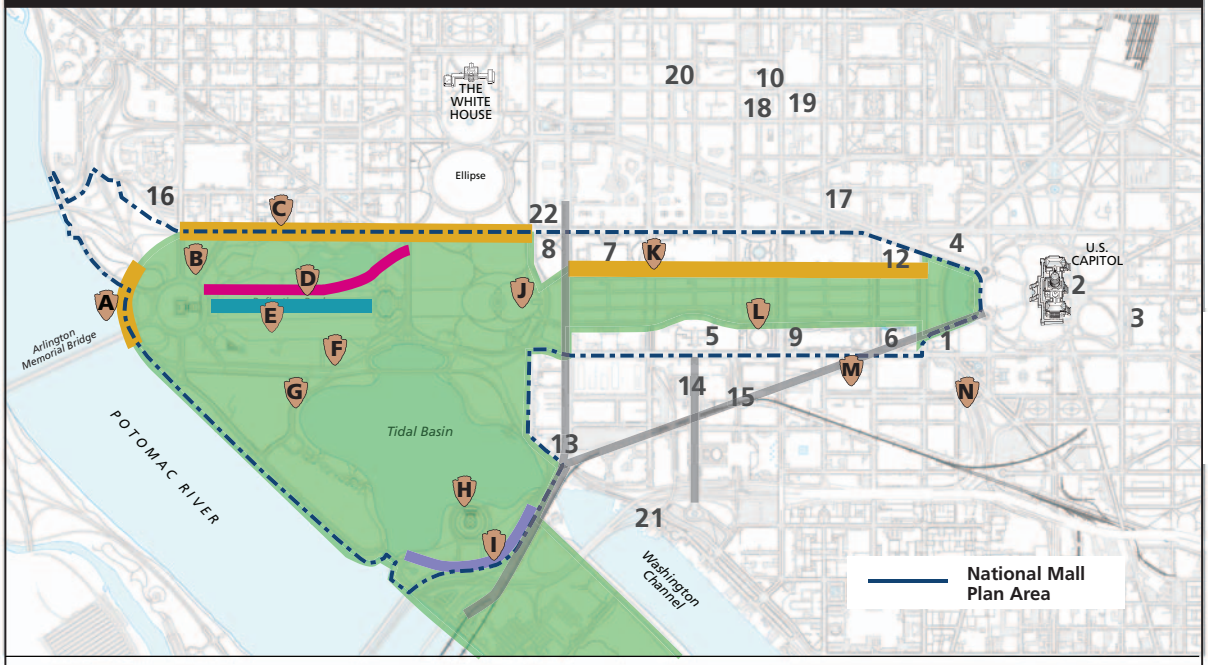
The Anacostia Waterfront Initiative Framework Plan. The Anacostia Waterfront plan is intended to guide the revitalization of the Anacostia waterfront area. The five themes in the plan include creating a clean and active river; eliminating barriers to neighborhoods and providing access to residents; improving the urban riverfront park system; providing cultural destinations of distinct character; and building strong waterfront neighborhoods (DC 2003a).

Recent, Ongoing, and Future Cumulative Projects

National Mall Plan

United States Department of the Interior / National Park Service

DSC • Oct. 2009 • 802 • 100476



RECENT, ONGOING AND FUTURE CUMULATIVE PROJECTS

U.S. Capitol

1 U.S. Botanic Garden (2006)

2 Capitol Visitor Center (2008)

3 Library of Congress Exhibits Update (2008)

4 U.S. Senate Youth Park and U.S. Botanic Garden Education and Outreach Center (future)

Smithsonian Institution

5 Arts and Industries Building Stabilization (2009)

6 National Museum of the American Indian (2004)

7 National Museum of American History Rehabilitation (2008)

8 National Museum of African American History and Culture (future)

9 Mallwide Security Perimeter (ongoing)

10 National Portrait Gallery / American Art Museum (2006)

11 National Museum of the American Latino (location to be determined)

National Gallery of Art

12 East Building Facade Repairs (2009)

District of Columbia

13 14th Street Bridge Corridor (future)

14 L'Enfant Promenade Urban Study (future)

Other

15 Maryland Avenue (future)

16 U.S. Institute of Peace (under construction)

17 Newseum (2008)

18 Spy Museum (2002)

19 National Museum of Crime and Punishment (2008)

20 Madame Tussauds Wax Museum (2007)

21 SW Waterfront (future)

22 National Aquarium Constitution Avenue Entrance (future)

Ongoing NPS National Mall Projects

A Ohio Drive Roadwork

B Vietnam Veterans Memorial Center

C Constitution Avenue Roadwork

D Potomac Park Levee

E Lincoln Memorial Security and Reflecting Pool Area

F D.C. War Memorial Rehabilitation

G Martin Luther King, Jr. Memorial

H Thomas Jefferson Memorial Plaza and Seawall Rehabilitation

I Thomas Jefferson Memorial Security Perimeter

J Washington Monument Security Screening

K Madison Avenue Roadwork

L National Mall Wayfinding and New Pedestrian Guides

M Eisenhower National Memorial

N American Veterans Disabled for Life

D.C.'s Transit System Future Plan. In partnership with the Washington Metropolitan Area Transit Authority, the D.C. Department of Transportation is proposing a network of streetcar lines operating in eight corridors throughout the District. In most cases streetcars would share travel lanes with car traffic; however, in some cases, streetcar vehicles could use available rights-of-way and use exclusive transit-only lanes. The proposed streetcar line from the Takoma Metrorail station to Buzzard Point would cross the National Mall along 7th Street. The streetcar line in Anacostia is under construction, tracks are being laid for a second line along H Street NE, and planning is underway for additional lines (DC DOT 2010).

Southwest Waterfront Plan. The *Southwest Waterfront Plan* is a redevelopment framework for nearly 50 acres of waterfront in the southwest quadrant of Washington. The plan envisions replacing parking lots and underutilized streets with a mix of public plazas, cultural venues, restaurants, shops, and residences to create a vibrant neighborhood and regional waterfront destination. More than 2 million square feet of new construction are proposed, including 14 acres of new parks along the waterfront, three times the existing open space (DC 2003b).

The District of Columbia Bicycle Master Plan. The *Bicycle Master Plan* generally recommends more and better bicycle facilities, including a bike route system with more bike facilities on roadways, more bicycle friendly policies, and more bicycle-related education, promotion, and enforcement. It also suggests upgrades of National Mall roadways and multi-use trails, improved bridge access, bike-friendly traffic calming, exclusive bus and bicycle lanes, and intersection safety and visibility improvements to better accommodate bicycling (DDOT 2005a).

The District of Columbia Pedestrian Master Plan. The draft plan identifies pedestrian potential, as well as problems to be addressed, such as walking along roadways and crossing roads (DDOT 2008a). The plan recommends improved pedestrian access and safety at controlled crossings and intersections to meet the needs of pedestrians of all ability levels, as well as programs that support pedestrian travel. The related vision statement fits well with National Mall plan goals:

> Washington, DC will be a city where any trip can be taken on foot safely and comfortably, and where roadways equally serve pedestrians, bicyclists, transit users and motorists.

L'Enfant Promenade Urban Planning Study. The D.C. Department of Transportation, in coordination with the Federal Highway Administration, the National Park Service, and the Washington Interdependence Council, is pursuing an urban planning study to identify and evaluate rehabilitation options and modifications to the existing roadway and sidewalks for the L'Enfant Promenade, in southwest Washington, including connections to the southwest waterfront (DDOT 2003). One of the proposals is for a multi-level parking and intermodal transportation facility below the 10th Street Overlook, which would provide approximately 1,200 parking spaces and a terminal and parking facility for commuter and tour buses. The *Monumental Core Framework Plan* proposes an alternative intermodal transportation facility linked to the L'Enfant Metro station that could provide tour bus and visitor parking beneath 10th Street (NCPC 2009).

New York Avenue Corridor Study. The study's goals for New York Avenue from 7th Street NW to the intersection with Baltimore-Washington Parkway, and 7th Street from H to N streets NW (including three blocks to the east and west of 7th Street NW) are (1) to facilitate the more efficient and safe movement of people while minimizing the negative impacts of commuter traffic on nearby neighborhoods; (2) to provide a transportation system to include autos, trucks, rail, bus, bicycles, and pedestrians; (3) to investigate opportunities for an intermodal transportation center; (4) to accommodate local and regional transportation needs over the next 30 to 50 years; (5) to create capacity for new commercial and residential development; and (6) to avoid displacing residents or excluding income diversity (DDOT 2005b).

National Capital Planning Commission

The National Capital Urban Design and Security Plan. This plan for Washington's monumental core and the downtown focuses on

perimeter building security to protect employees, visitors, and federal functions and property from threats generated by unauthorized vehicles approaching or entering sensitive buildings (NCPC 2002). It specifically addresses the proliferation of makeshift barriers and identifies various security design solutions, including "hardened" street furniture and landscaped planting walls, that can enhance local streetscapes, while still providing security.

NCPC's New Vision for South Capitol Street. As envisioned, South Capitol Street will include a combination of parkland, retail, residential, and cultural establishments, such as a museum or performing arts venue (NCPC 2005b).

Washington's Waterfronts. Six waterfront areas are identified for potential development: the east and west banks of the Anacostia River; the Bolling-Anacostia waterfront; the southeast waterfront; the southwest waterfront; and the Georgetown/northwest waterfront (NCPC 1999).

National Park Service

American Veterans Disabled for Life Memorial. The National Park Service and the Disabled Veterans' Life Memorial Foundation have proposed siting a national memorial for disabled veterans at Washington Avenue and 2nd Street SW, near the National Mall. The National Capital Planning Commission approved this site in August 2001. The memorial will consist of a grove of trees and a reflecting pool. Stone and glass walls will enclose the site and define pathways (NPS 2005a).

Anacostia Riverwalk. The proposed Anacostia riverwalk project would create a multi-use trail and connecting points on the east side of the Anacostia River from the Washington Navy Yard to Benning Road, and on the west side of the river from the Anacostia Naval Station to Bladensburg Trail in Prince George's County, Maryland (NPS 2004a).

Centennial Initiative / Wayfinding and New Pedestrian Guides. In 2006 President George W. Bush and Secretary of the Interior Dirk Kempthorne proposed a 10-year initiative to upgrade the condition of the national park system by its 100th anniversary in 2016 (NPS 2007c). Additional operating funds will be provided to supplement budgets, along with specific projects at parks. To provide incentives, matching funds are to be raised for projects by private/public partnerships.

The National Mall and Memorial Parks has been selected for the Centennial Initiative, and the first project is for park signage and graphics. The Trust for the National Mall is providing matching funds (NPS 2008b). The project, which is underway, will develop and update a sign system for all National Mall and Memorial Parks, which will include pedestrian wayfinding signs and directories; identification signs for park areas; orientation, information, and map locations; general information signs; park rules and regulations; temporary signs; and interactive signs. The coordinated sign plan has been reviewed and approved by U.S. Commission of Fine Arts and the National Capital Planning Commission, and the first phases for the Mall are scheduled to be installed summer 2010.

Constitution Avenue Roadwork. Constitution Avenue roadwork will repair and resurface the travel lanes and a concrete lane for bus drop-offs from 17th to 19th streets, as well as provide new granite curbs, curb cuts, new concrete sidewalks on both sides of the street, concrete walks connecting bus drop-offs to the main east-west sidewalk on the south side, new street lights, and a new stormwater drainage system. Portions of travel lane work could begin earlier. The project is scheduled for 2014, but it could be accelerated under the American Recovery and Reinvestment Act of 2009.

D.C. War Memorial. Rehabilitation of the D. C. War Memorial is being funded by the American Recovery and Reinvestment Act of 2009. The project has been approved, the contract has been awarded, and restoration is expected to begin in late summer 2010 and last until June 2011.

Eisenhower National Memorial. The Dwight D. Eisenhower Memorial Commission is in the planning stages to create an Eisenhower National Memorial. The approved site is directly south of the National Air and Space Museum, between 4th and 6th streets SW, and Independence Avenue SW and C Street SW (Dwight D. Eisenhower Memorial Commission 2006).

Georgetown Waterfront Park and C&O Canal National Historical Park. The National Park Service has submitted final site development plans for a portion of the Georgetown Waterfront Park, which were approved by the National Capital Planning Commission on June 2, 2005.

Lincoln Memorial Circle Roadway, Security Project, and Reflecting Pool Area. The circle roadway project was completed in 2008 and improved bicycle and pedestrian safety, enhanced traffic flow, upgraded visitor facilities, and reduced tour bus congestion. The pedestrian plaza on the east side of the circle was improved, concrete bus pads added, drainage and lighting improved, curbs and sidewalks replaced, new signalized pedestrian crossings and drinking fountains installed, and traffic patterns coordinated (NPS 2005b).

A new project that includes the permanent security barrier along with repairs to the reflecting pool, the lower approachway, and elm walkways is being funded by the American Recovery and Reinvestment Act of 2009. Designs have been approved. Rather than using potable water to fill the pool, water from the Tidal Basin will be used, with backup excess water from the World War II Memorial; potable water would only be used as a last choice. A facility for filtering/recirculating water will be located in the U.S. Park Police stables area. A construction contract is scheduled to be awarded in late summer 2010, with construction beginning by the end of 2010 and expected to be completed by November 2012.

Madison Drive Roadwork. Madison Drive will be milled and repaved. Resurfacing is scheduled to begin July 5, 2010, and be completed September 30, 2010.

Martin Luther King, Jr. Memorial. A national memorial to Dr. Martin Luther King Jr. will be built on a 4-acre site on the northwest corner of the Tidal Basin. Construction is underway and expected to be completed by October 2011. After construction, the National Park Service will maintain and operate the memorial (NPS 2005c).

National Mall and Memorial Parks Concession Contracts and Commercial Services. The National Mall and Memorial Parks has concession contracts to provide visitor services such as food/retail and recreation equipment rentals. Economic feasibility assessments would determine the nature and scope of commercial business services.

Ohio Drive Roadwork. The project will repair and resurface the travel lanes on Ohio Drive from 23rd Street and Independence Avenue to the Constitution Avenue belvedere, and it will realign the road by 2 feet away from the river to develop a wider, safer, multipurpose trail where it passes under Arlington Memorial Bridge and Parkway Drive. The project will add new granite curbs and a concrete sidewalk on the river side of the street, reset the granite cobble sidewalk on the memorial side of the street, and install a new stormwater drainage system. Construction was begun in April 2010 and is scheduled to be completed in October 2010.

Poplar Point Redevelopment Project. The D.C. Lands Act calls for the redevelopment of the 110-acre Poplar Point site on the Anacostia River, which is to be transferred from the National Park Service to Washington, D.C. Alternatives are being analyzed in an environmental impact statement for the District's redevelopment of the site, as well as the replacement of NPS and USPP facilities, which could be located elsewhere at the site or in the District.

Potomac Park Levee Project. The National Park Service, in cooperation with U.S. Army Corps of Engineers and the National Capital Planning Commission, has evaluated three action alternatives and a no-action alternative to improve the reliability of river flood protection provided by the Potomac Park levee system to a portion of the monumental core and downtown Washington D.C. Without adequate flood protection measures, several downtown locations, including portions of the monumental core, portions of Pennsylvania and Constitution avenues, and other public and private facilities south of the U.S. Capitol to Fort McNair, are at risk of flooding from a major (100-year plus) flood event (NPS 2008d). Construction of a levee closure structure for 17th Street is scheduled to begin in October 2010 and be completed by October 2011.

Rehabilitation of Rock Creek and Potomac Parkway. The National Park Service, in coop-

eration with the Federal Highway Administration's Eastern Federal Lands Highway Division, proposes to rehabilitate Rock Creek and Potomac Parkway from Virginia Avenue to the P Street bridge and the Thompson Boat Center, along with the access road, bridge, and parking area at the Thompson Boat Center (NPS 2005e).

Rock Creek Park. The record of decision for the *Final General Management Plan and Environmental Impact Statement* was approved June 6, 2006. The plan would provide for the broadest use of the park by improving resource protection, enhancing recreational opportunities, and continuing the traditional visitor experience of automobile touring along the length of the park (NPS 2005f).

Thomas Jefferson Memorial Permanent Security Improvements. This project will create a vehicle barrier system around the memorial while maintaining pedestrian flow across the grounds. Schematic designs are being prepared. Construction is scheduled to be completed by October 2014.

Thomas Jefferson Memorial Plaza and Seawall Rehabilitation. The National Park Service is continuing to work on repairing the seawalls near the plaza. Construction is being funded by the American Recovery and Reinvestment Act of 2009. Construction began in spring 2010 to stabilize and repair the seawalls. Work is expected to be completed by June 2011.

Vietnam Veterans Memorial Center. The underground center will be west of the Vietnam Veterans Memorial along 23rd Street NW. It will affect circulation and visitor experiences in the vicinity of Lincoln Circle and Henry Bacon Drive from 21st to 23rd streets (NPS 2007f). Surveys are underway and the project is in concept design.

Washington Monument Permanent Security Improvements. Completed in 2007, this project reconfigured the grounds of the Washington Monument to create a vehicle barrier system around the monument while maintaining pedestrian flow across the grounds. Work included site walls, sidewalks and plaza, new flagpoles, lighting, irrigation, utility work, and rehabilitation of Monument Lodge (NPS 2002). Schematic design based on the previously approved conceptual designs for a permanent screening facility is underway, and work is scheduled to be completed by July 30, 2012.

Washington Mall Plan 1973–1976. This plan was prepared for the National Park Service by Skidmore, Owings and Merrill in preparation for the 1976 Bicentennial (Skidmore, Owings and Merrill 1973). As a result of this plan, Adams and Washington drives were converted from streets to wide pedestrian walks. Early plan drafts also recommended tunneling more roads under the National Mall and providing underground parking. The plan recognized that "the Mall in its present form is not a satisfactory pedestrian environment" and intended to restore the pedestrian role by removing surface traffic; providing visitor amenities such as refreshments, orientation, and resting facilities; providing a visitor transportation system (Tourmobile); adding new plantings to enhance year-round attractiveness, and embellishing the 8th Street axis. Access would be provided for bicyclists, pedestrians, Tourmobile buses, and service vehicles on narrower roads. Visitor parking was to be removed. The plan illustrated several different approaches to the Mall tree planting, however additional tree planting was rejected.

Wetland Restoration and Canada Goose Management Plan for Anacostia. The National Park Service is preparing a wetland restoration plan, including resident goose management strategies to control undesired impacts of Canada geese at Anacostia Park.

Smithsonian Institution

Arts and Industries Building. A stabilization program for the building is being funded by the American Recovery and Reinvestment Act of 2009.

National Museum of the American Indian. The museum at 4th Street and Independence Avenue SW opened on September 21, 2004 (Smithsonian Institution 2005b).

National Museum of American History Renovation. After three years of renovation the museum was reopened in November 2008. While the building footprint did not change, there is the potential for a future underground pedestrian and service connection to the. National

Museum of African American History and Culture. This potential connection could affect circulation near 14th Street and Madison Drive. The Smithsonian Institution is seeking a new home for the bandstand gazebo located west of the museum.

National Museum of African American History and Culture. The site for this new museum is Constitution Avenue between 14th and 15th streets NW. A draft environmental impact statement has been prepared, and design and compliance are to be started.

Smithsonian Institution Mall-Wide Perimeter Security Improvements. In consideration of the National Capital Planning Commission's *National Capital Urban Design and Security Plan* (NCPC 2002), the Smithsonian Institution has proposed perimeter security improvements. In October 2004 the National Capital Planning Commission approved preliminary plans for perimeter security measures for nine Smithsonian Institution museums on the Mall. The plans include establishing security lines within the building yard rather than in the public space; incorporating security into already existing site features when possible; respecting the monumentality of Independence and Constitution Avenues; custom designing solutions at entryways and plaza areas; and establishing a comprehensive tree planting program. Along Independence Avenue, for example, existing walls will be hardened and custom-designed bollards will be used to secure pedestrian and vehicular entrances. Along Constitution Avenue the design calls for new freestanding walls on the inside edge of the sidewalk. Custom-designed benches, light poles, and urns will complement the historic fabric of the Mall precinct (NCPC 2004b).

U.S. Department of Agriculture

The Jamie L. Whitten Building, the central administration headquarters for the U.S. Department of Agriculture, is located across from the National Mall at 1400 Independence Avenue, SW. The neoclassical building was completed in 1930. The NCPC *Monumental Core Framework Plan* (NCPC 2009) proposes that the Whitten Building could become a cultural destination on the National Mall. Any such action would require congressional legislation.

U.S. Department of Defense

Air Force Memorial. The Air Force Memorial honors men and women who have served in the U.S. Air Force and its predecessors. On 3 acres of the Naval Annex site, the memorial includes three spires ranging from approximately 200 feet to 270 feet high, a parade ground, an honor guard sculpture, contemplative outdoor rooms and seating areas, pedestrian walkways, and a parking area (US DOD 2003).

Pentagon September 11th Memorial. The memorial honors those who lost their lives in the 2001 terrorist attack on the Pentagon. It opened on September 11, 2008.

U.S. Department of Transportation

The District of Columbia Tour Bus Management Initiative. The *Tour Bus Management Initiative* examines the impact of tour buses, explores best practices, identifies potential strategies, recommends counting methods and locations to get a better sense of the demand, and recommends the completion of a plan (US DOT 2003). The initiative identifies a shortage of parking and loading/unloading space, associated traffic and safety issues, adverse environmental impacts from buses, and obstruction of view corridors. The study also concluded that the National Mall does not have sufficient curbside loading/unloading space for demand. Some potential strategies include increased peripheral parking outside the monumental core and downtown, centrally located parking facilities, encouraging walking among clustered destinations, pricing strategies for parking or permits/licenses, and defined routes and driver facilities/shuttles between parking lots and hotels.

Other Reasonably Foreseeable Actions

National Aquarium. Currently located in the basement of the Commerce Building, the aquarium entrance will be relocated to Constitution Avenue, making access more convenient for visitors on the National Mall.

United States Institute of Peace Headquarters — A permanent headquarters facilities is under

construction on the northwest corner of the National Mall at the intersection of Constitution Avenue and 23rd Street NW.

Steamlines. Repairs to steam and condensate piping at the Washington Monument have recently been completed. The General Services Administration intends to request construction funds to replace steam and condensate piping at the monument as part of a project to upgrade piping at 6 sites throughout Washington, D.C., in addition to 20 sites that have already been funded. This work would have a short-term impact on circulation on the east side of the monument grounds, but a long-term, minor to moderate, beneficial impact on the environmental conditions on the interior of the Washington Monument.

Maryland Avenue. Proposals for renovation of Maryland Avenue have included decking over rail lines to restore the avenue to the prominence envisioned in the L'Enfant plan.

Southwest Waterfront Development. A plan by a private developer aims to produce an active, mixed-use, urban riverfront that showcases distinctive cultural destinations and that builds on the existing, strong waterfront community.

Impairment

In addition to determining the environmental consequences of implementing the alternatives, NPS *Management Policies 2006* require the analysis of potential effects to determine whether actions would impair park resources (NPS 2006e).

The fundamental purpose of the national park system, established by the 1916 Organic Act and reaffirmed by the General Authorities Act of 1970, as amended, begins with a mandate to conserve park resources and values. NPS managers must always seek ways to avoid, or to minimize to the greatest degree practicable, adverse impacts on park resources and values. However, the laws do give the National Park Service the management discretion to allow impacts to park resources and values when necessary and appropriate to fulfill the purposes of a park, as long as the impact does not constitute impairment of the affected resources and values. Nevertheless, that discretion is limited by the statutory requirement that the National Park Service must leave park resources and values unimpaired, unless a particular law directly and specifically provides otherwise.

The prohibited impairment is an impact that, in the professional judgment of the responsible NPS manager, would harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources or values. An impact to any park resource or value might constitute impairment. According to the NPS *Management Policies 2006* (NPS 2006e, sec. 1.4.5), an impact would be more likely to constitute impairment to the extent that it affects a resource or value whose conservation is:

- necessary to fulfill specific purposes identified in the park's establishing legislation or proclamation;
- key to the park's natural or cultural integrity; or
- identified as a goal in the park's management plan or other relevant NPS planning documents.

Impairment may result from NPS activities in managing the park, visitor activities, or activities undertaken by concessioners, contractors, and others operating in the park. The potential for impairment is discussed in the conclusion section of each natural and cultural resource impact topic. In accordance with the criteria defined above for park resources and values, determinations of impairment are not required for topics such as demonstrations, events, and national celebrations, access and circulation, visitor experience, socioeconomic environment, or park operations.

Unacceptable Impacts

The impact threshold at which impairment occurs is not always readily apparent. Therefore, the National Park Service will apply a standard that offers greater assurance that impairment will not occur. The National Park Service will do this by avoiding impacts that it determines to be unacceptable. These are impacts that fall short of impairment, but are still not acceptable within a particular park's environment. Park managers

must not allow uses that would cause unacceptable impacts; they must evaluate existing or proposed uses and determine whether the associated impacts on park resources and values are acceptable.

Virtually every form of human activity that takes place within a park has some degree of impact on park resources or values, but that does not mean the impact is unacceptable or that a particular use must be disallowed. Therefore, for the purposes of these policies, unacceptable impacts are impacts that, individually or cumulatively, would

- be inconsistent with a park's purposes or values, or
- impede the attainment of a park's desired future conditions for natural and cultural resources as identified through the park's planning process, or
- create an unsafe or unhealthful environment for visitors or employees, or
- diminish opportunities for current or future generations to enjoy, learn about, or be inspired by park resources or values, or
- unreasonably interfere with park
  - programs or activities, or
  - an appropriate use, or
  - the atmosphere of peace and tranquility, or the natural soundscape maintained in wilderness and natural, historic, or commemorative locations within the park, or
  - NPS concessioner or contractor operations or services.

In accordance with *Management Policies 2006*, park managers must not allow uses that would cause unacceptable impacts to park resources. To determine if unacceptable impact could occur to the resources and values of the National Mall, the impacts of proposed actions in this environmental impact statement have been evaluated based on the above criteria. A determination on unacceptable impacts is made in the conclusion section for each of the natural and cultural resource topics carried forward in this chapter.

FUTURE COMPLIANCE

This environmental impact statement describes the impacts associated with a management plan for the National Mall. As specific elements of the plan are implemented, the NEPA environmental analysis will be reviewed to determine that (1) all impact topics have been analyzed in site-specific detail adequate for this particular action, (2) there are no changes to the proposal, (3) there are no appreciable changes in the affected environment (e.g., listing of a resource on the National Register of Historic Places), and (4) there are no changes to impacts to environmental resources. If all of these criteria apply, a memo-to-file will be used to document that site-specific compliance with the National Environmental Policy Act has been documented in this environmental impact statement. If changes have occurred or if the site-specific detail is insufficient, additional compliance documentation will be required.

Projects would continue to be assessed for their impacts on historic properties, and consultation under section 106 of the National Historic Preservation Act would occur as needed (see Table 43 in "Consultation and Coordination"). Required reviews and approvals by the Commission of Fine Arts and the National Capital Planning Commission would occur in accordance with legislation, as would reviews by the U.S. Park Police.

CULTURAL RESOURCES

METHODOLOGY FOR ANALYZING IMPACTS

Potential impacts to contributing elements or character-defining features of a resource (direct, indirect, and cumulative) are described in terms of type, intensity, and duration, as described below. This analysis is consistent with the CEQ regulations for the National Environmental Policy Act. Unless otherwise noted, the context for all impacts would be direct and site-specific.

Memorials on the National Mall are protected by authorities under the Commemorative Works Act. Potential impacts to the memorials resulting from actions described in the alternatives are evaluated in this chapter by area.

Impact Intensity Levels

The following impact thresholds were defined for impacts on cultural landscapes:

- **Negligible** — Negligible impacts would be at the lowest levels of detection — barely perceptible and not measurable. There would be no change to defining features that contribute to the eligibility of a resource for listing on the National Register of Historic Places. For purposes of a determination under section 106 of the National Historic Preservation Act, the determination of effect would be *no adverse effect.*
- **Minor** — Impacts would not affect the character-defining features of a historic resource listed or eligible for listing on the National Register of Historic Places. Impacts would be detectable but would not diminish the overall integrity of the resource. For purposes of a determination under section 106 of the National Historic Preservation Act, the determination of effect would be *no adverse effect.*
- **Moderate** — Moderate impacts would alter a character-defining feature or features of a significant historic resource, and would diminish the overall integrity of the resource to the extent that its eligibility for the National Register of Historic Places could be jeopardized. Mitigation measures would be identified to reduce the level of impact and would be implemented with a high degree of success. For purposes of a determination under section 106 of the National Historic Preservation Act, the determination of effect would be *adverse effect.*
- **Major** — Major impacts would result from substantial and highly noticeable changes that would alter the character-defining features of a historic resource, and diminish the integrity of the resource to the extent that it would no longer be eligible for listing on the National Register of Historic Places. Mitigation measures would be identified to reduce the level of impact and adopted not knowing the degree of success. For purposes of a determination under section 106 of the National Historic Preservation Act, the determination of effect would be *adverse effect.*

Type of Impact

Beneficial impacts would occur as a result of the restoration or rehabilitation of resources, or the removal of incompatible or noncontributing features. Adverse impacts would generally occur as a result of modifying a significant characteristic of a historic structure or landscape resource; removing a significant structure or landscape resource; or adding new, incompatible facilities in proximity to a historic site or structure.

Duration

Impacts could be temporary, short-term, long-term, or permanent.

- ***Temporary*** — The impact would last no longer than two days.
- ***Short-term*** — The impact would generally last up to one year or the life of a construction project.
- ***Long-term*** — The impact would last longer than one year or for the life of the plan (up to 50 years).

- ***Permanent*** — The impact would last beyond the life of the plan (or longer than 50 years).

Regulations and Policies

Current laws and policies that apply to the management of cultural resources include the following:

- National Historic Preservation Act of 1966, as amended (16 USC 470(f))
- Archeological and Historic Preservation Act of 1974 (16 USC 469 et seq.)
- The *Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation* (NPS 1983)
- *The Secretary of the Interior's Standards for the Treatment of Historic Properties, with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings* (NPS 1995)
- *The Secretary of the Interior's Standards for the Treatment of Historic Properties, with Guidelines for the Treatment of Cultural Landscapes* (NPS 1996c)
- "Nationwide Programmatic Memorandum of Agreement between the National Park Service, the Advisory Council on Historic Preservation, and the National Council of State Historic Preservation Officers"
- NPS *Management Policies 2006* (NPS 2006e); *Director's Order #28: Cultural Resource Management; NPS-28: Cultural Resource Management Guideline* (NPS 1998b)

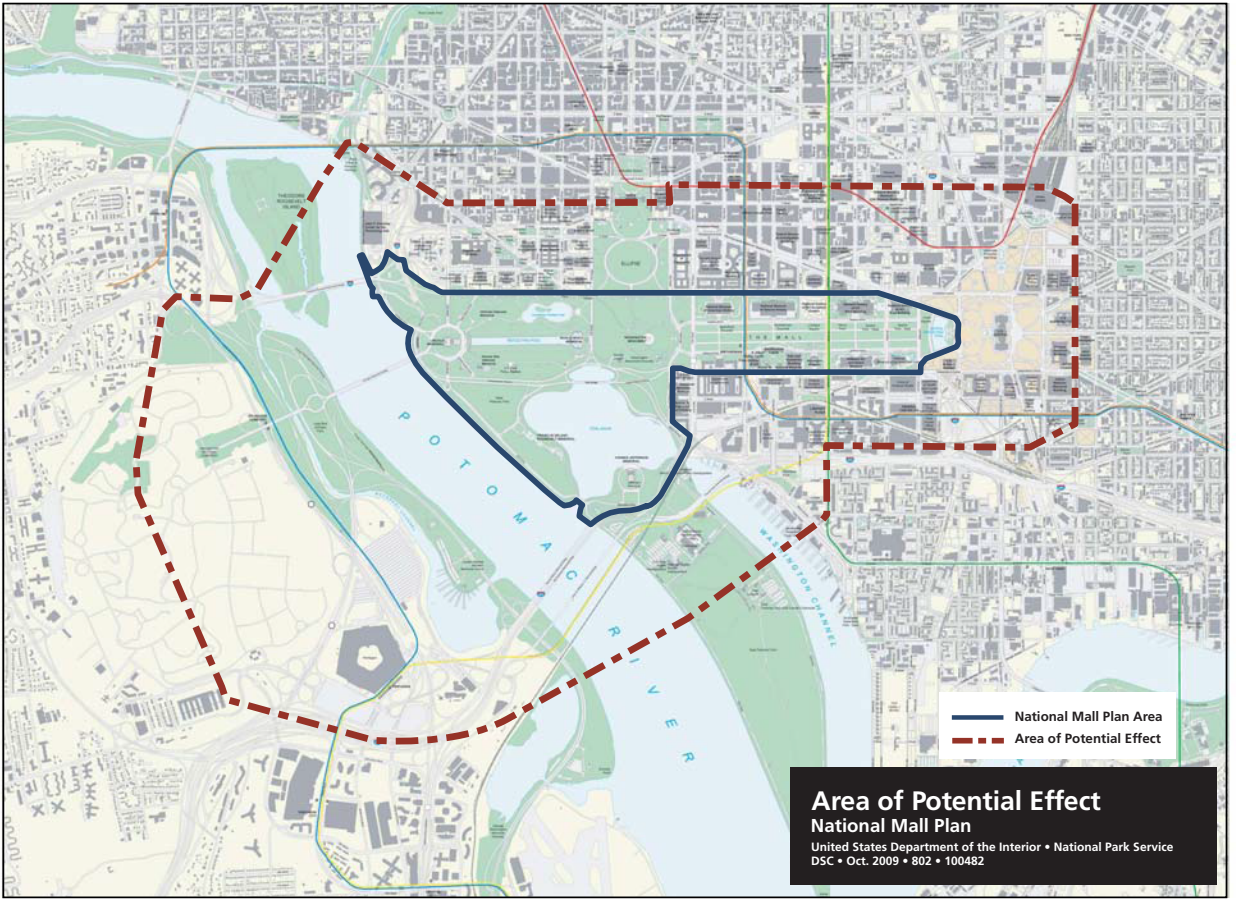
Historic structures are inventoried and evaluated under National Register of Historic Places criteria. The qualities that contribute to the listing or eligibility for listing of historic structures on the national register are protected in accordance with *The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation*.

National Historic Preservation Act Section 106 Analysis

The assessment of impacts on cultural resources for this project was made in accordance with regulations of the Advisory Council on Historic Preservation for implementing section 106 of the National Historic Preservation Act (36 CFR 800). The project is being reviewed in accordance with the 2008 "Nationwide Programmatic Agreement between the National Park Service, the Advisory Council on Historic Preservation, and the National Council of Historic Preservation Officers." This programmatic agreement stipulates that section 106 compliance will be undertaken for all major planning efforts and will be in accordance with the servicewide programmatic agreement.

In accordance with the Advisory Council on Historic Preservation's (ACHP) regulations for implementing section 106 (36 CFR 800), impacts to cultural resources were identified and evaluated by (1) determining the area of potential effect; (2) identifying cultural resources present in this area that are either listed on or eligible for listing on the National Register of Historic Places; (3) applying the criteria of adverse effect to affected resources; and (4) considering ways to avoid, minimize or mitigate adverse effects. Each of these requirements is further described below:

- ***Area of Potential Effect*** — The area of potential effect is the area within which an action could be expected to have some effect upon cultural resources listed on, or eligible for listing on, the National Register of Historic Places. The impact could be direct or indirect, or possibly visual in nature. The area of potential effect for the National Mall plan was defined broadly during the historic preservation consultation process. The Area of Potential Effect map represents the area that the D.C. Historic Preservation Office and the National Park Service determined could potentially be affected.
- ***Resources within the Area of Potential Effect*** — Resources on the National Mall are discussed in "The Affected Environment" (beginning on page 266).
- ***Determination of Effect*** — Under the ACHP regulations a determination of either *adverse effect* or *no adverse effect* must also be made for affected properties that are listed on or eligible for listing on the National Register of Historic Places.



Area of Potential Effect

National Mall Plan

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Area of Potential Effect

- ***Adverse effect*** — An adverse effect occurs whenever an impact alters, directly or indirectly, any characteristic of a cultural resource that qualifies it for listing on the National Register of Historic Places, e.g. diminishing the integrity (or the extent to which a resource retains its historic appearance) of location, design, setting, materials, workmanship, feeling, or association. An adverse effect also includes reasonably foreseeable effects caused by the alternatives that would occur later in time, be farther removed in distance, or be cumulative (36 CFR 800.5).
- ***No Adverse Effect*** — A determination of no adverse effect means there is an effect, but the effect would not diminish the characteristics of the cultural resource that qualify it for listing on the National Register of Historic Places.

CEQ regulations and NPS *Director's Order #12: Conservation Planning, Environmental Impact Analysis and Decision Making* (NPS 2001a) also call for a discussion of mitigation, along with an analysis of how effective the mitigation would be in reducing the intensity of a potential impact, for example, reducing an impact intensity from major to moderate or minor. Any resultant reduction in impact intensity due to mitigation, however, is an estimate of the effectiveness of mitigation only under the National Environmental Policy Act. It does not suggest that the level of effect as defined by section 106 would be similarly reduced. Cultural resources are nonrenewable resources, and adverse effects generally consume, diminish, or destroy the original historic materials or form, resulting in a loss in the

integrity of the resource that can never be recovered. Therefore, although actions determined to have an adverse effect under section 106 might be mitigated, the effect would remain adverse.

The final assessment of effect for each action described in the management alternatives will be undertaken in consultation with D.C. Historic Preservation Office and the Advisory Council on Historic Preservation. All future consultation and compliance on the National Mall plan will be undertaken according to the terms and conditions of a programmatic agreement between the National Park Service, the D.C. Historic Preservation Office, and the Advisory Council on Historic Preservation. The agreement will be signed before the record of decision for the plan.

The Secretary of the Interior's Standards for the Treatment of Historic Properties

The Secretary of the Interior's Standards for the Treatment of Historic Properties, with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings (NPS 1995) identifies four treatment approaches that apply to a wide variety of resource types, including buildings, sites, structures, objects, districts, and landscape features and patterns. Three of these treatments are included in this plan — preservation, rehabilitation, and restoration — and they are defined below (the fourth treatment, reconstruction, is not considered in this plan):

- ***Preservation*** — The act or process of applying the measures necessary to sustain the existing form, integrity, and materials of a historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses on ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction.
- ***Rehabilitation*** — The act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features that convey its historical, cultural, or architectural values.
- ***Restoration*** — The act or process of accurately depicting the form, features, and character of a property as it appeared at a particular period of time by removing features from other periods in its history and reconstructing missing features from the restoration period.
- ***Reconstruction*** — The act or process of depicting by means of new construction, the form, features, and detailing of a nonsurviving site, landscape, building, structure, or object for the purpose of replicating its appearance at a specific period of time and in its historic location.

These treatment approaches apply to a wide variety of resource types, including buildings, sites, structures, objects, districts, and landscape features and patterns.

Most of the proposed actions for the National Mall fall under rehabilitation, and the standards that would apply to the National Mall include the following:

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 elements from other historic properties, will not be undertaken.
4. Changes to a property that have acquired historic significance in their own right shall be retained and preserved.
5. Distinctive materials, features, 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. [Relates to chemical or physical treatments.]
8. [Relates to archeological resources.]
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 a such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

NPS Management Policies 2006

The NPS *Management Policies 2006* state that the National Park Service will protect, preserve, and foster appreciation of the cultural resources in its custody (NPS 2006e, ch. 5). The Park Service's cultural resource management program involves

- research to identify, evaluate, document, register, and establish basic information about cultural resources
- planning to ensure that management processes for making decisions and setting priorities integrate information about cultural resources and provide for consultation and collaboration with outside entities
- stewardship to ensure that cultural resources are preserved and protected, receive appropriate treatments (including maintenance) to achieve desired conditions, and are made available for public understanding and enjoyment

The treatment of a cultural landscape will preserve significant physical attributes, biotic systems, and uses when those uses contribute to historical significance. Treatment decisions will be based on a cultural landscape's historical significance over time, existing conditions, and use, and they will consider both the natural and built characteristics and features of a landscape. There are three types of treatment for extant cultural landscapes: preservation, rehabilitation, and restoration (NPS 2006e, sec. 5.3.5.2). A cultural landscape may be rehabilitated for contemporary use if

- it cannot adequately serve an appropriate use in its present condition; and
- rehabilitation will retain its essential features and not alter its integrity and character or conflict with approved park management objectives (NPS 2006e, sec. 5.3.5.2.2).

Contemporary alterations and additions to a cultural landscape must not radically change, obscure, or destroy its significant spatial organization, materials, and features. New buildings, structures, landscape features, and utilities may be constructed in a cultural landscape if

- existing structures and improvements do not meet essential management needs;
- new construction is designed and sited to preserve the landscape's integrity and historic character; and
- the alterations, additions, or related new construction is differentiated from yet compatible with the landscape's historic character — unless associated with an approved restoration or reconstruction. New additions will meet *The Secretary of the Interior's Standards for Rehabilitation* (NPS 2006e, sec. 5.3.5.2.7).

Impacts Common to All Alternatives

Direct and Indirect Impacts

Because of the unusually long timeframe for the approved National Mall plan, the actions described are conceptual in nature and their effect on the historic character of contributing features of the National Mall cannot be definitively stated. The impacts are referred to as potential effects. Final determinations o f effect for all actions will be determined in future consulta-

tions with the D.C. Historic Preservation Office and the Advisory Council on Historic Preservation. A park-specific programmatic agreement as previously described would be developed in consultation with the D.C. Historic Preservation Office and the Advisory Council on Historic Preservation to facilitate the compliance process.

Regarding impacts within the area of potential effect, land use and general vegetation patterns on the National Mall would not change, nor would the monumental character and essential relationships of the planned open space, memorials, and museums to the city. The National Park Service would continue consultation with the D.C. Historic Preservation Office, and if needed the Advisory Council on Historic Preservation, to address any potential adverse effects, which would be appropriately documented through compliance with section 106 of the National Historic Preservation Act.

As each action was more fully developed, appropriate compliance would be undertaken in consultation with the D.C. Historic Preservation Office and the Advisory Council on Historic Preservation.

A comprehensive design and consultation process would be undertaken for new projects resulting from the National Mall plan (see "Consultation and Coordination" beginning on page 559). Specific actions that could adversely affect cultural resources would be evaluated on a case-by-case basis as they were proposed for implementation, and appropriate compliance with section 106 of the National Historic Preservation Act, as amended, would be undertaken before implementation. Associated impacts could be direct, indirect, or cumulative over time; site-specific or localized within the area of potential effect; and negligible to major and adverse, depending on the action taken.

All memorials would be preserved and protected, along with receiving periodic preventive maintenance. Resulting impacts would be long-term and beneficial, but generally only negligible in intensity because visitors should not notice any change in the condition of a memorial, with the exception of restoration of the Ulysses S. – Grant Memorial under the action alternatives, which would result in a minor to moderate, beneficial impact.

The discussion of impacts below is based on assumptions about design decisions yet to be made. It is an estimate as to what the impacts would be based on an understanding of what the proposed alternatives might detail.

The Mall

Under every alternative, contributing elements of the Mall, such as the type of vegetation, circulation patterns, small-scale features, and views and vistas would be preserved. Impacts would be long-term, negligible to minor, and beneficial.

Washington Monument and Grounds

The Washington Monument and adjacent historic structures (Monument Lodge and Survey Lodge) and the historic theater function would be preserved. The impact would be long-term, negligible, and beneficial. The condition of the non-contributing German-American Friendship Garden would be improved, resulting in a long-term, negligible, beneficial impact. Contributing vegetation would be preserved, and many non-contributing tree plantings (cherry groves, street trees) would also be preserved, resulting in long-term, negligible, beneficial impacts.

West Potomac Park (North of Independence Avenue)

Vietnam Veterans Memorial

The Vietnam Veterans Memorial and its features (walks, vegetation, and an information station near the Lincoln Memorial) would be preserved and protected. Impacts would be long-term, negligible, and beneficial.

World War II Memorial

The World War II Memorial would be preserved and protected, a long-term, negligible, beneficial impact.

Lincoln Memorial and Grounds

The Lincoln Memorial would be preserved and protected. The impact would be long-term, negligible, and beneficial.

The renovation of the exhibit area and the restrooms on the lower level of the Lincoln Memorial, along with the bookstore relocation, would not affect contributing elements of the memorial. Therefore, impacts would be long-term, minor, and beneficial.

Braddock's Memorial Rock Well and the Constitution Avenue belvedere would both be preserved and protected under every alternative. Impacts would be long-term, minor, and beneficial.

Korean War Veterans Memorial

The Korean War Veterans Memorial would be preserved and protected, resulting in long-term, negligible, beneficial impacts.

West Potomac Park (South of Independence Avenue)

Tidal Basin Area

The Thomas Jefferson Memorial would be preserved and protected, and it would undergo regular preventive maintenance. The impact would be long-term, negligible, and beneficial. Implementing the recommendations of engineering studies to improve Tidal Basin flushing and to ensure seawall stability would have long-term, minor, beneficial impacts.

Franklin Delano Roosevelt Memorial

The Franklin Delano Roosevelt Memorial and the surrounding landscape (pools, lighting, walks, vegetation, and facilities) would be preserved and protected, and regular preventive maintenance would be undertaken. Impacts would be long-term, negligible, and beneficial.

George Mason Memorial

Rehabilitating the historic fountain at the George Mason Memorial, undertaken according to *The Secretary of Interior's Standards for the Treatment of Historic Properties,* would likely have no effect on this significant character-defining constructed water features. The impact would be long-term, negligible, and beneficial.

Conclusion

The impacts of actions common to all alternatives would be long-term, negligible to minor, and beneficial as the result of protecting and preserving contributing features, along with actions at the Lincoln Memorial (regular preventive maintenance, renovation of the exhibit area and restrooms, and protection of associated features), protection of cherry trees at the Tidal Basin, and rehabilitation of the historic fountain at the George Mason Memorial.

Impacts of the No-Action Alternative

Under the no-action alternative the National Park Service would continue to preserve and protect all identified cultural resources (buildings, sites, structures, objects, and districts) to the best of its ability given the limitation of available funds. Prioritization decisions would be based on such factors as listing on or eligibility for listing on the National Register of Historic Places, the identified fundamental resources, interpretive values, resource condition, and suitability for NPS operations. Individual actions would require consultation with the D.C. Historic Preservation Office and the Advisory Council on Historic Preservation, if needed, and would be appropriately documented through compliance with section 106 of the National Historic Preservation Act.

All preservation, rehabilitation, or restoration efforts would be undertaken in accordance with *The Secretary of the Interior's Standards for the Treatment of Historic Properties* (NPS 1995). Any materials removed during rehabilitation or restoration efforts would be evaluated to determine their value to the National Mall and Memorial Park's museum collection and/or for their comparative use in future preservation work at the sites. Preservation, rehabilitation, or restoration could result in beneficial impacts on cultural resources.

In addition to the impacts common to all alternatives, the following direct or indirect impacts would occur.

Direct and Indirect Impacts

The Mall

Union Square

The Ulysses S. Grant Memorial would be preserved and protected, resulting in a long-term, negligible, beneficial impact.

Union Square would be preserved in its current condition. Without rehabilitation efforts, the Capitol Reflecting Pool, walkways, and other contributing features would continue to deteriorate, which would result in long-term, minor to moderate, adverse impacts to contributing features such as the designed water feature.

The Mall

The historic landscape of the National Mall would be preserved in its existing condition. Without rehabilitation efforts, the tree panels, grass panels, walkways, and other contributing features would continue to deteriorate, which would result in long-term, minor to moderate (potentially major), adverse impacts on contributing features such as vegetation, which if lost could also alter the character and planned views and vistas.

Washington Monument and Grounds

Replacing the existing temporary visitor service facility with a more compatible facility designed to fit within the historic landscape would remove an adverse visual intrusion, resulting in long-term, minor, beneficial impacts. Depending on the location (examined in other alternatives), the facility would be a new element in the historic setting. Even though it would replace another facility, it would potentially affect components of the cultural landscape, such as views and vistas, spatial organization and noncontributing vegetation. Impacts would have the potential to be long-term, moderate, and adverse.

West Potomac Park (North of Independence Avenue)

Constitution Gardens

The area would be preserved, but some features of the cultural landscape (pool, walks, trees, refreshment stand) could be affected as a result of high visitor use, erosion, climate change, and natural aging that routine maintenance might not be able to keep up with. Impacts would be long-term, negligible, and adverse.

The Lockkeeper's House would be preserved in its present location, a long-term, negligible, beneficial impact.

Korean War Veterans Memorial

While the Korean War Veterans Memorial would be preserved, designed landscape features could begin to deteriorate as a result of high visitation that could exceed the capacity of the circulation system (walks, vegetation). Impacts would be long-term, minor, and adverse.

Ash Woods

Ash Woods and the U.S. Park Police stables are not contributing features listed on the national register nomination for West Potomac Park. Preserving the woods as a naturalized, thickly wooded area would retain the historic character of this portion of West Potomac Park, resulting in long-term, negligible, beneficial impacts. Rehabilitating the restroom would have no impact because the structure is not historic.

West Potomac Park (South of Independence Avenue)

Tidal Basin Area

Repairs to the Tidal Basin seawalls would be made in kind. Impacts would be long-term, negligible, and beneficial. Ongoing high levels of use would continue to adversely affect contributing features of the cultural landscape, such as circulation and vegetation. Impacts would be long-term, minor to moderate, and adverse.

West Potomac Park Riverfront

Associated features of the cultural landscape (walks, vegetation) would continue to be preserved. Continuing to stabilize the river walls south of Arlington Memorial Bridge with riprap would result in long-term, negligible to minor, beneficial impacts.

The contributing feature of dry-laid seawalls would continue to deteriorate as a result of erosion due to wave action, periodic flooding,

and rising sea levels. Impacts would be long-term, minor, and adverse.

Summary

Impacts on cultural resources under the no-action alternative would be long-term and would range from negligible to minor, and would be adverse or beneficial. Some of the actions described under this alternative would likely pose long-term, negligible to minor, adverse impacts on the overall cultural landscape or its contributing resources.

Cumulative Impacts

Past Actions

Following the filling of the Potomac River tidal flats in the late 19th century to create East Potomac Park and West Potomac Park, a number of commemorative memorials and monuments were created. Park features were designed to provide an appropriate setting for the new monuments and to extend the National Mall to the west. The McMillan plan was largely responsible for the National Mall's present size, layout, and the completion of the Mall as well as the Grant, Lincoln, and Thomas Jefferson memorials.

From World War I until the 1970s temporary Department of Defense structures kept the various areas from being completed. Subsequent to the removal of these temporary facilities, additional memorials were added, along with more parklike amenities. The designed landscape for Union Square by Frederick Law Olmsted Jr., which implemented the McMillan plan, was removed in the 1970s to accommodate a freeway tunnel. Spatial organization, circulation, views and vistas, and vegetation were affected, resulting in a permanent, moderate, adverse impact.

In 2003 Congress declared the National Mall to be a completed work of civic art. That action was intended to stop the future addition of monuments, memorials, statues, and visitor centers throughout the National Mall. The memorials and monuments, as well as associated landscapes, are preserved in accordance with *The Secretary of the Interior's Standards for the Treatment of Historic Properties* (NPS 1995).

Altogether, the impacts of all of these actions have been long-term to permanent, major, and beneficial.

Present Actions

Present actions described in this plan either have already undergone or would undergo consultation with the D.C. Historic Preservation Office and/or the Advisory Council on Historic Preservation to minimize effects on the National Mall's cultural resources. Designs for projects funded under the American Recovery and Reinvestment Act of 2009 (the Lincoln reflecting pool area, the D.C. War Memorial, and the Thomas Jefferson Memorial seawall/plaza) are underway, as are designs for modifying the Potomac Park levee and installing security measures around the Thomas Jefferson Memorial. Other projects would include the rehabilitation of paving on Madison Drive between 3rd and 14th streets NW and the rehabilitation of Ohio Drive from 23rd Street to Rock Creek and Potomac Parkway. While every effort will be made to protect contributing elements of the cultural landscapes through a consultation process, the impacts could potentially be permanent, minor, and adverse.

The construction of the Martin Luther King, Jr. Memorial, the Smithsonian Institution's Museum of African American History and Culture, and the Vietnam Veterans Memorial Center would affect existing spatial organization and pedestrian circulation on the National Mall, as well as views and vistas. Consultations are ongoing. Impacts on the overall landscape would be permanent, negligible to minor, and potentially adverse.

The development and implementation of a wayfinding and sign plan within the boundaries of the National Mall is also underway. Ongoing consultation, along with careful design and siting, would ensure that any signs erected would minimally affect the scale and visual relationships among landscape features. Impacts would be long-term, minor, and beneficial.

Other ongoing actions include mostly routine maintenance actions, such as the repair of walkways and roads, tree pruning and planting, sod replacement, addition of post and chain, and other landscape work. All stabilization, preser-

vation, and rehabilitation efforts would be undertaken in accordance with *The Secretary of the Interior's Standards for the Treatment of Historic Properties* (NPS 1995). Impacts would be long-term, negligible to minor, and beneficial.

Taken as a whole, the cumulative impacts of all present actions would be long-term to permanent, negligible to minor, and beneficial as a result of ongoing consultation to mitigate impacts on contributing features of the cultural landscape.

Reasonably Foreseeable Actions

Some of the reasonably foreseeable actions described in this plan will undergo consultation with the D.C. Historic Preservation Office and the Advisory Council on Historic Preservation, resulting in an agreement that will detail management strategies to minimize impacts.

A permanent security screening function for the Washington Monument would be developed, and the temporary structure located on the east side of the monument would be removed. The impact would be long-term, minor, and beneficial.

Installing parking meters or kiosks on Madison and Jefferson drives, as recommended by the 2006 NPS *Visitor Transportation Study*, would not be likely to impact views along these streets, resulting in long-term, negligible, adverse impacts. However, paid parking could improve circulation patterns on the drives, a possible long-term, minor, beneficial impact.

Future actions that would occur adjacent to the National Mall include security projects for the Smithsonian Institution museums, memorials for Dwight D. Eisenhower and American Veterans Disabled for Life, improvements of the 14th Street Bridge corridor, and the development of the southwest waterfront. Sensitive designs of new structures and features, including the use of appropriate materials and colors and select vegetation plantings as visual buffers, if appropriate, would minimally affect the scale and visual relationships among important landscape features of the National Mall. In addition, the topography, circulation features, and land use patterns of the National Mall would remain largely unaltered by such actions. Impacts would be long-term, minor to moderate, and beneficial.

A proposed streetcar line from the Takoma Metrorail station to Buzzard Point would cross the National Mall along 7th Street (DC DOT 2010). The National Park Service would work with the National Capital Planning Commission, the Commission of Fine Arts, the Advisory Council on Historic Preservation, the D.C. Historic Preservation Office, and the Washington Metropolitan Area Transit Authority to ensure that viewsheds would not be impacted by overhead lines.

The replacement of steam and condensate piping at the Washington Monument by the General Services Administration would have little, if any, effect on existing topography, spatial organization, or land use patterns. Once the steamlines were replaced and the trenches backfilled, the disturbed ground would be restored to its pre-construction contour and condition. Any impacts on the grounds would be short-term, negligible to minor, and adverse.

Replacement or permanent repairs of the steamlines would reduce potential impacts from breaks causing excessive amounts of high humidity and water on the interior of the structure, which since 2008 has caused acceleration of rust staining and water damage to the interior walls, platforms, and commemorative stones. Impacts would long-term, minor to moderate, and beneficial.

Summary

The impacts of past, present, and reasonably foreseeable actions would be long-term to permanent, negligible to minor, and adverse, as well as negligible to major and beneficial. The no-action alternative would result in long-term impacts on cultural resources that would be negligible to minor and adverse, as well as negligible to minor and beneficial. These impacts, in combination with the impacts of past, present, and reasonably foreseeable actions, would result in long-term, major, beneficial cumulative impacts. The beneficial impacts of the no-action alternative, however, would be a very small component of overall cumulative impacts.

Conclusion

The no-action alternative would result in long-term, negligible to minor impacts on cultural resources that would either be adverse or beneficial. The overall impacts of past, present, and reasonably foreseeable actions combined with the impacts of the no-action alternative would result in long-term, major, beneficial cumulative impacts. The impacts associated with the no-action alternative would be a very small component of the beneficial cumulative impacts. There would be no impairment of cultural resources under the no-action alternative.

NHPA Section 106 Summary

After applying the Advisory Council on Historic Preservation's criteria of adverse effects (36 CFR Part 800.5, "Assessment of Adverse Effects"), the National Park Service concludes that the no-action alternative would have potential *adverse effects* on cultural resources.

Impacts of the Preferred Alternative

Under the preferred alternative all identified cultural resources (memorial, buildings, sites, structures, objects, landscapes, and districts) on the National Mall would continue to be preserved and protected by the National Park Service. Prioritization decisions would be based on such factors as listing on or eligibility for listing on the National Register of Historic Places, identified fundamental resources, interpretive values, resource condition, and suitability for NPS operations. Individual actions would require consultation with the D.C. Historic Preservation Office and the Advisory Council on Historic Preservation, and would be appropriately documented through compliance with section 106 of the National Historic Preservation Act.

All preservation, rehabilitation, or restoration efforts would be undertaken in accordance with *The Secretary of the Interior's Standards for the Treatment of Historic Properties* (NPS 1995). Any materials removed during rehabilitation or restoration efforts would be evaluated to determine their value to the National Mall and Memorial Park's museum collection and/or for their comparative use in future preservation work at the sites. Preservation, rehabilitation, or restoration conducted according to *The Secretary of Interior's Standards* could result in beneficial impacts on cultural resources.

In addition to the impacts common to all alternatives, the following impacts are analyzed.

Direct and Indirect Impacts

The Mall

Union Square (1st to 3rd Streets)

The Ulysses S. Grant Memorial would be restored, resulting in a long-term, minor to moderate, beneficial impact.

The redesign of Union Square would incorporate elements from the other action alternatives and would protect key contributing elements of the cultural landscape, such as the Grant Memorial, the preservation of historic vistas, the protection of historic trees, and the provision of visitor services outside historic vistas. The redesign would alter the existing 1970s design by redesigning the Capitol Reflecting Pool, paving, and adding visitor facilities and demonstration/event infrastructure. These actions would meet anticipated use levels now and in the future and would protect the Mall's cultural landscape from overuse, but the 1970s design of Union Square would be altered, resulting in a permanent, major, adverse impact on the designed water feature that might be eligible for inclusion on the National Register of Historic Places. The square's redesign could also affect views to and from the Grant Memorial, the Mall, and the U.S. Capitol. Impacts on Union Square would be long-term, minor to major, and adverse.

The Mall (3rd to 14th Streets)

Compacted soils would be removed and replaced with engineered soils capable of withstanding intensive use, and new drainage and irrigation systems would be installed, resulting in beneficial impacts on the health of contributing features of grass and elm trees and the important views and vistas of the Mall. Installing underground event utility infrastructure would result in the removal of visually intrusive aboveground utilities and temporary utility support systems, such as generator trucks and power lines. Im-

pacts would be long-term, minor to moderate, and beneficial.

Other actions proposed to address the impacts of overuse and permitted events on the Mall's cultural landscape could potentially adversely affect the Mall and would need to be carefully designed to minimize effects. These actions include such things as widening or removing walkways, replacing gravel with paved surfaces, installing curbing, paving walks or widened areas for event and staging purposes, developing a paved welcome plaza with a visitor contact station and restroom, developing a flexible office/restroom facility, developing a restroom near the National Air and Space Museum, and adding seating and pedestrian enhancements such as interactive water features. While the criteria for incorporating such actions would include preserving vistas and vegetation, these actions could pose potential changes to contributing characteristics of the Mall's cultural landscape, such as circulation. Impacts would likely be long-term, minor, and adverse.

Washington Monument and Grounds

Developing underground infrastructure for demonstrations and special events and adaptively reusing Survey Lodge could visually enhance the Washington Monument and grounds. Impacts would be long-term, negligible, and beneficial.

Constructing a new multipurpose indoor/outdoor visitor service facility to replace the Sylvan Theater facility and the existing circular restroom could have a long-term, minor, beneficial impact on the Washington Monument grounds. (Neither the restroom nor the Sylvan Theater structures are on or eligible for listing on the National Register of Historic Places, nor are they or related plantings a contributing feature of the grounds.) The location of the facility would be outside the planned vistas of the National Mall,

Replacing damaged walks would rehabilitate the overall appearance of this portion of the historic landscape, resulting in long-term, negligible, beneficial impacts on the visual quality of the historic landscape.

Redesigning roads and parking south of Independence Avenue, along with developing bicycle trails, could have long-term, negligible to minor, adverse impacts on historic vistas of the National Mall.

West Potomac Park (North of Independence Avenue)

Constitution Gardens

The possible relocation of the Lockkeeper's House, which is listed on the National Register of Historic Places, away from its current location immediately adjacent to Constitution Avenue could provide greater protection from potential damage by vehicles. The structure is significant for its historical association with the old Washington City Canal, which no longer exists. In 1915 the structure was relocated 49 feet west and 6 feet north of its original location, when 17th Street was extended. Since then, Constitution Avenue has been widened, reducing the amount of space between the avenue and the north side of the house. After the completion of the Potomac Park levee project, the possible relocation of the Lockkeeper's House within the present grounds, keeping the structure's original orientation to the former canal, and adaptively rehabilitating it could result in long term, minor, beneficial impacts.

Important landscape features of Constitution Gardens would be rehabilitated. Soils and vegetation would be restored, walkways would be repaved, and the lake would be rebuilt to include circulation systems and self-sustaining aquatic vegetation. Rehabilitation would enhance the general appearance of important contributing features of this historic landscape. Impact would be long-term, minor to moderate, and beneficial.

A new food service facility with restrooms would be built in the area identified in the 1970s design for Constitution Gardens and would be compatible with existing spatial organization, vegetation, and circulation. Limited sidewalk widening would somewhat alter the completed design; therefore, the impacts of these actions would be long-term, minor, and adverse.

Vietnam Veterans Memorial

Potential circulation and pedestrian enhancements, such as seating, could affect the character of the memorial, but that effect would depend

on the design and location. The impact would be long-term, negligible to minor, and adverse.

Lincoln Memorial and Grounds

Constructing a new restroom facility near the south concession refreshment stand would introduce a nonhistoric feature to meet visitor needs in this area. Depending on the design and location, the facility could potentially result in adverse impacts to vegetation and spatial organization in the Lincoln Circle and along the radial roads. The use of previously approved architectural styles would allow the restroom to appear as part of the recent design for the refreshment stand. Impacts would be long term, negligible to minor, and adverse.

Potentially removing the Vietnam Veterans Memorial information station once the Vietnam Veterans Memorial Center was completed would have a long-term, negligible, beneficial impact.

Korean War Veterans Memorial

Widening walks on the west side of the Korean War Veterans Memorial would affect the original design and circulation of the memorial and the view of the memorial from the west. However, the widened walks would be in areas leading to the memorial from the sidewalks along the diagonal road and would follow the existing walks and circulation patterns. Impacts would be long-term, negligible, and adverse.

Ash Woods

Ash Woods is not a contributing feature listed on the national register nomination for West Potomac Park. Converting Ash Woods road to pedestrian circulation would reuse a noncontributing circulation element in a manner that would better meet the needs of visitors today and retain a circulation function. Redeveloping the U.S. Park Police facilities at Ash Woods, including new stables (parking area, administrative and support facilities, and a new access road from Independence Avenue) would have long-term, negligible, beneficial impacts, since it would not affect contributing vistas or spatial organization.

West Potomac Park (South of Independence Avenue)

Tidal Basin Area

The Tidal Basin is a contributing feature of the West Potomac Park national register listing. Rebuilding the Tidal Basin seawalls and installing adequate width walks would better protect the cherry trees but would affect the historic characteristics of the Tidal Basin, such as shape, walks, and vegetation. The basin would be noticeably changed on the southeast side to accommodate pedestrian, bicycle, and vehicular circulation. While this would alter the historic appearance of the basin in this area, the scale of the Tidal Basin is so large that it could absorb these changes in a manner that would appear natural to new visitors.

Providing additional space for both bicyclists and pedestrians near Kutz, Inlet, and Outlet bridges would more safely meet today's level of visitation, but would alter the original design and shape of the Tidal Basin landscape, while retaining the appearance of the historic seawalls. The design of the seawall and walks would consider the need for pedestrian lighting, additional seating, and some widened areas to accommodate safe pedestrian movement. Adding separate bicycle trails through the area for safety would change existing circulation patterns.

A new refreshment stand, new recreation equipment rental facilities, and new restrooms would replace noncontributing facilities but could also affect the appearance of the Tidal Basin area.

Altogether, impacts would be long-term, minor to moderate, and adverse

Franklin Delano Roosevelt Memorial

Providing food service and restrooms between the Franklin Delano Roosevelt Memorial and the future Martin Luther King, Jr. Memorial could result in long-term, negligible to minor, adverse impacts since the facility could potentially be seen from the north entry to the Roosevelt Memorial and from the south side of the King Memorial.

West Potomac Park Riverfront

Developing a partially vegetated shoreline and stabilizing the deteriorated dry-laid stone seawall against seasonal flooding and erosion would have long-term, negligible to minor, beneficial impacts. The vegetated shoreline and stabilized stone seawall could affect the visual appearance of the shoreline when seen from West Potomac Park, a long-term, negligible, adverse impact, because it would affect the historic fabric of a contributing feature of West Potomac Park. The overall impact would be long-term, negligible, and adverse.

Constructing separate bike and pedestrian lanes to provide additional visitor safety could visually affect the grounds and circulation along the riverfront of West Potomac Park, resulting in long-term, minor, adverse impacts.

Thomas Jefferson Memorial and Grounds

Redesigning the tour bus drop-off and replacing the noncontributing refreshment stand and adding restrooms, as well as developing new bicycle lanes and trails, would alter existing spatial organization and circulation patterns, resulting in long-term, minor, adverse impacts.

Summary

Long-term impacts on cultural resources under the preferred alternative would be negligible to major and adverse , as well as negligible to moderate and beneficial. Some of the actions described under this alternative would likely pose an adverse effect for the landscape or its contributing resources, with long-term, negligible to moderate, adverse impacts.

Cumulative Impacts

The impacts of past, present, and reasonably foreseeable actions would be the same as described under the no-action alternative and would be long-term to permanent, negligible to moderate, and adverse, as well as negligible to major and beneficial.

As described above, implementing the preferred alternative would result in long-term, negligible to major, adverse impacts on cultural resources, along with long-term, negligible to moderate, beneficial impacts. These impacts, in combination with the impacts of past, present, and reasonably foreseeable projects, would result in long-term, major, beneficial cumulative impacts. The beneficial impacts of the preferred alternative would be a noticeable component of the beneficial cumulative impacts.

Conclusion

Impacts on cultural resources under the preferred alternative would be long-term, negligible to major, and adverse and also long-term, negligible to moderate, and beneficial. The overall impacts of past, present, and reasonably foreseeable actions, combined with the impacts of the preferred alternative, would result in long-term, major, beneficial cumulative impacts. The impacts associated with the preferred alternative would be a noticeable component of the beneficial cumulative impacts. There would be no impairment of cultural resources under the preferred alternative.

NHPA Section 106 Summary

After applying the Advisory Council on Historic Preservation's criteria of adverse effects (36 CFR 800.5), the National Park Service concludes that implementing the preferred alternative would have potential *adverse effects* on cultural resources. Further consultation would be required to make a final determination of effect and to identify appropriate mitigation measures.

IMPACTS OF ALTERNATIVE A

Under alternative A all identified cultural resources on the National Mall would be preserved and protected by the National Park Service to the best of its ability. Prioritization decisions would be based on such factors as listing or eligibility for listing on the National Register of Historic Places, identified fundamental resources, interpretive values, resource condition, and suitability for NPS operations. Individual actions would require consultation with the D.C. Historic Preservation Office and the Advisory Council on Historic Preservation, if needed, and would be appropriately documented through compliance with section 106 of the National Historic Preservation Act.

All preservation, rehabilitation, or restoration efforts would be undertaken in accordance with *The Secretary of the Interior's Standards for the Treatment of Historic Properties* (NPS 1995). Any materials removed during rehabilitation or restoration efforts would be evaluated to determine their value to the National Mall and Memorial Park's museum collection and/or for their comparative use in future preservation work at the sites. Preservation, rehabilitation, or restoration conducted according to *The Secretary of Interior's Standards* could result in beneficial impacts on cultural resources.

In addition to the impacts common to all alternatives, the following impacts are analyzed.

Direct and Indirect Impacts

The Mall

Union Square (1st to 3rd Streets)

The Grant Memorial would be restored, resulting in a long-term, minor to moderate, beneficial impact.

A redesign for Union Square as a civic square focusing on the Grant Memorial would preserve historic vistas, provide visitors services outside historic vistas, preserve historic trees, and result in a smaller reflecting pool that would recall the historic Washington City Canal. These actions would protect the cultural landscape of the Mall. While no redesign plans have been developed, any redesign would alter the existing 1970s design, affecting the reflecting pool and paving, and adding visitor facilities. The impact on a designed water feature that may be eligible for inclusion on the National Register of Historic Places would be long-term, major, adverse. Impacts on Union Square would be long-term, minor to major, and adverse.

The Mall (3rd to 14th Streets)

Actions designed to protect the lawns and elm trees, such as replacing compacted soils with engineered soils capable of withstanding intensive use, installing new drainage and irrigation systems, and installing underground event utility infrastructure, would have long-term, minor, beneficial impacts on the appearance of the Mall. The National Park Service would work with the city to remove vehicle parking along north-south streets (3rd, 4th, and 7th streets) within the east-west vista. Impacts would be long-term, minor, and beneficial as a result of enhancing views.

Washington Monument and Grounds

Actions on the Washington Monument grounds, such as the development of a partially underground visitor services/food service structure directly east of the monument between 14th and 15th streets would affect the east-west vista and would be highly visible from the monument and plaza, as well as somewhat change the terrain in the area. Impacts would be long-term, moderate, and adverse. Replacing the circular restroom facility southeast of the monument with a larger restroom structure that would continue to be screened from the monument would result in long-term, minor, beneficial impacts.

West Potomac Park (North of Independence Avenue)

Constitution Gardens

The lake within Constitution Gardens, a contributing feature of the West Potomac Park national register listing, would be rehabilitated. The existing restrooms and refreshment stand on the west side would be replaced with new facilities. Impacts would be long-term, negligible, and adverse.

Lincoln Memorial and Grounds

Working with others to remove the cloverleaf ramp from Arlington Memorial Bridge to Rock Creek Parkway would affect historic circulation patterns at the Lincoln Memorial and Arlington Memorial Bridge. Impacts on historic circulation patterns would be long-term, minor, and adverse.

Korean War Veterans Memorial

As described under the no-action alternative, the Korean War Veterans Memorial would be preserved, but features of the designed landscape could begin to deteriorate as a result of high visitation that exceeds the capacity of the circulation system (walks, vegetation). Impacts would be long-term, minor, and adverse.

Ash Woods

Ash Woods is not a contributing feature listed on the national register nomination for West Potomac Park. Rehabilitating the U.S. Park Police stables and replacing the restroom would have long-term, negligible, beneficial impacts.

West Potomac Park (South of Independence Avenue)

Tidal Basin

The Tidal Basin is a character-defining feature of the West Potomac Park national register listing. Rehabilitating and raising the height of the Tidal Basin walls in their current location so they would not be overtopped by tidewater could have long-term, negligible to minor, adverse visual impacts.

Installing paving around the Tidal Basin and reconfiguring Kutz Bridge for safer pedestrian use would change historic circulation patterns and the existing appearance of the contributing elements of the cultural landscape around the Tidal Basin. Impacts would be long-term, minor to moderate, and adverse.

New visitor facilities to replace the noncontributing existing refreshment stand and recreation equipment rental facility on the northeast side of the Tidal Basin would include new restrooms, rental facilities, and refreshment stands. Impacts could potentially be long-term, minor, and adverse on the portions of character-defining features of the West Potomac Park cultural landscape, including views and vistas, spatial organization, circulation, and vegetation.

West Potomac Park Riverfront

Rehabilitating the dry-laid stone river walls would result in long-term, negligible, beneficial impacts, but could be expected to be a high-cost ongoing activity due to changing water levels.

Summary

Overall long-term impacts on cultural resources under alternative A would be both adverse and beneficial; adverse impacts would be negligible to major, and beneficial impacts would be negligible to minor.

Cumulative Impacts

The impacts of past, present, and reasonably foreseeable actions would be the same as described under the no-action alternative and would be long-term to permanent, negligible to moderate, and adverse, as well as long-term, negligible to major, and beneficial.

Long-term impacts on cultural resources under alternative A, as described above, would be negligible to major and adverse, as well as negligible to minor and beneficial. These impacts, in combination with the impacts of other past, present, and reasonably foreseeable actions, would result in long-term, major, beneficial cumulative impacts. The beneficial impacts of alternative A, however, would be a very small component of the beneficial cumulative impacts.

Conclusion

Impacts on cultural resources under alternative A would be long-term, negligible to major, and adverse, as well as long-term, negligible to minor, and beneficial. The overall impacts of past, present, and reasonably foreseeable actions added to those of alternative A would result in long-term, major, beneficial cumulative impacts. The impacts associated with alternative A would be a very small component of the beneficial cumulative impacts. There would be no impairment of cultural resources under alternative A.

NHPA Section 106 Summary

After applying the Advisory Council on Historic Preservation's criteria of adverse effects (36 CFR 800.5), the National Park Service concludes that implementation of alternative A would have potential *adverse effects* on cultural resources. Further consultation would be required to make a final determination of effect on these resources and identify appropriate mitigation measures.

IMPACTS OF ALTERNATIVE B

Under alternative B all of the identified cultural resources on the National Mall would continue to be preserved and protected by the National Park Service to the best of its ability. As described under the other alternatives, prioriti-

zation decisions would be based on such factors as listing on or eligibility for listing on the National Register of Historic Places, identified fundamental resources, interpretive values, resource condition, and suitability for NPS operations. Individual actions would require consultation with the D.C. Historic Preservation Office and the Advisory Council on Historic Preservation, if needed, and would be appropriately documented through compliance with section 106 of the National Historic Preservation Act.

All preservation, rehabilitation, or restoration efforts would be undertaken in accordance with *The Secretary of the Interior's Standards for the Treatment of Historic Properties* (NPS 1995). Any materials removed during rehabilitation or restoration efforts would be evaluated to determine their value to the National Mall and Memorial Park's museum collection and/or for their comparative use in future preservation work at the sites. Preservation, rehabilitation, or restoration conducted according to *The Secretary of Interior's Standards* could result in beneficial impacts on cultural resources.

In addition to the impacts common to all alternatives, the following impacts are analyzed.

Direct and Indirect Impacts

The Mall

Union Square (1st to 3rd Streets)

The Grant Memorial would be restored, a long-term, minor to moderate, beneficial impact.

A redesign of Union Square would include removing the Capitol Reflecting Pool to create a paved civic square, preserving historic vistas, providing visitors services outside historic vistas, and preserving historic trees. Removing the reflecting pool would alter the existing 1970s design, a long-term, major, adverse impact on a designed water feature that may be eligible for inclusion on the National Register of Historic Places.

The Mall (3rd to 14th Streets)

Installing interactive water features at the 8th Street cross axis and at other areas around the Mall would add nonhistoric features into a landscape listed on the National Register of Historic Places, intruding on the east-west vista and affecting turf grass. Resulting impacts would be long-term, minor to moderate, and adverse.

An underground parking facility below the Mall between 12th and 15th streets NW and entered from 15th Street would result in a short-term, minor, adverse impact during construction. While its impact cannot be known at this point, it is highly likely that the portals would be visible from the Washington Monument and that the garage could affect circulation patterns. These actions could cause long-term, moderate to major, adverse impacts.

Actions to protect the lawns and elm trees, such as replacing compacted soils with engineered soils capable of withstanding intensive use, installing new drainage and irrigation systems, and providing underground event utility infrastructure, would have long-term, minor to moderate, beneficial impacts on the health of contributing Mall features.

Constructing a visitor contact station and restroom facilities would introduce new elements into the cultural landscape. While these facilities would be outside vistas and tree panels, they could result in long-term, negligible to minor, adverse impacts on the character-defining features of the Mall. Enlarging and paving walkways and providing additional paved areas for demonstrations and special events would add nonhistoric elements to the cultural landscape, resulting in long-term, minor, adverse impacts.

Washington Monument and Grounds

Removing the restroom facility and constructing a new multipurpose indoor/outdoor visitor service facility in the vicinity, which would also replace the Sylvan Theater, could have long-term, minor, beneficial impacts on the Washington Monument grounds. None of these features — the restroom facility, the Sylvan Theater, and related vegetation — is on or eligible for listing on the National Register of Historic Places, nor are they a contributing feature of the Washington Monument grounds. At the same time these elements could potentially affect spatial organization, a long-term, negligible to minor, adverse impact.

Providing infrastructure designed to facilitate demonstrations and events would have a long-term, negligible, beneficial impact since it would be underground and there are already visible utility boxes.

Providing pedestrian bridges or underpasses and underground parking below the south grounds to meet the needs to high levels of visitation, and covering over Maine Avenue on the south grounds would likely be very noticeable, could affect circulation patterns, some immediate views, and vegetation. Impacts would be short-term, moderate, and adverse during construction and long-term, minor, and adverse afterward.

West Potomac Park (North of Independence Avenue)

Constitution Gardens

Moving the Lockkeeper's House away from its current location immediately adjacent to Constitution Avenue would provide greater protection from potential damage by vehicles on Constitution Avenue. The structure is significant for its association with the Washington City Canal, which no longer exists, and it was relocated to its present site in 1915. After the completion of the Potomac Park levee project, moving the structure to a nearby location, keeping its orientation to the former canal, and adaptively rehabilitating it could result in long term, minor, beneficial impacts.

A new food service and retail facility would be built on the east side of the lake, as included in the 1970s design. The introduction of new features would result in long-term, minor, adverse impacts.

Redesigning the lake to be shallow and drainable so that it could accommodate demonstrations and special events, would retain its reflective capability and pastoral character, but would temporarily result in the loss of character when it was drained for events. While the design intent for Constitution Gardens was for a festival grounds, draining the lake for events was not envisioned and would therefore affect a contributing designed water feature of the West Potomac Park national register nomination. The resulting impact would be long-term, minor, and adverse.

Lincoln Memorial and Grounds

Installing additional restroom facilities near the north and south concession refreshment stands could potentially affect the planting plan. The facilities would be designed to be architecturally compatible with the existing stands. Impacts would be long-term, minor, and adverse.

Removing the Vietnam Veterans Memorial information station once the Vietnam Veterans Memorial Center was completed would have a long-term, negligible, beneficial impact.

Korean War Veterans Memorial

East side entry walks would be constructed to accommodate high volumes of pedestrian traffic. This would somewhat alter the original design intent to approach the memorial from the west, resulting in a long-term, negligible to minor, adverse impact.

Ash Woods

Ash Woods is not a contributing feature on the national register nomination for West Potomac Park. Converting Ash Road into a pedestrian walkway, replacing the U.S. Park Police stables, removing the existing restroom, and constructing a new restroom closer to the stables would not affect contributing views and vistas, spatial organization, vegetation, or circulation. Impacts would be long-term, negligible, and beneficial.

West Potomac Park (South of Independence Avenue)

Tidal Basin

The Tidal Basin is a contributing feature of the West Potomac Park national register listing. Widening walkways around the Tidal Basin would affect the size and appearance of the Tidal Basin somewhat, but the scale of the basin can absorb these changes. Constructing three pedestrian bridges, replacing the refreshment stand and restrooms, and upgrading the recreation equipment rental facilities would have long-term, minor, adverse impacts in terms of views, spatial organization, and circulation.

Franklin Delano Roosevelt Memorial

Providing food service and restrooms between the Franklin Delano Roosevelt Memorial and the future Martin Luther King, Jr. Memorial could result in long-term, negligible to minor, adverse impacts since the facility could potentially be seen from the north entry to the Roosevelt Memorial and from the south side of the King Memorial.

West Potomac Riverfront Park

The riverwalls are a contributing feature of the West Potomac Park national register nomination. Constructing higher stone-faced structural walls to limit overtopping by tidewater along the Potomac River would affect the remaining historic fabric of dry-laid stone walls. The higher wall would also likely affect the visual appearance of the shoreline from West Potomac Park, resulting in long-term, minor to moderate, adverse impacts.

Thomas Jefferson Memorial and Grounds

Replacing the noncontributing refreshment stand with a new structure that would be more compatible with the overall unified design scheme of the National Mall would result in a long-term, negligible to minor, adverse impact, since it could potentially affect some views and spatial organization.

Summary

Overall long-term impacts on cultural resources under alternative B would be minor to major and adverse, as well as negligible to moderate and beneficial.

Cumulative Impacts

The impacts of past, present, and reasonably foreseeable actions would be the same as described under the no-action alternative and would be long-term to permanent, negligible to moderate, and adverse, as well as negligible to major and beneficial.

As described above, impacts to cultural resources under alternative B would be long-term, minor to major, and adverse, as well as long-term, negligible to moderate, and beneficial. The impacts of this alternative, in combination with the impacts of past, present, and reasonably foreseeable actions, would result in long-term, major, beneficial cumulative impacts. The beneficial effects of alternative B, however, would be a small component of the beneficial cumulative impacts.

Conclusion

Overall impacts on cultural resources under alternative B would be long-term, minor to major, and adverse and long-term, minor to moderate, and beneficial. The overall impacts of past, present, and reasonably foreseeable actions added to those described for alternative B would result in long-term, major, beneficial impacts. The impacts associated with this alternative would be a small component of the beneficial cumulative impacts. There would be no impairment of cultural resources under alternative B.

NHPA Section 106 Summary

After applying the Advisory Council on Historic Preservation's criteria of adverse effects (36 CFR Part 800.5), the National Park Service concludes that implementation of alternative B would have potential *adverse effects* on cultural resources. Further consultation is required to make a final determination of the effect on this resource and to identify appropriate mitigation measures.

Impacts of Alternative C

Under alternative C identified cultural resources on the National Mall would continue to be preserved and protected by the National Park Service to the best of its ability. As described under the other alternatives, prioritization decisions would be based on such factors as listing on or eligibility for listing on the National Register of Historic Places, the identified fundamental resources, interpretive values, resource conditions, and suitability for NPS operations. Individual actions would require consultation with the D.C. Historic Preservation Office and, if required, the Advisory Council on Historic Preservation, and would be appropriately documented through compliance with section 106 of the National Historic Preservation Act.

All preservation, rehabilitation, or restoration efforts would be undertaken in accordance with

The Secretary of the Interior's Standards for the Treatment of Historic Properties (NPS 1995). Any materials removed during rehabilitation or restoration efforts would be evaluated to determine their value to the National Mall and Memorial Park's museum collection and/or for their comparative use in future preservation work at the sites. Preservation, rehabilitation, or restoration conducted according to *The Secretary of Interior's Standards* could result in beneficial impacts on cultural resources.

Direct and Indirect Impacts

The Mall

Union Square (1st to 3rd Streets)

The Grant Memorial would be restored, resulting in a long-term, minor to moderate, beneficial impact.

The redesign of Union Square would protect key contributing elements of the cultural landscape, such as the Grant Memorial, the preservation of historic vistas, the protection of historic trees, and the provision of visitors services outside historic vistas. The redesign would alter the existing 1970s design by redesigning the Capitol Reflecting Pool, paving, and adding visitor facilities and demonstration/event infrastructure. These actions would meet anticipated use levels now and in the future and protect the Mall's cultural landscape from overuse, but the 1970s design of Union Square would be altered, resulting in a long-term, major, adverse impact on the designed water feature that might be eligible for inclusion on the National Register of Historic Places. The square's redesign could also affect views to and from the Grant Memorial, the Mall, and the U.S. Capitol. Impacts on Union Square would be long-term, minor to major, and adverse.

The Mall (3rd to 14th Streets)

Compacted soils would be removed and replaced with engineered soils capable of withstanding intensive use, and new drainage and irrigation systems would be installed, resulting in beneficial impacts on the health of contributing features of grass and elm trees and the important views and vistas of the Mall. Installing underground event utility infrastructure would result in the removal of visually intrusive aboveground utilities and temporary utility support systems, such as generator trucks and power lines. Impacts would be long-term, minor to moderate, and beneficial.

Facilitating more informal recreation on the Mall by removing a few north-south walks near the 8th Street axis, installing interactive water features, a children's play area, and paving walkways, along with adding new restroom facilities and refreshment stands, could affect the character-defining features of the cultural landscape and circulation patterns. Recreation already occurs within the vista, and the scale of recreation does not alter the vista; removing some walks would make a more continuous swath of turf to support the concept of the *tapis verte* or green lawn. Additional amenities would be located outside the east-west vista along shaded walks and would affect some views. Impacts would be long-term, minor, and adverse.

A new 14th Street vehicular tunnel under the Mall would change the historic views up and down the Mall by removing vehicular traffic. It would also adversely affect historic circulation patterns and the spatial organization of the Mall. Impacts would be short-term, minor, and adverse during construction, but long-term, minor, and beneficial as a result of removing traffic. Retaining the definition of the roadbed would adaptively reuse historic circulation patterns in a way that would create more space for pedestrians as well as increase sustainable space for temporary event facilities.

Washington Monument and Grounds

New restrooms and a reconstructed Sylvan Theater would replace existing facilities, but the historic uses of the site would remain. These facilities are not contributing features of the monument and grounds, and they are not usually visible from the monument. Impacts would be long-term, negligible, and beneficial.

Constructing a new permanent food service and retail facility between 14th and 15th streets and north of Independence Avenue would be outside primary view corridors. The proposed location is one that has not been previously disturbed, and it might be visible from the Washington Monument and grounds. It would also

likely affect circulation, vegetation, and spatial organization. Impacts would be long-term, minor, and adverse.

Independence and Maine avenues would be redesigned and Maine Avenue would be decked over to connect the south grounds with the Tidal Basin area. While pedestrian circulation would be improved, motorists' views of the Tidal Basin would be affected, and the action could affect circulation patterns and some vegetation. Impacts on the Washington Monument and grounds would be long-term, minor, and adverse because of changes to historic circulation patterns.

West Potomac Park (North of Independence Avenue)

Constitution Gardens

Moving the Lockkeeper's House away from its current location immediately adjacent to Constitution Avenue would provide greater protection from potential damage by vehicles on Constitution Avenue. The structure is significant for its association with the Washington City Canal, which no longer exists, and it was relocated to its present site in 1915. After the completion of the Potomac Park levee project, moving the structure to a nearby location, keeping its orientation to the former canal, and adaptively rehabilitating it could result in long term, minor, beneficial impacts. Constitution Gardens is a contributing feature of the West Potomac Park national register nomination.

The lake, an original constructed water feature of the garden's cultural landscape, would be rehabilitated to be self-sustaining but would keep the same configuration and edge. A new food service facility with restrooms would be built in the area identified in the 1970s design and would be compatible with existing spatial organization, vegetation, and circulation. Similarly, limited sidewalk widening would not alter the original finished design. The impacts of these actions would be long-term, minor, and adverse.

Lincoln Memorial and Grounds

Constructing a new restroom facility near the south refreshment stand would introduce a non-historic feature to meet visitor needs in this area. Depending on the design and location, the facility could potentially result in adverse impacts to vegetation and spatial organization in the Lincoln Circle and along the radial roads. The use of previously approved architectural styles would allow the restroom to appear as part of the recent design for the stand. Impacts would be long term, negligible to minor, and adverse.

Korean War Veterans Memorial

East side entry walks would be constructed to accommodate high volumes of pedestrian traffic. This would somewhat alter the original design intent to approach the memorial from the west, resulting in a long-term, negligible to minor, adverse impact.

Ash Woods

Ash Woods is not a contributing feature listed in the national register nomination for West Potomac Park. Rebuilding the U.S. Park Police stables, removing the restroom and providing a new restroom near the stables, and providing upgraded vehicular access and parking for park use and recreational activities would result in long-term, negligible to minor, beneficial impacts, since vistas, circulation, or spatial organization would not be affected.

West Potomac Park (South of Independence Avenue)

Tidal Basin Area

The Tidal Basin is a character-defining feature of the West Potomac Park national register nomination. Filling in the bay north of Kutz Bridge to provide additional recreation fields would be a permanent, major, adverse impact to the original design of the Tidal Basin and West Potomac Park. The setting of the John Paul Jones Memorial, a national register property, would be significantly altered, resulting in a permanent, moderate, adverse impact.

Rehabilitating the Tidal Basin walls to address flooding would prevent damage to the walks and landscape, a long-term, minor, beneficial impact.

Altering the area surrounding the Tidal Basin by adding wider walkways, redesigning roads and parking, and constructing new pedestrian

bridges, new recreation fields, a new restroom, and food service and recreation equipment rental facilities would change the original design, shape, and appearance of the Tidal Basin area. While the scale of the Tidal Basin is very large, the resulting impacts would be long-term, minor to moderate, and adverse.

West Potomac Park Riverfront

Developing a partially vegetated shoreline and stabilizing the deteriorated dry-laid stone seawall against seasonal flooding and erosion would have long-term, negligible to minor, beneficial impacts. The vegetated shoreline and stabilized stone seawall could affect the visual appearance of the shoreline when seen from the park, a long-term, negligible, adverse impact, because it would affect the historic fabric of a contributing feature of West Potomac Park national register listing. The overall impact would be long-term, negligible, and adverse.

Constructing separate bike and pedestrian lanes to provide additional visitor safety could have a visual impact on the grounds and circulation along the riverfront of West Potomac Park, resulting in long-term, minor, adverse impacts.

Thomas Jefferson Memorial and Grounds

The change in the bus drop-off area would not alter existing circulation patterns, visitor access, or circulation at the tour bus drop-off. Nor would these changes alter visual elements in the historic landscape. The impact of redesigning the tour bus drop-off would likely be long-term, negligible to minor, and beneficial. Relocating the refreshment stand would be long-term, negligible to minor, and beneficial.

Summary

Overall impacts of alternative C on cultural resources would be long-term to permanent, negligible to major, and adverse, as well as long-term, negligible to moderate, and beneficial.

Cumulative Impacts

The impacts of past, present, and reasonably foreseeable actions would be the same as described under the no-action alternative and would be long-term to permanent, negligible to moderate, and adverse, as well as long-term to permanent, negligible to major, and beneficial.

As described above, alternative C would result in long-term to permanent, negligible to major, adverse impacts to cultural resources, as well as long-term, negligible to moderate, beneficial impacts. These impacts, in combination with the impacts of other past, present, and reasonably foreseeable actions, would result in long-term, major, beneficial cumulative impacts. The overall adverse impacts of alternative C would be a noticeable adverse component of the overall beneficial cumulative impacts.

Conclusion

Alternative C would result in long-term to permanent, negligible to major, adverse impacts, along with long-term, negligible to moderate, beneficial impacts on cultural resources. Under this alternative several actions could affect character-defining features. The overall impacts of past, present, and reasonably foreseeable actions added to those for alternative C would result in long-term, major, beneficial cumulative impacts. The impacts associated with alternative C would be a noticeable adverse component of the overall beneficial cumulative impacts. There would be no impairment of cultural resources from implementation of alternative C.

NHPA Section 106 Summary

After applying the Advisory Council on Historic Preservation's criteria of adverse effects (36 CFR Part 800.5), the National Park Service concludes that implementation of alternative C would have potential *adverse effects* on cultural resources. Further consultation is required to make a final determination of effect on Union Square and identify appropriate mitigation measures.

NATURAL RESOURCES

The analysis of anticipated impacts to natural resources was based on research, knowledge of park resources, and the best professional judgment of planners, biologists, hydrologists, and botanists who have experience with similar types of projects. Information on natural resources was gathered from several sources, including the U.S. Fish and Wildlife Service and site-specific resource inventories for wetlands, water quality, wildlife, fisheries, and vegetation. As appropriate, additional sources of data are identified under each topic heading.

Where possible, map locations of sensitive resources were compared with the locations of proposed developments and modifications. Predictions about short- and long-term site impacts were based on previous case studies of use and development impacts on natural resources.

The definitions and impact analyses used in this section assume that mitigation would be implemented. It is also assumed that NPS policies, sustainability guidelines, and other best practices would be adhered to in implementing any alternative.

For this document, the planning team qualitatively evaluated the impact intensity for natural resources using resource-specific methodology and the threshold definitions that are described below.

WATER RESOURCES

Methodology for Impact Analysis

This topic includes water quality, water quantity, floodplains and stormwater, and use of potable water. The impact topic on wetlands was dismissed from further consideration, as explained on page 36. Potential impacts of actions comprising the alternatives often cannot be defined relative to site-specific locations. Consequently, water resource impacts of the alternatives were assessed qualitatively.

Impact Intensity Levels

The following categories were used to evaluate the potential impacts on water resources:

- **Negligible** — Impacts on water resources would not be readily measurable or detectable and would have no impact outside the National Mall.
- **Minor** — Impacts on water resources would be small, detectable, and measurable, but with few impacts beyond the National Mall.
- **Moderate** — Impacts on water resources would be easily detectable, with potential effects outside the National Mall.
- **Major** — Impacts on water resources would be substantial and obvious, with impacts extending outside the National Mall.

Type of Impact

Impacts associated with water resources could be beneficial or adverse. Beneficial impacts would improve water quality or reduce the use of potable water. Adverse impacts would result in deteriorated water quality or increased use of potable water.

Duration of Impacts

Impacts could be short- or long-term.

- *Short-term* — The impact would generally last up to one year or the life of a construction project.
- *Long-term* — The impact would last longer than one year or for the life of the plan (up to 50 years).

NPS Policies

NPS *Management Policies 2006* state that the National Park Service will build a science-based understanding of park resources (NPS 2006e, sec. 4.1). The Park Service will determine the quality of park surface and groundwater resources and avoid, whenever possible, the pollution of park waters by human activities

occurring within and outside the parks (NPS 2006e, sec. 4.6.3). The Park Service will

- work with appropriate governmental bodies to obtain the highest possible standards available under the Clean Water Act for the protection for park waters
- take all necessary actions to maintain or restore the quality of surface waters and groundwaters within the parks consistent with the Clean Water Act and all other applicable federal, state, and local laws and regulations
- enter into agreements with other agencies and governing bodies, as appropriate, to secure their cooperation in maintaining or restoring the quality of park water resources.

NPS *Director's Order 77-2: Floodplain Management* (NPS 2003b) states that when it is not practicable to locate or relocate development or inappropriate human activities to a site outside the floodplain, the National Park Service will:

- prepare and approve a statement of findings, in accordance with procedures described in *Procedural Manual 77-2: Floodplain Management* (NPS 2004d)
- take all reasonable actions to minimize the impact to the natural resources of floodplains
- use nonstructural measures as much as practicable to reduce hazards to human life and property
- ensure that structures and facilities are designed to be consistent with the intent of the standards and criteria of the National Flood Insurance Program (44 CFR Part 60)

Impacts Common to All Alternatives

Under all alternatives water quality problems in designed water features would continue to be addressed, and alternative management methods, such as addressing algae growth in designed water features, would help improve water quality. This would be a long-term, minor, beneficial impact on water quality.

None of the alternative actions proposed in this plan would affect natural floodplains or cause a meaningful change in development or use of existing floodplains. For additional information, see the "Statement of Findings for Floodplains" in appendix E. Under any alternative the National Park Service would work with the District of Columbia and other entities in designing and constructing structures such as retention ponds and other means to manage stormwater runoff within the National Mall.

Under any alternative, as projects were implemented, mitigation measures would need to be in place before construction permits were issued.

Park managers would monitor conditions affected by global climate change (e.g., temperature, rainfall, and sea level) and develop strategies to mitigate the effects of climate change, especially sea level rise.

Impacts of the No-Action Alternative

Direct and Indirect Impacts

The no-action alternative would allow existing water quality issues to continue. Most large man-made water features on the National Mall have a problem with algae growth caused by poor water circulation or aeration. This growth adversely affects aesthetics and the quality of water for other aquatic life. Treatments to control the algae include mechanical removal and the application of chemical algicides. This, in turn, may continue to cause a long-term, minor, adverse impact on regional water quality when the pools are periodically drained into the Tidal Basin or another water body.

Due to soil compaction, some of the lawn treatment chemicals (fertilizers, etc.) used on turfgrass areas would continue to wash into the area's surface waters, resulting in the continuation of short- and long-term adverse impacts to water quality. This impact varies greatly depending on the level of soil compaction, by timing of application, and precipitation, so it is difficult to determine the level of impact.

The Potomac River walls along West Potomac Park were constructed by the Army Corps of

Engineers in the 1880s and 1890s, and they have begun to deteriorate. Some erosion along the Potomac River would continue to introduce a low level of sediment to river waters, a long-term, negligible, adverse impact to water quality.

Large volumes of potable water provided by the District of Columbia would continue to be used annually in ornamental water features as the result of loss to evaporation and the need to refill pools during semi-annual cleaning. This would continue long-term, moderate, adverse impacts on potable water use.

Nothing in this alternative would increase or reduce the amount of impervious surfaces in the planning area more than negligibly; however, constrained water infiltration caused by these surfaces would continue to contribute to accelerated stormwater runoff and potential for urban drainage flooding.

Cumulative Impacts

Water quality and quantity have been adversely affected to various degrees since the region has been settled. Water has been removed from the streams for domestic, agricultural, and industrial uses for about 200 years. Several types of pollutants as well as sediment are contained in effluent discharges that return to surface waters, causing long-term, minor to moderate, adverse impacts to water quality. Previously free-flowing streams and other drainages have been channeled, rerouted, or shunted underground through pipes, resulting in long-term, minor to moderate, adverse impacts on water resources.

Approximately 68% of the drainage area that encompasses the planning area currently consists of surfaces that are more than 50% impervious (see the Impervious Surfaces map on page 301). Soil compaction is so great in some areas of the National Mall that even the soil may be considered impervious. The reduction in precipitation retention results in increased sediment discharge into local waterways and a decrease in the percolation of water to the water table, both long-term, adverse impacts. The construction of the National Museum of African American History and Culture, the Vietnam Veterans Memorial Center, and the Martin Luther King, Jr. Memorial would increase the amount of impervious surfaces in the study area. A goal of ongoing planning efforts in the Washington area is to minimize any increase in the amount of impervious surfaces.

The National Park Service has been cooperating with the Army Corps of Engineers and the District of Columbia to design and build a permanent solution for the flood control levee as it crosses 17th Street. This would reduce the potential for river overflow flooding north of the National Mall, a long-term, major, beneficial impact on the protection of buildings as well as flood insurance costs for facilities within the 100-year floodplain, but it would have no effect on natural floodplains within the National Mall.

The ongoing Chesapeake Bay Program, of which the National Park Service is a partner with other federal and state agencies, was established to protect and improve the quality of water resources in the greater Chesapeake Bay watershed. Implementing sustainability guidelines for urban resource management would also improve the condition of water resources. The long-term effects of these ongoing programs are expected to be moderate and beneficial.

The National Park Service recognizes that global climate change could lead to a rise in sea level, with estimates of between 5 and 37 inches (0.13–0.95 meter) in the United States over the next century (Resources for the Future 2009). A sea level rise of 20 inches or more could result in the inundation of large areas of the National Mall. Adaptive management and regional cooperation would be used to plan and implement strategies for dealing with the effects of global warming and for reducing the contribution of NPS operations to global warming.

In summary, long-term, minor to moderate, adverse impacts to water quality would continue as a result of pollutants and sediment discharges in surface water runoff; the channeling, rerouting, or shunting underground of streams and other drainages; and reduced percolation of water and increased runoff because of impervious surfaces. Long-term, beneficial impacts would result from a flood-control levee at 17th Street (a major, beneficial impact on the downtown area, but no effect on natural floodplains within the National Mall), and from improved water quality in the greater Chesapeake Bay (a moderate, beneficial impact).

These adverse actions and impacts would be reduced somewhat by implementing mitigation and sustainability practices. This alternative would make a large contribution to the effects of other past, present, and reasonably foreseeable actions. The overall cumulative effects would be long-term, moderate, and adverse.

Conclusion

Implementing the no-action alternative would result in the continuation of short- and long-term, minor to moderate, adverse impacts on potable water use, groundwater, and surface water resources. The overall cumulative impacts would be long-term, moderate, and adverse. There would be no impairment of a key park resource.

Impacts of the Preferred Alternative

Direct and Indirect Impacts

Under the preferred alternative nonpotable water sources would be used in ornamental features, resulting in a reduction in potable water use, and water infiltration would be enhanced as a result of improved soil conditions that would, in turn, reduce runoff. Water features would be rehabilitated and water quality improved through recirculation, filtration, and improved equipment. The National Park Service would seek sound, natural ways to improve water quality. The National Park Service would seek to manage more stormwater on-site, as well as seek sustainable water use and reuse of graywater. These actions would result in long-term, moderate, beneficial impacts on water resources.

The Capitol Reflecting Pool would be redesigned for sustainable water management in order to substantially reduce the volume of water needed. It could be redesigned to be drained for events or frozen for ice skating. Changing the management of this pool would result in long-term, negligible, beneficial impacts on water use.

Constitution Gardens Lake would be redesigned to be self-sustaining and support fish and desirable plant populations. This change would reduce the need for chemical and mechanical algae control, and nonpotable water sources would be explored. These actions would result in long-term, minor, beneficial impacts on water quality and use.

Some areas of turf south of the National Gallery of Art Sculpture Garden and along 3rd, 4th, 7th, and 14th streets would be paved. In addition some existing sidewalks could be widened in Constitution Gardens, at the Korean War Veterans and the Vietnam Veterans memorials, and around the Tidal Basin. These actions would increase the area of impervious surfaces by about 5 acres. However, new and replaced paving would use sustainable materials and methods to increase water infiltration and reduce water runoff. Paving would result in long-term, minor, adverse impacts on groundwater percolation and quality.

Constructing or replacing visitor amenities (e.g., restrooms, food service facilities, and retail spaces) near Union Square, the Washington Monument, and the Lincoln Memorial would increase the amount of impervious surfaces, resulting in long-term, negligible, adverse impacts because of the small, previously disturbed areas affected. These adverse impacts would be essentially offset by improved soil management techniques on large areas of the Mall, which would reduce compaction and use of chemicals and would increase percolation of precipitation, resulting in long-term, minor, beneficial impacts on water quality, quantity, and groundwater replenishment.

Naturalized riverbanks would be established in some areas along the Potomac River frontage where existing river walls have deteriorated. Aging and deteriorating seawalls around the Tidal Basin would be rebuilt in accordance with engineering studies and would eliminate regular overflowing and bank erosion while allowing wider pedestrian sidewalks. These actions would reduce the amount of sediment being washed into the river, resulting in long-term, negligible, beneficial impacts to water quality. Short-term, moderate, adverse impacts to water quality could occur from increased siltation during construction.

In summary under the preferred alternative nonpotable water sources would be used in ornamental features where feasible, resulting in

a reduction in potable water use. The National Park Service would seek to manage more stormwater onsite, as well as seek sustainable water use and reuse of graywater. Water infiltration would be improved as a result of improved soil conditions, which would reduce runoff. These actions would result in long-term, minor, beneficial impacts on water quality and use.

Cumulative Impacts

Impacts of other past, present, and reasonably foreseeable actions would be the same as those described for the no-action alternative. In summary, long-term, minor to moderate, adverse impacts to water quality would continue as a result of pollutants and sediment discharges in surface water runoff; the channeling, rerouting, or shunting underground of streams and other drainages; and reduced percolation of water and increased runoff because of impervious surfaces. Long-term, beneficial impacts would result from a flood-control levee at 17th Street (a major, beneficial impact on the downtown area, but no effect on natural floodplains within the National Mall), and from improved water quality in the greater Chesapeake Bay (a moderate, beneficial impact).

The impacts on water resources of the preferred alternative, in combination with the impacts of other past, present, and reasonably foreseeable actions, would result in long-term, moderate, adverse cumulative impacts. The preferred alternative would have a slight beneficial contribution to cumulative impacts.

Conclusion

Implementing the preferred alternative would result in short-term, moderate, adverse impacts during construction activities at the Tidal Basin and along the Potomac River, but over the long-term impacts on potable water use and on groundwater and surface water resources would be minor and beneficial. Cumulative impacts would be long-term, moderate, and adverse, with this alternative making a slight beneficial contribution. Because there would be no major, adverse impacts to a key park resource, there would be no unacceptable impacts or impairment of a key park resource.

Impacts of Alternative A

Direct and Indirect Impacts

Under alternative A water features would be rehabilitated and water quality improved through recirculation, filtration, and improved equipment.

Under this alternative Constitution Gardens Lake would be redesigned to be self-sustaining and to support desirable plant populations. Less chemical and mechanical algae control would be needed. This would result in long-term, minor, beneficial impacts on water quality. There would be no other impacts to wetlands.

Constructing or replacing visitor amenities (e.g., restrooms, food service facilities, or gift shops) near the Washington Monument, Constitution Gardens, and the Lincoln Memorial would also increase the amount of impervious surfaces, causing long-term, negligible, adverse impacts because of the relatively small areas affected. Improved soil management techniques would reduce compaction, require less chemical use, and increase percolation of precipitation on large areas of the Mall, having long-term, minor, beneficial impacts on water quality and flows.

Seawalls along the Tidal Basin and the Potomac River would be rebuilt in place. Short-term, moderate, adverse impacts would occur to water quality from increased siltation during construction.

Cumulative Impacts

Impacts of other past, present, and reasonably foreseeable actions would be the same as those described for the no-action alternative. In summary, long-term, minor to moderate, adverse impacts to water quality would continue as a result of pollutants and sediment discharges in surface water runoff; the channeling, rerouting, or shunting underground of streams and other drainages; and reduced percolation of water and increased runoff because of impervious surfaces. Long-term, beneficial impacts would result from a flood-control levee at 17th Street (a major, beneficial impact on the downtown area, but no effect on natural floodplains within the National Mall), and from improved water quality in the greater Chesapeake Bay (a moderate, beneficial impact).

The impacts of alternative A, when considered with the impacts of other past, present, and reasonably foreseeable actions, would result in long-term, moderate, adverse cumulative impacts to water resources. Alternative A would make a slight beneficial contribution to these impacts.

Conclusion

Implementing alternative A would result in short-term, negligible, adverse impacts to water resources during the construction of new Tidal Basin seawalls but long-term, negligible to minor, beneficial impacts. Cumulative impacts under this alternative would be long-term, moderate, and adverse, with a slight beneficial contribution from this alternative. Because there would be no major adverse impacts to a key park resource, there would be no unacceptable impacts or impairment of a key park resource.

Impacts of Alternative B

Direct and Indirect Impacts

Under alternative B, like alternative A, water features would be rehabilitated and water quality improved through recirculation, filtration, and upgraded equipment.

Under alternative B some existing sidewalks in Constitution Gardens and around the Tidal Basin would be widened and repaved. These actions could increase the area of impervious surfaces by about 3.25 acres. However, new and replaced paving would use sustainable materials and methods to increase water infiltration and reduce water runoff. Paving would result in long-term, negligible to minor, adverse impacts on groundwater percolation and quality.

Constructing or replacing visitor amenities (e.g., restrooms, food service facilities, or gift shops) near the Washington Monument, Constitution Gardens, and the Lincoln Memorial would increase the amount of impervious surfaces, causing long-term, negligible, adverse impacts because of the relatively small areas affected. Improved soil management techniques on large areas of the Mall would reduce compaction and chemical use and would increase percolation of precipitation, resulting in long-term, minor, beneficial impacts on water quality and flows.

Seawalls along the Tidal Basin and the Potomac River frontage would be reconstructed to eliminate regular overflowing and bank erosion. This would reduce the amount of sediment being washed into these waterways, resulting in long-term, negligible, beneficial impacts to water quality. Short-term, moderate, adverse impacts to water quality would occur from increased siltation during construction.

If underground parking garages were determined to be feasible by engineering, security, geotechnical, and economic studies, any impacts on water resources as a result of garage construction would be assessed during the subsequent environmental analysis for these projects.

Cumulative Impacts

Impacts of other past, present, and reasonably foreseeable actions would be the same as those described for the no-action alternative. In summary, long-term, minor to moderate, adverse impacts to water quality would continue as a result of pollutants and sediment discharges in surface water runoff; the channeling, rerouting, or shunting underground of streams and other drainages; and reduced percolation of water and increased runoff because of impervious surfaces. Long-term, beneficial impacts would result from a flood-control levee at 17th Street (a major, beneficial impact on the downtown area, but no effect on natural floodplains within the National Mall), and from improved water quality in the greater Chesapeake Bay (a moderate, beneficial impact).

The impacts of alternative B, in combination with the impacts of other past, present, and reasonably foreseeable actions, would result in long-term, moderate, adverse, cumulative impacts to water resources. Alternative B would have slight adverse and beneficial contributions to these effects.

Conclusion

Implementing alternative B would result in short-term, moderate, adverse impacts during construction at the Tidal Basin and along the Potomac River. Over the long-term impacts on potable water use, and on the park's groundwater and surface water resources, would be

both adverse and beneficial, with the combined impacts being neutral. Cumulative impacts would be long-term, moderate, and adverse, with this alternative having slight adverse and beneficial contributions. Because there would be no major adverse impact to a key park resource, there would be no unacceptable impacts or impairment of a key park resource.

Impacts of Alternative C

Direct and Indirect Impacts

Under alternative C water features would be rehabilitated and water quality improved through recirculation, filtration, and improved equipment. Additionally, the National Park Service would seek environmentally sound, natural ways to improve water quality.

Constitution Gardens Lake would be redesigned to be self-sustaining and to support fish and desirable plant populations. Less chemical and mechanical algae control would be needed. This would result in long-term, minor, beneficial impacts on water quality. The Capitol Reflecting Pool could be drained for events or frozen for ice skating.

Some existing sidewalks in Constitution Gardens and around the Tidal Basin would be widened and repaved.

These actions could increase the area of impervious surfaces by about 3.25 acres. However, new and replaced paving would use sustainable materials and methods to increase water infiltration and reduce water runoff. Paving would result in long-term, negligible to minor, adverse impacts on groundwater percolation and quality.

Constructing visitor amenities (e.g., restrooms, food service facilities, or retail spaces) near the Washington Monument and the Lincoln Memorial would also increase the amount of impervious surfaces, causing long-term, negligible, adverse impacts. These adverse impacts would be essentially offset by improved soil management techniques on large areas of the Mall, which would reduce compaction and chemical use and would increase percolation of precipitation, resulting in long-term, minor, beneficial impacts on water quality and flows.

The results of engineering studies to maximize the ability of the Tidal Basin to flush and absorb tidal surges would be implemented. This would result in long-term, minor, beneficial impacts. The northern bay of the Tidal Basin would be filled in under this alternative. This action would eliminate a small area (5.6 acres) of the shallow, human-made basin that is not currently serving any hydrologic purpose and so would most likely not result in any impacts to water resources. Seawalls along the Tidal Basin and Potomac River frontage would be rebuilt to eliminate regular overflowing and bank erosion. Seawalls in some areas along the Potomac River would be replaced with sustainable wetland shorelines. These actions would reduce the amount of sediment being washed into these waterways, resulting in long-term, negligible beneficial impacts to water quality. Short-term, moderate, adverse impacts could occur to water quality from increased siltation during construction.

Cumulative Impacts

Impacts of other past, present, and reasonably foreseeable actions would be the same as those described for the no-action alternative. In summary, long-term, minor to moderate, adverse impacts to water quality would continue as a result of pollutants and sediment discharges in surface water runoff; the channeling, rerouting, or shunting underground of streams and other drainages; and reduced percolation of water and increased runoff because of impervious surfaces. Long-term, beneficial impacts would result from a flood-control levee at 17th Street (a major, beneficial impact on the downtown area, but no effect on natural floodplains within the National Mall), and from improved water quality in the greater Chesapeake Bay (a moderate, beneficial impact).

The impacts on water resources of alternative C, when considered in combination with the impacts of other past, present, and reasonably foreseeable actions, would result in long-term, moderate, adverse cumulative impacts. Alternative C would make a slight beneficial contribution to these effects.

Conclusion

Implementing alternative C would result in short-term, moderate, adverse impacts to water

quality during construction at the Tidal Basin and along the Potomac River. Over the long-term impacts on potable water use, and on groundwater and surface water resources, would be negligible to minor and beneficial. Cumulative impacts would be long-term, moderate, and adverse, with this alternative having a slight beneficial contribution. Because there would be no major adverse impact to a key park resource, there would be no unacceptable impacts or impairment of a key park resource.

SOILS

Methodology for Impact Analysis

Predictions about site impacts were based on knowledge of soil characteristics and the impact on soils from use and the development of other visitor and operation facilities under similar circumstances.

Impact Intensity Levels

The following thresholds were used to evaluate the potential impacts on soils:

- **Negligible** — Impacts on soils would be slight and largely unnoticeable compared to healthy native soils typical of the soil type and profile. Any effects on productivity, compaction, infiltration, subsidence, or erosion potential would not be measurable.
- **Minor** — Impacts on soils would be noticeable compared to healthy native soils typical for the soil type and profile. Any effects on productivity, compaction, infiltration, subsidence, or erosion potential would be measurable but localized to a small area.
- **Moderate** — Impacts on soils would be readily apparent compared to healthy native soils typical for the soil type and profile. Any effects on productivity, compaction, infiltration, subsidence, or erosion potential would be measurable and would cover several acres.
- **Major** — Impacts on soils would substantially alter healthy native soils typical for the soil type and profile. Any effects on productivity, compaction, infiltration, subsidence, or erosion potential would be measurable and would affect a relatively large area (more than 5 acres).

Type of Impact

Soil-related impacts could be beneficial or adverse. Beneficial impacts would improve soil conditions in terms of productivity, compaction, infiltration, subsidence, or erosion potential. Adverse impacts would degrade these soil conditions.

Duration of Impacts

Impacts could be short- or long-term.

- *Short-term* — The impact would generally last up to one year or the life of a construction project.
- *Long-term* — The impact would last longer than one year or for the life of the plan (up to 50 years).

NPS Policies

The NPS *Management Policies 2006* state that action will be taken by superintendents to prevent or at least minimize adverse, potentially irreversible impacts on soils. Soil conservation and soil amendment practices may be implemented to reduce impacts. Importation of off-site soil or soil amendments may be used to restore damaged sites (NPS 2006e, sec. 4.8.2.4).

Impacts Common to All Alternatives

Soils would be rehabilitated and managed to restore natural processes and functions, with long-term, moderate, beneficial impacts.

Impacts of the No-Action Alternative

Direct and Indirect Impacts

Under the no-action alternative existing adverse impacts on soil conditions would continue. There would be no change in how quickly various areas of the National Mall would be able to sustain continued high levels of use and recover because of the impacts of demonstrations and events. Some locations would be more affected than others because of near nonstop use from

spring through fall. Certain events like the annual spring Public Employees Roundtable (which displays large vehicles such as mobile laboratories and military equipment) and the biennial autumn Solar Decathlon (with displays of solar houses) would continue to have disproportionate impacts because of the weight of delivery vehicles and heavy displays that affect extensive areas of soil for several days.

Poor soil quality and productivity resulting from severe compaction would continue on heavily used portions of the Mall. This would continue a long-term, moderate to major, adverse impact on soils. Indirectly, these conditions would have long-term adverse effects on hundreds of American elm trees and many acres of turf, affecting the historic *tapis verte* (see the cultural resource sections).

Adverse impacts caused by social trails (compaction, wind and water erosion) would continue and could increase unless corrective actions were taken. Compacted trail impacts are generally localized and less than 3 acres total. Conditions in affected areas are being improved through aeration and resodding. Because of this mitigation, the impacts would be long-term, adverse, and minor.

Until permanent fixes can be completed, land subsidence along the southern side of the Tidal Basin would continue to cause sinking of the seawall. This land subsidence would be a long-term, minor, adverse impact.

Cumulative Impacts

Soil conditions throughout large parts of the planning area are less than ideal because of adverse impacts from past and present heavy daily foot traffic, recreational activities, and large events. Soils in some test pits on the National Mall have been found to be "as dense as concrete" when density and pore space are calculated (NPS 1975). This compaction has resulted in long-term, moderate to major, adverse impacts to soil quality and productivity because of the reduced capacity to hold water and air. Concentrated visitor use along certain routes has created social trails that compact the soil and destroy vegetative cover, which leads to soil loss from wind and water erosion.

The National Park Service manages three concerts annually (Memorial Day, Fourth of July, and Labor Day) on the west grounds of the Capitol, reducing direct impacts on the National Mall and resulting in a long-term, major, beneficial impacts. The impacts on natural resources in areas managed by the Architect of the Capitol would continue to be temporary, moderate, and adverse. However, these impacts are somewhat mitigated by using a number of best practices, which include requiring a minimum one-month scheduling gap between concerts, locating the stage and related facilities in the same space, and using temporary surfacing for vehicular access to reduce compaction, closing 1st Street near the Ulysses S. Grant Memorial for support facilities, and restoring the site at the end of the season. Also, the overall event duration is four months.

New paved walkways constructed near the Lincoln Reflecting Pool would add to the amount of hardened surfaces but would reduce the level of impacts to adjacent soils, resulting in long-term, minor, beneficial and adverse impacts.

The construction of the National Museum of African American History and Culture, the Martin Luther King, Jr. Memorial, and the Vietnam Veterans Memorial Center would cause short- and long-term, minor, adverse impacts on soils in these areas. Site-specific impacts would be addressed in subsequent environmental analyses for these projects.

The no-action alternative would allow the continuation of these adverse actions and effects, although they would be reduced somewhat by implementing mitigation and sustainability practices. The effects of this alternative when combined with the effects of other past, present, and reasonably foreseeable actions would result in overall cumulative effects being long-term, moderate to major, and adverse. This alternative would contribute a considerable amount to the overall impacts on soils.

Conclusion

Implementing the no-action alternative would result in continuing short- and long-term adverse impacts on soils that range from minor to major because of heavy daily foot traffic, recreational activities, and large events, affecting soil quality and productivity. Combining the

impacts of this alternative with the impacts of other past, present, and reasonably foreseeable actions would result in long-term, moderate to major, adverse cumulative impacts, with a large adverse contribution from the no-action alternative. This level of impact is considered unacceptable because it would continue to impede the attainment of the park's desired future conditions for natural and cultural resources. There would be no impairment of a key park resource.

Impacts of the Preferred Alternative

Direct and Indirect Impacts

Actions taken under the preferred alternative would improve the physical ability of areas on the National Mall to sustain high levels of use and to recover quickly. The improvements would be both highly visible and subtle, improving convenience and creating sustainable spaces for all. Measures would be taken to ensure that natural resources would be protected from injury and compaction during setup and takedown operations, as well as during the events themselves.

Soil conditions would be improved under the preferred alternative by replacing or augmenting soils or implementing other sustainable technologies in heavily used areas in the center of the Mall. Soil conditions would be improved in areas such as Constitution Gardens as well. These measures would decrease compaction and increase soil quality and productivity by increasing the soil's capacity to hold water and air and enhance the soils' ability to naturally filter percolating water. This would result in long-term, moderate, beneficial impacts to soil resources.

Installing barriers (e.g., curbs, fencing, or some other measure) in various places and closing elm tree panels on the Mall to event facilities would reduce the amount of pedestrian and vehicle trampling. The National Park Service would undertake efforts to restore and improve soil conditions in the top 2 feet of soil that comprises the tree root zone. As trees die and were replaced, efforts to restore soil would become more extensive. This would result in long-term, moderate, beneficial impacts to soil resources.

This alternative would result in paving turf areas in Union Square, south of the National Gallery of Art Sculpture Garden, and along 3rd, 4th, 7th, and 14th streets, and in widening some sidewalks in Constitution Gardens and at the Korean War Veterans and the Vietnam Veterans memorials. Paving materials would be as sustainable as possible, but these actions would reduce the area of "natural" surfaces by about 5 acres, resulting in long-term, minor, adverse impacts on soil resources.

Constructing or replacing visitor amenities (e.g., restrooms, food service facilities, or retail space) near the Washington Monument, the Lincoln Memorial, Union Square, Constitution Gardens, the Tidal Basin, and along the Mall would result in short-term, adverse impacts on soil due to wind and water erosion. However, mitigating measures would make these impacts negligible. Long-term effects would be adverse but negligible because most development would occur on unnatural fill soils.

Seawalls along the Potomac River frontage would be rebuilt or replaced with self-sustaining naturalized shorelines to eliminate soil loss due to bank erosion. This would result in long-term, negligible to minor, beneficial impacts.

Cumulative Impacts

Impacts of past, present, and reasonably foreseeable actions would be the same as those described under the no-action alternative. In summary, compacted soils throughout large parts of the planning area have resulted in long-term, moderate to major, adverse impacts to soil quality and productivity because of the reduced capacity to hold water and air. Future construction projects would cause short- and long-term, minor, adverse impacts on soils in specific areas, including new paved walkways near the Lincoln Reflecting Pool, which would add to the amount of hardened surfaces but would reduce the level of impacts to adjacent soils.

The impacts of the preferred alternative on soil resources, when considered with the effects of other past, present, and reasonably foreseeable actions, would result in long-term, moderate to major, adverse cumulative effects. The preferred alternative would have modest beneficial and adverse contributions to these impacts.

Conclusion

Implementing the preferred alternative would result in short-term, minor, adverse impacts to park soil resources from construction and long-term, moderate, beneficial impacts from soil augmentation or replacement. The overall cumulative impacts of combining the impacts of this alternative with the impacts of other actions would be long-term, moderate to major, and adverse, with this alternative making a modest adverse and beneficial contribution. Because there would be no major adverse impact to a key park resource, there would be no unacceptable impacts to or impairment of a key park resource.

Impacts of Alternative A

Direct and Indirect Impacts

Compared to the no-action alternative, lower use levels under alternative A and no use of the elm tree panels during special events would result in long-term, negligible to moderate, beneficial impacts on the ability of various venues to sustain use and recover quickly.

Soil conditions on the Mall would be improved under alternative A by replacing or augmenting soils or implementing other sustainable technologies in heavily used areas (about 33 acres), similar to the preferred alternative. Augmentation or similar technologies would decrease soil compaction, which would improve soil quality and productivity by increasing the capacity to hold water and air. This would result in long-term, moderate, beneficial impacts to soil resources.

Installing barriers (e.g., curbs or fencing) in various places and widening sidewalks would reduce the amount of trampling and social trails. This would result in long-term, minor, beneficial impacts to soil resources.

This alternative calls for constructing or replacing visitor amenities (e.g., restrooms, food service facilities, or retail space) near the Washington Monument, Constitution Gardens, the Lincoln Memorial, and along the Mall. Construction activities would result in short-term, adverse impacts on soils from wind and water erosion, but mitigating measures would make these impacts negligible. Long-term impacts would be adverse but negligible because most development would occur on unnatural fill soils.

Seawalls along the Potomac River frontage would be rebuilt to eliminate loss of soil due to bank erosion. This would be a long-term, negligible to minor, beneficial impact.

Cumulative Impacts

Impacts of past, present, and reasonably foreseeable actions would be the same as those described under the no-action alternative. In summary, compacted soils throughout large parts of the planning area have resulted in long-term, moderate to major, adverse impacts to soil quality and productivity because of the reduced capacity to hold water and air. Future construction projects would cause short- and long-term, minor, adverse impacts on soils in specific areas, including new paved walkways near the Lincoln Reflecting Pool, which would add to the amount of hardened surfaces but would reduce the level of impacts to adjacent soils.

The impacts of alternative A on soil resources, in combination with the impacts of other past, present, and reasonably foreseeable actions, would result in long-term, moderate to major, adverse cumulative effects. Alternative A would make a modest beneficial contribution to these effects.

Conclusion

Alternative A would result in short-term, negligible, adverse impacts from construction and long-term, moderate, beneficial impacts on the park's soil resources from soil augmentation or replacement. The overall cumulative impacts of combining the impacts of this alternative with the impacts of other actions would be long-term, moderate to major, and adverse, with this alternative having a modest beneficial contribution. Because there would be no major adverse impact to a key park resource, there would be no unacceptable impacts to or impairment of a key park resource.

Impacts of Alternative B

Direct and Indirect Impacts

Soil conditions would be improved under this alternative by replacing or augmenting soil or

implementing other sustainable technologies on about 33 heavily used acres on the Mall, similar to the preferred alternative. Augmentation or similar technologies would increase the soil's capacity to hold water and air, thus enhancing soil quality and productivity. This would result in long-term, moderate, beneficial impacts to soil resources.

Installing barriers (e.g., curbs or fencing) in various places and widening sidewalks would reduce the amount of trampling and social trails. This would result in long-term, minor, beneficial impacts to soil resources.

Constructing or replacing visitor amenities (e.g., restrooms, food service facilities, or retail space) near the Washington Monument, Constitution Gardens, the Lincoln Memorial, and the Mall would result in short-term, adverse impacts on soils during construction from wind and water erosion, but mitigating measures would make these impacts negligible. Long-term effects of these actions would be adverse but negligible because most development would occur on unnatural fill soils.

Seawalls along the Potomac River frontage would be rebuilt to eliminate soil loss due to bank erosion. This would be a long-term, negligible to minor, beneficial impact.

If underground parking garages were determined to be feasible by engineering, security, geotechnical, and economic studies, there would be impacts on soils as a result of garage construction. These site-specific impacts would be assessed during the subsequent environmental analysis for this construction project.

Cumulative Impacts

Impacts of past, present, and reasonably foreseeable actions would be the same as those described under the no-action alternative. In summary, compacted soils throughout large parts of the planning area have resulted in long-term, moderate to major, adverse impacts to soil quality and productivity because of the reduced capacity to hold water and air. Future construction projects would cause short- and long-term, minor, adverse impacts on soils in specific areas, including new paved walkways near the Lincoln Reflecting Pool, which would add to the amount of hardened surfaces but would reduce the level of impacts to adjacent soils.

The impacts of alternative B on soil resources, when considered with the impacts of other past, present, and reasonably foreseeable actions, would result in long-term, moderate to major, adverse cumulative effects. Alternative B would make a modest beneficial contribution to these effects.

Conclusion

Implementing alternative B would result in short-term, negligible, adverse impacts from construction and long-term, moderate, beneficial impacts from soil augmentation or replacement. The overall cumulative impacts of combining the impacts of this alternative with the impacts of other actions would be long-term, moderate to major, and adverse, with this alternative making a modest beneficial contribution. Because there would be no major adverse impact to a key park resource, there would be no unacceptable impacts to or impairment of a key park resource.

Impacts of Alternative C

Direct and Indirect Impacts

Soil conditions would be improved in this alternative by replacing or augmenting soils or implementing other sustainable technologies in heavily used areas on the Mall (on about 33 acres), similar to the preferred alternative. Augmentation or similar technologies would decrease the level of soil compaction, which would increase soil quality and productivity by increasing the capacity to hold water and air. This would result in long-term, moderate, beneficial impacts to soil resources.

Installing barriers (e.g., curbs or fencing) in various places and widening sidewalks would reduce the amount of trampling and social trails. This would result in long-term, minor, beneficial impacts to soil resources.

Constructing or replacing visitor amenities (e.g., restrooms, food service facilities, or retail space) near the Washington Monument, the Lincoln Memorial, and along the Mall would result in short-term, adverse impacts from wind and water erosion, but mitigating measures would

make these impacts negligible. Long-term impacts would be adverse but negligible because most facilities would be on unnatural fill soils.

Seawalls along the Potomac River would be rebuilt or replaced with self-sustaining wetland shorelines to eliminate soil loss due to bank erosion. This would result in long-term, negligible to minor, beneficial impacts.

Cumulative Effects

Impacts of past, present, and reasonably foreseeable actions would be the same as those described under the no-action alternative. In summary, compacted soils throughout large parts of the planning area have resulted in long-term, moderate to major, adverse impacts to soil quality and productivity because of the reduced capacity to hold water and air. Future construction projects would cause short- and long-term, minor, adverse impacts on soils in specific areas, including new paved walkways near the Lincoln Reflecting Pool, which would add to the amount of hardened surfaces but would reduce the level of impacts to adjacent soils.

The impacts on soil resources of alternative C, when considered with the impacts of other past, present, and reasonably foreseeable actions, would result in long-term, moderate to major, adverse cumulative impacts. Alternative C would have a modest beneficial contribution to these effects.

Conclusion

Alternative C would result in short-term, negligible, adverse impacts from construction and long-term, moderate, beneficial impacts from soil augmentation or replacement. The overall cumulative impacts of combining the impacts of this alternative with the impacts of other actions would be long-term, moderate to major, and adverse, with this alternative making a modest beneficial contribution. Because there would be no major adverse impact to a key park resource, there would be no unacceptable impacts or impairment of a key park resource.

VEGETATION

Methodology for Impact Analysis

Impacts to the health of vegetation (individual plants and/or communities) were assessed qualitatively. Information was taken from general documents such as the park's "Resource Management Plan" and the results of site-specific surveys. Predictions about impacts were based on previous experience with development impacts on natural resources.

Impact Intensity Levels

The following impact thresholds were defined:

- **Negligible** — Impacts on vegetation would not be measurable. The abundance or distribution of native or cultivated vegetation would be only slightly affected. Ecological processes, biological productivity, or sustainability would not be affected. Irrigation would not be needed or would function properly to support healthy vegetation.
- **Minor** — Impacts on vegetation would be measurable. The abundance or distribution of native or cultivated vegetation would affect small areas or affect several trees. Ecological processes, biological productivity, or sustainability would be affected slightly. Irrigation would not be needed or would function properly to support healthy vegetation.
- **Moderate** — Impacts on vegetation would be measurable and clearly evident in visible areas. The abundance or distribution of native or cultivated vegetation would affect areas of up to 10 acres or up to two dozen trees. Ecological processes, biological productivity, or sustainability would be affected. Irrigation would or would not function properly to support healthy vegetation.
- **Major** — Impacts on vegetation would be measurable and clearly evident in areas that are prominent and highly visible. The abundance or distribution of native or cultivated vegetation would affect areas of more than 10 acres or several dozen trees. Ecological processes, biological produc-

tivity, or sustainability would be affected. Irrigation would or would not function properly to support healthy vegetation.

Type of Impact

Impacts could be beneficial or adverse. Beneficial impacts would improve growing conditions and the health of vegetation growing on the National Mall. Ecological processes, biological productivity, or sustainability would be enhanced. Adverse impacts would result in deteriorated growing conditions and/or the loss of vegetation, and ecological processes, biological productivity, or sustainability would be affected.

Duration of Impacts

Impacts could be short- or long-term:

- *Short-term* — The impact would generally last up to one year or the life of a construction project.
- *Long-term* — The impact would last longer than one year or for the life of the plan (up to 50 years).

NPS Policies

The NPS *Management Policies 2006* state that where necessary to preserve and protect the desired condition of specific cultural resources and landscapes, plants and plant communities generally will be managed to reflect the character of the landscape that prevailed during the historic period (NPS 2006e, sec. 4.4.2.5).

More specifically with regard to cultural landscapes, the policies state that the treatment of a cultural landscape will preserve significant physical attributes, biotic systems, and uses when those uses contribute to historical significance (sec. 5.3.5.2). Biotic cultural resources, which include plant and animal communities associated with the significance of a cultural landscape, will be duly considered in treatment and management. The cultural resource and natural resource components of the park's resource stewardship strategy will jointly identify acceptable plans for the management and treatment of biotic cultural resources (sec. 5.3.5.2.5).

Impacts Common to All Alternatives

Vegetation health would be managed to improve health and appearance, with long-term, moderate, beneficial impacts.

Impacts of the No-Action Alternative

Direct and Indirect Impacts

Under the no-action alternative existing conditions and situations affecting vegetation would continue. There would be no change in how quickly various areas of the National Mall would be able to sustain continued high levels of use and recover from the impacts of large demonstrations and events. Some locations would be more affected than others because of near nonstop use from spring through fall.

The growth and health of trees, shrubs, and turfgrass would continue to be adversely affected by poor soil quality on heavily used portions of the Mall. Severely compacted soils have inhibited the health and vitality of vegetation because pore space water capacity is reduced and the physical hardness of the soil often forces shrub and tree roots out of the ground. The continuing lack of a functioning irrigation system in the center grass panels (due to damage from tent stakes and other factors) contributes to the inability to maintain healthy turf areas.

Even though the National Park Service has installed some post-and-chain fencing to confine use to walkways, trampling of exposed tree roots (especially elms and cherry trees) would continue on the Mall and around the Tidal Basin. Of the approximately 600 American elm trees lining the Mall, approximately 40% (246–261) are potentially subject to adverse effects caused by facilities and visitor use during the Smithsonian Folklife Festival in July. The impacts would continue to be long-term, major, and adverse because of the large number of American elm and cherry trees and the large areas of turf affected.

Events like the annual spring Public Employees Roundtable (which displays large vehicles such as mobile laboratories and military equipment)

and the biennial autumn Solar Decathlon (with displays of solar houses) have disproportionate impacts because of the weight of delivery vehicles and heavy displays that cover extensive areas of turf for several days. Large crowds and special events would continue to have short-term, moderate to major, adverse impacts on turfgrass due to trampling and destruction of grass in concentrated use areas.

Cumulative Impacts

Vegetation in and around the National Mall has been highly manipulated for over 200 years, so there is no resemblance to the native vegetation patterns of the Atlantic Coastal Plain and Piedmont provinces. Nonetheless, the current urban forest possesses important ecological and social values (see "The Affected Environment," page 304).

Turfgrass conditions throughout large parts of the planning area are poor because of adverse impacts from heavy daily foot traffic, recreational activities, large crowds, and special events. Concentrated use along certain routes has created social trails and jogging paths that have destroyed vegetation.

Severe soil compaction has resulted in long-term, moderate, adverse impacts to all types of vegetation: turfgrass cannot reseed correctly, weeds proliferate, and water does not percolate enough to encourage proper root growth; shrubs and trees become rootbound because the surrounding soil is too hard to penetrate; tree roots are forced to the surface where they become subject to abrasion and trampling. All these conditions can result in the premature death of trees and other vegetation.

Moderate adverse impacts from regular inundation of turf and cherry trees along the southern side of the Tidal Basin have occurred due to subsidence of the seawall in that area.

New paved walkways constructed near the Lincoln Reflecting Pool would add to the amount of hardened surfaces but would reduce the level of impacts to adjacent vegetation, resulting in long-term, minor, beneficial and adverse impacts.

The construction of the National Museum of African American History and Culture, the Martin Luther King, Jr. Memorial, and the Vietnam Veterans Memorial Center would cause short- and long-term adverse effects on vegetation in those areas. Site-specific impacts would be addressed in subsequent environmental analysis for these projects.

Under the no-action alternative these adverse actions and impacts would continue, although they would be reduced somewhat by implementing mitigation and sustainability practices. The overall cumulative effects would be long-term, moderate to major, and adverse, with a large contribution from this alternative.

Conclusion

The no-action alternative would result in the continuation of short- and long-term, major, adverse impacts on the National Mall's vegetation. The overall cumulative impacts would be long-term, moderate to major, and adverse. The impacts are considered severe enough to be unacceptable impacts because they would continue to impede the attainment of the park's desired future resource conditions and diminish opportunities for current or future generations to enjoy or be inspired by park resources. The impacts could lead to impairment of a key park resource unless successful mitigating measures were employed.

Impacts of the Preferred Alternative

Direct and Indirect Impacts

Actions taken under the preferred alternative would substantially improve the physical ability of areas on the National Mall to sustain high levels of use and to recover quickly. The improvements would be both highly visible and subtle, improving convenience and creating sustainable spaces for all. Measures would be taken to ensure that natural resources would be protected from injury during setup and take-down operations as well as during the events themselves.

Turfgrass conditions would be substantially improved under the preferred alternative by replacing or augmenting soils and installing new

irrigation systems on about 33 acres of heavily used areas. This would result in long-term, moderate, beneficial impacts to vegetation.

Installing barriers (e.g., curbs, post-and-chain or other fencing) in tree panels would reduce the amount of vegetation trampling and social trails. Temporary facilities or staging areas for special events would no longer be allowed in the elm tree panels. These actions would result in long-term, moderate, beneficial impacts to vegetation in these areas.

Under the preferred alternative new areas would be paved in Union Square, south of the National Sculpture Garden, and along 3rd, 4th, 7th, and 14th streets; and some sidewalks would be widened in Constitution Gardens and at the Korean War Veterans and Vietnam Veterans memorials. These actions would reduce the area of vegetation by about 5 acres total, but some of these areas are or have been devoid of vegetation due to overuse. Impacts on existing vegetation would be long-term, minor, and adverse.

Not allowing special events in the elm tree panels would avoid adverse impacts on the trees, especially because midsummer heat is the highest stress time for vegetation. The health of cherry trees and turf around the Tidal Basin would be improved under this alternative by rebuilding the basin's seawalls to prevent overflowing and by widening the walkways and installing barriers to curtail root trampling by people straying off the walkways. These actions would result in long-term, moderate, beneficial impacts.

Constitution Gardens Lake would become a self-sustaining wetland ecosystem capable of supporting aquatic vegetation. This would result in long-term, negligible, beneficial impacts.

A wetland shoreline using native plant materials would be created to replace river walls in some areas along the Potomac River frontage, which would improve sustainability and restore ecological processes. This action would result in long-term, moderate, beneficial impacts.

Constructing or replacing visitor amenities (e.g., restrooms, food service facilities, or retail space) near the Washington Monument, Union Square, Constitution Gardens, the Lincoln Memorial, near the Tidal Basin, and along the Mall would result in a temporary and permanent loss of vegetation. In most cases this ground is already trampled, occupied by facilities, and devoid of vegetation, so impacts would be short- and long-term and adverse but negligible in intensity.

Cumulative Impacts

The impacts of past, present, and reasonably foreseeable actions would be the same as those described under the no-action alternative. In summary, vegetation has been affected by severe soil compaction, resulting in long-term, moderate, adverse impacts because of improper root growth and rootbound shrubs and trees. Future construction would cause short- and long-term, adverse, localized effects on the vegetation. New paved walkways near the Lincoln Reflecting Pool would add to the amount of hardened surfaces but would reduce the level of impacts to adjacent vegetation, resulting in long-term, minor, beneficial and adverse impacts.

The impacts of the preferred alternative on vegetation, when considered with the impacts of other past, present, and reasonably foreseeable actions, would result in long-term, minor, adverse cumulative impacts. This alternative would make modest beneficial and adverse contributions to these effects.

Conclusion

Implementing the preferred alternative would result in long-term, minor, adverse impacts from new or widened sidewalks and long-term, moderate, beneficial impacts from actions to improve growing conditions for park vegetation. Cumulative impacts would be long-term, minor, and adverse, with a modest adverse and beneficial contribution from this alternative. Because there would be no major adverse impact to a key park resource, there would be no unacceptable impacts to or impairment of a key park resource.

Impacts of Alternative A

Direct and Indirect Impacts

Compared to the no-action alternative, natural resources on the National Mall would be able to recover more quickly as a result of improved conditions, but improvements would not be able to sustain current levels of use.

Under alternative A fewer visitor facilities and amenities on the National Mall would likely reduce the rate of increase than under the other alternatives. This could allow more time for areas to recover from intensive use during demonstrations and special events. Turfgrass conditions would be substantially improved under this alternative by augmenting soils and installing new irrigation systems on about 33 heavily used acres, similar to the preferred alternative. This would result in long-term, minor to moderate, beneficial impacts on vegetation.

Installing barriers (e.g., curbs or fencing) in elm tree panels would reduce the amount of trampling and social trails. Temporary event facilities such as tents or stages would no longer be allowed in the elm tree panels. These actions would result in long-term, minor, beneficial impacts to vegetation in these areas.

The health of cherry trees and turf around the Tidal Basin would be improved by rebuilding the seawalls to prevent overflowing and by installing barriers to stop root trampling by visitors. Impacts would be long-term, minor, and beneficial. However, the actions might be insufficient to control use levels, with long-term, moderate, adverse impacts.

Replacing sidewalks would affect some areas of vegetation, but in most cases this ground is already trampled and devoid of vegetation, so impacts would be long-term and adverse but negligible in intensity.

Constitution Gardens Lake would become a self-sustaining wetland ecosystem capable of supporting aquatic vegetation. This would result in long-term, negligible, beneficial impacts.

Constructing or replacing visitor amenities (e.g., restrooms, food service facilities, or retail space) near the Washington Monument, Constitution Gardens, the Lincoln Memorial, and along the Mall would result in temporary and permanent losses of vegetation. Impacts would be short- and long-term and adverse but negligible in intensity because previously disturbed areas would be used.

Cumulative Impacts

The impacts of past, present, and reasonably foreseeable actions would be the same as those described under the no-action alternative. In summary, vegetation has been affected by severe soil compaction, resulting in long-term, moderate, adverse impacts because of improper root growth and rootbound shrubs and trees. Future construction would cause short- and long-term, adverse, localized effects on the vegetation. New paved walkways near the Lincoln Reflecting Pool would add to the amount of hardened surfaces but would reduce the level of impacts to adjacent vegetation, resulting in long-term, minor, beneficial and adverse impacts.

The impacts of alternative A on vegetation, when considered in conjunction with the impacts of other past, present, and reasonably foreseeable actions, would result in long-term, minor, adverse cumulative impacts. Alternative A would make a small beneficial contribution to these impacts from improved growing conditions.

Conclusion

Implementing alternative A would result in long-term, negligible, adverse impacts on park vegetation due to construction and in long-term, moderate, beneficial impacts. Cumulative impacts would be long-term, minor, and adverse, with a small beneficial contribution from this alternative from improved growing conditions. Because there would be no major adverse impact to a key park resource, there would be no unacceptable impacts to or impairment of a key park resource.

Impacts of Alternative B

Direct and Indirect Impacts

Under alternative B the physical ability of the National Mall to sustain high levels of use and to recover quickly would be substantially improved for many areas compared to the no-action alternative. Turfgrass conditions would be substantially improved on about 33 heavily used acres by replacing or augmenting soils and installing a new irrigation system, the same as the preferred alternative. In addition, under this alternative more frequent restoration of smaller areas would be undertaken. These actions would result in long-term, moderate, beneficial impacts to vegetation.

Installing barriers (e.g., curbs or fencing) around or in elm tree panels on the Mall would reduce the amount of trampling and social trails. Within the elm tree panels an upgraded irrigation system and better soil conditions would improve post-event recovery. Use of the elm tree panels could continue if turf/root zones and soils were protected through an acceptable and authorized method. Resulting impacts to trees and other vegetation in these areas would be long-term, moderate, and beneficial.

The health of cherry trees and turf around the Tidal Basin would be improved under this alternative by rebuilding the basin's seawalls to prevent overflowing and by installing barriers to stop root trampling by visitors. Rebuilding the seawalls along the Potomac River frontage would prevent the loss of vegetation due to bank erosion. These actions would result in long-term, minor, beneficial impacts.

Constructing new sidewalks and widening existing sidewalks would remove some areas of vegetation, but in most cases this ground is already heavily trampled and sparsely vegetated, so it is anticipated that impacts would be long-term and adverse but negligible in intensity.

Constitution Gardens Lake would become a landscape feature that could be drained for use in public events. This would result in the loss of an artificial wetland habitat, a long-term, minor, adverse impact.

Constructing or replacing visitor amenities (e.g., restrooms, food service facilities, or retail space) near the Washington Monument, Constitution Gardens, the Lincoln Memorial, and along the Mall would result in a temporary and permanent loss of some vegetation. Impacts would be short- and long-term and adverse but negligible because most construction would replace existing facilities.

If an underground parking garage was determined to be feasible by engineering, security, geotechnical, and economic studies, any impacts on vegetation as a result of garage construction would be assessed during the subsequent environmental analysis for this project.

Cumulative Impacts

The impacts of past, present, and reasonably foreseeable actions would be the same as those described under the no-action alternative. In summary, vegetation has been affected by severe soil compaction, resulting in long-term, moderate, adverse impacts because of improper root growth and rootbound shrubs and trees. Future construction would cause short- and long-term, adverse, localized effects on the vegetation. New paved walkways near the Lincoln Reflecting Pool would add to the amount of hardened surfaces but would reduce the level of impacts to adjacent vegetation, resulting in long-term, minor, beneficial and adverse impacts.

The impacts on vegetation of alternative B, when considered with the impacts of other past, present, and reasonably foreseeable actions, would result in long-term, minor, adverse cumulative impacts. Alternative B would have a slight beneficial contribution to these impacts.

Conclusion

Implementing alternative B would result in long-term, negligible, adverse impacts from new and widened sidewalks. The continued use of the Mall elm tree panels could result in long-term, major, adverse impacts if turf/root zones and soils were not properly protected through an acceptable and authorized method. Overall, long-term impacts would be moderate and beneficial because of improved growing conditions for park vegetation. Cumulative impacts would be long-term, minor, and adverse, with a slight beneficial contribution form this alternative. Because there would be no major adverse impact to a key park resource, there would be no unacceptable impacts to or impairment of a key park resource.

Impacts of Alternative C

Direct and Indirect Impacts

Under alternative C the physical ability of National Mall resources to sustain high levels of use and to recover quickly would be substantially improved. Turfgrass conditions would be substantially improved by replacing or augmenting soils and installing new irrigation systems on about 33 acres of heavily used areas, similar to the preferred alternative. This would result in

long-term, minor to moderate, beneficial impacts to vegetation.

Installing barriers (e.g., curbs or fencing) in elm tree panels would reduce the amount of trampling and social trails. Temporary event facilities such as tents or stages would no longer be allowed in the tree panels. These actions would result in long-term, moderate, beneficial impacts to vegetation in these areas.

The health of cherry trees and turf around the Tidal Basin would be improved by rebuilding the seawalls to prevent overflowing and by installing barriers to curtail root trampling by people walking off the paved walkways. A self-sustaining wetland shoreline would be created to replace seawalls in some areas along the Potomac River. These actions would improve sustainability and natural ecological processes, resulting in long-term, moderate, beneficial impacts.

Constructing new sidewalks and widening existing sidewalks would remove some areas of vegetation, but in most cases this ground is already trampled and devoid of vegetation, so impacts are anticipated to be long-term and adverse but negligible in intensity.

Constitution Gardens Lake would become a self-sustaining wetland ecosystem capable of supporting aquatic vegetation. This would be a long-term, negligible, beneficial impact.

Constructing or replacing visitor amenities (e.g., restrooms, food service facilities, or retail space) near the Washington Monument, the Lincoln Memorial, and along the Mall would result in a temporary and permanent loss of vegetation. Impacts would be short- and long-term and adverse but negligible because most of the actions would occur in previously disturbed areas.

Cumulative Impacts

The impacts of past, present, and reasonably foreseeable actions would be the same as those described under the no-action alternative. In summary, vegetation has been affected by severe soil compaction, resulting in long-term, moderate, adverse impacts because of improper root growth and rootbound shrubs and trees. Future construction would cause short- and long-term, adverse, localized effects on the vegetation. New paved walkways near the Lincoln Reflecting Pool would add to the amount of hardened surfaces but would reduce the level of impacts to adjacent vegetation, resulting in long-term, minor, beneficial and adverse impacts.

The impacts of this alternative on vegetation, in combination with the impacts of other past, present, and reasonably foreseeable actions, would result in long-term, minor, adverse cumulative effects. Alternative C would have a small beneficial contribution to these effects.

Conclusion

Implementing alternative C would result in long-term, negligible, adverse impacts from new and widened sidewalks and long-term, moderate, beneficial impacts from improved growing conditions for park vegetation. Cumulative impacts would be long-term, minor, and adverse, with a small beneficial contribution from this alternative. Because there would be no major adverse impact to a key park resource, there would be no unacceptable impacts to or impairment of a key park resource.

Fish and Wildlife

Methodology for Impact Analysis

Impacts on fish and wildlife are closely related to impacts on habitat. The analysis considered whether actions would be likely to displace some or all individuals of a species in the park or would result in loss or creation of habitat conditions needed for the viability of local or regional populations.

Impact Intensity Levels

The following impact thresholds were defined:

- **Negligible** — Impacts would not be measurable on the abundance or distribution of native, naturalized, or introduced populations or the viability of regional populations and their habitats.
- **Minor** — Impacts would be slight but measurable on the abundance or distribution of native, naturalized, or introduced populations but would not affect the viability of

local or regional populations and their habitats.

- **Moderate** — Impacts would be measurable on the abundance or distribution of native, naturalized, or introduced populations and could affect a documentable change in the abundance of local populations and their habitats.
- **Major** — Impacts would be measurable on the abundance or distribution of native, naturalized, or introduced populations and could affect a visible change in the abundance and viability of local populations and their habitats.

Type of Impact

Impacts associated with fish and wildlife might include any change in habitat quality, food supply, protective cover, or distribution or abundance of species. Beneficial impacts would improve conditions or the viability of native populations whether locally or regionally or reduce the abundance and viability of nonnative populations. Adverse impacts are those that reduce the abundance or viability of native populations.

Duration of Impacts

Impacts could be temporary, short- or long-term.

- ***Temporary*** — The impact would last for a few hours or a few days, such as the displacement of animals while construction was being undertaken.
- ***Short-term*** — The impact would generally last up to one year or the life of a construction project.
- ***Long-term*** — The impact would last longer than one year or for the life of the plan (up to 50 years).

NPS Policies

NPS *Management Policies 2006* state that the National Park Service will maintain as parts of the natural ecosystems of parks all plants and animals native to park ecosystems (NPS 2006e, sec. 4.4.1). Whenever possible, natural processes will be relied upon to maintain native plant and animal species and influence natural fluctuations in populations of these species (sec. 4.4.2). Whenever the Park Service identifies a possible need for reducing the size of a park plant or animal population, scientifically valid resource information obtained through consultation with technical experts, literature review, inventory, monitoring, or research will be used to evaluate the identified need for population management; this information will be documented in the appropriate park management plan (sec. 4.4.2.1).

The National Park Service will pursue opportunities to improve natural resource management within parks and across administrative boundaries by pursuing cooperative conservation with public agencies (NPS 2006e, sec. 4.1.2). Cooperation may involve coordinating management activities in two or more separate areas, integrating management practices to reduce conflicts, coordinating research, and sharing data and expertise.

The *Management Policies 2006* (sec. 4.4.4.2) state that all exotic plant and animal species that are not maintained to meet an identified park purpose will be managed if control is prudent and feasible, and if the exotic species

- interferes with natural processes and the perpetuation of natural features, native species or natural habitats, or
- disrupts the genetic integrity of native species, or
- disrupts the accurate presentation of a cultural landscape, or
- damages cultural resources, or
- significantly hampers the management of park or adjacent lands, or
- poses a public health hazard as advised by the U. S. Public Health Service (which includes the Centers for Disease Control and the NPS public health program), or
- creates a hazard to public safety.

Impacts of the No-Action Alternative

Direct and Indirect Impacts

Existing conditions and situations affecting wildlife would continue under the no-action alternative. Some existing artificial waters, such as Constitution Gardens Lake and the Tidal Basin, would continue to be available to aquatic species and waterfowl.

Fish would continue to get stranded during spawning season on walks or turf areas along the south side of the Tidal Basin, a long-term, minor, adverse impact on native and some naturalized, nonnative species.

Urban wildlife would continue to rely on humans for some or all of their food, whether from garbage or direct feeding by some visitors. Nonnative bird species that became less migratory in nature and stayed in the area year-round could affect on the viability of native populations. Long-term, minor, adverse impacts to other wildlife and aesthetics caused by unnaturally large congregations of these birds would continue. The park has a goal of reducing the ever expanding numbers of Canada geese. Regional and local approaches to controlling populations of Canada geese would result in long-term, moderate, beneficial impacts on native wildlife.

Cumulative Impacts

Most of the metropolitan area has been disturbed by development, and open space are being converted to maintained landscapes over the last 200 years or more. This loss of undisturbed habitat and the almost continuous presence of human activity have resulted in the near total displacement of many native species, a long-term, moderate, adverse impact. Ideal conditions (low turf) for nonnative populations of Canada geese have been perpetuated as the area was increasingly cultivated. Species such as nonmigratory Canada geese and mallard ducks have adapted to human presence and are becoming year-round (nonmigratory) residents, which is an unnatural behavior and results in long-term, moderate, adverse impacts on the viability of waterfowl populations as large areas are taken over by these unnatural populations.

The construction of the National Museum of African American History and Culture, the Martin Luther King, Jr. Memorial, and the Vietnam Veterans Memorial Center would cause short- and long-term, negligible to minor, adverse effects on urban habitat in these areas.

The no-action alternative would result in the continuation of long-term, minor, adverse impacts on fish and wildlife. When combined with the impacts of other past, present, and reasonably foreseeable actions, cumulative impacts would be long-term, moderate, and adverse. This alternative would make a modest contribution to these impacts.

Conclusion

The no-action alternative would result in the continuation of long-term, moderate, adverse impacts to native and naturalized populations of fish and wildlife. Cumulative impacts would be long-term, moderate, and adverse. There would be no unacceptable impacts to or impairment of a key park resource under this alternative.

Impacts of the Preferred Alternative

Direct and Indirect Impacts

Public stewardship messages about not feeding wildlife and proper trash disposal would reduce the dependence of urban wildlife on human-related food sources. This would have a long-term, negligible to minor, beneficial impact on urban wildlife species.

Constitution Gardens Lake would become a self-sustaining pond/wetland ecosystem capable of supporting introduced and naturalized fish populations. This would be a long-term, negligible, beneficial impact to fish and waterfowl. Removing the present Capitol Reflecting Pool and adding some ornamental water features would have a long-term, negligible, adverse impact because this pool provides only small habitat for some waterfowl.

Constructing or replacing visitor amenities (e.g., restrooms, food service facilities, or retail space) near the Washington Monument, Union Square, Constitution Gardens, the Lincoln Memorial, near the Tidal Basin, and along the Mall in

previously disturbed areas, along with adding or widening sidewalks, would temporarily disrupt habitat and displace individual animals from construction areas. Resulting impacts from the loss of some urban habitat used by terrestrial species and bats would be long-term, negligible, and adverse. These impacts would be negligible due to the relatively small area of habitat affected.

Rebuilding the Tidal Basin seawalls and widening the walkways would have temporary impacts during construction, but long-term impacts during fish spawning would be beneficial and minor because rebuilt walls would be higher and would prevent fish from being stranded. Widening the walkways could require moving the basin wall into the basin, resulting in the loss of about 5 acres of warm and shallow water habitat used by fish and other aquatic organisms. Short-term, moderate, adverse impacts from habitat disturbance and sedimentation would occur during construction. However, since the Tidal basin is artificial, long-term impacts would be adverse but negligible.

Portions of the wall along Potomac River frontage would be replaced with a more natural wetland using native materials. This would cause short-term, minor, adverse impacts from habitat disturbance and sedimentation during construction but long-term, minor, beneficial impacts on fish and wildlife.

Cumulative Impacts

Impacts of past, present, and reasonably foreseeable actions would be the same as those described for the no-action alternative. In summary, impacts have been long-term, moderate, and adverse because of nearly total displacement of many native species by habitat loss and human activity and increased nonnative populations, such as year-round Canada geese, that adversely affect the viability of native populations. Regional or local approaches to controlling introduced nonnative species and nonnative populations of Canada geese would result in long-term, moderate, beneficial impacts. The construction of future projects would cause short- and long-term, negligible to minor, adverse impacts on the urban habitat in those areas.

The preferred alternative would have both beneficial and adverse impacts on wildlife. Adding these impacts to the effects of past, present, and reasonably foreseeable actions would result in long-term, moderate, adverse cumulative effects on fish and wildlife. This alternative's contribution would be slight but adverse overall.

Conclusion

Implementing the preferred alternative would result in long-term, minor, beneficial impacts to fish and wildlife from stewardship messages to visitors, a self-sustaining pond/wetland ecosystem at Constitution Gardens Lake, higher seawalls along the Tidal Basin, and a naturalized Potomac River shoreline. There would also be short- and long-term, negligible to moderate, adverse impacts to fish and wildlife from various projects throughout the National Mall. Cumulative impacts would be long-term, moderate, and adverse, with a slight but adverse contribution from this alternative. This alternative would not result in unacceptable impacts to or impairment of a key park resource.

Impacts of Alternative A

Direct and Indirect Impacts

Constitution Gardens Lake would become a self-sustaining wetland capable of supporting aquatic plants, but all fish would be removed. This would be a long-term, negligible, adverse impact to the artificially maintained fish population and a long-term, negligible, beneficial impact to ducks and other plant-eating waterfowl.

The construction or replacement of visitor amenities (e.g., restrooms, food service facilities, and retail space) near the Washington Monument, Constitution Gardens, the Lincoln Memorial, and along the Mall would occur in previously disturbed areas. Impacts from this construction would be temporary, minor, and adverse because urban habitat would be disrupted and individual animals displaced. Long-term, negligible, adverse impacts would occur from the loss of some urban habitat used by terrestrial species and bats.

Rebuilding the failing Tidal Basin seawalls in place would result in short-term, minor, adverse impacts because of physical habitat disturbance

and sedimentation during construction, with no long-term effects to fish or wildlife after construction. Impacts during fish spawning would be long-term, minor, and beneficial because rebuilt walls would be higher and would prevent fish from being stranded.

Cumulative Impacts

Impacts of past, present, and reasonably foreseeable actions would be the same as those described for the no-action alternative. In summary, impacts have been long-term, moderate, and adverse because of nearly total displacement of many native species by habitat loss and human activity and increased nonnative populations, such as Canada geese, that adversely affect the viability of native populations. Regional or local approaches to controlling nonnative populations of Canada geese would result in long-term, moderate, beneficial impacts. The construction of future projects would cause short- and long-term, negligible to minor, adverse impacts on the urban habitat in those areas.

Alternative A would have beneficial and adverse impacts on wildlife. Adding these impacts to the effects of other past, present, and reasonably foreseeable actions would result in long-term, moderate, adverse cumulative impacts on fish and wildlife. This alternative's contribution would be slight but adverse overall.

Conclusion

Implementing alternative A would result in long-term, negligible to minor, beneficial impacts from actions at Constitution Gardens Lake and along the Tidal Basin, and in short- and long-term, negligible to minor, adverse impacts from construction projects at other sites. Cumulative impacts on fish and wildlife would be long-term, moderate, and adverse, with a slight but adverse contribution from alternative A. This alternative would not result in unacceptable impacts to or impairment of a key park resource.

Impacts of Alternative B

Direct and Indirect Impacts

Under alternative B the Capitol Reflecting Pool would be removed. This pool provides only a very small habitat need for some waterfowl, so the impact would be negligible.

Constitution Gardens Lake would become a landscape feature that could be drained for use in public events. This would result in the loss of an artificial wetland habitat currently used by fish and waterfowl, a long-term, negligible, adverse impact.

Constructing or replacing visitor amenities (e.g., restrooms, food service facilities, or retail space) near the Washington Monument, Constitution Gardens, the Lincoln Memorial, and along the Mall, along with adding some paved sidewalks, would occur in previously disturbed areas. Temporary, minor, adverse impacts during construction would occur from the disruption of urban habitat and the displacement of individual animals. Long-term, negligible, adverse impacts would occur from the loss of some urban habitat used by terrestrial species and bats.

Under this alternative the failing Tidal Basin seawalls would be rebuilt and the walkways atop the walls would be widened. Widening the walkways could require moving the basin walls into the basin. This would result in the loss of about 5 acres of warm and shallow water habitat used by fish and other aquatic organisms. Short-term, minor, adverse impacts would occur from the physical disturbance of habitat and sedimentation during construction. However, since the Tidal Basin is artificial, the long-term impacts would be adverse but negligible. Impacts during fish spawning would be long-term, minor, and beneficial because the rebuilt walls would be higher and would prevent fish from being stranded.

If underground parking garages were determined to be feasible by engineering, security, geotechnical, and economic studies, any impacts on fish and wildlife as a result of garage construction would be assessed during the subsequent environmental analysis for this project.

Cumulative Impacts

Impacts of past, present, and reasonably foreseeable actions would be the same as those described for the no-action alternative. In summary, impacts have been long-term, moderate, and adverse because of nearly total displacement of many native species by habitat loss and human activity and increased nonnative popula-

tions, such as Canada geese, that adversely affect the viability of native populations. Regional or local approaches to controlling nonnative populations of Canada geese would result in long-term, moderate, beneficial impacts. The construction of future projects would cause short- and long-term, negligible to minor, adverse impacts on the urban habitat in those areas.

Alternative B would have short- and long-term, negligible to minor, adverse impacts on wildlife. When added to the impacts of other past, present, and reasonably foreseeable actions, the cumulative impacts on fish and wildlife would be long-term, moderate, and adverse. This alternative's contribution would be small.

Conclusion

Implementing alternative B would result in short- and long-term, negligible to minor, adverse impacts to fish and wildlife from a drainable lake at Constitution Gardens, modifications of the Tidal Basin, and various construction projects, along with long-term, minor, beneficial impacts from a more natural Potomac River shoreline in some areas. Cumulative impacts would be long-term, moderate, and adverse, with a small contribution from this alternative. This alternative would not result in unacceptable impacts to or impairment of a key park resource.

Impacts of Alternative C

Direct and Indirect Impacts

Stewardship messages about not feeding wildlife and proper trash disposal would have long-term, negligible to minor, beneficial impacts on urban wildlife species.

The Capitol Reflecting Pool could be drained for events or frozen for ice skating, This pool provides only a very small habitat need for some waterfowl (mostly year-round nonnative populations), so the impact on wildlife would be negligible.

Constitution Gardens Lake would become a self-sustaining pond/wetland ecosystem capable of supporting fish populations. This would result in long-term, negligible, beneficial impacts to fish and waterfowl.

Constructing or replacing visitor amenities (e.g., restrooms, food service facilities, or retail space) near the Washington Monument, the Lincoln Memorial, and along the Mall in previously disturbed areas, along with adding some paved sidewalks, would result in temporary, negligible, adverse impacts during construction due to habitat disruption and displacement of individual animals. Long-term, negligible, adverse impacts would occur from the loss of some urban habitat used by terrestrial species and bats.

Under this alternative the Tidal Basin seawalls would be rebuilt and the walkways widened, which could require moving the basin wall into the basin. In addition, the small bay north of the Kutz Bridge would be eliminated (walled off and filled in). These actions would result in the loss of about 15 acres (14%) of the Tidal Basin's warm and shallow water habitat used by fish and other aquatic organisms. Short-term, minor, adverse impacts would result from habitat disturbance and sedimentation during construction. Since the Tidal Basin is artificial, the long-term impacts of these actions would be adverse but negligible. Impacts during fish spawning would be long-term, minor, and beneficial because the rebuilt walls would be higher and would prevent fish from being stranded.

Cumulative Impacts

Impacts of past, present, and reasonably foreseeable actions would be the same as those described for the no-action alternative. In summary, impacts have been long-term, moderate, and adverse because of nearly total displacement of many native species by habitat loss and human activity and increased nonnative populations, such as Canada geese, that adversely affect the viability of native populations. Regional or local approaches to controlling nonnative populations of Canada geese would result in long-term, moderate, beneficial impacts. The construction of future projects would cause short- and long-term, negligible to minor, adverse impacts on the urban habitat in those areas.

Alternative C would have beneficial and adverse impacts on wildlife. These impacts, in combination with the impacts of other past, present, and reasonably future actions, would result in

long-term, moderate, adverse cumulative impacts on fish and wildlife. This alternative's contribution would be slight but adverse overall.

Conclusion

Implementing alternative C would result in long-term, negligible to minor, beneficial impacts from stewardship messages to visitors, a self-sustaining pond/wetland ecosystem at Constitution Gardens Lake, and work around the Tidal Basin. There would also be short- and long-term, negligible to moderate, adverse impacts to fish and wildlife from various projects throughout the National Mall. Cumulative impacts would be long-term, moderate, and adverse, with a slight but adverse overall contribution from this alternative. This alternative would not result in unacceptable impacts to or impairment of a key park resource.

DEMONSTRATIONS, SPECIAL EVENTS, AND NATIONAL CELEBRATIONS

METHODOLOGY FOR ANALYZING IMPACTS

The analysis looks at how the alternatives would affect demonstrations, national celebrations, and special events in the following areas:

- ***Impacts on demonstration and event participants*** — This topic analyzes the beneficial and adverse impacts on the numbers of people who can participate in demonstrations, national celebrations, and special events as a result of the physical capacity of the National Mall and specific sites, as well as ease of access.

  An essential purpose of the National Mall is to provide space for the expression of First Amendment rights, and in accordance with in the U.S. Constitution the courts have determined that no limits may be placed on the number of people who can participate in First Amendment activities, regardless of any impacts that might otherwise be considered unacceptable.

  This impact topic considers how varying degrees of crowding would affect participants. The following assumptions were made, based on input from the U.S. Park Police and George Mason University:

  - Space of 3 square feet per person would constitute a high level of crowding, such as during a concentrated demonstration or on pleasant days during the peak of the National Cherry Blossom Festival or during the 2009 inauguration.
  - Space of 7–10 square feet per person would be equivalent to a seated or standing audience at an event performance.

- ***Impacts on demonstration and event organizers*** — The topic analyzes how organizers would be affected by permitting, scheduling, and managing processes, by the type and range of venues for demonstrations, national celebrations, and special events; by measures to protect the historical context, vistas, and symbolic character of the National Mall; by the convenience of access; and by any changes in management processes.

Impact Intensity Levels

The following impact thresholds were defined for demonstrations, national celebrations, and special events:

- ***Negligible*** — The impact would not be detectable or would be barely detectable to most participants and organizers, and there would be no discernible effect on the sustainability of park resources and the ability of the National Park Service to support demonstrations, national celebrations, or special events.
- ***Minor*** — The impact would be detectable to some participants or organizers, or it would have a limited effect, either adversely or beneficially, on the sustainability of park resources and the ability of the National Park Service to support demonstrations, national celebrations, or special events.
- ***Moderate*** — The impact would be readily apparent; it would have an appreciable impact on many participants and organizers; and it would clearly affect, either adversely or beneficially, the sustainability of park resources and the ability of the National Park Service to support demonstrations, national celebrations, or special events.
- ***Major*** — The impact would be severely adverse or exceptionally beneficial and apparent to most participants and organizers, and it would dramatically affect the sustainability of park resources and the ability of the National Park Service to support demonstrations, national celebrations, or special events.

Type of Impacts

Impacts can be beneficial or adverse. Beneficial impacts would enhance the management of and participation in demonstrations, national celebrations, and special events. Adverse impacts would have the opposite effect.

Duration of Impacts

Impacts could be temporary, short-term, long-term, or permanent.

- ***Temporary*** — The impact would usually last for a few hours or up to two days, such as a road closure for a day or less or limited access to an area during a demonstration.
- ***Short-term*** — The impact would generally last up to one year and could include setup / takedown times for large special events or national celebrations, seasonal closures for restoration, or limited access to an area to facilitate park operations or construction.
- ***Long-term*** — The impact would last longer than one year or for the life of the plan (up to 50 years).
- ***Permanent*** — The impact would last beyond the life of the plan (or longer than 50 years).

User Capacity Estimates

User capacity estimates do not include capacity estimates for NPS and D.C. roadways, which may be closed during major events (such as the Fourth of July or a presidential inauguration).

Maximum capacities of venues for demonstrations and special events were decreased by a certain percentage to allow for safe circulation, with more circulation needed at higher capacity levels

- ***Union Square*** — A 15% allowance for circulation at 3 sq. ft. / person with a reflecting pool, and a 10% allowance without a pool.
- ***Mall center panels*** — A 25% circulation allowance at 3 sq. ft. / person.
- ***Mall tree panels*** — A 30% circulation allowance at 7 sq. ft. / person due to trees.
- ***General open areas*** — A 10% circulation allowance at 7–10 sq. ft. / person.
- ***Lincoln Memorial elm walks and reflecting pool area*** — A 30% circulation allowance at 3 sq. ft. / person because of grade changes, the reflecting pool, and trees.

Regulations and Policies

Federal Regulations

Federal regulations that could affect the management of demonstrations, national celebrations, and special events are discussed in chapter 1. As previously stated, the superintendent may limit public use or close areas to use; designate areas for specific uses; and terminate restrictions, limits, closure or visitor hours to protect public health and safety, environmental or scenic values, or natural or cultural resources; or to implement management responsibilities, equitable allocation and use of facilities, or the avoidance of conflict among visitor use activities (36 CFR 1.5; 36 CFR 7.96).

Furthermore, permitted activities are to be consistent with legislation, administrative policies, and based on a determination that public health and safety, environmental or scenic values, natural or cultural resources, scientific research, implementation of management responsibilities, proper allocation and use of facilities, or the avoidance of conflict among visitor use activities will not be adversely affected (36 CFR 1.6; 36 CFR 7.96). A permit may be denied if the capacity of the area or facility would be exceeded by one or more of these factors.

An essential purpose of the National Mall is to provide space for the expression of First Amendment rights. This purpose, anchored in the U.S. Constitution, does not include limits on the number of people who can participate in First Amendment activities on the National Mall, regardless of any impacts that might otherwise be considered unacceptable.

Regulations at 36 CFR 7.96 specifically relate to the National Capital Region and define permit requirements for demonstrations and special events, as well as limitations, for park areas managed by the National Mall and Memorial

Parks, including the National Mall. The determination whether to approve permits for special events will be based on the following criteria (36 CFR 7.96(g)(5)(vi):

(A) Whether the objectives and purposes of the proposed special event relate to and are within the basic mission and responsibilities of the National Capital Region, National Park Service.

(B) Whether the park area requested is reasonably suited in terms of accessibility, size, and nature of the proposed special event.

(C) Whether the proposed special event can be permitted within a reasonable budgetary allocation of National Park Service funds considering the event's public appeal, and the anticipated participation of the general public therein.

(D) Whether the proposed event is duplicative of events previously offered in National Capital Region or elsewhere in or about Washington, D.C.

(E) Whether the activities contemplated for the proposed special event are in conformity with all applicable laws and regulations.

NPS Management Policies 2006

First Amendment Rights

The NPS *Management Policies 2006* affirm the use of park land for public assemblies, meetings, demonstrations, religious activities, and other public expressions of views protected under the First Amendment of the U. S. Constitution, in accordance with 36 CFR 2.51 or 36 CFR 7.96.

There must be equal opportunities for differing sides of an issue to be heard, and NPS staff must remain neutral toward the activity while remaining responsible for the protection of participants, spectators, private property, public property, and park resources.

Special Events

Special events may be permitted when there is a meaningful association between the park area and the event, and when the event will contribute to visitor understanding of the park area (NPS 2006e, sec. 8.6.2.1). An event will not be permitted when it is conducted for the material or financial benefit of a for-profit entity, it awards participants an appearance fee or prizes, it requires in-park advertising or publicity, or it charges a separate public admission fee (NPS 2006e, sec. 8.6.2.1).

Special events will not be permitted if they would result in unacceptable impacts, such as impeding the ability to achieve desired natural and cultural resource conditions; diminishing opportunities for current or future generations to enjoy, learn about, or be inspired by park resources or values; or unreasonably interfere with park programs or activities, appropriate uses, the atmosphere of peace and tranquility, or NPS concessioner or contractor operations (NPS 2006e, sec. 8.2 and 1.4.7.1).

Recreational use permits are required for use of designated fields and areas (DC Recreation Board 1972).

Filming and Photography Policy

Filming and photography, whether commercial or non-commercial, are allowed provided the activity does not cause unacceptable impacts (NPS 2006e, sec. 8.6.6). Commercial filming requires a permit (NPS 2006e, sec. 8.6.6.2).

IMPACTS COMMON TO ALL ALTERNATIVES

Direct and Indirect Impacts

Impacts on Demonstration and Event Participants

Public transportation access varies by location, with many sites having excellent transit access, such as Union Square (two subway stations within a five-minute walk), the Mall (the Smithsonian Metro entrance is on the Mall and four other subway stations are within a five-minute walk), and the Washington Monument (two subway stations are within a five-minute walk). Some sites such as Constitution Gardens, the Lincoln Memorial, the Thomas Jefferson Memorial, and the Tidal Basin are farther from public transit, and most athletic fields are a 15–25 minute or more walk from the nearest Metro station. Activities at sites farther from public

transportation could result in additional parking demand or participants having to use supplemental transportation. Access impacts on demonstration and special event participants would continue to be short- and long-term, minor to moderate, and beneficial depending on the location of the activity.

The following examples are typical of use capacities and experiences that could be expected on the National Mall. The physical capacity of different types of spaces is based on ranges of how much space (in square feet) is needed for each person in different types of situations, and the expected social experience that level of use would entail.

- ***Maximum Daily Capacity (Union Square to the Lincoln Memorial)*** — An estimated 2.1 million people could be accommodated on the National Mall from east end to the west end, including Constitution Gardens. This capacity is based on 3 square feet per person in high-use areas and 7–50 square feet per person in multipurpose areas. Experiences would be highly crowded, with minimal opportunities for more contemplative experiences.
- ***Fourth of July Celebration*** — An estimated 750,000 people could be accommodated on the National Mall at 10–50 square feet per person, which is the average level of use and accommodates informal picnicking. (Note: An additional 100,000 people could view fireworks from the Capitol grounds, and thousands more from George Washington Memorial Park in Virginia.) Since the Fourth of July is a major national celebration, visitors could expect many other people.
- ***National Cherry Blossom Festival*** — The National Cherry Blossom Festival largely takes place around the Tidal Basin, and estimates assume an 8-hour day, with people spending about two hours walking around the basin. At a maximum capacity of 3 square feet per person on walks, 25,000 people could be accommodated on the walks at any one time, plus 15,000 at the Thomas Jefferson Memorial plaza, the Tidal Basin parking lot, and related areas, with a maximum daily capacity of 200,000 people. Visitor experiences would be highly social, with opportunities for less crowded conditions only in the early morning or evening.
- ***Smithsonian Folklife Festival*** — Assuming that only the center panels on the Mall would be used, the capacity of the festival at any one time would be around 44,000. This assumes 10 square feet per person on the Mall, 50 square feet per person on walks, and 200–1,000 square feet per person in adjacent areas.

Impacts on Demonstration and Event Organizers

Demonstrations and special events would continue to be scheduled on a space available basis 12 months in advance, so there would be no new impacts on organizers. Cost reimbursement for damages would continue to be required in the permitting process for special events.

Demonstrations would continue to be managed in accordance with federal regulations at 36 CFR 7.96 and NPS *Management Policies 2006* under all alternatives. Permits would continue to be required generally for all demonstrations with more than 25 people. Demonstration periods could be extended unless a previously permitted use would preclude double occupancy. For example, a limited number of demonstrations related to the Vietnam Veterans Memorial have continued for many years. Typically demonstrations are temporary, lasting a very short time, with setup and takedown occurring within one or two days. For some demonstrations and events stages and sound systems are used, and facilities such as restrooms and temporary trash containers are provided by the organizers. Annually it is likely there would continue to be fewer than a dozen very large demonstrations that would limit the ability of other event or demonstration organizers to find space available. There would be no new impacts.

Some demonstrations and events would continue to use stages, sound systems, and large video screens to simulcast events or to locally improve visibility of events. There would be no new impacts.

Permits for special events and commercial filming would continue to be required.

Different areas of the National Mall would continue to be closed for construction, restoration, or maintenance projects, making them unavailable for demonstrations, national celebrations, special events, or other permitted activities. This could result in short- to long-term, minor, adverse impacts on event organizers because some venues might not be available. During these times, such as when the Martin Luther King, Jr. Memorial is constructed, the National Park Service would make every effort to ensure that public access to other sites would remain in order to minimize the impact.

Conclusion

There would be no change in permit regulations for demonstrations and special events under any alternative. Impacts common to all alternatives related to public access would be short- and long-term, minor to moderate, and beneficial or adverse depending on the distance of an activity from public transportation. Infrastructure improvements at the Lincoln Memorial would improve the ability to host performances and demonstrations, as well as facilitate setup and takedown operations, resulting in long-term, moderate, beneficial impacts. Closing different areas of the National Mall for construction, restoration, or maintenance projects could result in short- to long-term, minor, adverse impacts on event organizers because some venues might not be available. Cumulative impacts of past, present, and reasonably foreseeable actions could be long-term, major, beneficial impact if some events were relocated from the National Mall, thus reducing impacts. There would be long-term, major, beneficial impacts on event organizers and participants if a new subway stop was provided near the Thomas Jefferson Memorial.

IMPACTS OF THE NO-ACTION ALTERNATIVE

Direct and Indirect Impacts

The National Mall was never designed for the current high levels of use that occur during some demonstrations and national celebrations. The number of special events on the National Mall has increased dramatically, at least in part because of the prestige and status that comes from being at the heart of the nation's capital. However, this degree of use, along with longer than necessary setup and takedown times, has caused damage to resources and infrastructure, resulting in undesirable landscape conditions and appearance. Locations of existing venues for demonstrations and special events are shown on the Civic Stages plan map.

Impacts on Demonstration and Event Participants

Under the no-action alternative there would be no change in the ability to participate in demonstrations, national celebrations, or special events. The user capacities of individual venues for demonstrations and special events, allowing for circulation space, would be as follows:

- ***Union Square*** —100,000 (3 sq. ft. / person)
- ***Mall center panels (between 3rd and 14th streets)*** — 500,000 (3 sq. ft. / person), plus 80,000 in the elm tree panels (7 sq. ft. / person)
- ***Washington Monument grounds*** — 700,000 (3 sq. ft. / person)
- ***Lincoln Memorial*** — 7,000 on the steps and plaza (7 sq. ft. / person), and 90,000 along the reflecting pool (3 sq. ft. / person)
- ***JFK hockey fields*** — 60,000 (7 sq. ft. / person)
- ***West Potomac Park ballfields / polo grounds (west of the Franklin Delano Roosevelt Memorial)*** — 220,000 (7 sq. ft. / person)
- ***D.C. War Memorial area*** — 425 (10 sq. ft. / person)
- ***Tidal Basin*** — Parking area: 5,000 (10 sq. ft. / person), walks: 25,000 (3 sq. ft. / person)
- ***Jefferson Memorial steps and plaza*** — 4,000 (10 sq. ft. / person)

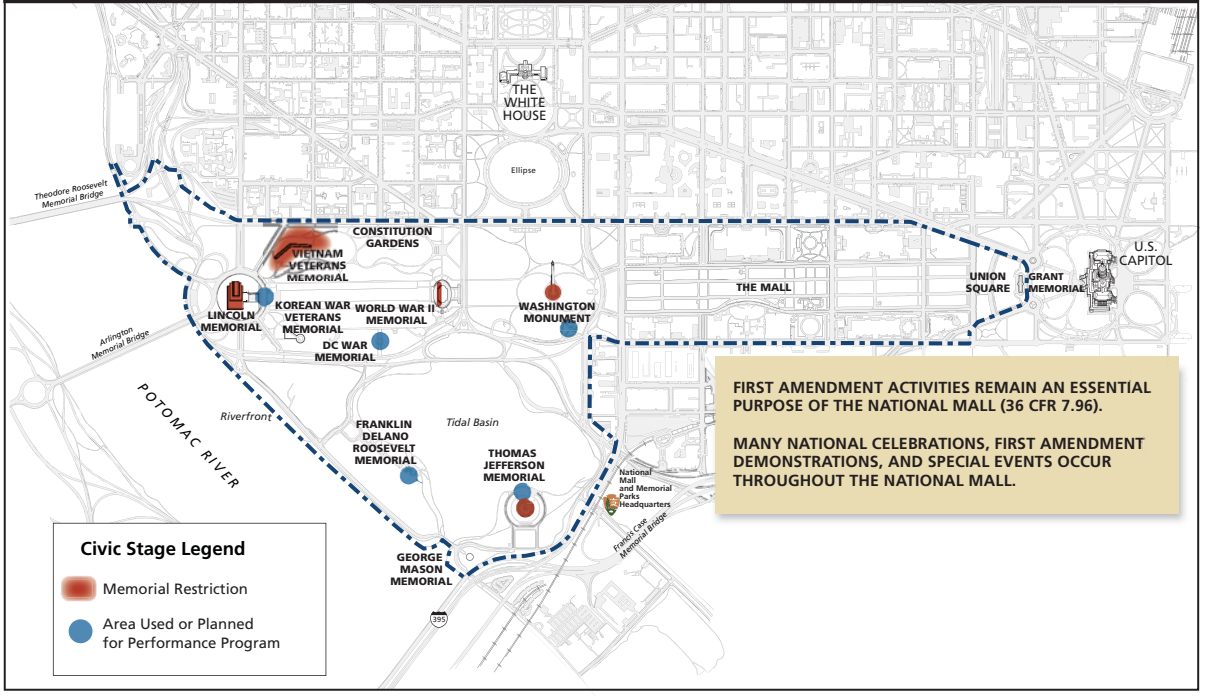
There would be no change to public access to the National Mall. No sites have sufficient public restrooms to accommodate the needs of demonstrations, national celebrations, or special events, and all venues necessitate the use of

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FIRST AMENDMENT ACTIVITIES REMAIN AN ESSENTIAL PURPOSE OF THE NATIONAL MALL (36 CFR 7.96).

MANY NATIONAL CELEBRATIONS, FIRST AMENDMENT DEMONSTRATIONS, AND SPECIAL EVENTS OCCUR THROUGHOUT THE NATIONAL MALL.

Civic Stage — No-Action Alternative

sponsor-provided portable restrooms. There would be no change in short- or long-term impacts on demonstration or event participants. Conditions in some venues would continue to be less than desirable for some participants. Dust, resulting in breathing and vision problems, would continue to affect some participants on the Mall. During hot and humid weather participants would find most venues uncomfortable and would seek shade and seating, as well as require water.

Many event stages have been relocated so that they do not block important views, thus enhancing the experience for participants, and preserving historic views from and to various monuments or memorials, as well as the U.S. Capitol and the White House.

Impacts on Demonstration and Event Organizers

Permitting, Scheduling, and Management Processes

Under the no-action alternative the permitting process for special events would continue to require application in person; no on-line process would be available. The limited number of program staff would continue to preclude consistent support for and monitoring of events. Planning information about event venues could remain limited. Very few events would be turned down except when venues had been previously scheduled; however, organizers would not know that in advance. There would be no change in impacts on demonstration and event organizers.

Venues

Organizers of demonstrations, national celebrations, and special events would continue to have a wide variety of venues with views of national symbols as their backdrop. As described in the

"Affected Environment," the National Mall contains a number of venues of varying sizes that are attractive to demonstration and event organizers. Some of these venues would be temporarily closed during future construction, restoration, or maintenance projects, resulting in temporary to short-term, minor to moderate, adverse impact on organizers because of the availability of specific venues. Other sites would remain available and could be used. The National Park Service would make every effort to ensure that public access remained to the greatest degree possible and that the size of the impact would be minimized.

Impacts at specific venues are discussed below.

Union Square. Union Square would continue to be used periodically as a highly visible venue for demonstrations and events up to 100,000 people due to its proximity to the U.S. Capitol and views of Washington Monument. However, its desirability as a venue would continue to be limited by the stepped level changes, logistical and access challenges, lack of visitor facilities, and the line of bollards running through the center of the site. The very large Capitol Reflecting Pool would continue to make circulation and the placement of support facilities awkward, and the occasional malodorous conditions from the uncirculated water would continue. Portable restrooms would have to continue to be brought into the site for demonstrations and special events. There would be no change in impacts on event organizers.

The Mall. Under the no-action alternative the Mall would continue to host demonstrations, national celebrations, and special events, and use would continue nearly nonstop from spring to fall. The large open turf areas in the center provide flexible space for event layout. This highly visible location, with superb background views of the U.S. Capitol to the east and the Washington Monument to the west, along with the historic landscape, make this a very desirable venue.

Organizers of larger demonstrations or events are required to use temporary flooring to reduce impacts and to provide restrooms. Refreshment stand owners would continue to coordinate with event organizers to provide additional food items. Organizers would have to safely provide for utilities and to cover power and water lines so they are not tripping hazards; stringing power and communication lines through tree canopies is not allowed. Both the 12th Street side panels and north side panels near 9th and 8th streets are gaps in the regularly spaced elm trees, and these gaps would continue to be used for event logistics, storage, and construction staging. Unattractive visual impacts of fenced construction storage sites and the presence of large trucks for long periods of time would continue. Portable restrooms would continue to be lined up along Madison and Jefferson drives, creating a temporary wall and blocking visual access to adjacent areas. Dust generated by the gravel walkways would continue to create adverse effects for organizers, as well as participants.

The elm tree panels along the Mall may be used during First Amendment demonstrations that require this additional space because of size. In accordance with federal regulations, the Smithsonian Folklife Festival is authorized for a two-week period in late June or early July between 7th and 14th streets on the Mall (36 CFR 7.96 (g)(4) (D)); a recent rule change designates an eight-week period for setup and takedown. The elm tree panels are used as a shady location (where it can be 10 degrees cooler) for temporary event facilities during the festival. NPS concession food service providers also use nearby turf areas under the elm trees during events such as the Library of Congress Book Festival, the Smithsonian Folklife Festival, and the Black Family Reunion. Other event organizers are not allowed to use the elm tree panels for these purposes, creating a perception of dual standards and unequal treatment. This policy would continue to result in long-term, moderate, adverse impacts on other event organizers.

Washington Monument Grounds. Under the no-action alternative the Washington Monument grounds would continue to host a wide variety of demonstrations, national celebrations, and special events since the grounds are conveniently accessible to two Metro stations and provide large open turf areas that can be flexibly used. One of the Independence Day concerts would continue to be presented on the grounds, as authorized by federal regulation. Temporary facilities such as portable restrooms, stages and related

backstage areas, and first-aid stations are provided.

The Sylvan Theater would continue to be used for all sizes of events despite the awkward orientation of the theater area to circulation patterns and hillside seating. The theater stage would continue to lack many of the amenities desired by organizers, who may need to provide temporary upgrades for sound and lighting systems.

The northeast, northwest, and southwest corners of the north portion of the main grounds would continue to be used as venues for stages and event facilities, with temporary utility connections provided by organizers. Temporary events facilities would still occasionally block the planned historic view between the White House and the Thomas Jefferson Memorial. There would be no change in impacts on demonstration or event organizers under the no-action alternative.

Constitution Gardens. Constitution Gardens would continue to be a desirable location for a few small to moderate size activities, traditionally related to Veterans Day and Memorial Day. Tents would continue to be placed along walkways, and the open turf area west of the lake would provide a larger area for demonstrations and events. A perceived lack of transit access makes the location less attractive to some organizers. There would be no change in impacts on demonstration or event organizers under the no-action alternative.

Lincoln Memorial. Under the no-action alternative the east plaza and lower approachway of the Lincoln Memorial would continue to be a desirable venue for small to large demonstrations and events because of its iconic status and historic role in hosting activities related to civil rights and liberties, as well as the spectacular vista toward the Washington Monument and the U.S. Capitol. Demonstrations and special events would continue to be managed according to the 2009 *Guidelines for Special Events and Demonstrations* to protect cultural resources.

Activities would continue to be primarily located on paved surfaces, with the memorial stairs and lower approachway providing informal seating. Turf areas alongside the reflecting pool would also continue to be used. Because subway access is 0.75 mile away, occasionally organizers have provided bus transportation to the memorial.

West Potomac Park Riverfront. The West Potomac Park riverfront and athletic fields under the no-action alternative would continue to see regular use spring through fall for special events, especially walks, runs, and races, which may use Ohio Drive and West Basin Drive or the athletic fields as staging areas. Because the riverfront area is within a short walk from parking lots, participants may arrive by bicycle or cross the bridge from Virginia, and organizers do not have to provide access. There would be no change in impacts on demonstration or event organizers under the no-action alternative.

Tidal Basin. The Tidal Basin would remain the center of the highly attended annual National Cherry Blossom Festival, and it would continue to be available for other activities. It is a desirable location for special events because of the concentration of spring flowering trees, the relationship to nearby memorials, and the visibility of the Washington Monument in the background. An untapped seasonal opportunity is the vibrant fall color of cherry trees around the Tidal Basin.

Management changes that were made in 2008 for the festival would continue, including closing the parking lot and using it for temporary facilities. Free shuttles would be provided from parking areas in East Potomac Park. The lack of pedestrian lighting around the Tidal Basin may continue to make the venue less attractive for nighttime use, and lantern-led tours are provided. There would be no change in impacts on demonstration or event organizers under the no-action alternative.

Thomas Jefferson Memorial. Under the no-action alternative the Thomas Jefferson Memorial steps and plaza would continue to be an attractive location for demonstrations and special events because of opportunities for informal seating, with the plaza functioning as a performance area. Vistas to the White House and the U.S. Capitol from areas on the plaza and steps are an important part of the memorial's appeal to organizers. Utility connections on the plaza would continue to be available to organizers. The large paved plaza and wide walks near

the memorial would continue to provide flexible space for temporary facilities, and these areas can support the weight of delivery vehicles. As a result of changes in 2008, organizers are encouraged to locate stages so they do not block views between the memorial and the White House. There is parking for 300 vehicles within a 5-minute walk, but the 15- to 20-minute walk from the nearest Metro station would mean that event organizers might want to provide shuttle transportation. Until permanent perimeter security is completed, the presence of temporary concrete barriers would remain unattractive, and controlled access would continue to be inconvenient. There would be no change in impacts on demonstration or event organizers under the no-action alternative.

Cumulative Impacts

Past Actions

The number of requests for permitted events annually has substantially increased over the last thirty years. Past court decisions have reaffirmed First Amendment rights, and there would be no change in the ability of First Amendment demonstrators to use available and allowable venues, including the Mall elm tree panels.

Current Actions

Other federal park areas in Washington, D.C., where demonstrations may be held include Franklin Park, McPherson Square, U.S. Reservation 31 (west of 18th Street and south of H Street NW), Rock Creek and Potomac Parkway (west of 23rd Street and south of P Street NW), and U.S. Reservation 46 (north of Pennsylvania Avenue, west of 8th Street, and south of D Street SE). However, none of these areas is able to accommodate the scale of demonstrations that have been accommodated on the National Mall just because of the physical space. The ability of a group to host an event or demonstration on the National Mall has become increasingly prestigious.

As areas around the National Mall have been or are being developed, such as the construction of the National Museum of the American Indian and the National Museum of African American History and Culture, space available for demonstrations and events has become more concentrated onto the Mall, particularly between 3rd and 14th streets. The volume of events has increased dramatically in the last 30 years, although the number has been fairly stable since the mid 1990s. Also, locations and seasons for events have become traditional, and more special events have become annual events, adding to the pressure on park resources as multiple demonstrations and events are accommodated.

Improvements under all alternatives funded by the American Recovery and Reinvestment Act of 2009 would improve infrastructure at the Lincoln Memorial for hosting performances and demonstrations. Wider paved areas along the reflecting pool would also improve pedestrian access, and utility and communication connections would be provided. These improvements would facilitate setup and takedown operations for organizers, resulting in long-term, moderate, beneficial impacts.

Reasonably Foreseeable Actions

In the future some traditional event locations could change because of a strong meaningful connection to future facilities and locations. For example, the Library of Congress Book Festival could move to the paved areas around the Capitol Visitor Center east plaza and 1st Street, which would provide an excellent, highly visible, accessible, and sustainable location adjacent to the Library of Congress. The Black Family Reunion might choose to relocate to outdoor spaces at the future National Museum of African American History and Culture or near the future Martin Luther King, Jr. Memorial. The relocation of some events to other sites could have a long-term, major, beneficial impact on the ability of the entire National Mall to accommodate events and for resources to recover.

The NCPC *Monumental Core Framework Plan* has identified an opportunity to create a new event venue of approximately 30 acres south of the Thomas Jefferson Memorial, which could host events from 100 to 200,000 people. The Thomas Jefferson Memorial and Washington Monument would be visible from this venue. This venue, however, would more likely appeal to special events rather than demonstrations since neither the U.S. Capitol nor the White House is visible from this location. Other future

projects include consolidating the 14th Street / I-395 and railroad bridges and developing a new subway stop within a five-minute walk of the Thomas Jefferson Memorial. This would result in long-term, major, beneficial impacts for participants and organizers of demonstrations, national celebrations, and special events held at that location.

Cumulative Impact Summary

Present rehabilitation projects for the Lincoln Memorial lower approachway and reflecting pool, the Thomas Jefferson Memorial plaza, and the D.C. War Memorial would have long-term, minor, beneficial impacts on organizers and negligible to minor beneficial impacts on participants because of improved infrastructure. It is also possible that some event organizers could select other venues in the future, resulting in long-term, minor to moderate, beneficial impacts because events would be better dispersed, thus taking pressure off high-demand locations on the National Mall. It is also possible that a large event and recreation venue could be developed south of the Thomas Jefferson Memorial, as proposed in the *Monumental Core Framework Plan,* with access from a new Metro station. This action could have long-term, moderate, beneficial impacts on both event organizers and participants.

The impacts of these past, present, and reasonably foreseeable actions on event organizers would be long-term, moderate, and beneficial because of rehabilitated and new event venues. However, taken together with the impacts of the no-action alternative, cumulative impacts would be long-term, moderate to major, and adverse, with an appreciable contribution from the no-action alternative because venues and visitor services and amenities would become increasingly inadequate.

Conclusion

Present impacts on participants and organizers would continue, with the National Mall continuing to host a large number of events and demonstrations at current venues, including the Mall elm tree panels, with growing demand for space (particularly the Mall, the Washington Monument grounds, and the Lincoln Memorial) because of the status and visibility conferred on events due to the presence of national icons in the background. Over the life of this plan impacts would become moderate to major and adverse because of inadequate venues and the lack of visitor facilities and amenities. These impacts, together with the impacts of past, present, and reasonably foreseeable actions, would result in long-term, moderate to major, adverse cumulative impacts because venues, as well as visitor services and amenities, would become increasingly inadequate.

Impacts of the Preferred Alternative

Direct and Indirect Impacts

Existing and proposed venues under the preferred alternative for demonstrations and special events are shown on the Civic Stage plan map.

Impact on Demonstration and Event Participants

The preferred alternative recognizes that the National Mall will continue to see high levels of use because of its symbolism and its location in the core of the nation's capital. Under the preferred alternative the National Mall could accommodate more participants in demonstrations and events. The National Mall could accommodate about 230,000 more people compared to the no-action alternative because of increased capacities at the following venues:

- ***Union Square*** — 290,000 people (3 sq. ft. / person) with a smaller reflecting pool that could be drained for special events; this is nearly triple the current capacity of 100,000.
- ***Constitution Gardens*** — 4,000 (200 sq. ft. / person).
- ***Tidal Basin walks*** — 50,000 (3 sq. ft. / person), an increase of 25,000 over the no-action alternative due to wider walks
- ***Thomas Jefferson Memorial south plaza*** — 10,000 (10 sq. ft. / person)

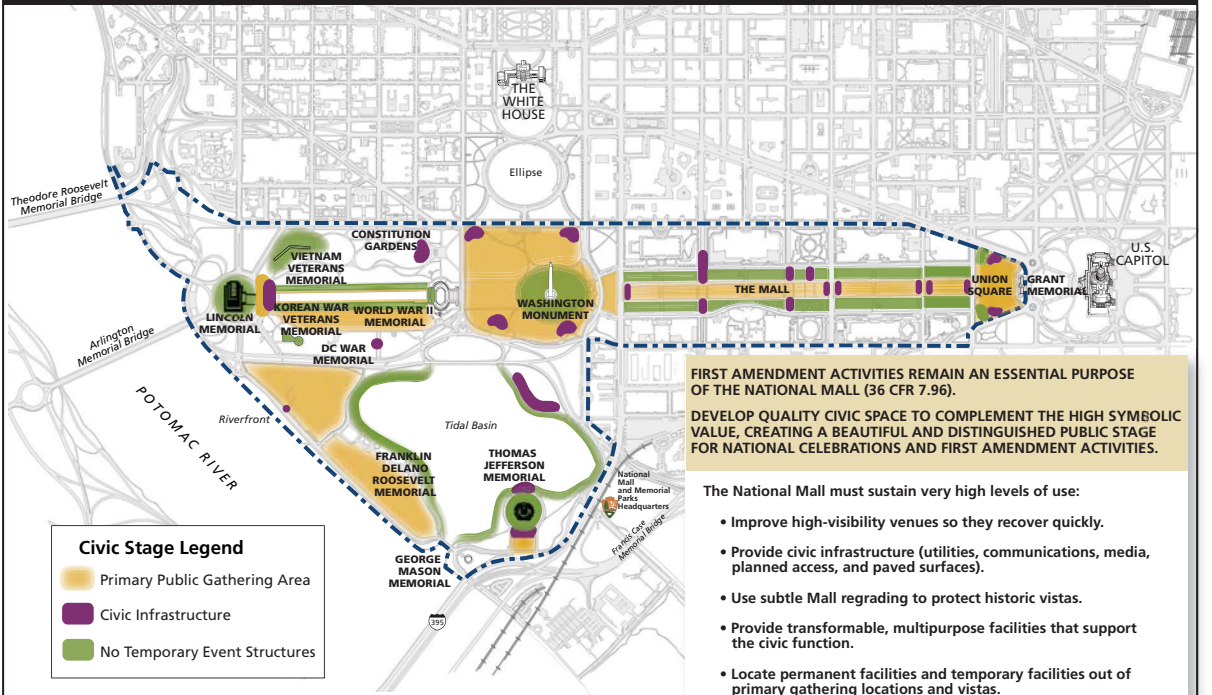
Maximum capacities at the following venues would be the same as the no-action alternative,

THE CIVIC STAGE: Preferred Alternative

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Civic Stage Legend

- Primary Public Gathering Area
- Civic Infrastructure
- No Temporary Event Structures

FIRST AMENDMENT ACTIVITIES REMAIN AN ESSENTIAL PURPOSE OF THE NATIONAL MALL (36 CFR 7.96).

DEVELOP QUALITY CIVIC SPACE TO COMPLEMENT THE HIGH SYMBOLIC VALUE, CREATING A BEAUTIFUL AND DISTINGUISHED PUBLIC STAGE FOR NATIONAL CELEBRATIONS AND FIRST AMENDMENT ACTIVITIES.

The National Mall must sustain very high levels of use:

- **Improve high-visibility venues so they recover quickly.**
- **Provide civic infrastructure (utilities, communications, media, planned access, and paved surfaces).**
- **Use subtle Mall regrading to protect historic vistas.**
- **Provide transformable, multipurpose facilities that support the civic function.**
- **Locate permanent facilities and temporary facilities out of primary gathering locations and vistas.**

Civic Stage — Preferred Alternative

except that the Mall elm tree panels could not be used during special events:

- ***Mall center panels*** — 500,000 (3 sq. ft. / person), plus an additional 80,000 (7 sq. ft. / person) in the elm tree panels during First Amendment demonstrations only
- ***Washington Monument grounds*** — 700,000 (3 sq. ft. / person)
- ***Lincoln Memorial*** — 7,000 (7 sq. ft. / person) with an additional 90,000 along the reflecting pool (3 sq. ft. / person)
- ***JFK hockey fields*** — 60,000 (7 sq. ft. / person)
- ***West Potomac Park ballfields / polo grounds*** — 220,000 (7 sq. ft. / person)
- ***Tidal Basin parking area*** — 5,000 (3 sq. ft. / person)
- ***D.C. War Memorial area*** — 425 (10 sq. ft. / person)
- ***Jefferson Memorial steps and plaza*** — 4,000 (50 sq. ft. / person)

The impact of more people being able to participate in a wide range of demonstrations, celebrations, and special events would be long-term, major, and beneficial. This would primarily be as a result of redesigning Union Square so it could accommodate many more people.

There would be no change in terms of access to various venues around the National Mall.

Impacts on Demonstration and Event Organizers

Permitting, Scheduling, and Management Processes

Event permitting processes under the preferred alternative would be revamped. The public and organizers would be able to go on-line and check venue availability and capacity, as well as explore venue facilities, requirements, and general information. Event standards for each venue (such as temporary surfacing materials

and acceptable locations for event staging and restrooms) would ensure the protection of park resources and facilitate setup and takedown operations for organizers.

Additional NPS staff would be dedicated to provide consistent advance planning information for every venue, along with support and monitoring that would be useful to event organizers. Event organizers would be encouraged to use venues that have a meaningful association with their group and that would be suited to their needs and goals. Event setup and takedown times would be included in permit applications. Additional staff would oversee events to prevent adverse resource impacts. Intense recovery procedures would be required following events.

Compared to the no-action alternative, changes in the permitting, scheduling, and management process for demonstrations and special events under the preferred alternative would result in long-term, major, beneficial impacts to organizers.

Venues

Under the preferred alternative several venues on the National Mall used for civic activities, national celebrations, and special events would be redesigned to better sustain high levels of use. These venues would be able to accommodate more people; utilities, communications, and facilities would be provided to reduce setup and takedown times; information about daily activities and wayfinding to venues would be provided; and spaces that could accommodate temporary facilities such as portable restrooms or event offices and staging facilities would be designated to minimize the visual impact on planned vistas and the historic landscape. These actions would affect the majority of organizers and would result in long-term, major, beneficial impacts on organizers' ability to stage demonstrations, national celebrations, and special events on the National Mall.

To preserve the character and symbolism of the National Mall, limited onsite space would be available in some locations for storage and construction supplies for event setup and takedown. This would have a temporary, moderate, adverse impact on organizers who may in the past have used larger areas for longer periods of time.

Like the no-action alternative, technology would continue to be used to increase the capacity of various venues and to extend venue areas. Under the preferred alternative technology could also be used to provide opportunities for people to vicariously participate in offsite demonstrations through simulcasts or to take part in events at multiple venues. This action would be consistent with NPS policies to use websites to reach a broader audience.

The following discussion analyzes the impacts of demonstrations and special events in high-use areas on the National Mall.

Union Square. Under the preferred alternative Union Square would be developed into a desirable National Mall destination that could be easily transformed to accommodate or support a demonstration, national celebration, or special event. The site would also be able to support a variety of entertainment that could accompany some of these permitted activities and help take pressure off venues on the Mall.

A context-sensitive redesign would highlight the Grant Memorial and respect the historic landscape, witness trees, and the area's history, and it would nearly triple the square's physical capacity. Actions that would support the needs of organizers and make this venue more desirable for demonstrations and events include redesigning the reflecting pool and water features; providing hard surfaces to accommodate temporary facilities, as well as setup and takedown operations; developing utilities and communication system connections; improving pedestrian access and wayfinding; eliminating grade changes; and developing permanent visitor facilities. Providing restrooms that could be opened in sections to meet higher use demands as needed would make the site more convenient for organizers and would reduce the need to provide portable restrooms. If additional portable restrooms were needed, they could be grouped on paved surfaces in locations that could be easily serviced but outside historic viewsheds. Compared to the no-action alternative, actions at Union Square under the preferred alternative would result in long-term, major, beneficial impacts for organizers.

The Mall. The intent of actions on the Mall under the preferred alternative would be to

accommodate very high levels of use at areas that would be designed to respect the historic design and character of the National Mall and to recover quickly after demonstrations or events. Circulation would be improved, gravel pathways replaced, off-Mall pedestrian connections improved, and orientation and wayfinding enhanced. Areas would be designed to accommodate operational and logistical needs of organizers, such as staging space in the air rights over the 12th Street tunnel and flexible office space that could be used by event organizers, and onsite NPS staff for event support, monitoring, emergency services, or first aid. This would reduce the need for trailers and trucks to be placed on the site for long periods of time. Permanent utility and communication connections would be provided in convenient locations to support all demonstrations, national celebrations, and special events. This would facilitate setup and takedown times, along with reducing tripping hazards from covered power and telephone lines.

Two new large, permanent restrooms would be conveniently located in the 12th Street corridor. The northside restroom would be designed so that stalls could be opened in sections as needed, and the southside restroom would be located near the Metro station entry. A small self-cleaning restroom would be located near the refreshment stand by the National Air and Space Museum. Required placement areas for additional portable restrooms would be conveniently dispersed on the Mall, and areas would be designed so that restrooms could be grouped to be easily serviced, to limit odors, and to minimize visual clutter.

Areas adjacent to roadways that are regularly used for portable stages or screens would be paved and easy access developed. Areas adjacent to refreshment stands would be renovated to be pleasant locations for more seating and more efficient food service during special events. Additional site furnishings would enhance the pedestrian experience, such as permanent seating (including group seating and shaded seating) along the north-south walks in the elm panels, cooling water features, and potted plants. Turfgrass would be installed along the tree-lined boulevards along Madison and Jefferson drives. New paving and facilities would be compatible with the character of the Mall, and new irrigation systems would improve the appearance of the turf.

The elm tree panels along the Mall would continue to be available for demonstrations that require all available space, and they would also be available to general visitors for relaxation and recreation. However, under the preferred alternative the elm tree panels could no longer be used during special events for activities or temporary event facilities, such as tents and stages. This would result in long-term, moderate, beneficial impacts on organizers of demonstrations because general conditions on the Mall would be improved and all organizers would be treated equitably.

However, the impact on a few event organizers would be long-term, adverse, and major because the elm tree panels could no longer be used for temporary event facilities, such as tents and stages. Under this alternative all facilities for the Smithsonian Folklife Festival and one other special event would have to be located on the center grass panels, where there is sufficient space for their needs. Event organizers would benefit from other actions under the preferred alternative, such as permanent restrooms and flexible office space, as well as paved spaces to temporarily store events supplies and equipment. Under the preferred alternative event organizers would need to reorganize their layout plans.

Best practices, as well as visitor health concerns, indicate that major special events are better scheduled during off-peak seasons, and in the past events have been held at different times of year and in differing locations. Offering improved venues would enhance their desirability for demonstrations and events, resulting in long-term, major, beneficial impacts for most demonstration and event organizers compared to the no-action alternative because paved areas would provide convenient flexible venues that could be used more frequently and stay in desired condition.

Washington Monument Grounds. Under the preferred alternative the Washington Monument grounds would continue to host a wide variety of demonstrations, national celebrations, and special events, including one of the Inde-

pendence Day concerts. Improving infrastructure for events and replacing the Sylvan Theater with a multipurpose performance venue would continue the historic function of the theater along with reinvigorating this space as a desirable event venue. High-capacity restrooms and food service would further meet organizers' needs. Utility and communication connections would be developed on the southwest side of 15th and Constitution Avenue NW, southeast of 17th and Constitution Avenue NW, and northwest of Survey Lodge, making these venues more attractive to organizers. Compared to the no-action alternative, the preferred alternative would result in long-term, major, beneficial impacts to demonstration and event organizers because of a new, flexible multipurpose facility better oriented for participant enjoyment and visibility as well as convenient infrastructure.

Constitution Gardens. Under the preferred alternative Constitution Gardens would be a new special events venue with a unique informal garden character and outdoor performance space that could be appealing to moderate sized events and programs. Improved circulation, space for small special events or demonstrations, and support infrastructure would make venues at this site more desirable. Compared to the no-action alternative, impacts on demonstration and event organizers would be long-term, moderate, and beneficial for event organizers of smaller events.

Lincoln Memorial. The Lincoln Memorial would continue to be a desirable venue for small to large activities under the preferred alternative because it is readily recognized throughout the country and it provides spectacular views toward the Washington Monument and the U.S. Capitol. Demonstrations and special events would continue to be managed according to the 2009 guidelines to protect the cultural resources. Because Metro access would be 0.75 mile away, organizers of some events could have to provide shuttle transportation. Resulting impacts on the Lincoln Memorial as an event and demonstration venue would be long-term, negligible, and beneficial compared to the no-action alternative.

West Potomac Park Riverfront. The West Potomac Park riverfront would continue to attract a number of special events, many of which are athletic in nature. Charity walks, runs, and races would still be able to use roads in the area or the athletic fields as staging areas. Compared to the no-action alternative, the preferred alternative would result in long-term, minor to moderate, beneficial impacts on the attractiveness of venues in this area to organizers, primarily as the result of the improved appearance, separate bicycle routes or lanes, and reconfigured parking along Ohio Drive, and if warranted by demand, food service near Ohio Drive and West Basin Drive.

Tidal Basin. The Tidal Basin would continue to be available for a variety of activities because of the concentration of spring flowering trees, the relationship to nearby memorials, and the visibility of the Washington Monument in the background. It would remain the center of the highly attended annual National Cherry Blossom Festival. The Tidal Basin area would be more desirable to demonstration and event organizers under the preferred alternative because of widened walks, separate bicycle lanes, improved pedestrian connections, revised parking, upgraded visitor facilities (permanent restrooms, food service), and pedestrian lighting. Management changes made during the 2008 Cherry Blossom Festival would continue, including closing the parking lot to accommodate temporary facilities and providing shuttles to parking areas in East Potomac Park. The impact of changes under the preferred alternative, as compared to the no-action alternative, would be long-term, major, and beneficial because of numerous improvements, such as wider walkways and additional permanent visitor facilities that would make the National Cherry Blossom Festival and other special events much easier to host.

Thomas Jefferson Memorial. Under the preferred alternative the Thomas Jefferson Memorial plaza would be a more desirable venue for organizers of demonstrations, national celebrations, and special events because of improved infrastructure and use of the south side of the memorial for special events, as well as continued opportunities for informal seating and performance areas, with vistas to the White House and the U.S. Capitol. Utility connections on the plaza would continue to be available to organizers.

The large paved plaza and wide walks near the memorial would still provide flexible space for locating temporary event facilities. As described for the no-action alternative, organizers would be encouraged to locate stages so they do not block views between the memorial and the White House. Nearby parking for 300 vehicles would remain, while Metro access would be a 15- to 20-minute walk, requiring some event organizers to consider providing shuttle access. Compared to the no-action alternative, the preferred alternative would have long-term, moderate to major, beneficial impacts, primarily as a result of improved conditions and a large flexible venue using space south of the memorial.

Cumulative Impacts

Cumulative impacts would be long-term, moderate, and beneficial, the same as those described under the no-action alternative, because of rehabilitated and new venues. The impacts of the preferred alternative would be long-term, major, and beneficial because of new venues on the National Mall, improved infrastructure that would facilitate event operations, and improved visitor facilities and amenities. These impacts, in combination with the impacts of past, present, and reasonably foreseeable actions, would result in long-term, major, beneficial cumulative impacts, with a substantial beneficial contribution from the preferred alternative.

Conclusion

The overall impacts of the preferred alternative on participants and organizers for demonstrations, national celebrations, and special events would be long-term, major, and beneficial because of changes in the permitting, scheduling, and management process, additional and more sustainable venues in highly desirable locations; equitable requirements for organizers; conveniently located civic infrastructure to facilitate event operations; permanent visitor facilities such as restrooms; a redesigned Union Square that could accommodate larger crowds; a flexible multipurpose space at the Sylvan Theater location; and a new venue at Constitution Gardens. However, impacts on the few organizers who could no longer use the elm tree panels on the Mall for temporary event facilities (such as tents and stages) would be long-term, major, and adverse. The impacts of past, present, and reasonably foreseeable actions combined with the impacts of the preferred alternative would result in long-term, major, beneficial cumulative impacts for all event organizers and participants, with a substantial beneficial contribution from the preferred alternative.

IMPACTS OF ALTERNATIVE A

Direct and Indirect Impacts

Existing and proposed venues under alternative A for demonstrations and special events are shown on the Civic Stage plan map.

Impacts on Demonstration and Event Participants

Alternative A would be similar to the no-action alternative except that the use of the Mall elm tree panels would not be allowed during special events. The maximum capacities of individual venues would be as follows:

- ***Union Square*** — 100,000 (3 sq. ft. / person)
- ***Mall center panels*** — 500,000 (3 sq. ft. / person), plus an additional 80,000 (7 sq. ft. / person) in the elm tree panels during First Amendment demonstrations only
- ***Washington Monument grounds*** — 700,000 (3 sq. ft. / person)
- ***Lincoln Memorial*** — 7,000 on the steps and plaza (7 sq. ft. / person), and 90,000 along the reflecting pool (3 sq. ft. / person)
- ***JFK hockey fields*** — 60,000 (7 sq. ft. / person)
- ***West Potomac Park ballfields / polo grounds*** — 220,000 (7 sq. ft. / person)
- ***D.C. War Memorial area*** — 425 (10 sq. ft. / person)
- ***Tidal Basin*** — parking area: 5,000 (10 sq. ft. / person); walks: 25,000 (3 sq. ft. / person)
- ***Jefferson Memorial steps and plaza*** — 4,000 (10 sq. ft. / person)

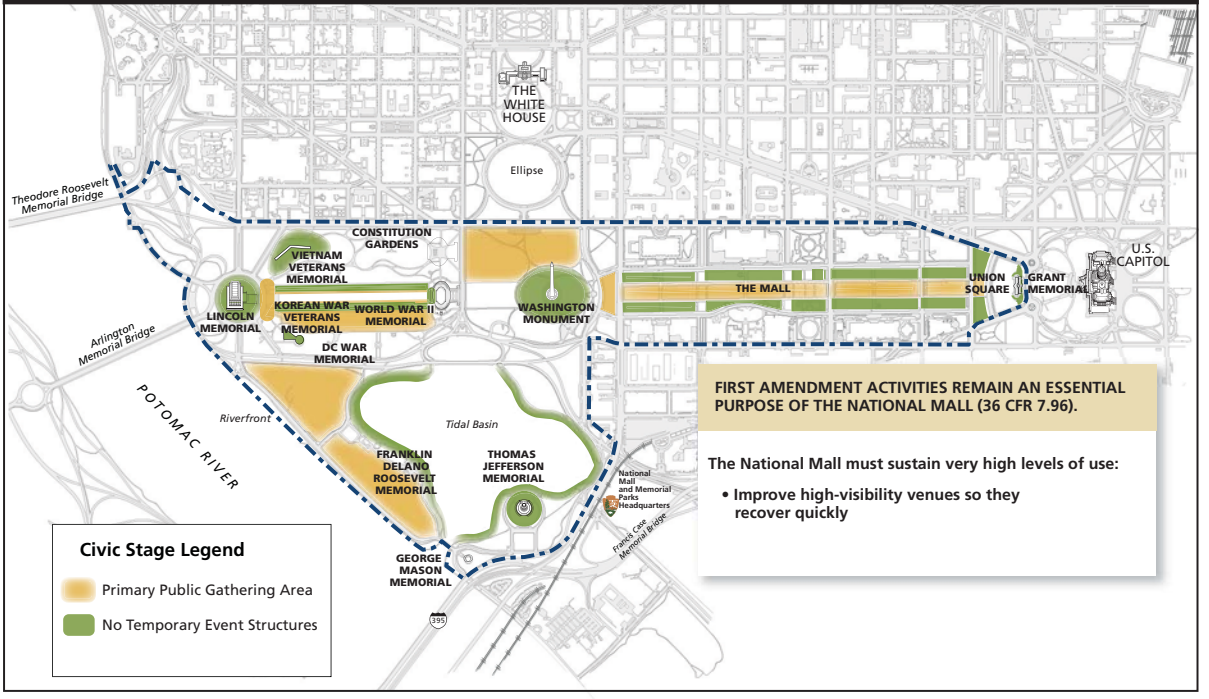
Under alternative A events would be required to have a meaningful association with the National Mall venues (36 CFR 7.96(g)(5)(vi)(A)). As a

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Civic Stage Legend

- Primary Public Gathering Area
- No Temporary Event Structures

FIRST AMENDMENT ACTIVITIES REMAIN AN ESSENTIAL PURPOSE OF THE NATIONAL MALL (36 CFR 7.96).

The National Mall must sustain very high levels of use:

- **Improve high-visibility venues so they recover quickly**

Civic Stage — Alternative A

result, some special events would no longer be permitted on the National Mall, resulting in a long-term, moderate, adverse impact on participants.

Impacts on Demonstration and Event Organizers

Permitting, Scheduling, and Management Processes

Under alternative A the permitting process for special events would be revised similar to the preferred alternative, with on-line access for permit applications, a dedicated staff to provide consistent support and monitoring, and improved advance planning information useful to event organizers. The public and organizers would be able to go on-line and check venue availability and capacity as well as explore venue facilities, requirements, and general information. Event standards would be defined for each venue, including temporary surfacing materials, tent and facility installation methods, generator decibel levels, and acceptable locations for temporary facilities (e.g., portable restrooms, incident command centers, and event staging). These standards would ensure the protection of park resources and facilitate setup and takedown operations for organizers.

Setup and takedown times would be included in permits. Special events would have to relate to and be within the basic mission and responsibilities of the NPS National Capital Region (36 CFR 7.96(g)(5) (vi)(A)). This would result in somewhat fewer special events being permitted on the National Mall, with long-term, moderate, adverse impacts on event organizers. Intense recovery procedures would follow events, with better cost recovery procedures to reduce expenses to the federal government.

Compared to the no-action alternative, alternative A would result in long-term, major, beneficial impacts on demonstration and most event organizers because of improvements in permitting, scheduling, and management processes.

Venues

Under alternative A the renovation of some venues would help organizers in the staging of demonstrations, national celebrations, and events, resulting in long-term, minor, beneficial impacts compared to the no-action alternative. However, because alternative A would require a meaningful association to sites in accordance with 36 CFR 7.96(g)(5)(vi)(A) and NPS *Management Policies 2006,* the number of events would be reduced; this requirement would not apply to demonstrations, which would continue to be fully accommodated. Alternative A would not increase the capacity of sites to accommodate more people, and additional limitations would be placed on where temporary facilities could be located in order to protect historic vistas. These actions would result in temporary, moderate to major, adverse impacts on the use of venues compared to the no-action alternative. At the same time these actions would protect the character of the venues that make them popular to organizers, a long-term, moderate to major, beneficial impact. Technology would continue to be frequently used to increase the capacity of venues or extend them. Impacts at specific venues are discussed below.

Union Square. Under alternative A Union Square would be redesigned as an attractive civic square, emphasizing the site's history. Further restrictions would be placed on where temporary facilities could be located in order to keep planned historic vistas free of visual intrusions. The pool would be redesigned to facilitate pedestrian circulation, paving and access would be improved, and walks would be widened. Like the no-action alternative, no permanent visitor facilities (such as restrooms) would be provided. Despite the square's redesign as a more attractive destination, it would not be able to accommodate more people, and the maximum capacity would remain about 100,000 people. Compared to the no-action alternative, alternative A would result in long-term, minor to moderate, beneficial impacts for event organizers from improved circulation and paving while at the same time further restricting the placement of temporary facilities, resulting in long-term, moderate, adverse impacts on the ability of organizers to stage events.

The Mall. The Mall would be preserved primarily as a historic space that would accommodate less use than the no-action alternative because fewer special events would be permitted since a meaningful association to venues would be required. However the health and appearance of the Mall would improve and that could make venues more attractive for organizers. Stages and screens for special events would have to be relocated in order to protect the eye-level east-west vista in the center of the grass panels. These facilities could be angled or placed off to the side as they were for the 2009 inauguration to take advantage of iconic backdrops. While this action would probably not make the Mall a less desirable venue, it would cause organizers to rethink event layout. Gravel walks would remain, and small restrooms would be provided near existing refreshment stands. Utility and communications infrastructure for events would be provided.

As described for the preferred alternative, no temporary facilities for events would be allowed in the elm tree panels, and the impacts would be similar — long-term, moderate, beneficial impacts for organizers of demonstrations because of a general improvement in the resources and appearance of the Mall, while impacts on event organizers would be long-term, major, and adverse on a few organizers. As described under the preferred alternative, some event organizers would have to reorganize their layout plans.

Compared to the no-action alternative, the Mall would likely be less attractive to event organizers under alternative A because of restrictions on the placement of temporary facilities to protect views and the requirement for a meaningful association with the park, even though better infrastructure, an improved appearance, and small permanent restrooms would be provided. The resulting impacts would be long-term, moderate, and adverse. Restrictions on the use of the side elm tree panels for temporary event facilities and tents would result in a long-term, moderate, adverse impact on a few event organizers.

Washington Monument Grounds. Use of the Washington Monument grounds would be similar to that described under the no-action alternative. The grounds would continue to host a wide variety of demonstrations, national

celebrations, and special events, including one of the Independence Day concerts. Temporary facilities such as portable restrooms, stages, and related backstage areas, first-aid stations would continue to be provided.

The Sylvan Theater would continue to be used for all sizes of events despite the awkward orientation of the theater area to circulation patterns and hillside seating. Organizers might need to provide temporary upgrades for sound and lighting systems in the theater.

The northeast, northwest, and southwest corners of the north portion of the main grounds would continue to be used as venues for stages and event facilities, with temporary utility connections provided by organizers. Under alternative A no temporary event facilities, such as tents or vehicles, would be allowed to block the planned historic view between the White House and the Thomas Jefferson Memorial. Impacts would be long-term, minor to moderate, and beneficial for organizers because viewshed protection requirements would retain a strong visual connection with national symbols.

Constitution Gardens. Constitution Gardens would continue to provide several small venues for a variety of demonstrations and events. These venues would provide paved walks and adjacent areas for small demonstrations and events, as well as a larger turf area west of the lake that could accommodate larger demonstrations and events. Facility improvements would include replacing the existing restroom and refreshment stand and adaptively reusing the Lockkeepers House as a staffed visitor contact station. Compared to the no-action alternative, impacts under alternative A would be long-term, minor, and beneficial, primarily as a result of improved visitor facilities making the area more attractive and visible to organizers of small to mid-size demonstrations and special events.

Lincoln Memorial. Under alternative A the east plaza and the lower approachway of the Lincoln Memorial would continue to be a desirable venue for small to large demonstrations and events. Demonstrations and special events would continue to be managed according to updated *Guidelines for Special Events and Demonstrations* to protect cultural resources. Activities would continue to be primarily located on paved surfaces, with the memorial stairs and lower approachway providing informal seating. Turf areas along the reflecting pool would also continue to be used. Because Metro access is 0.75 mile away, organizers might have to provide shuttle transportation. Impacts would be long-term, negligible, and beneficial, the same as the no-action alternative.

West Potomac Park Riverfront. Under alternative A, like the no-action alternative, the West Potomac Park riverfront and athletic fields would continue to see regular use spring through fall for special events. Walks, runs, and races would still use Ohio Drive or the athletic fields as staging areas. Because the riverfront area is within a short walk of parking lots, and participants may arrive by bicycle or cross the bridge from Virginia, organizers do not have to provide access. Compared to the no-action alternative, impacts would be long-term, negligible, and beneficial, primarily because of the improved appearance of natural resources.

Tidal Basin. As described under the no-action alternative, the Tidal Basin would continue to be a desirable venue for special events, primarily the National Cherry Blossom Festival. The Tidal Basin parking lot would continue to be closed during the Cherry Blossom Festival to provide ample paved surfaces for temporary facilities, but narrow walks would continue to limit movement. Shuttles would be provided from parking areas in East Potomac Park. The lack of pedestrian lighting around the Tidal Basin could continue to make the venue less attractive for nighttime use, and lantern-led tours would continue to be provided. Increasing educational programs by means of roving ambassadors during the Cherry Blossom Festival would help improve overall conditions for special events. An untapped opportunity for events at the Tidal Basin is during the vibrant fall color season. Compared to the no-action alternative, impacts would be long-term, negligible, and beneficial.

Thomas Jefferson Memorial. Under alternative A the Thomas Jefferson Memorial plaza would continue to be attractive for demonstrations and special events because of opportunities for informal seating and performance areas, with vistas to the White House and the U.S. Capitol

from areas on the plaza and steps. Utility connections on the plaza would continue to be available to organizers. The large paved plaza and wide walks near the memorial would continue to provide flexible space for temporary event facilities. As described for the no-action alternative, since 2008 organizers are encouraged to locate stages so that they do not block views between the memorial and the White House. Nearby parking would remain for 300 vehicles, while a 15- to 20-minute walk to the nearest Metro station would prompt some event organizers to provide shuttle access. Controlled access would continue to be inconvenient. Compared to the no-action alternative, improved conditions under alternative A would have long-term, minor, beneficial impacts on the attractiveness of this area as a venue for special events.

Cumulative Impacts

Cumulative impacts would be long-term, moderate, and beneficial, the same as those described under the no-action alternative, because of rehabilitated and new venues. Alternative A would result in long-term, minor, beneficial impacts. These impacts, in combination with the impacts of past, present, and reasonably foreseeable actions, would result in long-term, moderate, beneficial cumulative impacts, with a small beneficial contribution from alternative A.

Conclusion

The overall impacts of alternative A would be long-term, minor, and beneficial because of changes in the permitting, scheduling, and management process; somewhat improved venue conditions; and permanent small visitor facilities such as restrooms. However, the user capacity of desirable venues would remain the same, and mandated recovery time between events would mean fewer events could take place in high visibility venues such as the Mall and the Washington Monument grounds. However, impacts on the few organizers who could no longer use the elm tree panels on the Mall for temporary event facilities (such as tents and stages) would be long-term, major, and adverse. The impacts of past, present, and reasonably foreseeable actions, combined with the impacts of alternative A, would result in long-term, moderate, beneficial cumulative impacts, with a small beneficial contribution from this alternative.

IMPACTS OF ALTERNATIVE B

Direct and Indirect Impacts

Existing and proposed venues under alternative B for demonstrations and special events are shown on the Civic Stage plan map.

Impacts on Demonstration and Event Participants

The National Mall will continue to see high levels of use because of its symbolism and its location in the core of the nation's capital. Under alternative B about 240,000 more people than under the no-action alternative could be accommodated at demonstration, national celebrations, and special events because capacities would be increased at the following venues:

- ***Union Square*** — 290,000 (3 sq. ft. / person) without a reflecting pool; this is nearly triple the current capacity of 100,000.
- ***Constitution Gardens*** — 4,000 (200 sq. ft. / person); if the lake was drainable for an event, a maximum of 20,000 people at 10 square feet per person could be accommodated. Constitution Gardens is less likely to see maximum use capacity because the visual backdrop is not readily identified as being in the national capital, even though the Washington Monument is highly visible.
- ***Tidal Basin walks*** — 50,000 (3 sq. ft. / person), double the current capacity due to wider walks.

Maximum capacities at the following venues would be the same as the no-action alternative, except that the Mall elm tree panels could not be used during special events:

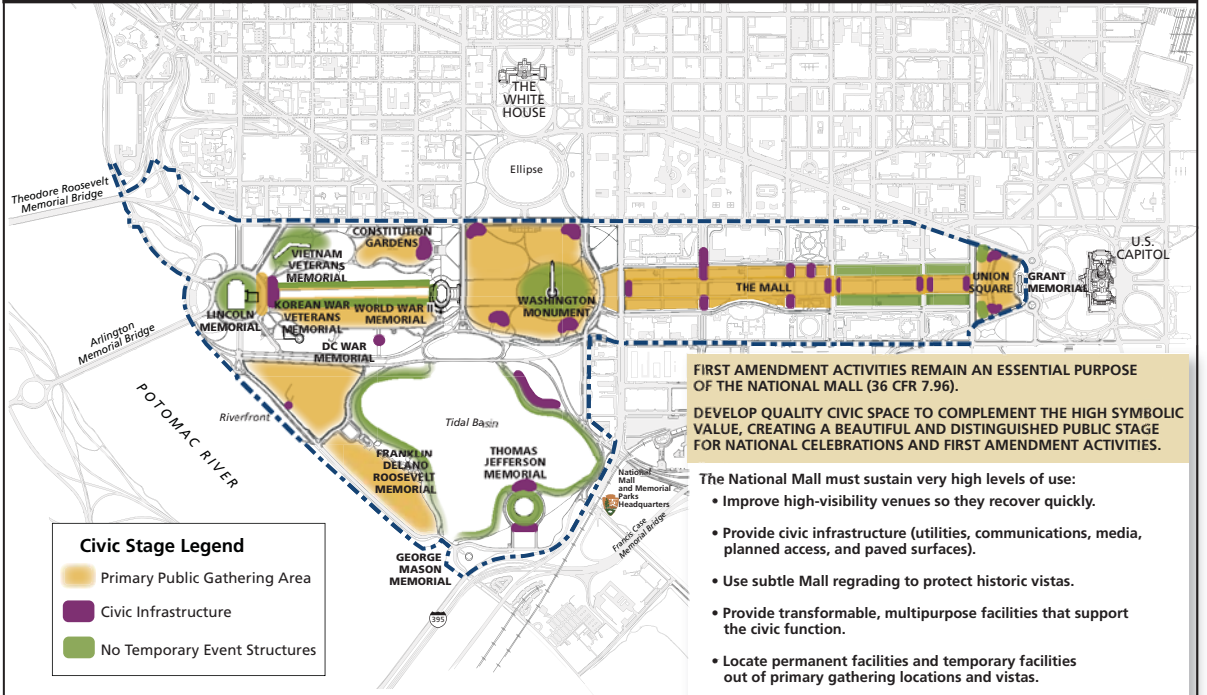
- ***Mall center panels*** — 500,000 (3 sq. ft. / person), plus an additional 80,000 (7 sq. ft. / person) in the elm tree panels if turf/root zones and soils were protected through an acceptable and authorized method
- ***The Washington Monument grounds*** — 700,000 (3 sq. ft. / person)

THE CIVIC STAGE: Alternative B

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Civic Stage Legend

- Primary Public Gathering Area
- Civic Infrastructure
- No Temporary Event Structures

FIRST AMENDMENT ACTIVITIES REMAIN AN ESSENTIAL PURPOSE OF THE NATIONAL MALL (36 CFR 7.96).

DEVELOP QUALITY CIVIC SPACE TO COMPLEMENT THE HIGH SYMBOLIC VALUE, CREATING A BEAUTIFUL AND DISTINGUISHED PUBLIC STAGE FOR NATIONAL CELEBRATIONS AND FIRST AMENDMENT ACTIVITIES.

The National Mall must sustain very high levels of use:

- Improve high-visibility venues so they recover quickly.
- Provide civic infrastructure (utilities, communications, media, planned access, and paved surfaces).
- Use subtle Mall regrading to protect historic vistas.
- Provide transformable, multipurpose facilities that support the civic function.
- Locate permanent facilities and temporary facilities out of primary gathering locations and vistas.

Civic Stage — Alternative B

- ***The Lincoln Memorial*** — 7,000 (7 sq. ft. / person) with an additional 90,000 along the reflecting pool (3 sq. ft. / person)
- ***JFK hockey fields*** — 60,000 (7 sq. ft. / person)
- ***West Potomac Park ballfields / polo grounds*** — 220,000 (7 sq. ft. / person)
- ***Tidal Basin parking area*** — 5,000 (3 sq. ft. / person)
- ***D.C. War Memorial area*** — 425 (10 sq. ft. / person)
- ***Jefferson Memorial steps and plaza*** — 4,000 (50 sq. ft. / person)

The impact on the ability to participate in a wide range of demonstrations, celebrations, and events would be long-term, major, and beneficial, primarily as a result of redesigning Union Square so it could accommodate many more people.

Impacts on Demonstration and Event Organizers

Permitting, Scheduling, and Management Processes

Under alternative B the permit process would be revamped so that organizers could apply for permits on-line. Staff would be dedicated to provide consistent support and monitoring, and advance planning information useful to event organizers would be improved. The public and organizers would be able to go online and check venue availability and capacity as well as explore the venue facilities, requirements, and general information, such as standards for specific venues, including temporary surfacing materials, tent installation methods, generator decibel levels, and acceptable locations for temporary facilities (e.g., portable restrooms, incident command centers, and event staging). These standards would ensure the protection of park resources and facilitate setup/takedown opera-

tions for organizers. Event organizers would be encouraged to use venues that would have a meaningful association to their group and that would be suited to their needs.

Additional staff would oversee events to prevent adverse resource impacts. Intense recovery procedures would follow events, and setup and takedown times would be built into permits. Compared to the no-action alternative, alternative B would make considerable changes in the processes for permitting, scheduling, and managing events, resulting in long-term, major, beneficial impacts.

Venues

Under alternative B several venues would be redesigned to sustain high levels of use for civic activities, national celebrations, and special events. Venues would accommodate more people; provide utilities, communications, and facilities that would reduce setup and takedown times; improve information about daily activities and wayfinding to venues; and provide paved or identified spaces that could flexibly accommodate temporary facilities such as portable restrooms, event offices, and staging facilities while minimizing the visual impact on planned vistas and the historic landscape. Some of the actions would be similar to the preferred alternative, which would also seek to accommodate a very high level of use. Like the preferred alternative, alternative B would affect the majority of organizers, resulting in long-term, major, beneficial impacts on the ability to stage, demonstrations, national celebrations, and events on the National Mall. Actions at specific sites are described below.

Union Square. Under alternative B Union Square would be redesigned as a desirable civic square that could be transformed to a demonstration or event site or to support national celebrations. The site would also be able to support a variety of entertainment that might accompany some of these permitted activities. The redesign would highlight the Grant Memorial and respect the historic landscape, witness trees, and site history. The physical capacity of the space would be nearly doubled. A context-sensitive redesign would accommodate more people by removing the reflecting pool, developing utilities and communications connections to facilitate flexible use, improving pedestrian access and wayfinding, adding pavement to facilitate setup and takedown, and providing permanent multipurpose facilities such as restrooms and food service that could support the needs of organizers. Restrooms could be incrementally opened as needed to meet higher use demands, providing convenience for organizers and reducing the need to provide portable restrooms. Compared to the no-action, alternative B would result in long-term, major, beneficial, impacts for organizers.

The Mall. Under alternative B the Mall would be recognized as a venue that must accommodate very high levels of use and yet be able to recover quickly. Like the preferred alternative, the Mall's improved appearance and facilities would enhance its desirability for use by demonstration and event organizers. Additional actions under alternative B would include closing Madison and Jefferson drives to allow them to be used more frequently for event facilities and constructing an underground parking garage to provide onsite public parking. These changes would result in long-term, major, beneficial impacts for organizers compared to the no-action alternative.

Under alternative B some temporary facilities for events could be placed in the side elm tree panels only if turf and root zones could be protected through effective, authorized methods. This difference would primarily affect the organizers of the Smithsonian Folklife Festival, with a long-term, negligible to minor, beneficial impact. However, dual standards and unequal treatment of organizers, as described under the no-action alternative, would result in a long-term, moderate, adverse impact on other event organizers.

Washington Monument Grounds. As described for the no-action alternative, the Washington Monument grounds would continue to host a wide variety of demonstrations, national celebrations, and special events under alternative B. Changes would be similar to those described for the preferred alternative and would include improved infrastructure to support events and a multipurpose performance venue to replace the Sylvan Theater, which would continue the historic function of the theater and

would reinvigorate this space as a desirable venue for events. High-capacity restrooms and food service would meet organizers' needs. Utility and communication connections would be developed on the southwest side of 15th and Constitution Avenue NW, the southeast side of 17th and Constitution Avenue NW, and northwest of Survey Lodge, making these venues more useful to organizers. If an underground parking garage was developed south of Independence Avenue, the site would be more desirable for demonstrations and special events because of improved parking. Compared to the no-action alternative, alternative B would result in long-term, major, beneficial impacts on event organizers because of infrastructure improvements and a new multipurpose venue.

Constitution Gardens. Under alternative B Constitution Gardens would be developed as a visitor destination with nearby performance space that has infrastructure, as well as improved circulation routes to accommodate small special events and demonstrations. In addition, Constitution Gardens Lake would be redesigned so that it could be drained to provide a large paved venue for demonstrations and special events. As a result of these actions, alternative B would have long-term, major, beneficial impacts.

Lincoln Memorial. The Lincoln Memorial would continue to be a desirable venue for small to large activities, similar to the preferred alternative. Well-attended events and demonstrations would also continue to use the turf areas along the reflecting pool. Activities would continue to be primarily located on paved surfaces, with the memorial stairs and lower approachway providing informal seating. Demonstrations and special events would continue to be managed according to updated guidelines to protect the cultural resources. Because Metro access would remain 0.75 mile away, occasionally organizers would have to provide shuttle access. Impacts would be long-term, negligible, and beneficial, the same as the no-action alternative.

West Potomac Park Riverfront. Under alternative B, like the no-action alternative, the West Potomac Park riverfront area would continue to attract numerous special events, many of which are athletic in nature. Charity walks, runs, and races would continue to use roads in the area or the athletic fields as staging areas. Developing a small staging area for demonstrations and events (grass pavement and utilities) south of 23rd Street and Independence Avenue would make this area more useful for organizers. Compared to the no-action alternative, alternative B would result in long-term, negligible to minor, beneficial impacts, primarily because the venues would be more attractive to organizers as a result of better infrastructure and the improved appearance of natural resources.

Tidal Basin. As described under the no-action alternative, the Tidal Basin would continue to be an attractive venue for special events, including the National Cherry Blossom Festival, because of the concentration of spring flowering trees, the relationship to nearby memorials, and the visibility of the Washington Monument in the background. Under alternative B the Tidal Basin would be more desirable as a venue because of widened walks, improved pedestrian connections, a nearby underground parking garage, improved visitor facilities (permanent restrooms and food service), pedestrian lighting, and more choice in recreation equipment rentals.

Management changes that were made in 2008 for the Cherry Blossom Festival would continue, including closing the Tidal Basin parking lot and using it for temporary facilities, and providing shuttle transportation from parking areas in East Potomac Park. The impact of alternative B on the attractiveness of the Tidal Basin for events and demonstrations, compared to the no-action alternative, would be long-term, major, and beneficial, primarily as a result of the numerous improvements to visitor facilities.

Thomas Jefferson Memorial. Under alternative B the Thomas Jefferson Memorial plaza would continue to be a desirable venue for organizers of demonstrations, national celebrations, and special events because of opportunities for informal seating and performance areas, with vistas to the White House and the U.S. Capitol from areas on the plaza and steps. Utility connections on the plaza would continue to be available to organizers, and the large paved plaza and wide walks would continue to provide space for temporary facilities. As a result of management changes made in 2008, organizers are encouraged to locate stages so they do not block

views between the memorial and the White House. Parking for 300 vehicles within a five-minute walk would remain, but a longer walk from the nearest Metro station (15–20 minutes) would prompt some event organizers to provide a shuttle service. Controlled access would continue to be inconvenient. Compared to the no-action alternative, impacts under alternative B would be long-term, minor, and beneficial, primarily as a result of improved conditions.

Cumulative Impacts

Cumulative impacts, which would be the same as those described under the no-action alternative, would be long-term, moderate. and beneficial because of three rehabilitated venues and a new venue south of the Thomas Jefferson Memorial. The impacts of alternative B would be long-term, major, and beneficial. These impacts, in combination with the impacts of past, present, and reasonably foreseeable actions, would result in long-term, major, beneficial cumulative impacts, with a substantial beneficial contribution from alternative B.

Conclusion

Taken as a whole, alternative B would result in long-term, major, beneficial impacts because of changes in the permitting, scheduling, and management process; more sustainable venues in highly desirable locations; conveniently located civic infrastructure to facilitate event operations; permanent visitor facilities such as restrooms; a redesigned Union Square that could accommodate larger crowds; a flexible multipurpose space at the Sylvan Theater location; and a new venue at Constitution Gardens. The impacts of past, present, and reasonably foreseeable actions combined with the impacts of the preferred alternative would result in long-term, major, beneficial cumulative impacts, with a substantial beneficial contribution from alternative B.

IMPACTS OF ALTERNATIVE C

Direct and Indirect Impacts

Existing and proposed venues under alternative C for demonstrations and special events are shown on the Civic Stage plan map.

Impacts on Demonstration and Event Participants

Under alternative C the National Mall could accommodate about 215,000 more people than under the no-action alternative because capacities would be increased at the following venue:

- ***Union Square*** — 290,000 people (3 sq. ft. / person) with a smaller reflecting pool that could be drained for special events; this is nearly triple the current capacity of 100,000.
- ***Tidal Basin walks*** — 50,000 (3 sq. ft. / person), double the current capacity due to wider walks.

Maximum capacities at the following venues would be the same as the no-action alternative, except that the Mall elm tree panels could not be used during special events:

- ***Mall center panels*** — 500,000 (3 sq. ft. / person), plus an additional 80,000 (7 sq. ft. / person) in the elm tree panels during First Amendment demonstrations only
- ***Washington Monument grounds*** — 700,000 (3 sq. ft. / person)
- ***Lincoln Memorial*** — 7,000 (7 sq. ft. / person) with an additional 90,000 along the reflecting pool (3 sq. ft. / person)
- ***JFK hockey fields*** — 60,000 (7 sq. ft. / person)
- ***West Potomac Park ballfields / polo grounds*** — 220,000 (7 sq. ft. / person)
- ***Tidal Basin parking area*** — 5,000 (3 sq. ft. / person)
- ***D.C. War Memorial area*** — 425 (10 sq. ft. / person)
- ***Jefferson Memorial steps and plaza*** — 4,000 (50 sq. ft. / person)

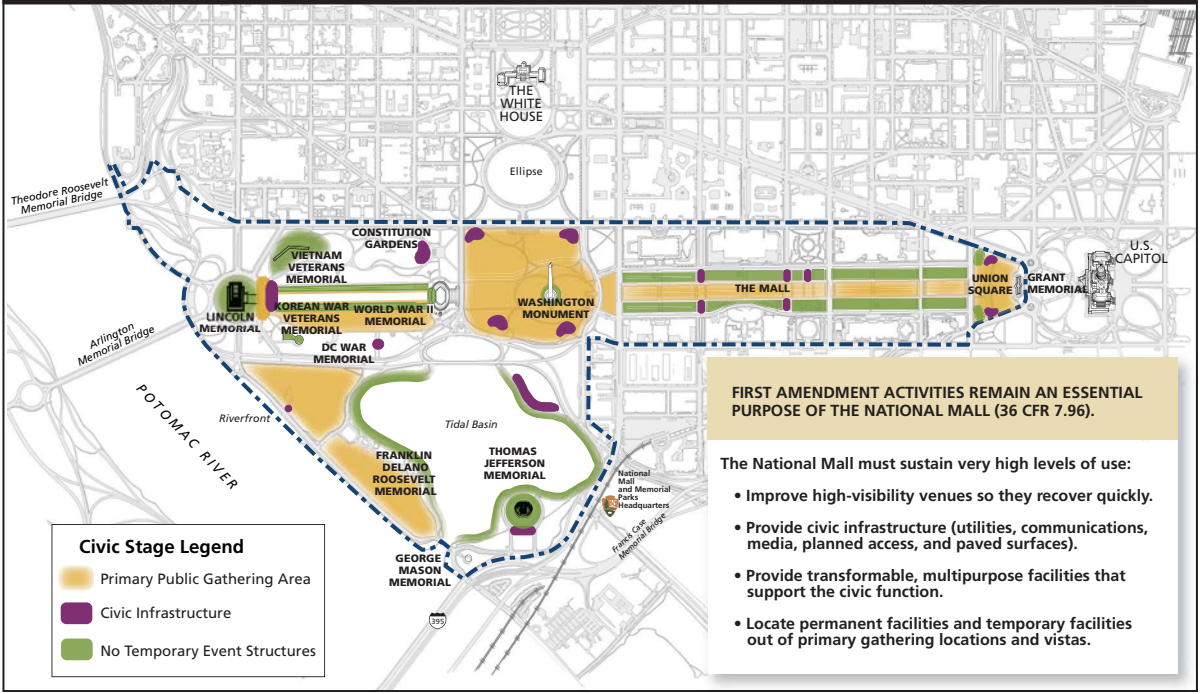
Impact on demonstration and event participants participate would be long-term, major, and beneficial, primarily as a result of redesigning Union Square so it could accommodate many more people.

THE CIVIC STAGE: Alternative C

National Mall Plan

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FIRST AMENDMENT ACTIVITIES REMAIN AN ESSENTIAL PURPOSE OF THE NATIONAL MALL (36 CFR 7.96).

The National Mall must sustain very high levels of use:

- **Improve high-visibility venues so they recover quickly.**
- **Provide civic infrastructure (utilities, communications, media, planned access, and paved surfaces).**
- **Provide transformable, multipurpose facilities that support the civic function.**
- **Locate permanent facilities and temporary facilities out of primary gathering locations and vistas.**

Civic Stage — Alternative C

Impacts on Demonstration and Event Organizers

Permitting, Scheduling, and Management Processes

Under alternative C, similar to the other action alternatives, the event permitting process would be revamped with on-line access to apply for a permit. The public and organizers would be able to go on-line and check venue availability and capacity, as well as explore venue facilities, requirements, and general information. Event standards would be defined for each venue, helping ensure the protection of park resources and facilitating setup/takedown operations for organizers. Under alternative C event scheduling (not First Amendment demonstrations) would ensure that part of the Mall's grass panels would be open for public recreation at all times, part available for events, and part available for landscape recovery/restoration.

Staff would be dedicated to providing consistent support and monitoring. Organizers would be encouraged to use venues with a meaningful association with their group and that would be suited to their needs. Compared to the no-action alternative, impacts under alternative C on event permitting, scheduling, and management would be long-term, major, and beneficial.

Venues

Under alternative C, similar to the preferred alternative and alternative B, the venues for demonstrations and special events would be improved, with long-term, moderate to major, beneficial impacts. As described in the preferred alternative, sustainable venues would be attractive to organizers, and more frequent but smaller scale restoration projects would mean that venues would stay in better shape and that more space would be available to organizers.

To maximize sustainability, organizers would be encouraged to pursue nontraditional approaches to expand participation. For example,

demonstrations of unity could be simulcast from several locations, rather than having all participants onsite, similar to the 2007 Live Earth concerts that took place around the world. The Kennedy Center periodically simulcasts performances taking place in their auditoriums to audiences on the National Mall. These special events have been very popular.

Organizers would be encouraged to provide transportation to venues and would be required to provide bicycle parking for events of more than 2,000 people. Similar to alternative A, no eye-level obstructions of planned historic vistas would be allowed, requiring changes to event facility locations, a long-term, minor to moderate, adverse impact on organizers. Compared to the no-action alternative, overall alternative C would result in long-term, major, beneficial impacts to organizers. Impacts at specific sites are discussed below.

Union Square. Under alternative C Union Square would provide an attractive, sustainable destination with flexible event and demonstration space that would maximize sustainable building practices. Context-sensitive design would include more paved surfaces and the elimination of grade changes to make the space more flexible and accessible to all people; a year-round water feature that could be drained for additional event space or that could be frozen for winter ice-skating; event utility infrastructure and connections, with the ability to view simulcasts or broadcasts of demonstrations and events occurring elsewhere, or to broadcast free-speech or civic activities from here; and a convenient refreshment stand for use by organizers. Self-cleaning public restrooms would be provided, but organizers would still have to provide additional portable restrooms for large events. As a result, Union Square would provide a venue that would almost double the number of potential participants. Impacts under alternative C would be long-term, major, and beneficial compared to the no-action alternative.

The Mall. Under alternative C the Mall would be recognized as a venue that must accommodate very high levels of use and yet be able to recover quickly, similar to the preferred alternative. Actions would include improved circulation and off-Mall pedestrian connections, replacement of gravel pathways, better orientation and wayfinding, areas to accommodate operational and logistical needs, permanent utility and communication connections, and two large permanent restrooms plus designated areas for additional portable restrooms. The Mall's improved appearance and facilities would enhance its desirability for organizers. These changes would result in long-term, major, beneficial impacts for organizers compared to the no-action alternative.

Like the preferred alternative and alternative A, no events would be allowed to use areas within the elm tree panels for activities or temporary event facilities such as tents and stages. The tree panels would continue to be available for demonstrations that require all available space and by general visitors for relaxation and recreation. The impact on the event organizers that use these areas would be long-term, major, and adverse. However, the resulting improvement in the appearance of the Mall for other event organizers would be long-term, moderate, and beneficial. Alternative C would require some event organizers to reorganize their layout plans.

Washington Monument Grounds. As described for the no-action alternative, the Washington Monument grounds would continue to host a wide variety of demonstrations, national celebrations, and special events because of the large open turf areas that can be flexibly used. Temporary facilities such as portable restrooms, stages and related backstage areas, and first-aid stations would be provided.

The Sylvan Theater would continue to see high levels of use for all sizes of events despite the awkward orientation of the theater to circulation patterns and hillside seating. Because the theater stage does not provide many of the desired amenities, organizers might need to provide temporary upgrades for sound and lighting systems.

The northeast, northwest, and southwest corners of the north portion of the main grounds would continue to be used as venues for stages and event facilities, and temporary utility connections would continue to be provided by organizers. Temporary event facilities, such as tents, would continue to occasionally block the planned historic view between the White House

and the Thomas Jefferson Memorial. Impacts under alternative C would be long-term, minor to moderate, and adverse because no changes would be made to event infrastructure.

Constitution Gardens. Constitution Gardens would be developed as a visitor destination with nearby performance space under alternative C, similar to the preferred alternative and alternative B. Circulation would be improved in a way to provide space for small special events or demonstrations, and infrastructure would be provided, making the area more desirable for organizers of small events. Compared to the no-action alternative, impacts would be long-term, moderate, and beneficial.

Lincoln Memorial. Under alternative C the east plaza and lower approachway to the Lincoln Memorial would continue to be a desirable venue for small to large demonstrations and events. Demonstrations and special events would continue to be managed according to updated *Guidelines for Special Events and Demonstrations* to protect cultural resources.

As described for the no-action alternative, activities would continue to be primarily located on paved surfaces, with the memorial stairs and lower approachway providing informal seating. Turf areas along the reflecting pool would also continue to be used. Organizers would have to consider providing shuttle transportation because the nearest Metro station is 0.75 mile away. Impacts would be long-term, negligible, and beneficial, the same as the no-action alternative.

West Potomac Park Riverfront. Under alternative C the West Potomac Park riverfront area would continue to attract a number of special events, many of which are athletic in nature. Charity walks, runs, and races would continue to use roads in the area or the athletic fields as staging areas. Parking would be improved along Ohio Drive, and separate bicycle lanes or routes would be provided to enhance access. Compared to the no-action alternative, alternative C would result in long-term, minor to moderate, beneficial impacts on the attractiveness of venues to organizers, primarily as the result of the improved appearance of natural resources, separate bicycle routes or lanes, and revised parking along Ohio Drive.

Tidal Basin. The Tidal Basin would continue to be an attractive location for special events. It would remain the center of the highly attended annual National Cherry Blossom Festival, but would also continue to be available for other activities. The Tidal Basin would be more desirable as an event venue under alternative C, similar to the preferred alternative, because of widened walks, separate bicycle lanes, improved pedestrian connections, revised parking, better visitor facilities (permanent restrooms, food service), pedestrian lighting, and more choice in recreation equipment rentals. Management changes made for the 2008 Cherry Blossom Festival would continue, including closing the parking lot to accommodate temporary facilities and providing shuttles to parking areas in East Potomac Park. The impacts to the attractiveness of the Tidal Basin as a venue under alternative C, compared to the no-action alternative, would be long-term, major, and beneficial because of numerous improvements to visitor facilities.

Thomas Jefferson Memorial. Under alternative C the Thomas Jefferson Memorial plaza would continue to be a desirable venue for organizers of demonstrations, national celebrations, and special events because of opportunities for informal seating and performance areas, with vistas to the White House and the U.S. Capitol from areas on the plaza and steps. Utility connections on the plaza would continue to be available to organizers. The large paved plaza and wide walks near the memorial would still provide flexible space for temporary event facilities. As a result of operation changes made in 2008, organizers are encouraged to locate stages so they do not block views between the memorial and the White House. Nearby parking for 300 vehicles within a five-minute walk would remain, but the 15- to 20-minute walk from the nearest Metro station would mean that event organizers might want to provide shuttle transportation. The continued need to control access would be inconvenient. Compared to the no-action alternative, impacts under alternative C would be long-term, minor, and beneficial because of improved conditions.

Cumulative Impacts

Cumulative impacts would be the same as those described under the no-action alternative. The

impacts of past, present, and reasonably foreseeable actions would be long-term, moderate, and beneficial because of three rehabilitated existing venues and a new venue south of the Thomas Jefferson Memorial. These impacts, in combination with the long-term, major, beneficial impacts of alternative C, would result in long-term, major, beneficial cumulative impacts, with a substantial beneficial contribution from alternative C.

Conclusion

The overall impacts of alternative C on participants and organizers for demonstrations, national celebrations, and special events would be long-term, major, and beneficial because of changes in the permitting, scheduling, and management process, additional and more sustainable venues in highly desirable locations; conveniently located civic infrastructure to facilitate event operations; permanent visitor facilities such as restrooms; a redesigned Union Square that could accommodate larger crowds; a reoriented Sylvan Theater to improve viewing from the hillside; and a new venue at Constitution Gardens. However, impacts on the few organizers who could no longer use the elm tree panels on the Mall for temporary event facilities (such as tents and stages) would be long-term, major, and adverse. The impacts of past, present, and reasonably foreseeable actions combined with the impacts of alternative C would result in long-term, major, beneficial cumulative impacts, with a substantial beneficial contribution from alternative C.

ACCESS AND CIRCULATION

METHODOLOGY FOR IMPACT ANALYSIS

This section analyzes the impacts of the alternatives on public access to the National Mall and wayfinding. The analysis takes into consideration adopted goals of local and federal transportation plans, NPS policy, best practices, the 2003 visitor survey and staff observations of visitor use patterns, and best professional judgment.

The following categories of impacts are analyzed:

- ***Impacts on visitor access to the National Mall*** — The beneficial and adverse impacts of alternatives on convenient access to the National Mall are analyzed, including vehicle access, parking, and transit access (Metro system as well as taxis).
- ***Impacts on the pedestrian environment*** — The beneficial and adverse impacts of the alternatives on pedestrian experiences on the National Mall and pedestrian connections to adjacent areas are analyzed.
- ***Impacts on bicycle users*** — This topic analyzes the beneficial and adverse impacts of alternatives on bicycle users.
- ***Impacts on motorized uses and the road system*** — The analysis looks at the degree to which the alternatives, in accordance with policy, either beneficially or adversely address the needs of motorists, whether they are visitors, through-travelers, or commuters.

Impact Intensity Levels

The following thresholds were established for impacts on circulation:

- ***Negligible*** — The impact would not be detectable or would be barely detectable to most park pedestrians, bicycle users, motorists, or commuters. There would be a negligible effect on local transportation plans and policies.
- ***Minor*** — The impact would be detectable to some park pedestrians, bicycle users, motorists, or commuters. There would be some consistency or inconsistency with local transportation plans and policies.
- ***Moderate*** — The impact would be readily apparent and would have an appreciable impact, either beneficial or adverse, on many pedestrians, bicycle users, motorists, or commuters. Actions would be generally consistent or inconsistent with local transportation plans and policies.
- ***Major*** — The impact would be severely adverse or exceptionally beneficial on most pedestrians, bicycle users, motorists, or commuters. Actions would be mostly consistent or inconsistent with local transportation plans and policies.

Type of Impact

Impacts could be either beneficial or adverse. Beneficial impacts would comply with federal regulations and NPS or local policies and plans; would incorporate appropriate best practices; would be convenient for users; and would improve circulation for all types of users. Adverse impacts would be inconsistent with federal regulations or with NPS or local policies and plans; would not address current challenges or obstacles to circulation; would be less convenient for some users of the system; or fail to incorporate relevant improvements from best practices.

Duration of Impacts

Impacts could be temporary, short-term, long-term, or permanent.

- ***Temporary*** — The impact would usually last for a few hours or up to two days, such as a road closure for a day or less or limited access to an area during a demonstration.
- ***Short-term*** — The impact would generally last up to one year or the life of a construction project.

- ***Long-term*** — The impact would last longer than one year or for the life of the plan (up to 50 years).

Regulations and Policies

Transportation Goals and Policies for Washington, D.C.

The National Capital Planning Commission adopted the *Comprehensive Plan for the National Capital: Federal Element*s on August 5, 2004. The plan discusses transportation under two elements — transportation and visitors. The goal for the transportation element is to develop and maintain a multimodal regional transportation system that meets the travel needs of residents, workers, and visitors, while improving regional mobility and air quality through expanded transportation alternatives and transit-oriented development. The plan recommends placing parking structures below ground for efficient land use and good urban design; and it supports walking, bicycling, and bicycle lanes.

Under the visitor element the plan supports increased information about transportation; encourages walking and bike riding; supports supplementary transit aimed at visitors, including shuttles to and from Metro stations; promotes increased awareness about long-term parking facilities; supports better tour bus management in the monumental core; and promotes a pedestrian friendly environment.

The *District of Columbia Bicycle Master Plan* (DDOT 2005a) discusses the benefits of bicycling, which include traffic relief, improved air quality, reduced need for motor vehicles, and improved health. Generally the plan recommends more and better bicycle facilities, including a bike route system with more bike facilities on roadways; more bicycle friendly policies; and more bicycle-related education, promotion, and enforcement. Additionally, it suggests upgrades of National Mall roadways and multi-use trails; improved bridge access; bike-friendly traffic calming (e.g., clearly marked intersections); exclusive bus and bicycle lanes; and intersection safety and visibility improvements to better accommodate bicycling.

The draft *District of Columbia Pedestrian Master Plan* (DDOT 2008b) identifies pedestrian potential as well as deficiencies, such as barriers to walking. Benefits of walking include an additional transportation option, reduced congestion, improved health, quality of life, and reduced pollution. The plan recommends improved pedestrian access and safety at controlled crossings and intersections that would meet the needs of pedestrians of all ability levels, and programs that support pedestrian travel.

The District of Columbia Tour Bus Management Initiative (US DOT 2003) examines the impact of tour buses; explores best practices; identifies potential strategies; recommends counting methods and locations to get a better sense of the demand; and recommends the completion and adoption of a comprehensive plan. The initiative identifies a shortage of parking and loading/unloading spaces; associated traffic and safety issues; adverse environmental impacts from buses; and obstruction of view corridors. The study also concluded that Mall areas do not have sufficient curbside loading/unloading space. Some potential strategies include increased peripheral parking outside the monumental core and downtown; centrally located parking facilities; encouraging walking among clustered destinations; pricing strategies for parking or permits/ licenses; defined routes and driver facilities/ shuttle between parking lots and hotels.

As previously described, *Planning Together for Central Washington* (NCPC 2008a) identifies common objectives of visionary planning efforts being undertaken by the Architect of the Capitol, the Commission of Fine Arts, the DC Office of Planning, the National Capital Planning Commission, and the National Park Service. Objectives include distinguished, accessible, well-connected public spaces served by a comprehensive, flexible, convenient, and coordinated network of public and visitor transit options. Walking and bicycling would be encouraged, and various travel demand strategies would be used to reduce congestion, improve air quality, and address parking and tour bus issues. Plan priorities are walkable corridors and state-of-the-art transportation for visitors, workers, and residents.

NPS Management Policies 2006

The NPS *Management Policies 2006* recognize that transportation systems and alternative transportation systems all strongly influence the quality of the visitor experience. Where appropriate, alternative transportation systems (a mix of buses, trains, ferries, etc.) are to be emphasized and encouraged, and non-motorized modes of access are preferred for moving within parks (NPS 2006e, sec. 9.2). The National Park Service will work with the U.S. Department of Transportation in the construction of new roads or the expansion of existing roads that may impact park lands (sec. 9.2.1.2.2).

Visitor facilities within park boundaries should be situated to stimulate the use of alternative transportation systems, bicycle routes, and pedestrian walkways (NPS 2006e, sec. 9.1.1.2).

Park roads should be sensitive to natural and cultural resources, and they should provide for safe and efficient travel (sec. 9.2.1). The National Park Service will work with other governmental authorities to maintain non-NPS roads consistent with park goals (sec. 9.2.1.2). It will also work with other governments to minimize the impacts of traffic on park resources and values and to accommodate necessary commercial traffic (sec. 9.2.1.2.1).

Walks and trails are to be sited to reduce conflicts with automobiles and incompatible uses, to allow for a satisfying experience, to allow accessibility by the greatest number of people, and to protect park resources. Heavily used walks will be surfaced for safety, accessibility for persons with disabilities, resource protection, and/or erosion control (sec. 9.2.2).

Bicycle trails are to be considered an alternative to motor vehicle access. They can be integrated with roads when determined safe and feasible (sec. 9.2.2.4).

Parking areas are to be located so that they do not unacceptably intrude (by sight, sound or other impact) on park resources or values. They should be limited to the smallest size and designed to accommodate other modes as well as parking motorized vehicles (sec. 9.2.4).

IMPACTS COMMON TO ALL ALTERNATIVES

Direct and Indirect Impacts

Impacts on Visitor Access

The National Park Service would work with the Washington Area Metropolitan Transit Authority to add "National Mall" to the Smithsonian Metro station name to facilitate public access. The impact of this change would be long-term, major, and beneficial since it would affect the majority of visitors and improve their ability to identify and access the National Mall.

According to the Washington Area Metropolitan Transit Authority, Metro capacity to fully meet the transportation needs of very large events on the National Mall will decrease over time, and a reliable multimodal transportation network will be essential. The result is the need for continued coordinated interagency planning related to large permitted events and demonstrations. Additional multimodal access would relate to specific activities, and related impacts would be short-term, moderate to major, and beneficial.

Impacts on Motorized Uses and the Road System

Continuing to redesign tour bus drop-off and pickup locations and to redesign the road system near the Thomas Jefferson Memorial to better accommodate tour buses, vehicular access, and pedestrian access for bus passengers would result in long-term, moderate, beneficial impacts because most tour buses would be affected. The National Park Service would work with tour bus companies to address the impacts of trash from tour bus passengers. Measures would include efforts to reduce the volume of waste and the provision of appropriate trash containers and a recycling program at tour bus drop-offs. Impacts would be long-term, moderate, and beneficial because better trash management would improve the appearance for the majority of visitors.

The National Park Service would continue to work with the city and the local business community to provide an appropriate amount of convenient parking for tour buses and visitors. Parking would comply with policies of the National Park Service, the National Capital

Planning Commission, and the District of Columbia. Parking would be designed so as not to intrude on park resources or values, and it would not result in an unacceptable level of noise or unpleasant odors. Any parking would be in areas capable of withstanding the impacts of parking.

Because the monumental core is well served by public transportation, providing less parking would be consistent with transit-oriented transportation systems. Resulting impacts on tour bus parking would be long-term, moderate to major, and adverse, affecting most tour buses until a citywide strategy was implemented. The impact on visitor parking would be long-term, minor to moderate, and beneficial because only 25% to 30% of visitors are motorists.

Conclusion

The impacts of actions common to all alternatives would generally be long-term, moderate to major, and beneficial as a result of adding the National Mall name to the Smithsonian Metro station, continuing to redesign tour bus drop-off and pickup locations, addressing the impacts of trash from tour bus passengers, and working with the city and the local business community to provide an appropriate amount of convenient parking for tour buses and visitors. However, temporary to long-term, minor to major, adverse impacts would result from constructing previously approved projects, which could interrupt the local transportation system.

IMPACTS OF THE NO-ACTION ALTERNATIVE

Direct and Indirect Impacts

Under the no-action alternative the National Park Service would continue present measures of responding to increased demand for personal vehicle access and parking. Since the 1960s the city has increasingly emphasized public transit to provide more convenient and energy-efficient access. Other less consumptive and healthy modes of circulation such as walking and bicycling have not been emphasized, so comparable amenities have not been provided.

Impacts on Visitor Access to the National Mall

Access to the National Mall by various public transportation systems (Metro system, premium circulator bus service, and public bus routes) would continue to meet the needs of two-thirds of visitors. Seven taxicab / pedicab pickup locations would continue to provide options for visitors who need some form of transportation and are not using a tour service or public transit. Parking for visitors with disabilities would continue to exceed the standards of the Americans with Disabilities Act, but would remain insufficient in areas such as the World War II Memorial, which attracts large numbers of elderly people who may have difficulty walking. Wheelchairs would remain available at five locations, providing access to six memorials; but limiting use to these areas would not be convenient for people who may want to visit multiple locations or walk between them.

In summary, visitor access would remain easy for the majority of visitors largely because of the convenient transportation system, but it would remain less convenient to motorists and tour buses. The long-term impacts on visitor access would be moderate and adverse because the demand for tour bus drop-off and pickup locations would continue to grow, resulting in more vehicle congestion as buses circulate or wait for pickup and drop-off spots.

Impacts on the Pedestrian Environment

Walking would continue to be the most popular way for visitors to move between the large number of attractions on and near the National Mall, but the pedestrian environment would remain dominated or interrupted by roads, traffic, and related noise.

Many walks would continue to be too narrow for the level of use, resulting in social trails adjacent to many walks. In addition, the pedestrian environment offers less than optimum accessibility, safety, and surface conditions, and desired amenities such as shaded seating, drinking fountains, and restrooms are not always within a reasonable range of a 5- to 10-minute walk (or about 2,000 feet).

CIRCULATION: No-Action
Including Cumulative Circulation Actions
National Mall Plan

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Theodore Roosevelt Bridge Approach Ramps; Lincoln Memorial and Kennedy Center Connections; Constitution Avenue Belvedere Restoration and Enhancement

M New Metro Station or Entrance

Potomac River Bridge and Roadway Crossing; Passenger Rail Crossing; Metro Crossing

Pedestrian Enhancements

- SIMPLIFY TRAFFIC PATTERNS
- STRENGTHEN PEDESTRIAN CONNECTION TO NEIGHBORHOODS AND KENNEDY CENTER

THE WHITE HOUSE

Ellipse

Union Station

Theodore Roosevelt Memorial Bridge

CONSTITUTION GARDENS

VIETNAM VETERANS MEMORIAL

LINCOLN MEMORIAL

WORLD WAR II MEMORIAL

WASHINGTON MONUMENT

KOREAN WAR VETERANS MEMORIAL

DC WAR MEMORIAL

THE MALL

UNION SQUARE

GRANT MEMORIAL

U.S. CAPITOL

Arlington Memorial Bridge

ADD NATIONAL MALL TO SMITHSONIAN METRO STOP NAME

POTOMAC RIVER

Riverfront

Tidal Basin

FRANKLIN DELANO ROOSEVELT MEMORIAL

THOMAS JEFFERSON MEMORIAL

National Mall and Memorial Parks Headquarters

Francis Case Memorial Bridge

GEORGE MASON MEMORIAL

395

PUBLIC TRANSPORTATION NOTES:

1. Public buses, including Circulator routes (Convention Center-SW Waterfront and Smithsonian / National Gallery of Art) travel through and stop on the National Mall.
2. Metrorail (subway) lines (Yellow, Orange, Blue, and Green) travel beneath the National Mall.
3. Sightseeing, tour, and school buses stop on and travel through the National Mall. Sightseeing buses cannot sell tickets while on park land.
4. Commuter buses, plus privately owned, fleet, and commercial vehicles, use roads within or tunneled under the National Mall.
5. Taxis and pedicabs operate on the National Mall, picking up or dropping off passengers.

CIRCULATION: No-Action Alternative Legend

OTHER CIRCULATION ELEMENTS

- M Metro Station
- Smithsonian / National Gallery of Art Circulator Bus
- D.C. Road with Parking Meters
- Capitol Complex Permit Parking
- Tour Bus Drop-off Location
- Improved Pedestrian Connections
- Proposed Streetcar Line

- National Mall Plan Area

NPS CIRCULATION ELEMENTS (Existing Only)

- Existing Visitor Tourmobile Route
- Tourmobile Stop
- P Parking Lot
  Note: Free parking on streets.
  All areas include parking for people with disabilities.
- Tour Bus Drop-off Location

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Walking surface materials would remain uncoordinated and would distract from a coherent pedestrian circulation system and identity. Surface conditions have deteriorated in several areas, and walks may be uneven or patched. Gravel walks would continue to be difficult for people with disabilities and others, and the attendant dust would generally contribute to a less pleasant environment and could affect the breathing or health of visitors.

Stop signs and stop lights would remain the primary methods to slow traffic and accommodate pedestrian crossings. Striped crosswalks are provided at designated crossing points and intersections. Crosswalk timing continues to be too short for many visitors, and visitors would continue to jaywalk or take shortcuts that could endanger them or degrade park resources by creating social trails.

In summary, the long-term impacts on the pedestrian environment would become moderate to major and adverse because walkways and amenities were not designed to accommodate current high-use levels, walkways need to be repaired, and the pedestrian experience is overwhelmed by roadways and vehicle traffic. Present conditions do not achieve the desired conditions for pedestrians, and many common best practices and sustainable approaches are not taken advantage of.

Impacts on Bicycle Users

Bicycling would continue as a popular means of commuting as well as recreation. Bicycling frequently takes place on the National Mall on the same walks used by pedestrians, and generally the walks are not wide enough to accommodate both uses and pedestrians travel at much slower speeds. While most bicyclists have some form of bell, pedestrians distracted by sights may not react in time.

The Washington Area Bicycle Association would continue to work to improve bicycling opportunities and safety. Bicycle parking during large events and national celebrations would continue to be staffed by local volunteers and NPS staff. The use of walkways by pedestrians and bicyclists does not facilitate safety or convenience for the large numbers of bicycle users, and bicycling as a green and nonpolluting mode of transportation would not be fully supported.

Despite the recent addition of more bicycle racks, over the long term impacts would be moderate and adverse because of inadequate facilities and routes for bicyclists, unsafe riding conditions, and an increased potential for conflicts with pedestrians.

Impacts on Motorists

An estimated 300,000 vehicles or more would continue to traverse surface streets in the National Mall on a daily basis. The Tidal Basin area would remain cut off from the remainder of the National Mall by the commuter road system, as would the Watergate area and East Potomac Park.

Awkward angled intersections on Independence and Maine avenues result in vehicles weaving between lanes to get into the desired lane. The road system would continue to be used by two distinctly different groups — commuters and visitors, which typically travel at different speeds. Commuters are very familiar with the roads and generally exceed the posted speed limit. Visitors not familiar with the roads may be distracted by sights or the desire to find parking. In summary, roads and motorists would continue to dominate the circulation system.

Impacts over the life of the plan would be long-term, moderate to major, and adverse because traffic congestion around the National Mall would continue to increase and no actions would be taken to improve traffic flow and to create safer conditions for pedestrians and bicyclists.

Cumulative Impacts

Past Actions

Circulation on the National Mall is an integral component of the city's circulation system. Circulator and other public buses, tour buses, sightseeing buses, and taxis operate on roads within the National Mall. The Metrorail subway system crossed under the National Mall and nearby, and several Metro stations provide convenient access.

Circulation on the National Mall was affected by the 1973 "Washington Mall Plan: Circulation Systems" (Skidmore, Owings and Merrill 1973), which closed Washington and Adams drives on the Mall and converted them to gravel walks. Also, 2nd, 9th, and 12th streets were tunneled under the Mall. The plan proposed a visitor transportation system, Tourmobile, which was begun by the National Park Service in 1969, but the proposal for a pedestrian- and bicycle-oriented National Mall free of surface parking was not achieved. Dedicated Tourmobile roadways were to have been shared with bicyclists, but these roadways have since been removed. Additional pedestrian amenities were recommended. During this era the subway system was also developed. The cumulative impact has been long-term, moderate to major, and beneficial, primarily as a result of public and visitor transit improvements but long-term, moderate, and adverse because other circulation goals for the National Mall were not achieved.

Present Actions

Ongoing roadwork and circulation improvements are cyclic and include several roadway and resurfacing projects that were previously discussed, including

- National Mall Road Improvements
- Constitution Avenue
- Lincoln Memorial Circle Roadway Project
- Ohio Drive

The cumulative impact of these projects would be long-term, minor to moderate, and beneficial, primarily as a result of general improvements that would be noticed by many users.

Construction of previously approved projects (Martin Luther King, Jr. Memorial, Vietnam Veterans Memorial Center, the National Museum of African American History and Culture) could interrupt the transportation system, as could the implementation of projects common to all alternatives, such as the Thomas Jefferson perimeter security, the Potomac Park levee, ongoing road projects, and future memorials outside the Reserve. Resulting impacts on transportation and circulation would be temporary to long-term, minor to major, and adverse.

The National Park Service has begun updating and replacing its orientation maps and developing a better sign system to improve pedestrian wayfinding and information coordinated with NPS sign standards. The project will be completed in phases. The impact of installing a new system will be long-term, major, and beneficial since it will positively affect the experience of all visitors and greatly help them plan and find their way around the National Mall. Some potential variations or additions to the system, such as electronic daily interpretive program signs, are discussed under "Impacts on Opportunities for Information and Education" in the "Visitor Experience" section.

As proposed in the 2006 *Environmental Assessment for a Visitor Transportation Study*, replacing the interpretive visitor transportation service would result in long-term, moderate to major, beneficial impacts on visitor experiences, primarily as a result of more convenient and frequent two-way transportation service around the National Mall that would be integrated into the public transportation system. The changes would be readily apparent to visitors, and would offer an exceptional level of convenience.

The National Park Service, as a result of a donation, has recently instituted a bike-sharing program for staff. The bike stations (at park headquarters, the National Capital Region, the I Street office, and the Interior Building) are powered by solar power and use a card system. This action supports use of sustainable modes of transportation and supports local bicycle and transportation goals. The cumulative impacts on transportation would be long-term, negligible, and beneficial; however, the impact in terms of setting a precedent for the National Park Service as a leader in sustainable practices would be long-term, moderate, and beneficial.

Reasonably Foreseeable Actions

The expressway, bridge, and road network that was developed in the 1960s could be revised to dramatically improve access, not only for commuters and visitors but also for other modes of transportation. Projects that are being considered include the following:

- *The 14th Street Bridge Corridor* — The 14th Street bridge corridor study area includes

all the I-395 bridges, the 14th and 15th street corridors north to Constitution Avenue, the Thomas Jefferson and George Mason memorials, and the southern and eastern portions of the Tidal Basin from Raoul Wallenberg Place to Inlet Bridge.

- *10th Street Overlook Transportation Facility* — A multi-level parking and intermodal transportation facility below the 10th Street Overlook would provide approximately 1,200 parking spaces and a terminal and parking facility for commuter and tour buses. The *Monumental Core Framework Plan* also proposes a multimodal and transfer facility under 10th Street closer to the L'Enfant Metro station. Either location could address visitor parking and tour bus needs near the National Mall.
- *Maryland Avenue* — Rail lines along the avenue could be realigned to improve road and pedestrian access.
- *Rock Creek and Potomac Parkway* — Rehabilitation of the parkway would be continued from Virginia Avenue to P Street Bridge (NPS 2005e). Road, bicycle, and pedestrian access would be improved along the parkway.
- ***D.C.'s Transit System Future Plan.*** A proposed streetcar line from the Takoma Metrorail station to Buzzard Point would cross the National Mall along 7th Street (DC DOT 2010). During implementation of the streetcar system, the National Park Service would work with the Advisory Council on Historic Preservation, the Commission of Fine Arts, the National Capital Planning Commission, and the D.C. Historic Preservation Office to minimize and mitigate the impacts of the project on the National Mall.
- *I-66 / Potomac River Freeway* — Proposals discuss decking the Potomac River Freeway and improving access to the Kennedy Center, with links to the Northwest Rectangle and the Lincoln Memorial.
- *Monumental Core Framework Plan* — The NCPC *Framework Plan* proposes a new Metro station with entries in East Potomac Park convenient to the Thomas Jefferson Memorial, and additional Metro entries at the Federal Triangle and the Navy / Archives / Penn Quarter station. These actions would substantially improve convenient transit access to the National Mall. The plan also proposes decking over the Southeast and Southwest freeways, improving pedestrian access to the Federal Triangle, and restoring street grids in some areas.
- *Smithsonian Institution Mall-wide Perimeter Security Improvements* — Perimeter security improvements would extend the curve of Jefferson Drive north of the Smithsonian Castle, farther into the Mall area. This would require revisions to pedestrian circulation in areas that are eroded by foot traffic, and it would affect several mature elm trees. The project would provide opportunities to improve pedestrian circulation, resulting in a long-term, major, beneficial impact, but at the same time road changes would bring vehicles and related sights, sounds, and smells closer to the center of the Mall, resulting in a long-term, moderate, adverse impact on the pedestrian environment.
- *Union Station* — Private developers owning air rights at Union Station could provide additional tour bus parking facilities.

Cumulative Impact Summary

The National Mall and its road and pedestrian circulation system would continue to be an essential part of the urban circulation of Washington, D.C. As the result of past actions, the city has a well-developed multimodal transportation system (rail, subway, bus, visitor transit). Some past actions moved toward developing a more pedestrian-oriented environment by converting Washington and Adams drives to walks, with a long-term, moderate, beneficial impact on pedestrian circulation despite gravel surfacing that generates dust and is difficult for many people to navigate. Controlled access roads (I-395 corridor, Potomac River Freeway) also brought a great deal of commuter traffic into the park on a daily basis, introducing potential conflicts between commuters and motorists visiting the park as well as pedestrians and bicycle riders.

Several current projects would improve the condition of park roads and related walks or trails (Constitution Avenue, Madison Drive, Ohio Drive). Under an NPS Centennial initiative the park is currently replacing its sign system with a coordinated series of orientation maps, pedestrian guides, and other signs. Implementing travel demand recommendations from the 2006 *Visitor Transportation Study* would help increase parking for visitors by metering NPS on-street parking, which tends to be used by local residents instead of visitors.

Constructing future road improvements to consolidate and relocate the I-395 and 14th Street bridge corridors, along with a new subway station near the Thomas Jefferson Memorial, could better serve East Potomac Park and the southwest waterfront as well as local recreation users. Future actions also include an improved visitor transportation system; improved access to Maryland Avenue, the southwest waterfront, the Kennedy Center, and the Federal Triangle; additional parking for visitors and tour buses; simplified vehicular circulation; and fewer barriers to circulation. Taken as whole, despite gravel walks and commuter routes through the National Mall, the impact of past, present and reasonably foreseeable projects on access and circulation would be long-term, major, and beneficial.

Impacts under the no-action alternative would be long-term, moderate to major, and adverse because of more vehicle congestion on the National Mall as buses circulate or wait for pickup and drop-off spots, and inadequate facilities for pedestrians and bicyclists. These impacts, combined with the impacts of past, present, and reasonably foreseeable actions, would result in long-term, major, beneficial impacts that would affect a very large number of motorists who drive through the area, as well as bicyclists and pedestrians, offsetting the adverse impacts of the no-action alternative.

Conclusion

There would be no change to access and circulation under the no-action alternative, but over the long-term impacts would be moderate to major and adverse because visitor access would become more difficult as use increased; the pedestrian environment would become less desirable with inadequate walkway surfaces and amenities and more impacts from vehicle traffic; facilities would not be improved for bicyclists; and increased traffic congestion would affect both motorists and visitors. However, cumulative impacts would be long-term, major, and beneficial because of improved maps and wayfinding signs, an improved visitor transportation service, and easier access for motorists, Metro users, and bicyclists. These impacts would affect a very large number of motorists who drive through the area, as well as bicyclists and pedestrians, offsetting the adverse impacts of the no-action alternative.

IMPACTS OF THE PREFERRED ALTERNATIVE

Direct and Indirect Impacts

The preferred alternative would combine ideas from all the alternatives to provide a quality experience on the National Mall. It would protect the historic landscape, increase diverse education, create a welcoming atmosphere for all visitors, incorporate universal design to meet the needs of all visitors, and accommodate high levels of use.

Impacts on Visitor Access to the National Mall

As described for the no-action alternative, various modes of convenient public access (Metro system, premium circulator bus service, and public bus routes) would continue to meet the needs of two-thirds of visitors. Seven taxicab / pedicab pickup locations would continue to provide options for visitors who need some form of transportation and are not using a tour service or public transit. However, the preferred alternative would differ by undertaking actions to improve visitor convenience and providing supplementary services.

The National Park Service would coordinate with local commercial parking garages to provide additional visitor parking, with visitor valet or shuttle service to and from designated locations on the National Mall. This program would make it easier for visitors to go to several destinations during the day and then get picked up at an identified spot to return to their vehicles.

CIRCULATION: Preferred Alternative

Including Cumulative Circulation Actions

National Mall Plan

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MONUMENTAL CORE FRAMEWORK PLAN CIRCULATION ELEMENTS

- Theodore Roosevelt Bridge Approach Ramps; Lincoln Memorial and Kennedy Center Connections; Constitution Avenue Belvedere Restoration and Enhancement
- M — New Metro Station or Entrance
- Potomac River Bridge and Roadway Crossing; Passenger Rail Crossing; Metro Crossing
- Pedestrian Enhancements

- *SIMPLIFY TRAFFIC PATTERNS*
- *STRENGTHEN PEDESTRIAN CONNECTION TO NEIGHBORHOODS AND KENNEDY CENTER*
- *EMPHASIZE PLANNED VISTAS ALONG PEDESTRIAN AND CIRCULATION ROUTES*
- *IMPROVE PEDESTRIAN ACCESS TO ELLIPSE, THE WHITE HOUSE AND PRESIDENT'S PARK*
- *SURVEY LODGE: CENTER FOR SUPPLEMENTARY TRANSIT, COURTESY SHUTTLES, PARKING FOR VISITORS WITH DISABILITIES, AND BIKE RENTAL*
- *PAID PARKING ALONG CONSTITUTION*
- *PAID PARKING ON MADISON AND JEFFERSON DRIVES*
- *PAID PARKING*
- *ADD NATIONAL MALL TO SMITHSONIAN METRO STOP NAME*
- *STRENGTHEN PEDESTRIAN CONNECTIONS TO U.S. CAPITOL AND MALL*
- *TIDAL BASIN BOAT SERVICE*
- *IMPROVE PEDESTRIAN CROSSWALKS AND ACCESS*
- *SEPARATE VEHICLES, PEDESTRIANS, AND BICYCLES REVISE OHIO DRIVE PARKING TO ACCOMMODATE SEPARATE USES AND PROVIDE PAID PARKING KIOSKS*
- *IMPROVE PEDESTRIAN CROSSWALKS AND ACCESS*
- *SEPARATE BICYCLES AND PEDESTRIANS AT BRIDGES*
- *IMPROVE ACCESS TO NATIONAL MALL AND EAST POTOMAC PARK. REALIGN MAINE AVENUE TO SW WATERFRONT; AND PROVIDE PEDESTRIAN ACCESS TO MARYLAND AVENUE.*
- *PAID PARKING*
- *SEPARATE VEHICLES, PEDESTRIANS, AND BICYCLES*
- *IMPROVE PEDESTRIAN AND BICYCLE ACCESS TO BRIDGE*

THE WHITE HOUSE
Ellipse
Union Station
Theodore Roosevelt Memorial Bridge
CONSTITUTION GARDENS
VIETNAM VETERANS MEMORIAL
LINCOLN MEMORIAL
WORLD WAR II MEMORIAL
WASHINGTON MONUMENT
KOREAN WAR VETERANS MEMORIAL
DC WAR MEMORIAL
THE MALL
UNION SQUARE
GRANT MEMORIAL
U.S. CAPITOL
Arlington Memorial Bridge
POTOMAC RIVER
Riverfront
Tidal Basin
THOMAS JEFFERSON MEMORIAL
FRANKLIN DELANO ROOSEVELT MEMORIAL
GEORGE MASON MEMORIAL
National Mall and Memorial Parks Headquarters
395

PUBLIC TRANSPORTATION NOTES:

1. Public buses, including Circulator routes (Convention Center-SW Waterfront and Smithsonian / National Gallery of Art) travel through and stop on the National Mall.
2. Metrorail (subway) lines (Yellow, Orange, Blue, and Green) travel beneath the National Mall.
3. Sightseeing, tour, and school buses stop on and travel through the National Mall. Sightseeing buses cannot sell tickets while on park land.
4. Commuter buses, plus privately owned, fleet, and commercial vehicles, use roads within or tunneled under the National Mall.
5. Taxis and pedicabs operate on the National Mall, picking up or dropping off passengers.

CIRCULATION: Preferred Alternative Legend

OTHER CIRCULATION ELEMENTS

- M — Metro Station
- Smithsonian / National Gallery of Art Circulator Bus
- D.C. Road with Parking Meters
- Capitol Complex Permit Parking
- Tour Bus Drop-off Location
- Improved Pedestrian Connections
- Proposed Streetcar Line

- National Mall Plan Area

NPS CIRCULATION ELEMENTS

- Memorials Visitor Transportation Route
- or — Visitor Transportation Stop
- Memorials / Downtown Visitor Transportation Route
- Visitor Transportation Transfer Point
- Separate Bike Routes or Lanes
- P — Parking Lot
  Note: Paid parking on streets and in lots. All areas include parking for people with disabilities.
- Tour Bus Drop-off Location
- Crosswalk Improvement
- Pedestrian Bridge
- Improved Pedestrian / Bicycle Environment, with Roving Courtesy Shuttles
- Pedestrian - Metro Stop Welcome Plaza
- Road Realignment
- Boat Service

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Adding parking for visitors with disabilities on the centrally located Washington Monument grounds, and making this site a one-stop location for all-day rental of equipment (such as wheelchairs and electric scooters) that could be used throughout the National Mall would increase convenience for visitors with disabilities. In addition, roving courtesy shuttles would provide transportation for those in need to the closest shuttle, transit, or visitor service locations. In cooperation with the U.S. Department of Agriculture, improving directions and the pedestrian access route to the Smithsonian

Metro station's accessible elevator entrance (on the north side of Independence Avenue at 12th Street) would improve convenience for families with strollers, people with disabilities, and others (nearly 25% of visitors have difficulty walking long distances because it is too tiring, they have young children, or they have a disability). Redesigning the Tidal Basin parking lot would improve pedestrian access.

Compared to the no-action alternative, the impacts of the preferred alternative on convenient visitor access would be long-term, major, and beneficial, far better meeting NPS policies and supporting local transportation plans and policies. Beneficial elements include providing a convenient shuttle to and from local garages or related valet parking with designated pickup spots; increasing onsite transportation options for visitors with courtesy shuttles; and increasing parking and transportation-related services for visitors with disabilities (wheelchair and scooter rentals).

Impacts on the Pedestrian Environment

Under the preferred alternative the pedestrian environment would be dramatically improved compared to the no-action alternative. Walking surfaces would be improved, walks would be widened, pedestrian lighting would be increased, more amenities would be provided, and crosswalks would be enhanced. While basic historic circulation patterns would remain, public access on the National Mall would emphasize pedestrian use; other circulation modes, such as driving and bicycling, would still be accommodated, but within a parklike setting.

It is assumed that most people will choose to walk if a destination is within 5 to 10 minutes and if there is limited parking, traffic congestion, or parking fees. The National Capital Planning Commission defines a reasonable walking distance as 2,000 feet, or about 0.4 mile. Pedestrian speeds range from 3 mph for adults walking at a brisk pace to 2 mph or less for children, seniors, and people with disabilities. It will take an individual walking at a brisk pace about 10 minutes to traverse 0.4 mile, but it will take children or an individual who has difficulty walking up to 25–30 minutes or longer to walk the same distance.

A comfortable, walkable environment would include universally accessible walking surfaces to better meet the needs of all people, including those with disabilities. Using a coordinated hierarchy of paving materials would create a sense of place and identity, as well as help unify the National Mall. This action would make it easier for pedestrians to find their way around by creating an easy to follow system of recognizable walks and paths. The palette of paving materials would use quality materials commensurate with the importance of the National Mall and could include surfaces appropriate for runners and joggers.

Entrances to the National Mall would provide clear, safe, and pleasant pedestrian transitions to and from adjacent areas and along a continuous riverfront walk and trail system. Walks in several areas, such as those along the Tidal Basin and entrances to the Korean War Veterans Memorial, would be widened to accommodate high levels of use, improving circulation flow and reducing crowding. Walks near some intersections would also be enlarged to safely accommodate more people.

Developing a coordinated lighting plan would help pedestrians to more safely experience the evocative and emotional nighttime character of the National Mall with its lighted monuments and memorials. Walkway lighting would be emphasized to provide for greater nighttime enjoyment and safety, but would not intrude on the lighting of the major memorials. Lighting would be added to those areas where it is missing, such as the Tidal Basin, to encourage pleasant evening strolls. Temporary fixtures along the elm walkways flanking the Lincoln

Reflecting Pool would be replaced, and more even lighting coverage would be provided along the Mall. All of these actions would make it easier for pedestrians to move between commemorative destinations during evening hours.

Amenities for pedestrians, such as visitor facilities, drinking fountains, restrooms, shelters, seating, emergency call buttons, and wayside exhibits would further enhance the pedestrian experience. Many of these facilities would be grouped for convenience and to create pleasant resting points, and they would be within a reasonable walking distance so visitors could expect where to find the next facility grouping. To increase pedestrian enjoyment, amenities could include small-scale features, such as seasonal plantings or water elements where pedestrians could cool off. Additional seating would be provided for visitors to sit and relax, with both sunny and shaded seating. Seating locations would take advantage of views or educational settings. Seating would also be provided near major entrances, such as the Metro or to meet the needs of groups.

Crosswalk improvements would be part of the coordinated paving system and would emphasize safe road crossings, as well as connections to museums. Pedestrian and motorist crossing times at stoplights would be more equitable, and longer crossing times would allow more pedestrians or slower moving pedestrians to safely cross wide roads. Traffic-calming approaches, such as raised crosswalks or specialty paving, would help identify pedestrian-crossing zones.

Compared to the no-action alternative, the preferred alternative would have long-term, major, beneficial impacts on the pedestrian environment because the experience of virtually every visitor would be improved and made safer. Quality and pedestrian circulation would be emphasized, walking surfaces improved and coordinated, walks widened, additional lighting provided, and crosswalk conditions enhanced, including longer crossing times.

Impacts on Bicycle Users

In terms of bicycle riding, the preferred alternative, compared to the no-action alternative, would support and encourage bicycling as a healthful form of recreation as well as an alternative transportation mode. Developing a system of bike lanes or routes separate from roads or pedestrian walkways, using traffic-calming measures, and giving bicyclists priority at intersections would all improve bicycling opportunities and safety. The bicycling experience would be further improved by enhancing connections to bicycle trails in East Potomac Park, Rock Creek Park, the Chesapeake and Ohio Canal, the George Washington Memorial Parkway, and the southwest Washington, D.C., area. The National Park Service would work with the city to implement compatible sections of its *Bicycle Master Plan* and bicycle rental program.

The number and distribution of bicycle racks on the National Mall would be improved. More NPS-guided bicycling tours would be provided. The National Park Service would also work with others to better fulfill the goals of the D.C. *Bicycle Master Plan,* with access to bridges and an onsite coordinated bicycle rental program.

Like the no-action alternative, the preferred alternative would continue to encourage bicycle parking for events and offsite bicycle rentals and guided bicycling tours to meet the needs of some visitors.

Compared to the no-action alternative, the preferred alternative would have long-term, major, beneficial impacts on bicycle users because separate trails or routes would provide a safer, more enjoyable environment, encouraging this alternative circulation mode. Improved bicycling opportunities, including facilities, tours, and bicycle rentals, would also support local planning goals to reduce vehicle use.

Impacts on Motorists

The current road system would remain largely intact under the preferred alternative, but the park setting for roads would be emphasized, and pedestrians and bicycles would be given more priority and additional crossing times at intersections. Traffic-calming measures would be used to slow traffic to posted speed limits but still maintain free-flow traffic movements. As a result, the circulation network would be safer for all users. The vicinity of Maine Avenue and East Basin Drive would be redesigned to facilitate better traffic flow for both east- and west-

bound access to I-395, and to accommodate improvements for bicycles, NPS service vehicles, and pedestrians. Ohio Drive would also be redesigned to accommodate bicycle lanes and parking. A new vehicular entry would be developed to the U.S. Park Police stables, and the related intersection would be coordinated with that for the future Martin Luther King, Jr. Memorial. Construction on park roads under the preferred alternative, as well as access improvements to I-395 and Maine Avenue, would result in short-term, moderate, adverse impacts because of the number of people affected. Long-term impacts on motorized and nonmotorized users would be moderate and beneficial.

Compared to the no-action alternative, the preferred alternative would have both beneficial and adverse impacts on motorized uses. Slowing traffic to current posted speeds, equalizing stoplight times for pedestrians and bicycles as well as vehicle traffic, and installing traffic-calming measures at crosswalks would result in some inconvenience to through-travelers and commuters. Based on average annual daily traffic counts from 2007, on a daily basis this would likely affect over 40,000 vehicles on Independence Avenue; over 25,000 on 17th Street; nearly 40,000 combined on 3rd, 4th, and 7th streets; approximately 46,000 on 14th Street; and about 14,000 on 15th Street. Because of the number of people affected, impacts would be long-term, major, and adverse. Improvements to traffic circulation would result in long-term, moderate to major, beneficial impacts because of improved access and traffic flow near I-395 and Maine Avenue and East Basin Drive, which would affect approximately 56,000 vehicle drivers on a daily basis.

Cumulative Impacts

Past, present, and reasonably foreseeable actions would be the same as those discussed for the no-action alternative and would be long-term, major, and beneficial. Actions under the preferred alternative would result in long-term, major, beneficial impacts because of a greater emphasis on a pedestrian-oriented environment, along with improved, safer, and more comfortable walking and bicycle environments. Altogether cumulative impacts would be long-term, major, and beneficial, with a substantial contribution from the preferred alternative.

Conclusion

The preferred alternative would result in long-term, major, beneficial impacts because of a greater emphasis on a pedestrian-oriented environment; improved, safer, and more comfortable walking and bicycle environments; separate bicycle routes or lanes; improved roadway access in the southeast area of the Tidal Basin; and more options and access for people with disabilities. These impacts, combined with the impacts of past, present, and reasonably foreseeable actions, would result in long-term, major, beneficial cumulative impacts because of better wayfinding aids, an improved visitor transportation system, future road improvements for motorists and Metro users, and more convenient access for pedestrians, bicyclists, families with children, and people with disabilities. The preferred alternative would make a substantial contribution to cumulative impacts.

Impacts of Alternative A

Direct and Indirect Impacts

Alternative A is focused on preserving the historic landscape and providing education.

Impacts on Visitor Access to the National Mall

Under alternative A, like the no-action alternative, a variety of convenient public mass transit (subway system, premium circulator bus service, and public bus routes) would continue to meet the needs of two-thirds of visitors. Seven taxicab / pedicab pickup locations would continue to provide options for visitors who need some form of transportation and are not using a tour/sightseeing service or public transit.

Wheelchairs would remain available at five locations, providing access to six memorials. However, limiting use to these areas would not be convenient for people who may want to visit multiple locations or move between them.

Impacts on the Pedestrian Environment

Increasing pedestrian crossing times at intersections and providing more pedestrian amenities, such as seating, would improve the pedestrian experience, resulting in long-term, major, beneficial impacts. However, retaining existing paving materials would make access difficult for families pushing strollers or individuals in wheelchairs. As a result, the needs of some user groups would not be met, resulting in long-term, moderate, adverse impacts. The National Mall would continue to lack a cohesive and unified pedestrian environment that is convenient and easily understandable. Even though there would be beneficial impacts from longer pedestrian crossing times and increased pedestrian amenities such as seating, the overall impacts of alternative A on the pedestrian environment, compared to the no-action alternative, would be long-term, moderate, and beneficial.

Impacts on Bicycle Users

Bicycling would continue to be a popular commuter method as well as a recreational pursuit on the National Mall; however, no additional facilities would be provided. Bicyclists would share walks with pedestrians, resulting in conflicts because walks are not wide enough to accommodate both uses and pedestrians travel at much slower speeds. While most bicyclists have some form of bell, pedestrians distracted by sights may not react in time.

The Washington Area Bicycle Association would continue to work to improve bicycling opportunities and safety. Bicycle parking during large-scale events and national celebrations would continue to be staffed by local volunteers.

Impacts on bicycle users would be similar to the no-action alternative and would be long-term, moderate, and adverse because of sharing walkways with pedestrians and riding in traffic on narrow roads. Also, local planning goals to increase nonmotorized uses would not be met.

Impacts on Motorists

Slowing through-traffic to posted speeds as a result of longer crossing times and traffic-calming measures at crosswalks would result in some inconvenience to through-travelers and commuters. Based on average annual daily traffic counts from 2007, on a daily basis this would likely affect over 40,000 vehicles on Independence Avenue; over 25,000 on 17th Street; nearly 40,000 combined on 3rd, 4th, and 7th streets; approximately 46,000 on 14th Street; and about 14,000 on 15th Street.

Compared to the no-action alternative, the impacts of alternative A on motorized uses and the road system would be long-term, moderate to major, and adverse.

Cumulative Impacts

Impacts from past, present, and reasonably foreseeable actions would be the same as those discussed under the no-action alternative and would be long-term, major, and beneficial. Actions under alternative A would increase crossing times for pedestrians, but overall facilities and amenities for pedestrians and bicyclists would not be improved. Taken altogether, cumulative impacts would be long-term, major, and beneficial, largely as a result of present and reasonably foreseeable actions related to the *Visitor Transportation Study* as well as actions occurring outside the National Mall. Alternative A would make a small beneficial contribution to cumulative impacts because of a somewhat improved pedestrian environment on the National Mall.

Conclusion

Alternative A would have long-term, moderate, beneficial impacts on visitor access to the Mall and the pedestrian environment resulting from increased crosswalk timing and additional pedestrian amenities; however, impacts on bicycle users would be long-term, moderate, and adverse because unsafe riding conditions would continue. These impacts, in combination with the impacts of past, present, and reasonably foreseeable actions, would result in long-term, major, beneficial cumulative impacts, largely as a result of an improved visitor transportation service, as well as present and future projects occurring outside the National Mall. Alternative A would make a small beneficial contribution to cumulative impacts with a somewhat improved pedestrian environment on the National Mall.

CIRCULATION: Alternative A

Including Cumulative Circulation Actions
National Mall Plan

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MONUMENTAL CORE FRAMEWORK PLAN CIRCULATION ELEMENTS

- Theodore Roosevelt Bridge Approach Ramps; Lincoln Memorial and Kennedy Center Connections; Constitution Avenue Belvedere Restoration and Enhancement
- M — New Metro Station or Entrance
- Potomac River Bridge and Roadway Crossing; Passenger Rail Crossing; Metro Crossing
- Pedestrian Enhancements

- SIMPLIFY TRAFFIC PATTERNS
- STRENGTHEN PEDESTRIAN CONNECTION TO NEIGHBORHOODS AND KENNEDY CENTER

PAID PARKING ON ROADS

PAID PARKING ON MADISON DRIVE AND JEFFERSON DRIVE

PROVIDE WIDER BIKE / PEDESTRIAN SPACES

PAID PARKING ON ROADS

PAID PARKING

ADD NATIONAL MALL TO SMITHSONIAN METRO STOP NAME

PAID PARKING ON ROADS

PAID PARKING

Theodore Roosevelt Memorial Bridge

Arlington Memorial Bridge

THE WHITE HOUSE

Ellipse

CONSTITUTION GARDENS

VIETNAM VETERANS MEMORIAL

LINCOLN MEMORIAL

WORLD WAR II MEMORIAL

KOREAN WAR VETERANS MEMORIAL

DC WAR MEMORIAL

WASHINGTON MONUMENT

THE MALL

UNION SQUARE

GRANT MEMORIAL

U.S. CAPITOL

Union Station

Riverfront

POTOMAC RIVER

Tidal Basin

FRANKLIN DELANO ROOSEVELT MEMORIAL

THOMAS JEFFERSON MEMORIAL

GEORGE MASON MEMORIAL

National Mall and Memorial Parks Headquarters

Francis Case Memorial Bridge

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PUBLIC TRANSPORTATION NOTES:

1. Public buses, including Circulator routes (Convention Center-SW Waterfront and Smithsonian / National Gallery of Art) travel through and stop on the National Mall.
2. Metrorail (subway) lines (Yellow, Orange, Blue, and Green) travel beneath the National Mall.
3. Sightseeing, tour, and school buses stop on and travel through the National Mall. Sightseeing buses cannot sell tickets while on park land.
4. Commuter buses, plus privately owned, fleet, and commercial vehicles, use roads within or tunneled under the National Mall.
5. Taxis and pedicabs operate on the National Mall, picking up or dropping off passengers.

CIRCULATION: Alternative A Legend

OTHER CIRCULATION ELEMENTS

- M — Metro Station
- Smithsonian / National Gallery of Art Circulator Bus
- D.C. Road with Parking Meters
- Capitol Complex Permit Parking
- Tour Bus Drop-off Location
- Improved Pedestrian Connections
- Proposed Streetcar Line

- National Mall Plan Area

NPS CIRCULATION ELEMENTS

- Memorials Visitor Transportation Route
- Visitor Transportation Stop or Visitor Transportation Stop
- Memorials / Downtown Visitor Transportation Route
- Visitor Transportation Transfer Point
- P — Parking Lot
  Note: Paid parking on streets.
  All areas include parking for people with disabilities.
- Tour Bus Drop-off Location

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IMPACTS OF ALTERNATIVE B

Direct and Indirect Impacts

Alternative B would provide a welcoming and accessible atmosphere to accommodate very high levels of use. If it was determined that underground parking garages would be feasible based on engineering, security, geotechnical, and economic studies, transportation-related impacts, including those on the Metro system, tour bus needs, and vehicle circulation, would be conducted as part of a project-specific environmental analysis.

Impacts on Visitor Access to the National Mall

As described for the no-action alternative, a variety of convenient public mass transit (subway system, premium circulator bus service, and public bus routes) would continue to meet the

needs of two-thirds of visitors. Seven taxicab / pedicab pickup locations would continue to provide options for visitors who need some form of transportation and are not using a tour service or public transit.

Compared to the no-action alternative, alternative B would identify specific locations for additional visitor parking. If determined feasible by engineering, security, geotechnical, and economic studies, an underground facility for paid visitor parking would be constructed between 12th and 15th streets, which would be entered from 15th Street. All surface parking on the Mall would be removed. Underground parking would also be provided on the south Washington Monument grounds, and a pedestrian tunnel would provide access under Independence Avenue. These actions would require redesigns of Independence and Maine avenues, and the Tidal Basin parking lot would be removed. Additional or underground parking would be consistent with NPS and local transportation policies to the extent that it would not be visible, but it would be inconsistent with local transportation policies that support the use of outlying parking areas and mass transit. Garage portals would need to be very carefully designed so as not to be visually and physically disruptive to visitors, especially since some could be visible from the east windows of the Washington Monument. The cost of constructing such facilities is extremely high ($30,000–$50,000 per space; Parking Design Group 2008), which would be reflected in high visitor parking fees.

The National Park Service would also add parking for visitors with disabilities on the centrally located Washington Monument grounds, as described for the preferred alternative. This site would offer a single accessible location for people with disabilities to rent equipment such as wheelchairs and scooters that could be used all day around the National Mall. These actions would make public access more convenient and improve access opportunities for those with disabilities, or the approximately 25% of visitors who have difficulty walking long distances.

Compared to the no-action alternative, the impacts of alternative B on visitor access would be long-term, major, and beneficial because parking would potentially be doubled; however, these benefits would be offset by the high cost of constructing underground parking garages and high parking fees. The impacts of increased services for visitors with disabilities (additional parking, wheelchair and scooter rentals) would be long-term, minor, and beneficial since it would affect a smaller group of people.

Impacts on the Pedestrian Environment

Constructing pedestrian tunnels under Independence Avenue and 14th Street, which would also provide access to parking garages, and constructing pedestrian bridges at 15th Street instead of increasing crosswalk timing, would reduce potential conflicts with vehicle traffic. However, pedestrian tunnels and bridges could be less convenient for pedestrians and elevator access would be required for people in wheelchairs or using personal transportation vehicles. Visitors would still be able to cross streets at grade, and it is likely that they would continue to use these more convenient crossings.

Other actions would be similar to those described for the preferred alternative. While the basic historic circulation patterns would be retained, the National Mall would be made more pedestrian friendly, and vehicular traffic would be accommodated within a parklike setting. A comfortable, walkable environment would

include universally accessible walking surfaces, with a coordinated hierarchy of paving materials to create a sense of place and identity to help unify the National Mall. These actions would make it easier for pedestrians to find their way by creating a system of recognizable walks and paths. The palette of paving materials would use quality materials commensurate with the importance of the National Mall. Pedestrian entries would provide clear, safe and pleasant pedestrian transitions to and from areas adjacent to the National Mall. Walks along the Tidal Basin would be widened, improving the enjoyment and circulation flow of pedestrians. New east-side entrance walks to the Korean War Veterans Memorial would make access more convenient for pedestrians who would not have to enter only on the west side, but this would alter the designed approach to the memorial.

Crosswalk improvements would be part of the coordinated paving system and would emphasize safe road crossings, as well as connections to museums. Walks near some intersections would be enlarged to safely accommodate more people. Stoplights would be timed to provide more equal time for pedestrians and motorists, allowing more people or those who are slower moving to safely cross wide roads. Traffic-calming approaches such as raised crosswalks or specialty paving would help identify pedestrian crossings.

A coordinated lighting plan would be developed so pedestrians could safely experience the evocative and emotional nighttime character of the National Mall with its lighted monuments and memorials. Pedestrian lighting would emphasize walkway lighting to provide for greater nighttime enjoyment and safety. Lighting would be added to those areas where it is missing, such as the Tidal Basin, to encourage pleasant evening strolls. Temporary fixtures along the elm walkways flanking the Lincoln Reflecting Pool would be replaced, and more even lighting coverage would be provided along the Mall. All of these actions would make it easier for pedestrians to move between commemorative destinations during evening hours.

Amenities for pedestrians, such as drinking fountains, restrooms, seating, and wayside exhibits, would be planned at reasonable walking distances, and they would be sited to provide pleasant interludes for people to relax. Pedestrian amenities could include small-scale features such as seasonal plantings or water elements where pedestrians could cool off during the summer. Additional seating would include both sunny and shady locations that would foster the enjoyment of views. Seating would be concentrated near major entrances such as the Metro station or to meet the needs of groups.

Compared to the no-action alternative, the impacts of alternative B on the pedestrian environment would be long-term, major, and beneficial because the experience of virtually every visitor would be affected with improved pedestrian circulation, universally accessible paving surfaces, widened walks, additional lighting, pedestrian tunnels and bridges to separate pedestrians and vehicular traffic, and longer crosswalk times.

Impacts on Bicycle Users

Alternative B would have the same impacts on bicycle users as the no-action alternative, with facilities and amenities for bicycling having a lower priority than those for pedestrians or motorists. Existing bike racks would remain, and additional parking would continue to be encouraged at special events. This alternative, however, would not support local plans encouraging nonpolluting and healthy modes of travel and recreation, and it would continue bicyclists' use of pedestrian walkways and motor vehicle roads, with resulting use conflicts and unsafe conditions for a large number of bicycle users.

Impacts on bicycle users would be long-term moderate, and adverse, similar to the no-action alternative, because neither the needs of bicyclists nor local planning goals would be met.

Impacts on Motorists

Under alternative B the current road system would remain largely intact, but the fact that the roads are in a park setting would be emphasized by giving pedestrians more priority and additional crossing time at intersections. Traffic-calming measures would be used to slow traffic to posted speed limits but still maintain a free flow of traffic. As a result, the circulation network would be safer for all pedestrians and motorists. There would likely be slowing of

CIRCULATION: Alternative B
Including Cumulative Circulation Actions
National Mall Plan

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MONUMENTAL CORE FRAMEWORK PLAN CIRCULATION ELEMENTS

- Theodore Roosevelt Bridge Approach Ramps; Lincoln Memorial and Kennedy Center Connections; Constitution Avenue Belvedere Restoration and Enhancement
- M — New Metro Station or Entrance
- Potomac River Bridge and Roadway Crossing; Passenger Rail Crossing; Metro Crossing
- Pedestrian Enhancements

- *SIMPLIFY TRAFFIC PATTERNS*
- *STRENGTHEN PEDESTRIAN CONNECTION TO NEIGHBORHOODS AND KENNEDY CENTER*

THE WHITE HOUSE

Ellipse

Union Station

Theodore Roosevelt Memorial Bridge

VIETNAM VETERANS MEMORIAL

CONSTITUTION GARDENS

LINCOLN MEMORIAL

KOREAN WAR VETERANS MEMORIAL

WORLD WAR II MEMORIAL

WASHINGTON MONUMENT

DC WAR MEMORIAL

PARKING FOR PEOPLE WITH DISABILITIES

ADD NATIONAL MALL TO SMITHSONIAN METRO STOP NAME

PAID PARKING ON MADISON DRIVE AND JEFFERSON DRIVE

THE MALL

UNION SQUARE

GRANT MEMORIAL

U.S. CAPITOL

Arlington Memorial Bridge

POTOMAC RIVER

Riverfront

Tidal Basin

REMOVE PARKING

PAID PARKING ON ROADS

ROAD REALIGNMENT

THOMAS JEFFERSON MEMORIAL

FRANKLIN DELANO ROOSEVELT MEMORIAL

GEORGE MASON MEMORIAL

National Mall and Memorial Parks Headquarters

Francis Case Memorial Bridge

PAID PARKING

395

PUBLIC TRANSPORTATION NOTES:

1. Public buses, including Circulator routes (Convention Center-SW Waterfront and Smithsonian / National Gallery of Art) travel through and stop on the National Mall.
2. Metrorail (subway) lines (Yellow, Orange, Blue, and Green) travel beneath the National Mall.
3. Sightseeing, tour, and school buses stop on and travel through the National Mall. Sightseeing buses cannot sell tickets while on park land.
4. Commuter buses, plus privately owned, fleet, and commercial vehicles, use roads within or tunneled under the National Mall.
5. Taxis and pedicabs operate on the National Mall, picking up or dropping off passengers.

CIRCULATION: Alternative B Legend

OTHER CIRCULATION ELEMENTS

- M — Metro Station
- Smithsonian / National Gallery of Art Circulator Bus
- D.C. Road with Parking Meters
- Capitol Complex Permit Parking
- Tour Bus Drop-off Location
- Improved Pedestrian Connections
- Proposed Streetcar Line

- National Mall Plan Area

NPS CIRCULATION ELEMENTS

- Memorials Visitor Transportation Route
- or — Visitor Transportation Stop
- Memorials / Downtown Visitor Transportation Route
- Visitor Transportation Transfer Point
- P — Parking Lot
  Note: Paid parking on streets.
  All areas include parking for people with disabilities.
- P — Underground Parking Garage
- Tour Bus Drop-off Location
- Crosswalk Improvement
- Pedestrian Bridge or Tunnel
- Improved Pedestrian / Bicycle Environment
- Welcome Plaza
- Road Realignment

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traffic on 15th Street as well as Maine Avenue to accommodate entrances and exits to underground parking, affecting many thousands of commuters on a daily basis.

The vicinity of Maine Avenue, Raoul Wallenberg Place, and East Basin Drive would be redesigned to facilitate better traffic flow and access to I-395. A new vehicular service entry would be developed to the U.S. Park Police stables, with the new intersection coordinated with future access to the Martin Luther King, Jr. Memorial. Traffic impacts from construction would be short-term, moderate, and adverse because of the high number of motorists affected.

Compared to the no-action alternative, the impacts of alternative B on motorized uses would be both adverse and beneficial. Impacts would be long-term, moderate to major, and adverse because through-traffic would be slowed to posted speeds, resulting in some inconvenience to through-travelers and commuters. Based on average annual daily traffic counts from 2007, on a daily basis this would likely affect over 40,000 vehicles on Independence Avenue; over 25,000 on 17th Street; nearly 40,000 combined on 3rd, 4th, and 7th streets; approximately 46,000 on 14th Street; and about 14,000 on 15th Street. Changes near I-395 / Maine Avenue and East Basin Drive would affect approximately 56,000 vehicles on a daily basis.

Cumulative Impacts

Impacts from past, present, and reasonably foreseeable actions would be the same as those discussed under the no-action alternative and would be long-term, major, and beneficial. Actions under alternative B would improve the pedestrian experience on the National Mall by providing more facilities for pedestrians and emphasizing a park experience, resulting in long-term, major, beneficial impacts. All of these impacts together would result in long-term, major, beneficial cumulative impacts because of quality improvements that would provide equity between nonmotorized and motorized uses, would better meet the needs of transit and tour buses, and would improve convenient transit access as well as the visitor transportation system. Alternative B would make a substantial beneficial contribution to these impacts, although underground parking garages would be inconsistent with local transportation planning policies.

Conclusion

Alternative B would result in long-term, major, beneficial impacts because of improved access, underground parking garages, a safer pedestrian environment (including crosswalks), and reduced conflicts with traffic. Impacts on bicyclists would be long-term, moderate, and adverse because neither the needs of bicyclists nor local planning goals would be met. These impacts, combined with the impacts of past, present, and reasonably foreseeable actions, would result in long-term, major, beneficial cumulative impacts because of improved wayfinding aids, an improved visitor transportation service, and future road improvements for motorists and Metro users. Alternative B would make a substantial beneficial contribution to cumulative impacts.

Impacts of Alternative C

Direct and Indirect Impacts

Alternative C would focus on urban open space, urban ecology, recreation, and healthy lifestyles.

Impacts on Visitor Access to the National Mall

As described under the no-action alternative, various means of convenient public mass transportation (subway system, premium circulator bus service, and public bus routes) would continue to meet the needs of two-thirds of National Mall visitors under alternative C. Seven taxicab / pedicab pickup locations would continue to provide options for visitors who need some form of transportation and are not using a sightseeing service or public transit.

Parking for visitors with disabilities would continue to exceed the standards of the Americans with Disabilities Act, but would remain insufficient in areas such as the World War II Memorial, which attracts large numbers of elderly people. Wheelchairs would remain available at five locations, with access to six memorials; but limiting use to these areas would not be convenient for people who might want to visit multiple locations or walk between them. Compared to the no-action alternative, the long-term impacts

of alternative C on access would be moderate and beneficial because more parking would be available to visitors, but moderate and adverse because parking would no longer be free.

Impacts on the Pedestrian Environment

The pedestrian environment under alternative C would be considerably different than under the no-action alternative. Tunneling 14th Street under the Mall would create a larger pedestrian-only area and constructing pedestrian bridges over 15th Street would result in a more cohesive pedestrian environment. Additionally, portions of Maine Avenue would be covered or decked over to provide safer and more convenient pedestrian access to the Tidal Basin.

While historic circulation patterns would be retained, separate routes would be provided for pedestrians and bicyclists, resulting in a safer experience for visitors to enjoy the parklike setting without worrying about hazards from bicyclists and vehicle traffic.

A walkable environment would be created using a coordinated hierarchy of paving materials to create a sense of place and identity that would also unify the National Mall. This would make it easier for pedestrians to find their way around by means of a system of recognizable walks and paths. The palette of paving materials would use quality materials commensurate with the importance of the National Mall and could include surfaces appropriate for runners and joggers. Pedestrian entries would provide clear, safe, and pleasant pedestrian transitions to and from areas adjacent to the National Mall. Walks in several areas, such as those along the Tidal Basin, would be widened, improving visitor enjoyment and pedestrian flow.

Crosswalk improvements would be part of the coordinated paving system and would emphasize safe road crossings as well as connections to museums. Times at stoplights would be more equal for pedestrians and motorists, allowing more pedestrians or slower moving pedestrians to safely cross wide roads.

New east-side entrances would be provided at the Korean War Veterans Memorial, as described for alternative B, making access more convenient for pedestrians but altering the designed approach to the memorial.

As described for the preferred alternative, developing a coordinated lighting plan would create a safer pedestrian experience and would offer opportunities to experience the nighttime character of the National Mall. Pedestrian lighting would emphasize walkway lighting to provide for greater nighttime enjoyment and safety. Lighting would be added to those areas where it is missing, such as the Tidal Basin, to encourage pleasant evening strolls. Temporary fixtures along the elm walkways flanking the Lincoln Reflecting Pool would be replaced, and more even lighting coverage would be provided along the Mall. All of these actions would make it easier for pedestrians to move between destinations during evening hours.

Amenities for pedestrians, such as drinking fountains, restrooms, seating, and wayside exhibits, would be planned at reasonable walking distances to provide pleasant locations to relax. Amenities could include small-scale features such as seasonal plantings or water elements where pedestrians could cool off in summer. Additional seating would include both sunny and shady locations and would foster enjoyment of views. Seating would be concentrated near major entrances such as the Metro station and to meet the needs of groups.

Compared to the no-action alternative, the impacts of alternative C on the pedestrian environment would be long-term, major, and beneficial because the experience of virtually every visitor would be improved. This would be because of safer pedestrian circulation (including a tunneled 14th Street, pedestrian bridges over 15th Street, a pedestrian tunnel under Independence Avenue, and intersection improvements), improved and coordinated walking surfaces, widened walks, additional lighting, and more pedestrian space over a tunneled 14th Street.

Impacts on Bicycle Users

Impacts on bicycle users would be the same as the preferred alternative. Alternative C would continue to encourage bicycle parking for events and off-site bicycle rentals and guided bicycling tours would continue to meet the needs of some visitors. However, alternative C would support

CIRCULATION: Alternative C

Including Cumulative Circulation Actions

National Mall Plan

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MONUMENTAL CORE FRAMEWORK PLAN CIRCULATION ELEMENTS

- Theodore Roosevelt Bridge Approach Ramps; Lincoln Memorial and Kennedy Center Connections; Constitution Avenue Belvedere Restoration and Enhancement
- M — New Metro Station or Entrance
- Potomac River Bridge and Roadway Crossing; Passenger Rail Crossing; Metro Crossing
- Pedestrian Enhancements

- *SIMPLIFY TRAFFIC PATTERNS*
- *STRENGTHEN PEDESTRIAN CONNECTION TO NEIGHBORHOODS AND KENNEDY CENTER*

Theodore Roosevelt Memorial Bridge

THE WHITE HOUSE

Ellipse

PAID PARKING ON MADISON DRIVE AND JEFFERSON DRIVE

Union Station

CONSTITUTION GARDENS

VIETNAM VETERANS MEMORIAL

LINCOLN MEMORIAL

WORLD WAR II MEMORIAL

WASHINGTON MONUMENT

THE MALL

UNION SQUARE

GRANT MEMORIAL

U.S. CAPITOL

KOREAN WAR VETERANS MEMORIAL

DC WAR MEMORIAL

Arlington Memorial Bridge

14TH STREET VEHICLE TUNNEL

ADD NATIONAL MALL TO SMITHSONIAN METRO STOP NAME

PAID PARKING

DECK OVER MAIN AVENUE TO IMPROVE PEDESTRIAN ACCESS

PAID PARKING

ROAD REALIGNMENT

PAID PARKING ON ROADS

POTOMAC RIVER

Riverfront

Tidal Basin

ROAD REALIGNMENT

FRANKLIN DELANO ROOSEVELT MEMORIAL

THOMAS JEFFERSON MEMORIAL

National Mall and Memorial Parks Headquarters

Francis Case Memorial Bridge

GEORGE MASON MEMORIAL

395

PAID PARKING ON STREETS AND IN LOTS. ALL AREAS INCLUDE PARKING FOR PEOPLE WITH DISABILITIES.

PUBLIC TRANSPORTATION NOTES:

1. Public buses, including Circulator routes (Convention Center-SW Waterfront and Smithsonian / National Gallery of Art) travel through and stop on the National Mall.
2. Metrorail (subway) lines (Yellow, Orange, Blue, and Green) travel beneath the National Mall.
3. Sightseeing, tour, and school buses stop on and travel through the National Mall. Sightseeing buses cannot sell tickets while on park land.
4. Commuter buses, plus privately owned, fleet, and commercial vehicles, use roads within or tunneled under the National Mall.
5. Taxis and pedicabs operate on the National Mall, picking up or dropping off passengers.

OTHER CIRCULATION ELEMENTS

- M — Metro Station
- Smithsonian / National Gallery Art Circulator Bus
- D.C. Road with Parking Meters
- Capitol Complex Permit Parking
- Tour Bus Drop-off Location
- Improved Pestrian Connections
- Proposed Streetcar Line

CIRCULATION: Alternative C Legend

- National Mall Plan Area

NPS CIRCULATION ELEMENTS

- Memorials Visitor Transportation Route
- Visitor Transportation Stop (or)
- Memorials / Downtown Visitor Transportation Route
- Visitor Transportation Transfer Point
- Separate Bike Routes or Lanes
- Parking Lot
  Note: Paid parking on streets.
  All areas include parking for people with disabilities.
- Tour Bus Drop-off Location
- Crosswalk Improvement
- Pedestrian Bridge or Tunnel
- Improved Pedestrian / Bicycle Environment
- Welcome Plaza
- Road Realignment
- Vehicle Tunnel

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and encourage bicycling as a green and healthful activity as well as a transportation mode. Developing a system of bike lanes or routes separate from roads and pedestrian walkways, instituting traffic-calming measures, and giving bicycles priority at intersections would all substantially improve bicycling opportunities and safety.

The number of bike racks on the National Mall would be increased and the distribution improved. More NPS guided bicycling tours would be provided. Connections to bicycling trails in East Potomac Park, Rock Creek Park, the Chesapeake and Ohio Canal, the George Washington Memorial Parkway, and the southwest Washington, D.C., area would be improved.

The National Park Service would work with other agencies and organizations to better fulfill the goals of the D.C. *Bicycle Master Plan,* provide access to bridges, and accommodate a coordinated onsite bicycle rental program.

Compared to the no-action alternative, the impacts of alternative C would be long-term, major, and beneficial because a separate bicycle route system would provide a safer, more equitable bicycling environment that would encourage this green and healthful circulation mode, would support local planning goals, and would provide improved facilities, tours, and bicycle rental opportunities.

Impacts on Motorists

Under alternative C 14th Street would be tunneled under the Mall, Independence Avenue would be redesigned in conjunction with filling the north bay of the Tidal Basin, and decks over portions of Maine Avenue would be constructed to improve pedestrian access. Pedestrians and bicyclists would be given more priority, and routes would be more separated from vehicular traffic, in addition to longer crossing times at intersections. As a result, the circulation network would be safer for all users.

The vicinity of Maine Avenue and East Basin Drive would be redesigned to facilitate better traffic flow and access to I-395, as well as to accommodate improved access for bicycles, service vehicles, and pedestrians. There would also be some road changes along Ohio Drive to accommodate bicycle lanes and parking. A new service vehicle entry would be developed to the U.S. Park Police stables, and the related intersection would be coordinated with that for the future Martin Luther King, Jr. Memorial.

Construction of the 14th Street tunnel and decking over Maine Avenue, as well as access improvements to I-395 and Maine Avenue, would result in short-term, major, adverse impacts on traffic.

Compared to the no-action alternative, the long-term impacts of alternative C on motorized uses would be both adverse and beneficial. Slowing through-traffic to posted speeds, providing traffic-calming measures at crosswalks, and increasing crossing times for pedestrians and bicycles at intersections would result in moderate to major, adverse impacts because of some inconvenience to through-travelers or commuters. Based on average annual daily traffic counts from 2007, on a daily basis this would likely affect over 40,000 vehicles on Independence Avenue; over 25,000 on 17th Street; nearly 40,000 combined on 3rd, 4th, and 7th streets; approximately 46,000 on 14th Street; and about 14,000 on 15th Street. However, impacts would be moderate to major and beneficial because of the improved traffic flows on 14th Street with the new tunnel (which would affect an estimated 46,000 vehicles daily), on Independence Avenue (affecting 40,000 vehicles daily), and near I-395/Maine Avenue and East Basin Drive (affecting approximately 56,000 vehicles). The number of motorists affected on 14th Street could be larger because the other tunnels see heavier traffic than the surface roads.

Cumulative Impacts

Impacts of past, present, and reasonably foreseeable actions would be the same as those discussed under the no-action alternative and would be long-term, major, and beneficial. Actions under alternative C would improve the experience for motorists; equitably treat pedestrians, bicyclists, and drivers; better meet the needs of transit and tour buses; improve convenient transit access along with the visitor transportation system, and enhance the appearance and function of the circulation systems. Considered altogether, the cumulative impacts of these actions would be long-term, major, and bene-

ficial, with a substantial beneficial contribution from this alternative.

Conclusion

Alternative C would result in long-term, major, beneficial impacts because of improved access and parking, a greater emphasis on safer and pleasanter pedestrian and bicycling environments, and more options for families and people with disabilities. These impacts, along with the impacts of past, present, and reasonably foreseeable actions, would result in long-term, major, beneficial cumulative impacts because of better wayfinding aids for pedestrians, an improved visitor transportation service, future road improvements for motorists and Metro users, and more convenient access for pedestrians, bicyclists, families with children, and people with disabilities. Alternative C would make a substantial beneficial contribution to these impacts.

VISITOR EXPERIENCE

METHODOLOGY FOR IMPACT ANALYSIS

The visitor experience section analyzes the impact of the management alternatives with respect to several evaluation topics affecting visitor experiences on the National Mall. The analysis considers how well the alternatives meet NPS policy and best practices. The no-action alternative provides the basis for comparing the alternatives, and it represents either no change or continuity with approved plans or management approaches.

The following topics have been selected for analysis:

- *Impacts on a quality visitor experience* — For the purposes of this document, a quality visitor experience is defined as one that would allow visitors (1) to understand and be able to contemplate core American values, government, and democracy as symbolized by the National Mall's history and memorials, as well as the adjacent cultural institutions; (2) to enjoy a welcoming experience and the beauty of the National Mall, both during the day and at night; and (3) to make an emotional or intellectual connections to the National Mall and what it represents. The beneficial and adverse impacts of the alternatives are analyzed in terms of opportunities to visit monuments and memorials on the National Mall, the area's visual appearance, to what degree visitors feel welcome, impacts of demonstrations and special events on the experience of general visitors, and opportunities to experience the nighttime character of the National Mall.
- *Impacts on opportunities for information and education* — The analysis looks at the beneficial and adverse impacts on opportunities to get advance planning information and site information on the Internet, and to participate in a range of accessible, engaging, and relevant educational programs on the National Mall through methods such as wayside exhibits, ranger programs (onsite, interactive, and curriculum-based), guided and self-guided tours (pedestrian, bicycle, and cell phone), exhibits, and publications (including maps and brochures).
- *Impacts on opportunities for enjoyment, entertainment, and informal recreation* — The beneficial and adverse impacts on opportunities for general relaxation and informal recreation pastimes, such as enjoying views, picnicking, reading, dog walking, walking, children's play, and entertainment, are analyzed. It is assumed that all activities are in accordance with NPS policies.
- *Impacts on opportunities for active recreation* — The beneficial and adverse impacts on active recreational and play opportunities on the National Mall are analyzed, including recreation equipment rentals (including paddleboats and bicycles) and space for pickup games (Frisbee, kickball, soccer, football or softball, and kite flying), organized team sports (softball, volleyball, etc.), and jogging or running.
- *Impacts of visitor facilities and amenities* — The degree to which the alternatives meet visitor needs (restrooms, food, rest, information) and wants (retail, bookstores, seating) in a manner that is convenient and pleasant is analyzed.
- *Impacts on public health and safety* — The impact analysis evaluates how well the alternatives address the needs of people with disabilities, dealing with weather extremes (heat and humidity / cold), health concerns (dust), safe nighttime experiences, pedestrian and bicycle safety, and emergency information or care.
- *Impacts on user capacity* — The beneficial and adverse impacts on the number of people who can visit the National Mall and locations within it, as well as the types of social experiences they can expect, are analyzed. This topic focuses on the desired general visitor capacity of various monuments and memorials on the National Mall, as well as specific areas (such as the Mall and the Washington Monument grounds).

These numbers are different from capacities considered for demonstrations, national celebrations, or special events discussed in "Demonstrations, Special Events, and National Celebrations" (beginning on page 428), where far more people can be accommodated because the nature of the experience is different — people at a demonstration or a special event expect to be in a crowded situation.

Impacts on participants at First Amendment demonstrations, national celebrations, and special events were previously analyzed (see page 428).

Impact Intensity Levels

The following thresholds were established for impacts on the visitor experience:

- ***Negligible*** — The impact would not be detectable or would be barely detectable to most visitors and would not affect their experiences or opportunities in a perceptible manner.
- ***Minor***— The impact would be detectable to some visitors and might result in some effect on their experiences or opportunities.
- ***Moderate*** — The impact would be readily apparent to many visitors and would be likely to affect the experiences or opportunities of many visitors.
- ***Major*** — The impact would be obvious to most visitors and would affect the experiences or opportunities of most or all visitors.

Type of Impacts

Impacts can be beneficial or adverse. Beneficial impacts would support federal regulation, as well as NPS or local policies and plans, would incorporate acceptable best practices, and would improve the quality, convenience, and pleasure of experiences and opportunities for all types of users. Adverse impacts would be inconsistent with federal regulations or NPS or local policies and plans, would not address known visitor needs, would result in less convenient opportunities and facilities, or would fail to incorporate relevant improvements from best practices.

Duration of Impacts

The duration of the impact could be temporary, short-term, or long-term; no permanent impacts are expected under visitor experience.

- ***Temporary*** — A temporary impact could last a few hours or up to several days.
- ***Short-term*** — The impact would generally last up to one year or the life of a construction project.
- ***Long-term*** — A long-term impact would be expected to last for more than a year up to the life of the plan.

Laws, Regulations, and Policies

The Commemorative Works Clarification and Revision Act of 2003 (40 USC 8901 et seq.) prohibits the construction of memorials and visitor centers within the Reserve, which comprises much of the National Mall.

Special federal regulations govern the National Capital Region and visitor experiences on the National Mall (36 CFR 7.96). Permits are required for organized athletic games; wet grounds may not be used for play; bathing, swimming, or wading in any fountain or pool (including the Tidal Basin) is prohibited except where officially authorized; and skating is prohibited unless in areas and at times authorized by the park superintendent. Fishing is authorized under the applicable state authority.

NCPC Visitor Planning

The "Visitor Elements" of the 2004 *Comprehensive Plan for the National Capital: Federal Elements* propose accommodating visitors in a way that ensures an enjoyable and educational experience, showcases the institutions of American culture and democracy, and supports federal and regional planning goals. Goals include

- protecting the monumental core (as described in the *Legacy Plan* and the *Memorials and Museums Master Plan;* NCPC 1997, 2001)

- providing visitor services (indoor and outdoor food service, retail) at appropriate locations
- providing visitor orientation centers in different areas
- supporting broad dissemination of information at locations frequented by tourists, such as hotel and transportation centers, and encouraging multilingual information
- balancing the needs of security and accessibility
- encouraging specialized learning
- encouraging visitor transportation, and increasing visitor transit access and walking
- dispersing special events, promoting off-peak events, and coordinating events to minimize disruption

Planning Together for Central Washington is a collaborative effort to create a welcoming atmosphere with well-connected public spaces, and beautiful, distinguished places of enduring quality that are green and sustainable (NCPC 2008a).

NPS Management Policies 2006

National park system areas belong to all Americans, and all visitors are welcome. Visitor enjoyment, education, and inspiration will receive special attention while the National Park Service fulfills its mission to conserve its resources and values for present and future generations. Visitor use is addressed in chapter 8 of the *NPS Management Policies 2006* (NPS 2006e).

- *Visitor Use* — Enjoyment of park resources and values by the people of the United States is part of the fundamental purpose of all parks. The National Park Service is committed to providing appropriate, high-quality opportunities for visitors to enjoy the parks, and the Park Service will maintain within the parks an atmosphere that is open, inviting, and accessible to every segment of American society (NPS 2006e, sec. 8.2).

  The National Park Service will afford visitors ample opportunities for inspiration, appreciation, and enjoyment through their own personalized experiences, without formality of programs or structures (NPS 2006e, sec. 8.2)

- *Appropriate Use* — The National Park Service will allow only uses that are (1) appropriate to the purpose for which the park was established, and (2) can be sustained without causing unacceptable impacts (NPS 2006e, sec. 8.1.1).

  To provide for enjoyment of the parks, the National Park Service will encourage visitor activities that

  - are appropriate to the purpose for which the park was established; and
  - are inspirational, educational, or healthful, and otherwise appropriate to the park environment; and
  - will foster an understanding of and appreciation for park resources and values, or will promote enjoyment through a direct association with, interaction with, or relation to park resources; and
  - can be sustained without causing unacceptable impacts to park resources or values (NPS 2006e, sec. 8.2).

  Recreational uses and new or changing patterns of recreation will be assessed for appropriateness. Appropriate recreational uses will be defined and managed (NPS 2006e, sec. 8.2). The National Park Service will mitigate the adverse effects of any legally mandated use. Superintendents will monitor park uses to ensure that unanticipated and unacceptable impacts do not occur (NPS 2006e, sec. 8.1.1 and 8.1.2).

- *Visitor Carrying Capacity* — Parks will identify the type and level of visitor use that can be accommodated while sustaining desired resource and visitor experience conditions. These will include quality indicators and standards (NPS 2006e, sec. 8.2.1).

Park facilities are discussed in chapter 9 of the NPS *Management Policies 2006*. Facilities should be necessary and appropriate, harmonious with park resources, and support sustainable practices to the extent practicable (NPS 2006e). (This topic was amplified in "Park Facilities Guidance" prepared for the National Mall plan; see appendix D.)

Interpretation and education are discussed in chapter 7 of the *Management Policies 2006*. National parks are among the most remarkable places for recreation, learning, and inspiration. The National Park Service will use education to connect people to parks and will provide opportunities for all visitors to form their own intellectual, emotional, and physical connections with authentic experiences. Education will encourage a stewardship ethic and broaden support for the NPS mission. Curriculum-based programs will link to national and state standards. Technology should be used to maximize the visitor experience, and websites will allow parks to reach a worldwide audience (NPS 2006e, sec. 7.3.3). The National Park Service will consider the special needs of children, senior citizens, non-English speakers, and the economically disadvantaged, and it will provide programs for visitors with disabilities in the most integrated setting appropriate. Additionally, the National Park Service will take all feasible steps to ensure effective communication with individuals with hearing, visual, and cognitive disabilities. These steps should include but not be limited to providing sign language interpreters, audio/visual presentations, Braille, and large-print versions of printed materials (NPS 2006e, sec. 7.5.2).

Volunteers in Parks will be used to increase interpretive and educational capacity (NPS 2006e, sec. 7.6.1.). Cooperating associations may provide publications and other items for sale that enhance the park's story (NPS 2006e, sec. 7.6.2).

User Capacity

NPS *Management Policies 2006* require park plans to include user capacities for all park areas (NPS 2006e, sec. 3.1.1). The National Park Service defines user capacity as the type and level of visitor use that can be accommodated while sustaining the quality of park resources and visitor opportunities consistent with the purposes of the park. It is not necessarily a set of numbers or limits, but rather a process involving monitoring, evaluation, actions (managing visitor use), and adjustments to ensure that park values are protected. The premise behind this process is that any use on public lands causes some level of impact that must be accepted; therefore, it is the responsibility of the National Park Service to decide what level of impact is acceptable and what actions are needed to keep impacts within acceptable limits. The capacities of park areas are addressed in the conservation zones.

An essential purpose of the National Mall is to provide space for the expression of First Amendment rights. This purpose, anchored in the U.S. Constitution, does not include limits on the number of people who can participate in First Amendment activities on the National Mall, regardless of any impacts that might otherwise be considered unacceptable.

There are three principal components that relate to determining the user capacity for a national park: (1) ecological or physical capacity, which includes the capabilities of the natural and cultural resources to sustain levels and types of use without unacceptable damage; (2) sociological capacity, which includes the ability of visitors to enjoy and appreciate these resources without undue interference by other visitors; and (3) NPS management, which includes the efforts that have been, or can be applied to the park to mitigate unwanted impacts. This component relates to the management of things such as roads, parking lots, buildings, trails, and visitor information.

IMPACTS COMMON TO ALL ALTERNATIVES

Direct and Indirect Impacts

Impacts on a Quality Visitor Experience

Memorials and the historic landscape with its planned vistas would continue to provide many opportunities for visitors to be inspired by the symbols of our nation, to make a patriotic connection to our nation or its history, and to understand American values and ideals. The experiences of day-to-day visitors may frequently be affected by demonstrations, national celebrations, and special events, even though visitors may not have been aware that a certain activity was happening. Almost all visitors are familiar with annual national celebrations such as the Fourth of July and the National Cherry Blossom Festival, as well as presidential inaugurations, which are well publicized by the Na-

tional Park Service and the local media. Apart from these well-known events, however, visitors may not be aware that more than 3,000 permitted activities take place annually, so there is a high likelihood that some sort of event will be taking place during their visit.

During large demonstrations or events, views to the memorials and buildings that are symbols of our nation may be blocked by signs, stages, displays, trucks, or tents. Visitors may not be able to capture the iconic photographic images free of visual evidence of these events. Visitors may be unable to easily cross streets or use the visitor transportation system. Larger events with tents and stages or road events such as Rolling Thunder will generally affect more National Mall visitors and generally have more intense impacts.

Sounds associated with events are more evident the closer one is and depending on the size of the event. Sounds may be regarded as noise that interrupts desired experiences for contemplation, or they may be enjoyable or even inspirational. For example, the sounds of cannon during the annual *1812 Overture* concert on the Washington Monument grounds may either be alarming or reassuringly familiar. Enjoyable or not, cannon sounds will be unavoidable to anyone present at the time.

The impacts of demonstrations on park users would be similar to those occurring now, and there would be no change in the type of impacts under any alternative. The impacts on visitors who come unexpectedly on a demonstration or special event are generally temporary. Impacts would range from minor to major and would either be beneficial or adverse, depending on visitors' attitudes. If visitors were inconvenienced and annoyed by sounds, crowds, and delays, impacts would be considered adverse. But if visitors felt they had special opportunities to witness or be part of a demonstration or special event that is uniquely American, then impacts would be considered beneficial.

Impacts on Opportunities for Information and Education

A wide variety of educational programs would continue to be provided. Park websites and information would be improved to make them more user friendly, and they would be continuously updated. Demonstrations provide an educational opportunity for visitors to understand the essential role of the U.S. Constitution and First Amendment speech in our country. They might also provide education and enjoyment through stirring speeches, music, or engaging entertainment. The impacts of these continued educational opportunities would be temporary, major, and beneficial for individual visitors at one specific time, but in the context of the importance of First Amendment rights to the history of the National Mall, the continuing impacts in terms of opportunities for a quality American visitor experience would be permanent, major, and beneficial.

Ranger programs would include scheduled interactive experiences that could include, for example, audio clips of FDR speeches at the Franklin Delano Roosevelt Memorial or group recitations or other historic events. More multilingual speakers and publications would also be provided. Park brochures, maps, and the National Parks Passport stamping program would be more readily visible, with directional signs to information areas; and self-service areas would allow visitors to obtain maps and brochures at their convenience. Park websites would be user friendly and up-to-date.

The National Park Service would continue to work with local tourist organizations and the tour bus industry to ensure the most factual information is available to visitors. Commercial tours would continue to be provided, primarily by tour bus companies, and schools would continue to provide student tours. Since tours may bring 20%–30% of National Mall visitors, this would result in long-term, negligible to moderate, beneficial impacts.

Impacts on Opportunities for Active Recreation

General recreational pursuits and recreational league play may be periodically superseded by permitted events. The construction of the Vietnam Veterans Memorial Center would result in the relocation of ballfields, a long-term, minor, adverse impact on active recreational opportunities for some people, primarily local residents.

Impacts on User Capacity

The conservation zones that have been defined for the National Mall (see discussion beginning on page 58) establish general carrying capacities by zone and in specific areas. Applicable standards are also defined, along with indicators to show whether desired levels of quality or experiences were being achieved or if user carrying capacities were being exceeded.

At most memorials 100–200 square feet per person would provide sufficient space for contemplation, reading quotations, or taking photos. At 50–100 square feet per person the social experience could be congested for many visitors, indicating that the memorial's capacity was being approached. A density of 50 square feet per person could be expected when high levels or pulses of visitation occur, such as when multiple tour buses arrive at the same time.

In National Mall character protection zones, visitor densities of 200 to 1,000 square feet per person would offer acceptable experiences. At 200 square feet per person many people could sit informally on the grass, but the sights and sounds of other people and groups would be very evident. This density is comparable to groups gathering informally for picnics, garden concerts, or small events. At 1,000 square feet per person the atmosphere would be more relaxed and enjoyable. On walks or at visitor facilities densities could be in the range of 10–50 square feet per person.

In multipurpose areas densities would range from 50 to 100 square feet per person. People would be very aware of the presence and sounds of others. In recreational areas a less dense experience of more than 1,000 square feet per person would be desirable.

In high-use areas user densities would be in the range of 3–50 square feet per person. The higher densities (3–10 sq. ft. / person) would be likely during national celebrations, such as the 2009 presidential inauguration, a large First Amendment demonstration, or a special event, and the impacts were previously discussed. The desired experiences for sightseeing and recreation in the high-use zone would be in the range of 100 square feet or more per person; more space per person would allow for freedom of movement for active recreation or fewer people in vistas.

Visiting during high-use seasons, during national celebrations or annual events, or even during afternoons in the peak season would result in a more social or crowded experience, with few opportunities for quiet contemplation. It would be possible to have quieter experiences during off-peak seasons, early in the morning, or late at night. The application of zones, area criteria, standards, and indicators would have long-term, major, beneficial impacts by ensuring that quality standards and visitor expectations would be consistently met. Additional issues affecting user capacity are addressed in the following analyses.

Conclusion

Impacts on the visitor experience that would be common to all alternatives would generally be long-term, moderate to major, and beneficial as a result of continued educational opportunities about First Amendment rights; cooperative efforts with local tourist organizations and the tour bus industry to ensure they have accurate information and to facilitate access to areas on the National Mall (affecting 20%–30% of visitors); and applying conservation zones and standards to ensure that visitor expectations are consistently met.

IMPACTS OF THE NO-ACTION ALTERNATIVE

Direct and Indirect Impacts

Under the no-action alternative the National Park Service would continue present approaches to offering educational, recreational, and enjoyment opportunities for visitors by providing programs, visitor facilities, and addressing some public health and safety problems. User capacity would not be addressed. No additional visitor facilities would be provided.

Impacts on a Quality Visitor Experience

Existing opportunities to visit the monuments and memorials on the National Mall that convey our history and democratic values would remain, along with opportunities to visit adjacent facilities (primarily museums and government

facilities). Visitors would still be able to contemplate core American values and to enjoy visible symbols of our democratic government, primarily the executive branch (symbolized by the White House) and the legislative branch (the U.S. Capitol). However, the beauty of the National Mall would continue to be visibly affected by deteriorated landscape conditions (poor turf conditions, social trails) and the huge volume of deferred maintenance and outdated facilities in need of repair (seawalls, walks, restrooms). Recent efforts to remove and stop the creation of social trails would be overshadowed by overall conditions on the National Mall. This would result in long-term, moderate to major, adverse impacts on visitors' abilities to appreciate the area's beauty and to have quality visitor experiences.

There would be no additional impacts on the experiences of visitors as a result of demonstrations, national celebrations, or special events. Impacts as described under "Impacts Common to All Alternatives" would continue.

Opportunities to experience the nighttime character of the monumental core would remain focused on the lighting of the prominent symbols of our nation — the Lincoln and Thomas Jefferson memorials, the Washington Monument, the White House, and the Capitol. The lighting of other memorials and ornamental water features would continue to contribute to the very evocative nighttime experience on the National Mall.

The National Mall and its memorials would continue to deeply inspire many visitors, and there would be no change in opportunities to experience the National Mall. Resulting long-term, major, beneficial impacts would continue. However, the enjoyment of the beauty of the National Mall and a sense of welcome would continue to be affected by the degraded conditions of natural resources (water features and vegetation), resulting in ongoing long-term, moderate, adverse impacts on many visitors.

Impacts on Opportunities for Information and Education

Existing educational opportunities would remain, with wayside exhibits, ranger programs, and a variety of park experiences. Classroom curriculum would continue to be updated. A variety of bicycling tours would continue to be provided, and cell phone tours would continue to be expanded. Outdated exhibits would be evaluated for accuracy, relevance, and condition, and then replaced or revised as needed.

The number of visitors is much larger than the number of uniformed park rangers, guides, and volunteers. For example, at the Lincoln Memorial visitors may outnumber rangers by a ratio of 9,000 to 1. The National Park Service would regularly analyze visitor circulation patterns by the time of day, month, and season to more strategically position uniformed staff to increase visitor contacts.

Park brochures, maps, and the NPS visitor passport program would continue to be available, but visitors might not know where to get information, and there are no self-service areas where visitors can obtain maps and brochures. Park websites would remain somewhat difficult for some people to navigate, and advance planning websites would remain inadequate.

Taken as a whole, the impact of the no-action alternative on opportunities for information and education would be long-term, negligible, and beneficial because educational opportunities would continue and the park would update its programs and offerings. Multiple, difficult-to-navigate websites would continue to make finding advance planning information inconvenient, with long-term, moderate, adverse impacts.

Impacts on Opportunities for Enjoyment, Entertainment, and Informal Recreation

The no-action alternative would continue to provide numerous sunny and shady open spaces on the National Mall for visitor enjoyment (including sightseeing and enjoying views), relaxation, and informal recreational pastimes (such as picnicking, reading, dog walking, and walking / strolling). The resulting impacts would continue to be long-term, moderate, and beneficial.

Views of memorials and major federal buildings would continue to inspire most visitors. However, conditions in other parts of the National Mall would detract from these viewing experiences for many visitors who could feel that present conditions throughout much of the area

are undesirable as a setting for the country's most important monuments and memorials. This would continue to result in long-term, moderate, adverse impacts on visitor enjoyment.

Present conditions for walking and strolling would continue in many areas. Walks around the Tidal Basin are too narrow for the level of use; many walking surfaces are in need of repair; and gravel surfaces are slippery and dusty, as well as inaccessible to many people. The resulting impacts would continue to be long-term, moderate to major, and adverse because most to all visitors would be affected.

Informal children's play would continue in open turf areas and within the shade of trees; no children's playgrounds would be provided. The carousel would remain. Impacts would be long-term, negligible to minor, and beneficial.

Entertainment such as musical and theatrical performances would continue primarily at larger activities, such as national celebrations (holiday concerts), annual events (National Cherry Blossom Festival, Smithsonian Folklife Festival), events such as twilight tattoos, and special events such as Kennedy Center simulcasts and Screen on the Green movies. With few exceptions, entertainment venues, other than open turf areas, would continue to be limited in their ability to conveniently host large or small performances on a regular basis. The Sylvan Theater would continue to be the primary venue designed for entertainment; however, its facilities are outdated, circulation changes have affected viewing and access to the stage, and its location is no longer desirable for major events like the Fourth of July. The D.C. War Memorial is the only other venue that was planned for small-scale entertainment. The Lincoln Memorial and Jefferson Memorial steps provide a natural seating area, and these hard surfaces areas can support regularly scheduled entertainment. Room Four in the Franklin Delano Roosevelt Memorial was designed for programs, lectures or appropriate performances but remains unused.

Impacts of diverse open spaces on opportunities for visitor enjoyment and informal recreation would continue to be long-term, moderate to major, and beneficial. However, the continuing unattractive conditions on the National Mall, less than ideal walking experiences, and limited venues to facilitate various kinds of public entertainment would result in long-term, moderate to major, adverse impacts because virtually all visitors could be affected.

Impacts on Opportunities for Active Recreation

Under the no-action alternative existing recreational opportunities would remain. Recreation areas help meet recreation needs in the metropolitan area. Activities include open space for pickup games (Frisbee, kickball, soccer, football, softball, kite flying), fields for organized team sports (such as baseball, softball, and volleyball), and recreation equipment rentals (paddleboats). Boat rentals would remain limited to paddleboats.

Jogging is a popular activity throughout the National Mall, but appropriate running surfaces are lacking, which has resulted in the creation of social trails adjacent to many walks and around the Lincoln Reflecting Pool. These social trails may be as hard as concrete and do not constitute an appropriate running surface, resulting in continuing long-term, minor, adverse impacts on runners.

Bicycling would continue as both a means of circulation and a recreational activity. Impacts related to bicycling are addressed under the access and circulation section.

While no actions would be taken under this alternative related to recreational activities, impacts would be long-term, minor, and beneficial because spaces would continue to be provided for informal recreation as well as organized sports. However, the continued lack of facilities for jogging and the limited choice in recreation equipment rentals would result in long-term, minor, adverse impacts.

Impacts of Visitor Facilities and Amenities

Under the no-action alternative visitor facilities and amenities on the National Mall would continue to be insufficient to meet the needs of a large portion of present visitors. Visitor facilities are too small, inconveniently located, lack coordinated amenities, and are outdated. Most facilities are also too small for present levels of

use. For example, restrooms with six toilets and two urinals are located near parking for nine tour buses; pulses of high use when several tour buses arrive at the same time (up to 450 visitors at a time, assuming 50 passengers per bus) strain the capacity of facilities and result in visitor discomfort. Some facilities are inconveniently located or spaced; for example, there are no restrooms east of 15th Street, despite heavy use of the Mall area for all kinds of visitor activities and events. While it is common to locate restrooms and food service together, there are no restrooms near refreshment stands. Some outdated restrooms are unattractive and NPS staff receive many complaints. Older facilities are primarily utilitarian in nature, and do not provide the pleasant atmosphere visitors expect of facilities in the nation's capital.

Bench seating is provided in both shady and sunny locations, but shady locations may be in short supply in the summer. Seating is not always oriented so visitors can enjoy the vistas. Seating for groups is very limited and is usually not located where groups congregate. While outdoor seating is provided near refreshment stands, it is utilitarian and does not contribute to a pleasant location for people to relax as they tour the National Mall. No indoor seating is provided.

Present retail facilities include small bookstores, food service, and locations where souvenirs are sold. Food choice is limited to seasonal and permanent refreshment stands and mobile carts.

Visitor facilities (or the lack of facilities) would continue in the following areas:

- ***Union Square*** — No visitor facilities are provided.
- ***The Mall*** — There are four small refreshment stands, but no restrooms.
- ***Washington Monument Grounds*** — Restrooms are provided in Monument Lodge, Survey Lodge, and near the Sylvan Theater; temporary food and retail facilities on the site of the future National Museum of African American History and Culture must be relocated. The Sylvan Theater location would remain outdated and inadequate because it is located both near tour bus parking and performance space. Monument Lodge restrooms are conveniently located near ticket queuing areas.
- ***World War II Memorial*** — Restrooms, which are convenient to tour bus drop-offs, would remain.
- ***Constitution Gardens*** — Facilities include a seasonal refreshment stand and restrooms that are scheduled to be remodeled but not replaced.
- ***Lincoln Memorial*** — Restrooms inside the memorial also serve visitors to the Korean War Veterans and Vietnam Veterans memorials. No restrooms are provided near food service. The future Vietnam Veterans Memorial Center would replace the information station near the Lincoln Memorial and provide restrooms, a bookstore, and information.
- ***Ash Woods*** — An outdated restroom is located near the World War II Memorial.
- ***Tidal Basin area*** — An outdated seasonal refreshment stand is located near the parking lot, but no restrooms are provided.
- ***Franklin Delano Roosevelt Memorial*** — There are restrooms and a bookstore. A bookstore and restrooms are planned at the future Martin Luther King, Jr. Memorial.
- ***Thomas Jefferson Memorial*** — Facilities include restrooms, a bookstore, and retail with a nearby outdated small refreshment stand.

The lack of facilities in some areas places a burden on adjacent museums, art galleries, and the U.S. Botanic Garden.

Under the no-action alternative visitor facilities would not be appropriately sized for the volume of users, conveniently located, or grouped to meet the needs of visitors. Primarily due to the lack and inadequacy of restrooms, and to a lesser degree the lack of pleasant food service, impacts on visitor experiences would continue to be long-term, major, and adverse because inadequate visitor facilities affect virtually every visitor.

Impacts on Public Health and Safety

Under the no-action alternative there would be no changes in the way that public health and safety are handled. Emergency care would continue to be provided by park rangers, and event organizers frequently provide first-aid tents during national celebrations and large special events. There are no emergency call boxes or public address system, and resulting impacts would continue to be long-term, minor to moderate, and adverse.

Some locations would continue to be difficult to access for people with disabilities, such as gravel walkways on the Mall and grade level changes and steps at Union Square. Elevators would continue to be provided at the Lincoln Memorial, Thomas Jefferson Memorial, and the Washington Monument.

Distances between destinations, drop-offs, and parking locations for people with disabilities would remain inconvenient, and the requirement to return borrowed wheelchairs to where they were picked up could make visiting multiple destinations difficult for those who need wheelchairs. Impacts would continue to be short- and long-term, moderate to major, and adverse for people with disabilities, as well as up to 25% of visitors who may have difficulty walking distances. Also, NPS policy goals for universal design and access for all segments of society would not be achieved.

Visitors would continue to be affected by weather extremes, and during hot humid weather the National Park Service would continue to occasionally run sprinklers to allow people to cool down. Water would continue to be provided during some events. Emergency care is provided by park rangers. There are no emergency call boxes. Dust from wind and loose gravel walks would continue to affect the comfort and breathing of many visitors on the Mall.

Pedestrian lighting would remain largely concentrated in the east-west corridor between the U.S. Capitol and the Lincoln Memorial. In some locations darker areas between light fixtures may make some visitors feel uncomfortable. The Tidal Basin would continue to have pedestrian lighting only at the memorials, leaving the walkway around the basin unlit. This would continue to limit pedestrian opportunities to safely visit the Franklin Delano Roosevelt, Thomas Jefferson, and George Mason memorials. Light from some fixtures shines into visitor's eyes, making it difficult for them to perceive surface conditions or making it difficult to see other people in the area. This condition would continue.

Roads would continue to be illuminated, resulting in higher levels of light near the highly developed edges of the National Mall. Most crosswalks would continue to be lit. The continued impact of existing road and pedestrian lighting on public health and safety would be long-term, moderate to major, and both beneficial and adverse. However, the lack of pedestrian lighting in some areas and the quality of the existing lighting would make the impact more adverse than beneficial.

The no-action alternative would continue current conditions, and taken as a whole, impacts on visitor health and safety would be long-term, moderate, and adverse because many people would be affected by undesirable access conditions and limited pedestrian lighting.

Impacts on User Capacity

Under the no-action alternative there would be no change in how many people could be accommodated on the National Mall. Degraded conditions from overuse throughout the National Mall would remain. General visitors would continue to be negatively affected by uses during large demonstrations, national celebrations, and special events because fewer permanent amenities would mean that event participants would be using general visitor facilities. Some locations, such as Union Square with the large reflecting pool and stepped levels and the narrow walkways around the Tidal Basin, may limit the number of people who can safely and comfortably use a particular location.

There would be no changes to user capacity as the result of continuing present management strategies. Impacts would remain long-term, moderate to major, and adverse because several prominent locations have continued obstacles to levels of use that are experienced today.

Cumulative Impacts

Past Actions

The night sky in Washington, D.C., is dominated by lighting of five symbolic icons — the U.S. Capitol, the White House, the Washington Monument, the Lincoln Memorial, and the Thomas Jefferson Memorial. Other public and private buildings, memorials, public art, streets and walks, and park areas are lit to varying degrees, with the potential for conflict.

New attractions that have been recently built on or near the National Mall include the World War II Memorial, the National Museum of the American Indian, the Capitol Visitor Center, the International Spy Museum, Madame Tussauds Wax Museum, the Museum of Crime and Punishment, and the Newseum. Nearby in Virginia are the Pentagon September 11 Memorial and the U.S. Air Force Memorial. Renovated visitor destinations include Ford's Theatre National Historic Site, the National Portrait Gallery / National Museum of American Art, the Library of Congress exhibits, and the National Museum of American History. The impact of additional destinations in and near the monumental core on visitor experience opportunities would continue to be long-term, major, and beneficial.

Pedestrian guide and wayside signs with historic information have been placed throughout the central business district, providing a sense of visitor welcome. Some signs are on and near the National Mall and guide visitors to National Mall destinations. The impact on visitor experiences has been long-term, moderate to major, and beneficial.

Present and Reasonably Foreseeable Actions

New pedestrian signs and maps would be better dispersed and would use symbols and colors to make wayfinding easier and more convenient. These actions would have long-term, major, beneficial impacts.

A visitor contact station at the Smithsonian Metro station on the Mall has improved the welcoming experience for visitors at this location, but since the location is not obvious to many pedestrians, the impact would continue to be long-term, minor to moderate, and beneficial.

The completion of perimeter security projects by the Smithsonian Institution and Department of Agriculture at their facilities would have long-term, major, beneficial impacts on public enjoyment, health, and safety.

The completion of future visitor destinations on the National Mall (the Martin Luther King, Jr. Memorial, the Vietnam Veterans Memorial Center, and the National Museum of African American History and Culture), as well as those nearby (the Dwight D. Eisenhower Memorial, Veterans Disabled for Life, and the U.S. Institute of Peace) would diversify visitor experience opportunities, contribute to visitor enjoyment and understanding of ongoing American history and values. The future Vietnam Veterans Memorial Center would replace the present information station near the Lincoln Memorial and provide restrooms, a bookstore, and information. Impacts to visitor enjoyment, education, and the ability to provide a quality American experience would be long-term, major, and beneficial.

Cumulative Impact Summary

Past projects in the memorial core of Washington, D.C., including the development of memorials, public and private museums, the Capitol Visitor Center, and other visitor attractions, have ensured that this area of the national capital provides numerous visitor opportunities. Current NPS projects (the sign system replacement, and rehabilitation of the D.C. War Memorial, the Lincoln Reflecting Pool, and the Thomas Jefferson plaza seawall) would improve visitor enjoyment and make it easier for visitors to find their way around. Other current projects (such as perimeter security, road projects) would increase safety. In the future the addition of authorized memorials and museums (including the Martin Luther King, Jr. Memorial, the Vietnam Veterans Memorial Center, the Eisenhower Memorial, the U.S. Institute of Peace, the National Museum of African American History and Culture, and the National Museum of the American Latino), as well as future commemorative and cultural opportunities as presented in the *Monumental Core Framework Plan*), would all contribute to the quality of visitor experiences, opportunities for education and

enjoyment, and visitor facilities in the metropolitan area.

The impacts of the no-action alternative on visitor experience would be long-term, moderate to major, and adverse. The impacts of past, present, and reasonably foreseeable actions in the metropolitan area would generally be long-term, major, and beneficial. Resulting cumulative impacts would be long-term, major, and beneficial, with a slight adverse contribution from the no-action alternative.

Conclusion

The impacts of the no-action alternative on visitor experiences would be long-term, moderate to major, and adverse despite the fact that visitors would continue to be inspired by the National Mall and its memorials. Visitor expectations for quality experiences would not be met because of the degraded condition of natural resources, inadequate information and education about park resources and opportunities, insufficient facilities (such as restrooms and food service) for present user volumes, and continued public health and safety challenges. However, the impacts of past, present, and reasonably foreseeable actions would generally be long-term, major, and beneficial, and these impacts would offset the adverse impacts of the no-action alternative. The no-action alternative would make a slight adverse contribution to cumulative impacts.

IMPACTS OF THE PREFERRED ALTERNATIVE

Direct and Indirect Impacts

Under the preferred alternative actions would be taken to refurbish the National Mall to be a beautiful, welcoming space that would accommodate high levels of use and provide a quality American experience. Visitor opportunities would be expanded in education, recreation, enjoyment, and entertainment; convenient, adequately sized, and pleasant multipurpose visitor facilities would be provided; pedestrian lighting would be improved; visitor capacity would be increased in some areas; and public health and safety issues would be addressed.

Impacts on a Quality Visitor Experience

The quality of the visitor experience would be improved on the National Mall. Refurbishing the National Mall, addressing deferred maintenance, replacing outdated facilities, and improving infrastructure elements would allow the National Mall to be maintained to desired conditions. Because the refurbishment would affect one of the most photographed places in our nation, the impacts on visitors' ability to appreciate the beauty of the National Mall would be long-term, major, and beneficial.

Better access and circulation would make it easier to visit memorials and adjacent facilities (primarily museums and government facilities), and additional educational wayside exhibits would provide information to increase visitor appreciation. Resulting impacts on the visitor experience would be long-term, major, and beneficial.

In addition to those impacts related to demonstrations and special events that were described under "Impacts Common to All Alternatives," general visitor experiences would be enhanced during demonstrations, national celebrations, and special events because venues would be improved and visitors would have information about the nature of the event or demonstration. Encouraging special events (not First Amendment demonstrations) during non-peak seasons and scheduling them throughout the National Mall would help keep major view corridors and open space free of activities that might otherwise intrude on visitor experiences. In areas that have high levels of demand, the requirement that special events have a "meaningful association" to the National Mall, adjacent areas, or venues would also improve general visitor experiences, and visitors would be more likely to value and enjoy the special events they do see. Compared to the no-action alternative, the preferred alternative would have long-term, major, beneficial impacts since the experiences of most visitors would be improved.

Developing a staffed welcome plaza with related amenities (restrooms, seating, maps, activity listings, and multilingual information) on the Mall near the Smithsonian Metro station would result in long-term, major, beneficial impacts in

terms of creating a welcoming atmosphere for visitors.

Opportunities to experience the nighttime character of the monumental core would be improved. Like the no-action alternative, lighting would remain focused on the prominent symbols of our nation — the Lincoln and Thomas Jefferson memorials, the Washington Monument, the White House, and the Capitol. However, under the preferred alternative the National Park Service would work closely with the Commission of Fine Arts, the National Capital Planning Commission, the Architect of the Capitol, the Smithsonian Institution, and D.C. city agencies to reestablish the lighting task force to develop an approved comprehensive lighting guideline for the monumental core area that would also prescribe desired lighting character for urban and park areas, character-defining elements such as statuary and building facades, pedestrian and vehicular areas, and transitions between different light levels. Appropriate light levels and light color would also be specified for different areas.

Lighting of other memorials and ornamental water bodies would continue to contribute to the nighttime character of the National Mall without intruding on the lighting of the five principal icons. Pedestrian lighting along the Tidal Basin and supplementary pedestrian lighting around the Mall would provide sufficient lighting for pedestrians to see walkway surfaces as well as other people in the area without interfering with the lighting of the prominent memorials or contributing to light pollution. These improvements would result in long-term, moderate to major, beneficial impacts affecting the way a great many visitors experience the National Mall at night.

In summary, the National Mall would continue to deeply inspire many visitors, but compared to the no-action alternative, the preferred alternative would improve the quality of the visitor experiences as a result of refurbishing all areas, providing a more welcoming atmosphere, and enhancing nighttime experiences. Opportunities to experience First Amendment demonstration, as well as to understand and appreciate our nation's history, memorials, and core American values, would also be enhanced. The preferred alternative would result in long-term, major, beneficial impacts on visitor experiences and their opportunities to have higher quality experiences.

Impacts on Opportunities for Information and Education

Under the preferred alternative developing a welcome plaza near the Smithsonian Metro station, improving understanding about the variety of park programs and wayside exhibits, and making use of technology to personalize visits would all enhance opportunities for information and education. These opportunities would help visitors understand the role of the National Mall as a civic stage for democracy, the history of the capital city, and sustainability and stewardship.

Existing programs would continue to be provided and upgraded, including classroom curriculum, cell phone tours, bicycling tours, and exhibits at memorials. NPS programs would seek to use new technology that would allow visitors the flexibility to customize their visits and learning experience. Electronic daily listings of programs, activities, and events would make many more people aware of park programs.

The Mall welcome plaza would be the hub for orientation, information, wayfinding, and hospitality. It could serve as a starting point for many guided walks, a group meeting location, and a venue for welcoming programs that could include recorded music or small live performances. Impacts on opportunities for education would be long-term, major, and beneficial because of the plaza's location at the primary Metro entrance to the National Mall. Impacts on visitors during construction would be short-term, minor, and adverse.

Taken as a whole, the impacts of the preferred alternative on opportunities for information and education, compared to the no-action alternative, would be long-term, moderate to major, and beneficial because information would be more readily available, educational opportunities would be more diverse and could be personalized by visitors to meet their interests, a welcome plaza at a centralized location would help visitors plan their activities and find out what opportunities are available, and educa-

tional themes and methods would be expanded. These changes would affect most visitors and would better fulfill NPS policy goals.

Impacts on Opportunities for Enjoyment, Entertainment, and Informal Recreation

The preferred alternative would continue to provide numerous sunny and shady open space opportunities on the National Mall for enjoyment (sightseeing and enjoying views), general relaxation, and informal recreational pastimes such as picnicking, reading, dog walking, and walking/strolling. The impacts of these opportunities would continue to be long-term, moderate, and beneficial.

Long-distance views to and from memorials along planned view corridors would continue to inspire visitors, but under the preferred alternative the condition of foreground areas as well as overall conditions on the National Mall would also be improved, helping make visitor experiences more enjoyable, a long-term, moderate, beneficial impact on visitor enjoyment.

Walking and strolling experiences would be improved throughout the National Mall by replacing and widening walks around the Tidal Basin, removing gravel from pathways on the Mall, and using universally accessible paving materials that would also reduce dust and slipperiness, resulting in long-term, major, beneficial impacts.

Additional recreational opportunities for children would include water features designed for play, model boating, and naturalistic features in Constitution Gardens that could be climbed on. Children's educational programming could include active play or recreation components. Like the no-action alternative, informal children's play (including preschool activities) would continue in open turf areas and within the shade of trees. While no children's playgrounds would be provided, the carousel would remain, continuing a long-term, negligible to minor, beneficial impact. Overall impacts on children's recreation would be long-term, minor, and beneficial because the needs of a small portion of the visiting population would be addressed.

Opportunities for relevant entertainment, music, and performances would be diversified and expanded to increase enjoyment. Entertainment opportunities would continue at larger activities, such as national celebrations and holiday concerts, annual events (National Cherry Blossom Festival, Smithsonian Folklife Festival), events such as twilight tattoos, and special events such as Kennedy Center simulcasts and Screen on the Green movies. In addition, several distinctly different multipurpose areas with performance venues would be created at Union Square, the Sylvan Theater area at the Washington Monument, and Constitution Gardens.

New facilities at Union Square would include views of the Capitol, the Mall, and the Washington Monument, as well as nearby destinations such as the National Gallery East Building and the U.S. Botanic Garden. The redesigned Sylvan Theater would be better oriented to the hillside to take advantage of seating opportunities, as well as views of the Washington Monument. The new multipurpose performance venue at Constitution Gardens would be on the east edge of the lake, banked by gentle tree-covered hills, while views toward the facility from the west and northwest would include the Washington Monument. These venues would accommodate small or large performances on a regular basis, while at other times they would be pleasant locations for visitors to rest, relax, and enjoy the unique views. These multipurpose facilities would have long-term, major, beneficial impacts on relevant entertainment and enjoyment.

The welcome plaza on the Mall would be used for small performances and programs that would contribute to a friendly, hospitable, and enjoyable atmosphere. The D.C. War Memorial would be renovated to allow small to midsize performances, which would be consistent with its original function as a bandstand. The steps and lower approachway at the Lincoln Memorial, along with the steps and plaza at the Thomas Jefferson Memorial, would continue to provide seating and performance areas. Infrastructure (such as utilities) would be provided to support relevant entertainment and performances. Room Four in the Franklin Delano Roosevelt Memorial could also be used more frequently for programs, lectures, or appropriate performances, which it was designed to accommodate.

The impacts of the preferred alternative on opportunities for enjoyment, entertainment, and informal recreation, compared to the no-action alternative, would be long-term, major, and beneficial primarily because of improved opportunities for general enjoyment and relaxation, pleasant multipurpose venues, and more regularly scheduled relevant entertainment. These actions would affect most visitors.

Impacts on Opportunities for Active Recreation

Under the preferred alternative recreational opportunities would be expanded. Additional recreation equipment rentals would be available, such as canoes and rowboats at the Tidal Basin, as well as model boats, bicycles, kites, or ice skates. More choice in recreational activities would support healthful recreation policies, resulting in long-term, minor, beneficial impacts.

The condition of open space available for pickup games (Frisbee, kickball, soccer, football, softball, kite flying) and organized team sports (softball, volleyball, etc.) would be improved, making play more pleasant and resulting in long-term, moderate, beneficial impacts. Surfaces appropriate for jogging or running would be provided, a minor to moderate impact on individual joggers and running clubs. Bicycling would be improved, with separate bike lanes or routes supporting recreational use of the National Mall as described in the "Access and Circulation" section.

The preferred alternative, compared to the no-action alternative, would have long-term, minor to moderate, beneficial impacts on opportunities for active recreation as the result of additional opportunities and improved facilities or conditions.

Impacts of Visitor Facilities and Amenities

Under the preferred alternative visitor facilities and amenities would be provided on the National Mall to accommodate the high levels of visitation it receives. Visitor facilities and amenities would be conveniently located, and they would generally be designed to serve multiple purposes and to incorporate naturally compatible amenities, such as restrooms near food service locations or seating and information by restrooms, in accordance with best practices used at other sites. All facilities would have an educational or informational component. Outdated facilities would be replaced. Many facilities (including mobile carts) would use a consistent design so they would be instantly recognizable and easy to find. In general, impacts would be long-term, major, and beneficial as the result of providing convenient, well-spaced, and pleasant visitor facilities.

Restrooms would be conveniently located near main pedestrian routes, and on the Mall they would be visible from existing refreshment stands. Restrooms would be adequately sized for expected use. For example, restrooms near tour bus parking and subway entrance areas would be sized for high levels of use. Restrooms would generally be located near destinations or spaced no more than one-third of a mile apart for visitor comfort and convenience. New restrooms would be added, and aging restrooms would be replaced with new facilities in better locations. Family-friendly restrooms would be provided, and additional restroom facilities would be provided for women. The impact of more, better dispersed, and adequately sized restrooms on the visitor experience would be long-term, major, and beneficial.

Drinking water would always be provided near restrooms, and drinking fountains would facilitate filling water bottles or taking care of pet water needs. Free-standing drinking fountains would be removed because they are difficult to maintain. Impacts would be long-term, major, and beneficial.

Food service would include additional types of facilities, such as full-service restaurants and cafeterias, as well as refreshment stands and mobile carts. Food service areas would be designed to be pleasant and attractive places for visitors to linger, enjoy views and watching activities, and be near trash and recycling containers, subtly encouraging visitors not to litter and reducing impacts at memorials. Outdoor seating areas would have shade options and could include potted flowering plants, small ornamental water fountains, or music to make the spaces more attractive and pleasant. Impacts

on the visitor experience would be long-term, major, and beneficial.

As previously described, multipurpose facilities at Union Square, Washington Monument, and Constitution Gardens would be designed as destinations with a unique architectural style compatible with the character of the National Mall.

- ***Union Square*** — Designing Union Square as a dignified area for visitor enjoyment, with food service, restrooms, information, retail, seating, and shade, would encourage visitors to rest and enjoy the views, programs, events, and performances, or to witness or participate in demonstrations. Since no visitor facilities are now in this area, redevelopment would result in long-term, major, beneficial impacts on convenience and comfort for visitors.
- ***Washington Monument Grounds*** — The multipurpose facility at the centrally located Washington Monument would be a hub for visitor services, replacing the temporary facility. Services such as food, restrooms, retail, information, and seating would be convenient for those waiting for Washington Monument tickets, visitors using tour buses and visitor transit, and pedestrians on their way to or from memorials around the Tidal Basin. The indoor / outdoor facilities would be very flexible and would be sized to accommodate large numbers of people. Two existing restrooms would remain — Monument Lodge was recently renovated, and Survey Lodge would be remodeled to provide more facilities for people with disabilities. The impacts of new and renovated facilities at the Washington Monument would be long-term, major, and beneficial.
- ***Constitution Gardens*** — Constitution Gardens would provide a higher end multipurpose destination, with food service, indoor/outdoor seating in a garden setting, restrooms, retail, and a performance area. The area is convenient to the World War II Memorial and public bus transit (the Circulator), visitor transit, and tour bus drop-off/pickup areas. Restrooms would be replaced. Additional seating would be well dispersed, some located for enjoyment of views as well as to meet the needs of groups. Impacts would be long-term, major, and beneficial.

Visitor facilities and amenities at other locations around the National Mall that would enhance the visitor experiences would include the following:

- ***World War II Memorial*** — The restrooms, which are convenient to tour bus drop-offs, would remain.
- ***Lincoln Memorial*** — Expanding restrooms inside the memorial and adding a restroom in the vicinity would make facilities more convenient to visitors.
- ***Ash Woods*** — Providing new restrooms in a better location would better disperse restroom facilities in this area of the National Mall. Should future use levels warrant, this area could also provide seasonal food service.
- ***Tidal Basin Area*** — The existing refreshment stand would be replaced. Providing a multipurpose facility (with food, retail, and restrooms) near the Tidal Basin parking lot would create a pleasant location to sit and enjoy views or recreational opportunities.
- ***Franklin Delano Roosevelt Memorial*** — If future use increased, a restroom and food service facility could be located near Ohio Drive and West Basin Drive, convenient to the Franklin Delano Roosevelt Memorial and the future Martin Luther King, Jr. Memorial. The Roosevelt Memorial would continue to have a bookstore and two restrooms, and the future King Memorial would also have a bookstore and restrooms.
- ***Thomas Jefferson Memorial*** — Replacing the refreshment stand with food, retail, restrooms, and seating sufficient to accommodate tour bus passengers would address visitor needs. Restrooms and a bookstore would remain inside the memorial.

The preferred alternative, compared to the no-action alternative, would result in long-term, major, beneficial impacts for all visitors as a result of providing diverse visitor facilities that would be adequately sized and could accommodate multiple purposes (restrooms, food service,

retail, seating). They would be well dispersed along pedestrian routes and entries, and they would be designed to be pleasant locations that contribute to enjoyment of the National Mall.

Impacts on Public Health and Safety

Under the preferred alternative a number of changes would be made in the way public health and safety are addressed. Locations would be more easily accessible to people with disabilities due to an emphasis on incorporating universal designs into all facilities. Grade level changes would be minimized at Union Square, and gravel on walkways on the Mall would be eliminated and high-quality hard surfaces would make it easier for all visitors to move around. Elevators would continue to be provided at the Lincoln Memorial, the Thomas Jefferson Memorial, and the Washington Monument. Additional parking for people with disabilities would be provided at Survey Lodge on the Washington Monument grounds, and wheelchairs and scooters would be also be available at this location so that people with disabilities could easily visit multiple destinations. Breathing problems caused by dust from gravel walkways on the Mall would be reduced by paving walkways. The resulting impacts would be long-term, moderate to major, and beneficial because all visitors would benefit from accessible designs.

Providing shaded seating, indoor food service, and access to ornamental water features designed to accommodate visitor play would all help alleviate health conditions caused by hot humid weather. Temporary misters might also be used to help cool people during hot humid weather. Water bottles would continue to be provided during some events.

Providing pedestrian lighting throughout the National Mall, with appropriate transitions to uniformly lower lighting levels on the National Mall, would improve public safety and prevent accidents, as well as enhance the nighttime ambience. Supplementary lighting would ensure that pathway lighting would be uniform so that there would not be dark areas between pools of light that might make visitors feel uncomfortable. Pedestrian lighting around the Tidal Basin would also enhance opportunities to visit the Franklin Delano Roosevelt, Thomas Jefferson, and George Mason memorials. A lighting plan for the National Mall would be developed, and all light fixtures would be coordinated, ensuring that lighting would be directed at pathways and not shine into visitors' eyes and making it easier for people to see surface conditions as well as other people in the area or their immediate surroundings.

Roads would continue to be illuminated, and the highly developed edges of the National Mall would be more brightly lit than interior spaces. Some crosswalks could also be more brightly lit to increase the visibility of pedestrians. The impact of existing road and pedestrian lighting on public health and safety would be long-term, moderate to major, and beneficial.

Emergency care would continue to be provided by park rangers, and designated first-aid tents would continue to be frequently provided by event organizers at national celebrations and events. Emergency call boxes would be located at logical points throughout the National Mall or at intersections, and an emergency notification system would be provided.

Changes to public health and safety under the preferred alternative, compared to the no-action alternative, would result in long-term, major, beneficial impacts because of improved access, increased pedestrian lighting, an emergency announcement system, and amenities to help visitors cope with extreme summer weather conditions.

Impacts on User Capacity

Changes under the preferred alternative would increase the number of people who could be accommodated on the National Mall without adversely affecting resource conditions. Changes at various venues, such as wider walks around the Tidal Basin, would create pleasanter conditions for visitors throughout the year and benefit general visitors. Capacity would also be increased at Union Square. Capacities at national memorials would not change.

Impacts on visitors would be long-term, major, and beneficial, especially during large annual events such as the National Cherry Blossom Festival, because space would be provided for logistical operations and amenities (such as

portable restrooms), reducing impacts on general visitors.

Cumulative Impacts

Past, present, and reasonably foreseeable actions would be the same as those described under the no-action alternative and would be long-term, major, and beneficial. The impacts of the preferred alternative would be long-term, major, and beneficial. Cumulative impacts would be long-term, major, and beneficial, with a substantial beneficial contribution from the preferred alternative.

Conclusion

Compared to no-action alternative, the impacts of the preferred alternative on visitor experiences would be long-term, major, and beneficial because of well-maintained areas that would meet desired conditions for the National Mall, enhanced website information, a more welcoming atmosphere (including a welcome plaza on the Mall and daily interpretive program listings), more opportunities to understand core American values through expanded educational themes, well-dispersed and pleasant visitor facilities that are adequately sized to meet user needs, more food service choice, an improved pedestrian and bicycling environment, increased opportunities for informal enjoyment, additional recreational opportunities and improved playing fields, more shaded seating, additional pedestrian lighting, and an emergency notification system. These impacts, combined with the long-term, major, beneficial impacts of past, present, and reasonably foreseeable actions, would result in long, term, major, beneficial cumulative impacts, with a substantial beneficial contribution from the preferred alternative.

IMPACTS OF ALTERNATIVE A

Direct and Indirect Impacts

The impacts on the visitor experience under alternative A would be similar to those under the no-action alternative. The National Park Service would continue to provide visitor facilities and would address some public health and safety issues, and improved resource conditions and visitor educational experiences would increase the quality and enjoyment of visits. However, visitor facilities and services would remain inadequate for the levels of use that the National Mall receives.

Impacts on a Quality Visitor Experience

Like the no-action alternative, a range of visitor experiences would continue to be provided on the National Mall. There would be no change in opportunities to visit memorials that convey our history and democratic values, and there would be no change in opportunities to visit adjacent facilities (primarily museums and government facilities). Visitors would still be able to contemplate core American values and to enjoy visible symbols of our form of government, primarily the executive branch (symbolized by the White House) and the legislative branch (the U.S. Capitol).

Under alternative A the appearance of the National Mall's landscape would be substantially improved as areas were rehabilitated, social trails were limited with various types of fencing and curbs, and deferred maintenance projects were undertaken, including the reconstruction of seawalls and deteriorated walkways and the repair of outdated facilities and restrooms. These improvements would affect the beauty of one of the most photographed places in our nation, resulting in long-term, moderate, beneficial impacts on visitors' ability to appreciate the beauty of the National Mall.

While new pedestrian signs would use symbols to make wayfinding easier, resulting in long-term, major, beneficial impacts, many visitors would continue to have no sense of welcome and orientation, with long-term, major, adverse impacts on overall experiences.

In addition to those impacts on general visitors related to demonstrations and special events that were described under "Impacts Common to All Alternatives," under alternative A requiring special events to have a "meaningful association" to the National Mall, adjacent areas, or venues would improve opportunities for general visitors to value and enjoy the special events they do see. Compared to the no-action alternative, impacts would be long-term, moderate to major, and

beneficial since the experiences of many to most visitors would be enhanced.

Opportunities to experience the nighttime character of the monumental core would remain focused on the most prominent symbols of our nation — the Lincoln and Thomas Jefferson memorials, the Washington Monument, the White House, and the Capitol. Like the preferred alternative, the National Park Service would work closely with the National Capital Planning Commission, the Commission of Fine Arts, and the Architect of the Capitol to develop a comprehensive lighting guideline for the monumental core. Lighting of other memorials and ornamental water bodies would continue to contribute to the nighttime experience on the National Mall. Under alternative A the removal of temporary lighting along the north and south elm walks flanking the Lincoln Reflecting Pool would be consistent with the historic design for this area and would focus attention on the memorial.

Alternative A, compared to the no-action alternative, would make some changes in visitor opportunities to have quality experiences, primarily as a result of improved landscape conditions, resulting in long-term, moderate, beneficial impacts although no actions would be taken to accommodate increased visitor use levels, and crowded conditions in some areas would continue to adversely affect visitor experiences.

Impacts on Opportunities for Information and Education

Existing opportunities for information and education would remain, with wayside exhibits, ranger programs, and a variety of park brochures being provided. There would be an additional focus on the city's history, and more living history programs would be provided, along with multilingual programs and brochures. Rangers throughout the National Mall would be able to provide directions and answer questions, creating a welcoming atmosphere. Classroom curriculum, cell phone tours, a variety of bicycling tours, and educational wayside exhibits would continue to be provided and updated, as well as park brochures, maps, and the NPS passport (stamping) program. Park websites would also be substantially improved and would include virtual tours in addition to more educational content and trip planning information.

Compared to the no-action alternative, alternative A would have long-term, moderate, beneficial impacts on opportunities for visitor information and education, primarily because educational themes would be expanded, multilingual programs and offerings would be provided, and the park website would be improved.

Impacts on Opportunities for Enjoyment, Entertainment, and Informal Recreation

Alternative A, like the no-action alternative, would continue to provide numerous sunny and shady spaces for visitors to enjoy sightseeing or views, relaxing, and participating in informal recreational pastimes, such as picnicking, reading, dog walking, and walking/strolling. The impacts on visitor enjoyment and informal recreation would be long-term, moderate, and beneficial.

Views to and from memorials along planned view corridors would continue to inspire visitors, and improved landscape conditions would make experiences more enjoyable for many visitors, who would readily appreciate the improved appearance of a national treasure. Impacts on visitor enjoyment would be long-term, moderate, and beneficial.

Walking and strolling experiences would continue to take place in less than ideal conditions in many areas. For example, walks around the Tidal Basin would remain too narrow for present levels of use. While walking surfaces in need of repair would be replaced, gravel pathways would continue to be slippery and dusty, as well as inaccessible to many people, especially visitors using wheelchairs. Resulting impacts would be long-term, moderate, and adverse.

Informal children's play (including preschool activities) would continue in open turf areas and within the shade of trees. No children's playgrounds would be provided, and the carousel would be removed, resulting in long-term, negligible to minor, adverse impacts.

Opportunities for relevant entertainment, such as musical and theatrical performances, would continue to be limited and would take place primarily in conjunction with larger activities, such as national celebrations (holiday concerts), annual events (National Cherry Blossom Festival, Smithsonian Folklife Festival), events such as twilight tattoos, and special events such as Kennedy Center simulcasts and Screen on the Green movies. Most entertainment venues, other than open turf areas, would continue to be limited in their ability to conveniently host large or small performances on a regular basis. The Sylvan Theater would continue to be the primary venue designed for entertainment, although its outdated facilities would remain. Circulation changes have affected viewing and access to the stage, and the theater's location make it unusable for major events like the Fourth of July. The D.C. War Memorial would be improved as a small entertainment venue. The steps at the Lincoln Memorial and the Thomas Jefferson Memorial provide natural seating areas, and the hard-surfaced plaza areas can support regularly scheduled programs and entertainment. Room Four in the Franklin Delano Roosevelt Memorial, which was designed for programs, would be used more for this purpose.

Overall impacts on opportunities for enjoyment and informal recreation under alternative A, compared to the no-action alternative, would be long-term, moderate, and beneficial because of improved conditions on the Mall and continued opportunities for informal recreation. However, gravel walkways would continue to adversely affect enjoyment for many visitors because of dust and difficult access for people with physical disabilities. Also, opportunities for relevant entertainment would remain limited. Resulting impacts on visitor enjoyment would be long-term, moderate, and adverse.

Impacts on Opportunities for Active Recreation

Like the no-action alternative, existing recreational opportunities would remain. These include recreation equipment rentals (paddleboats), open space available for pickup games (Frisbee, kickball, soccer, football, softball, kite flying), as well as spaces identified for organized team sports (such as softball and volleyball). Choices in boating opportunities would remain limited to paddleboats.

Appropriate surfaces and routes for jogging would continue to be lacking throughout the National Mall. More physical obstacles to prevent social trails adjacent to many walks and the coping of the Lincoln Reflecting Pool would continue long-term, minor, adverse impacts on runners. Bicycling would continue as both a circulation method and a recreational pastime, with related impacts addressed under the "Access and Circulation" section.

The impacts of alternative A on opportunities for active recreation, compared to the no-action alternative, would be long-term, negligible, and both adverse and beneficial. Opportunities for active recreation would remain, a beneficial impact, but more obstacles to running would result in an adverse impact on joggers, and bicycling would not be improved.

Impacts of Visitor Facilities and Amenities

Under alternative A the emphasis would be on protecting the National Mall's historic landscape, and minimal facilities (such as restrooms) would be provided to help meet current visitor needs. While outdated visitor facilities would be replaced, and small restrooms would be added near existing food service locations, associated amenities that would enhance and facilitate visitor use would not be proposed under this alternative.

Bench seating would be provided in both shady and sunny locations, with more seating in shade and some seating oriented to take advantage of views. Retail facilities would continue to include small bookstores, and some locations would offer souvenirs. Permanent refreshment stands and mobile carts would continue to offer food service, but under this alternative more food choices would be offered. Outdoor seating would remain near refreshment stands, and areas would be more pleasant for relaxing, even though no indoor seating would be available.

Visitor facilities at other locations around the National Mall would include the following:

- ***Union Square*** — Seating would be added at Union Square, but no visitor facilities (such as food service, retail, or restrooms) would be provided.
- ***The Mall*** — In addition to the four current refreshment stands, four restrooms would be provided on the Mall (east of 15th Street), helping meet needs in one of the most heavily used areas of the National Mall.
- ***Washington Monument grounds*** — Food, retail, and restrooms would be moved to a new underground facility east of 15th Street. This location would make outdoor seating impractical because of the surrounding traffic noise, which would also adversely affect views and visitor circulation. Existing facilities would remain at Monument Lodge (bookstore, restrooms) and Survey Lodge (restrooms), while the restrooms would be replaced at the Sylvan Theater.
- ***Constitution Gardens*** — Restrooms and the seasonal refreshment stand would be replaced at Constitution Gardens.
- ***Lincoln Memorial*** — A restroom would be added near the refreshment stand south of the Lincoln Memorial.
- ***Ash Woods*** — The Ash Woods restroom would be replaced and would improve the distribution of restrooms on the National Mall.
- ***Tidal Basin*** — The seasonal refreshment stand near the Tidal Basin parking lot would be replaced, and restrooms would be added.
- ***Franklin Delano Roosevelt Memorial*** — A bookstore and restrooms would continue to be provided at the Franklin Delano Roosevelt Memorial and would be provided at the future Martin Luther King, Jr. Memorial.
- ***Thomas Jefferson Memorial*** — A bookstore, retail options, restrooms, and a seasonal refreshment stand would remain at the Thomas Jefferson Memorial.

Compared to the no-action alternative, visitor facilities under alternative A would be improved, so impacts on visitors experiences would be long-term, moderate, and beneficial, primarily because of additional restrooms and the replacement of outdated facilities (restrooms and refreshment stands).

Impacts on Public Health and Safety

Alternative A would be similar to the no-action alternative in the way that many public health and safety concerns would be managed. However, under alternative A longer crosswalk times and a permanent mass notification system would be provided, improving health and safety for all visitors and resulting in long-term, moderate to major, beneficial impacts.

Like the no-action alternative, conditions in some locations would continue to make access difficult for people with disabilities, such as gravel walkways on the Mall and steps at Union Square. Elevators would continue to be provided at the Lincoln Memorial, the Thomas Jefferson Memorial, and the Washington Monument. Distances between destinations, drop-off and pickup locations, and parking locations for people with disabilities would continue to be inconvenient. The requirement to return borrowed wheelchairs to where they were picked up could make touring multiple destinations difficult for these visitors. Impacts would continue to be short- and long-term, moderate to major, and adverse for people with disabilities, as well as up to 25% of visitors who may have difficulty walking distances. Also, NPS policy goals for universal design and access for all segments of society would not be achieved.

Visitors would continue to be affected by weather extremes, and during hot humid weather the National Park Service would continue to occasionally run sprinklers to allow people to cool down. Water bottles would also continue to be provided during some events. Dust from loose gravel on walkways, which is exacerbated by wind, would continue to affect the comfort and breathing of many Mall visitors.

Pedestrian lighting would be largely concentrated in the east-west corridor between the U.S. Capitol and the World War II Memorial. In some areas darker spots between light fixtures would continue to make some visitors feel uncomfortable because of not being able to see

surface conditions or other people. The Tidal Basin would continue to have pedestrian lighting only at the memorials, leaving the walkway around the water body dark. The lack of pedestrian lighting would also continue to affect nighttime visits to the Vietnam Veterans, Korean War Veterans, Lincoln, Franklin Delano Roosevelt, Thomas Jefferson, and George Mason memorials. Light from some pedestrian light fixtures would continue to shine into visitors' eyes, making it more difficult to see their surroundings.

Roads would continue to be illuminated, along with most crosswalks. There would still be a transition between the more brightly lit edges of the National Mall that are highly developed and the interior areas. The impacts on public health and safety of pedestrian and road lighting would be long-term, moderate to major, and adverse because of the lack of pedestrian lighting in some areas and the quality of existing lighting. However, lighting of the prominent memorials, along with the White House and the Capitol, would remain focal points for nighttime experiences on the National Mall, with beneficial impacts.

Emergency care would continue to be provided by park rangers, and event organizers frequently provide first-aid tents during national celebrations and large special events. There are no emergency call boxes, and impacts would be long-term, minor to moderate, and adverse.

Taken as a whole, the impacts of alternative A, compared to the no-action alternative, would be long-term, minor to moderate, and adverse because of continued lack of pedestrian lighting, which would affect safe access to memorials for many visitors. Providing a mass notification system and improving crossing times at crosswalks would have long-term, moderate to major, beneficial impacts.

Impacts on User Capacity

Under alternative A there would be no change in how many people could be accommodated on the National Mall. General visitors would continue to be negatively affected by uses during large demonstrations, national celebrations, and special events because fewer permanent amenities would mean that event participants would be using general visitor facilities. As the number of users increases, so does the number of needed support facilities (restrooms, first-aid stations, event management offices), and that reduces space available for users.

There would be no changes to user capacity as the result of continuing present management strategies on the National Mall. However, the impact would remain long-term, moderate to major, and adverse because several prominent locations have continued obstacles to levels of use that are experienced today.

Cumulative Impacts

The impacts of past, present, and reasonably foreseeable actions would be the same as those described under the no-action alternative and would be long-term, major, and beneficial. The overall impacts of alternative A would be long-term, moderate, and beneficial. Cumulative impacts would be long-term, major, and beneficial, with a modest beneficial contribution from alternative A because of the prominence of the National Mall in the city.

Conclusion

Compared to the no-action alternative, alternative A would have long-term, moderate, beneficial impacts on visitor experiences because of substantially improved resource conditions and the appearance of the National Mall, better website information, educational themes focused on memorials and the development of the capital city, improved visitor facilities supplemented by small visitor facilities and food service at refreshment stands, a better pedestrian environment, improved playing field conditions, and an emergency notification system. But the needs of high volumes of users would not be met. These impacts, combined with the impacts of past, present, and reasonably foreseeable actions, would result in long-term, major, beneficial impacts, with a modest beneficial contribution from alternative A.

IMPACTS OF ALTERNATIVE B

Direct and Indirect Impacts

Under alternative B, like the preferred alternative, the National Mall would be refurbished to be a beautiful, welcoming space in the heart of the nation's capital. It would be able to accommodate high levels of use and provide quality visitor experiences. Additional opportunities for education, enjoyment, entertainment, and recreation would be provided, along with convenient, adequately sized, and pleasant multipurpose visitor facilities. Pedestrian experiences would be improved, including nighttime experiences, visitor capacity would be increased in some areas, and public health and safety issues would be addressed.

Impacts on a Quality Visitor Experience

The overall quality of visitor experiences on the National Mall would be improved. Refurbishing the National Mall, addressing deferred maintenance, and improving infrastructure elements would allow the National Mall to be maintained to desired conditions. Because the refurbishment would affect one of the most photographed places in our nation, the resulting impacts on visitors' ability to appreciate the beauty of the National Mall would be long-term, major, and beneficial.

Better access and circulation would make it easier to visit memorials and adjacent facilities (primarily museums and government facilities), and additional wayside education would increase visitor appreciation. Impacts on visitor experiences would be long-term, major, and beneficial.

Under alternative B cultural offerings and events on the Mall would be permitted to take place within the elm tree panels on the Mall if new methodologies could ensure that soils would not be compacted and that tree roots would not be adversely affected.

In addition to those impacts related to demonstrations and special events that were described under "Impacts Common to All Alternatives," the experience of general visitors would be enhanced because venues would be improved and they would have information about events and demonstrations. Compared to the no-action alternative, the impacts of alternative B on the experience of general visitors would be long-term, major, and beneficial since improvements would affect the experience of most visitors.

Developing a staffed welcome plaza with related amenities (restrooms, seating, maps, activity listings, and multilingual information) would be developed on the Mall near the Smithsonian Metro station, which serves as the primary entry for many visitors, would create a welcoming atmosphere with long-term, major, beneficial impacts.

Opportunities to experience the nighttime character of the monumental core would be substantially improved. Like the no-action alternative, lighting would remain focused on the prominent symbols of our nation — the Lincoln and Thomas Jefferson memorials, the Washington Monument, the White House, and the Capitol. Like the preferred alternative, the National Park Service would work closely with the National Capital Planning Commission, the Commission of Fine Arts, and the Architect of the Capitol to develop a comprehensive lighting guideline for the monumental core area. Lighting of other memorials and ornamental water bodies would continue to contribute to the nighttime character of the National Mall. Pedestrian lighting along the Tidal Basin and supplementary pedestrian lighting along the Mall would enhance the visitor experience without interfering with the lighting of the prominent memorials. These actions would result in long-term, moderate to major, beneficial impacts affecting the way a great many visitors experience the National Mall at night.

In summary, alternative B would improve the quality of visitor experiences on the National Mall, primarily because it would be refurbished, a more welcoming atmosphere would be created, and nighttime experiences would be enhanced. Opportunities to experience First Amendment demonstrations, as well as to understand and appreciate our nation's history, memorials, and core American values, would also be enhanced. Alternative B would result in long-term, major, beneficial impacts on visitor experiences.

Impacts on Opportunities for Information and Education

Under alternative B, like the preferred alternative, the development of a welcome plaza near the Smithsonian Metro station, the improved variety of park programs and wayside exhibits, and the use of technology to personalize visits would all enhance opportunities for information and education. These opportunities would help visitors understand the role of the National Mall as a civic stage for democracy, the history of the capital city, and sustainability and stewardship.

Existing programs would continue to be provided and upgraded, including classroom curriculum, cell phone tours, bicycling tours, and exhibits at memorials. NPS programs would seek to use new technology in order to personalize visits so that people would be able to explore the National Mall based on their own interests, making visits more relevant, enjoyable, and inspirational regardless of the time of visit.

The Mall welcome plaza would be the hub for orientation, information, wayfinding, and hospitality. It could serve as a starting point for many guided walks, a group meeting location, and a venue for welcoming programs that could include recorded music or small live performances. Impacts on opportunities for education would be long-term, major, and beneficial because of the plaza's location at the primary Metro entrance to the National Mall.

Electronic daily listings of programs, activities and events would make many more people aware of park programs. More multilingual speakers and publications would also be provided. Park brochures, maps, and the passport (stamping) program would be more readily visible, with directional signs to information areas. Self-service areas would allow visitors to obtain maps and brochures at their convenience. Park websites would be user friendly and up-to-date.

Taken as a whole, the impacts of alternative B on opportunities for information and education, compared to the no-action alternative, would be long-term, moderate to major, and beneficial because information would be more readily available, educational opportunities would be more diverse and could be personalized by visitors to meet their interests, a centralized welcome plaza would help visitors plan their activities and find out what opportunities are available, and educational themes and methods would be expanded. These changes would affect most visitors and would better fulfill NPS policy goals.

Impacts on Opportunities for Enjoyment, Entertainment, and Informal Recreation

Alternative B, like the preferred alternative, would continue to provide numerous sunny and shady open spaces on the National Mall for enjoyment (sightseeing and enjoying views), general relaxation, and informal recreational pastimes such as picnicking, reading, dog walking, and walking/strolling. The impacts of these opportunities would continue to be long-term, moderate, and beneficial.

Views to and from memorials along planned view corridors would continue to inspire visitors, but conditions in foreground areas as well as the overall condition of the National Mall would be improved, making visitor experiences more enjoyable. Impacts would be long-term, moderate, and beneficial.

Walking and strolling experiences would be improved throughout the National Mall by replacing and widening walks around the Tidal Basin, and removing gravel from pathways on the Mall and using hard surface paving that would be universally accessible and would reduce dust. Resulting impacts would be long-term, major, and beneficial because almost all visitors would be affected.

Opportunities for informal children's play (including preschool activities) would be the same as the no-action alternative, with open turf areas and shaded areas available for play; no children's playgrounds would be provided, but the carousel would remain, with long-term, negligible to minor, beneficial impacts. Under alternative B additional children's play opportunities would include water features designed for play, and the overall impact on children's recreation would be long-term, minor to moderate, and beneficial because the needs of a small portion of the visiting population would be addressed.

Opportunities for relevant entertainment, music and performances would be diversified and expanded to increase enjoyment, similar to the preferred alternative. Entertainment opportunities would continue at national celebrations (holiday concerts), annual events (National Cherry Blossom Festival, Smithsonian Folklife Festival), events such as twilight tattoos, and special events such as Kennedy Center simulcasts and Screen on the Green movies. In addition, several distinctly different multipurpose areas with performance venues would be created at Union Square, in the Sylvan Theater area at the Washington Monument, and Constitution Gardens. New facilities at Union Square would include magnificent views of the Capitol, the Mall, and the Washington Monument, as well as nearby destinations such as the National Gallery East Building and the U.S. Botanic Garden. Replacement facilities at the Sylvan Theater would be better oriented to the hillside to improve seating and viewing, with views of the Washington Monument. Constitution Gardens Lake would be constructed as a very shallow pool that could be drained to accommodate a wide variety of larger entertainment events. These venues would accommodate small or large performances on a regular basis, while at other times they would be pleasant locations for visitors to rest, relax, and enjoy the unique views. These multipurpose facilities would have long-term, major, beneficial impacts on entertainment and enjoyment.

The welcome plaza on the Mall could support small performances, programs, and audio that would contribute to a friendly, hospitable, and enjoyable atmosphere. The steps of the Lincoln Memorial and the lower approachway, as well as the steps and plaza at the Thomas Jefferson Memorial would both continue to provide seating and performance areas. Infrastructure (such as utilities) would facilitate entertainment and performances.

The impacts of alternative B on opportunities for enjoyment, entertainment, and informal recreation, compared to the no-action alternative, would be long-term, major, and beneficial primarily because of improved opportunities for general enjoyment and relaxation, multipurpose venues for entertainment, and more regularly scheduled relevant entertainment. These actions would affect most visitors.

Impacts on Opportunities for Active Recreation

Under alternative B recreational opportunities would be expanded. There would be additional types of rental boats, such as canoes and rowboats, at the Tidal Basin, which would support healthful recreation policies and result in long-term, minor, beneficial impacts. The condition of open space available for pickup games (Frisbee, kickball, soccer, football, softball, kite flying) and organized team sports (softball, volleyball, etc.) would be improved, making play more pleasant and resulting in long-term, moderate, beneficial impacts. Surfaces appropriate for jogging or running would be provided, a minor to moderate impact on individual joggers and running clubs.

Alternative B, compared to the no-action alternative, would have long-term, minor to moderate, beneficial impacts on opportunities for active recreation as the result of additional opportunities and improved facilities or conditions.

Impacts of Visitor Facilities and Amenities

Under alternative B, similar to the preferred alternative, adequate visitor facilities and amenities would be provided to accommodate high levels of visitation. Visitor facilities would be conveniently located, and they generally would be designed to serve multiple purposes and to incorporate naturally compatible amenities such as restrooms near food service areas or seating and information by restrooms, in accordance with best practices used at other sites. All visitor facilities would have an educational or informational component. Outdated visitor facilities would be replaced. Impacts on visitor experiences would be long-term, major, and beneficial as the result of providing convenient and pleasant visitor facilities.

Restrooms would be conveniently located near main pedestrian routes, and on the Mall they would be visible from existing refreshment stands. New food service facilities would include restrooms. Restrooms would be adequately sized to meet expected use levels. For example,

restrooms near tour bus parking areas and subway entrances especially would be sized for high use levels. Restrooms would generally be located near destinations or spaced no more than one-third of a mile apart to provide visitor convenience and comfort. New restrooms would be added, and aging restrooms would be replaced. Family friendly restrooms would be provided, along with additional restroom facilities for women. The impact of improved restrooms on visitor experiences would be long-term, major, and beneficial.

Drinking water would be provided near restrooms, and drinking fountains would facilitate filling water bottles or pet needs. Free-standing drinking fountains would be removed because they are difficult to maintain.

Food service would include additional types of facilities, such as full-service restaurants and cafeterias, as well as refreshment stands and mobile carts. All facilities (including mobile carts) would use a consistent design to be instantly recognizable and easy to find. Food service areas would be designed to be pleasant and attractive places to linger, enjoy views and activities, and be near trash and recycling containers, subtly encouraging visitors not to litter and reducing impacts at memorials. Outdoor seating areas would have shade options and could include potted flowering plants, small ornamental fountains, or music to make these spaces more attractive. Impacts would be long-term, major, and beneficial.

Multipurpose facilities at Union Square, the Washington Monument, and Constitution Gardens would be destinations with a unique architectural style compatible with the character of the National Mall.

- ***Union Square*** — Designing Union Square as a dignified but formal area for visitor enjoyment, with food service, restrooms, information, retail, seating, and shade, would encourage visitors to rest and enjoy the views, programs, events, and performances, or to witness or participate in demonstrations. Since there are no visitor facilities in this area, this redevelopment would result in long-term, major, beneficial impact on convenience and comfort for visitors.
- ***Washington Monument Grounds*** — The multipurpose facility at the centrally located Washington Monument would be a hub for more casual visitor services, replacing the temporary facility. Services such as food, restrooms, retail, information, and seating would be convenient for those waiting for Washington Monument tickets, visitors using tour buses and visitor transit, and pedestrians on their way to or from memorials around the Tidal Basin. The indoor/outdoor facilities would be very flexible and would be sized to accommodate large numbers of people. Survey Lodge would be remodeled to provide more facilities for people with disabilities. The impacts of new and renovated facilities at the Washington Monument would be long-term, major, and beneficial.
- ***Constitution Gardens*** — Constitution Gardens would provide a higher end multipurpose destination, with food service, indoor/outdoor seating in a garden setting, restrooms, and retail. The lake would be drainable to allow large entertainment events or performances. The area is convenient to the World War II Memorial and public bus transit (the Circulator), visitor transit, and tour bus drop-off/pickup areas. Restrooms would be replaced. Additional seating would be well dispersed, some located for enjoyment of views as well as to meet the needs of groups. Impacts would be long-term, major, and beneficial.

Visitor facilities and amenities at other locations around the National Mall that would enhance visitor experiences would include the following:

- ***World War II Memorial*** — The restrooms, which are convenient to tour bus drop-offs, would remain.
- ***Lincoln Memorial*** — Expanding restrooms inside the memorial and adding restrooms near the refreshment stands both north and south of the memorial would make facilities more convenient to visitors.
- ***Ash Woods*** — Providing new restrooms in a better location would better disperse restrooms. Should future use levels warrant, this area could provide seasonal food service.

- ***Tidal Basin Area*** — The existing refreshment stand would be replaced with a multipurpose facility (food, retail, and restrooms) near the Tidal Basin parking lot, creating a pleasant location to sit and enjoy views.
- ***Franklin Delano Roosevelt Memorial*** — If future use increased, food service could be provided and would also be convenient to the future Martin Luther King, Jr. Memorial. The Roosevelt Memorial would continue to have a bookstore and two restrooms, and the future King Memorial would also have a bookstore and restrooms.
- ***Thomas Jefferson Memorial*** — Replacing the refreshment stand near the Thomas Jefferson Memorial and providing restrooms and plenty of seating to accommodate tour bus passengers would address visitor needs. Restrooms, a bookstore, and retail would continue at the memorial itself.

Taken as a whole, the impacts under alternative B of visitor facilities and amenities on the visitor experience would be long-term, major, and beneficial, compared to the no-action alternative. These impacts would result from diverse types of visitor facilities that were adequately sized, met multiple purposes, were well dispersed, and were designed to be pleasant and contribute to enjoyment of the National Mall.

Impacts on Public Health and Safety

Under alternative B, like the preferred alternative, a number of changes in the way that public health and safety are addressed would be made. Locations would be more easily accessible to people with disabilities due to an emphasis on incorporating universal designs into all facilities. Grade level changes would be minimized at Union Square, and gravel on walkways on the Mall would be eliminated and high-quality hard surfaces would make it easier for all visitors to move around. Elevators would continue to be provided at the Lincoln Memorial, the Thomas Jefferson Memorial, and the Washington Monument. Additional parking for people with disabilities would be provided at Survey Lodge on the Washington Monument grounds, and wheelchairs and scooters would also be available at this location so that people with disabilities could easily visit multiple destinations. The resulting impacts would be long-term, moderate to major, and beneficial because all visitors would benefit from accessible designs.

Providing shaded seating, indoor food service, and access to ornamental water features designed to accommodate visitor play would all help alleviate health conditions caused by hot humid weather. Temporary misters might also be used to help cool people during hot humid weather. Water bottles would continue to be provided during some events. Breathing problems caused by dust from gravel walkways on the Mall would be reduced by paving walkways.

Providing pedestrian lighting throughout the National Mall, with appropriate transitions to uniformly lower lighting levels on the National Mall, would improve public safety and prevent accidents, as well as enhance the nighttime ambience. Supplementary lighting would ensure that pathway lighting would be uniform so that there would not be dark areas between pools of light that might make visitors feel uncomfortable. Pedestrian lighting around the Tidal Basin would also enhance opportunities to visit the Franklin Delano Roosevelt, Thomas Jefferson, and George Mason memorials at night. A lighting plan for the National Mall would be developed, and all light fixtures would be coordinated, ensuring that lighting would be directed at pathways and not shine into visitors' eyes, making it easier for people to see surface conditions as well as other people in the area or their immediate surroundings.

Roads would continue to be illuminated, and the highly developed edges of the National Mall would be more brightly lit than interior spaces. Some crosswalks could also be more brightly lit to increase the visibility of pedestrians. The impact of existing road and pedestrian lighting on public health and safety would be long-term, moderate to major, and beneficial.

Emergency care would continue to be provided by park rangers, and designated first-aid tents would continue to be frequently provided by event organizers at national celebrations and events. Emergency call boxes would be located at logical points throughout the National Mall or at intersections, and an emergency announcement system would be provided.

Changes to public health and safety under alternative B, like the preferred alternative, would result in long-term, major, beneficial impacts compared to the no-action alternative. These impacts would result from improved access, increased pedestrian lighting, an emergency announcement system, and amenities to help visitors cope with extreme summer weather conditions.

Impacts on User Capacity

Changes under alternative B would increase the number of people who could be accommodated on the National Mall without adversely affecting resource conditions. Changes at venues for demonstrations and special events would also positively affect general visitors. For example, wider walks at the Tidal Basin would benefit visitors throughout the year. User capacity would also be increased at Union Square and Constitution Gardens. There would be no change in capacities at national memorials.

Like the no-action alternative, technology would continue to be used to increase the capacity of various venues and to extend venue areas. Technology could also be used to provide opportunities for people to participate in offsite demonstrations through virtual connections or to take part in multi-venue events. This action would align with the NPS policy to use websites to reach a broader audience.

Increases in the physical capacity of the National Mall under alternative B, compared to the no-action alternative, would result in long-term, major, beneficial impacts on all visitors.

Cumulative Impacts

The impacts of past, present, and reasonably foreseeable actions would be the same as those described under the no-action alternative and would be long-term, major, and beneficial. The impacts of alternative B would also be long-term, major, and beneficial. Cumulative impacts would generally be long-term, major, and beneficial. Alternative B would make a substantial beneficial contribution to cumulative impacts because of the prominence of the National Mall in the city.

Conclusion

Compared to the no-action alternative, the impacts of alternative B on visitor experiences would be long-term, major, and beneficial because of well-maintained areas that would meet desired conditions, better website information, educational themes focused on the memorials and the civic function of the National Mall, well-dispersed and pleasant visitor facilities that were adequately sized to meet user needs, more food service choice, an improved pedestrian environment, increased opportunities for informal enjoyment as well as additional recreational opportunities and improved playing fields, more shaded seating, additional pedestrian lighting, and an emergency notification system. These impacts, combined with the long-term, major, beneficial impacts of past, present, and reasonably foreseeable actions, would result in long, term, major, beneficial cumulative impacts, with a substantial beneficial contribution from alternative B.

IMPACTS OF ALTERNATIVE C

Direct and Indirect Impacts

Under alternative C the National Mall would be refurbished to improve resource conditions, to be an ecologically sustainable urban open space with a focus of urban recreation and healthy lifestyles. Visitor opportunities would be expanded in education, recreation, and stewardship; convenient, adequately sized, and pleasant multipurpose visitor facilities would be provided; bicycling and pedestrian experiences would be vastly improved, as would nighttime experiences; and public health and safety issues would be addressed.

Impacts on a Quality Visitor Experience

The quality of visitor experiences would be improved on the National Mall. Refurbishing the National Mall, addressing deferred maintenance, replacing outdated facilities, and improving infrastructure would allow it to be maintained to desired conditions. Because the refurbishment would affect one of the most photographed places in our nation, the impacts on visitors' ability to appreciate the beauty of the

National Mall would be long-term, major, and beneficial.

Better circulation would make it easier to visit memorials that convey our history and democratic values or to visit adjacent facilities (primarily museums and government facilities). Visitors would still be able to contemplate core American values and to enjoy visible symbols of our democratic government, but additional wayside education would increase visitor appreciation.

Cultural offerings and events on the Mall would only be permitted in designated grass areas, resulting in short- and long-term, minor to negligible, adverse impact on visitors who would still have opportunities to participate in events but at different locations.

In addition to those impacts related to demonstrations and special events that were described under "Impacts Common to All Alternatives," the experiences of general visitors would be enhanced because venues for special events and demonstrations would be improved. Compared to the no-action alternative, the impacts of alternative C on general visitor experiences would be long-term, major, and beneficial since improvements would affect the experiences of most visitors.

Providing a staffed visitor contact station with related amenities (restrooms, seating, maps) on the Mall near the Smithsonian Metro station would result in long-term, major, beneficial impacts in terms of create a more welcoming experience for visitors.

Opportunities to experience the nighttime character of the monumental core would be substantially improved. Like the no-action alternative, lighting would remain focused on the prominent symbols of our nation — the Lincoln and Thomas Jefferson memorials, the Washington Monument, the White House, and the Capitol. Like the preferred alternative and alternatives A and B, the National Park Service would work closely with the National Capital Planning Commission, the Commission of Fine Arts, and the Architect of the Capitol to develop a comprehensive lighting guideline for the monumental core area. Lighting of other memorials and ornamental water bodies would continue to contribute to the nighttime character of the National Mall without intruding on lighting of the principal icons.

Under alternative C the emphasis on pedestrian lighting around the Tidal Basin and elsewhere on the Mall would be on reducing light pollution. These improvements would result in long-term, moderate to major, beneficial impacts affecting the way a great many visitors experience the National Mall at night.

In summary, the National Mall would continue to deeply inspire many visitors, but compared to the no-action alternative, alternative C would improve the quality of the American experience, primarily as a result of refurbishing all areas, enhancing nighttime experiences, and improving signs. Opportunities to experience First Amendment demonstrations, as well as to understand and appreciate our nation's history, memorials, and core American values, would also be enhanced. Alternative C would result in long-term, major, beneficial impacts on visitors and their opportunities to have higher quality experiences.

Impacts on Opportunities for Information and Education

Under alternative C educational opportunities would be focused on stewardship and activities. Education would help visitors understand the role of the National Mall in the history of the capital city, sustainability, and stewardship.

Existing programs would continue to be provided, but they would be upgraded to be current and engaging under alternative C, including classroom curriculum, cell phone tours, and exhibits at memorials. The number and variety of biking and walking tours would be expanded. Park brochures, maps, and the NPS passport (stamping) program would be more readily visible, with directional signs to information areas. Self-service areas would allow visitors to obtain maps and brochures at their convenience. Park websites would be user friendly and up-to-date.

Taken as a whole, compared to the no-action alternative, the impacts of alternative C on opportunities for information and education would be long-term, minor, and beneficial

because educational themes and bicycling tours would be expanded.

Impacts on Opportunities for Enjoyment, Entertainment, and Informal Recreation

Like the other alternatives, alternative C would continue to provide numerous sunny and shady open space opportunities on the National Mall for enjoyment (sightseeing and enjoying views), general relaxation, and informal recreational pastimes, such as picnicking, reading, dog walking, and walking/strolling. The impacts of these opportunities would continue to be long-term, moderate, and beneficial.

Long-distance views to and from memorials along planned view corridors would continue to inspire visitors, but these opportunities would be further enhanced because foreground views would also be improved, helping make visitor experiences more enjoyable, resulting in long-term, moderate, beneficial impacts.

Areas would be enhanced by seasonal floral variety. Walking and strolling experiences would be improved throughout the National Mall as a result of replacing and widening walks around the Tidal Basin and replacing gravel surfaces on Mall pathways with universally accessible paving, with long-term, major, beneficial impacts for nearly all visitors.

Informal children's play (including preschool activities) would continue in open turf areas and within the shade of trees, similar to the no-action alternative. Under alternative C, however, several children's playgrounds would be provided (on the Mall, at Constitution Gardens, and along the Potomac River); model boats could be used at Constitution Gardens Lake, and naturalistic features in the gardens would be climbable; water features designed for play would be provided; and the carousel would remain. The resulting impacts for children's enjoyment would be long-term, moderate, and beneficial to a relatively small number of people.

Opportunities for relevant entertainment and performances would be facilitated by providing infrastructure and flexible spaces. Entertainment would continue to be provided at national celebrations (holiday concerts), annual events (National Cherry Blossom Festival, Smithsonian Folklife Festival), events such as twilight tattoos, and special events such as Kennedy Center simulcasts, and Screen on the Green movies. The steps and lower approachway of the Lincoln Memorial, as well as the steps and plaza at the Thomas Jefferson Memorial, would continue to provide seating areas, and infrastructure (such as electrical outlets) would be provided to facilitate appropriate entertainment and performances.

The impacts of alternative C on opportunities for enjoyment, entertainment, and informal recreation, compared to the no-action alternative, would be long-term, major, and beneficial. These impacts would result from improved opportunities for general enjoyment and relaxation, pleasant multipurpose venues for entertainment, and more regularly scheduled appropriate entertainment. Almost all visitors would be affected.

Impacts on Opportunities for Active Recreation

Active recreational opportunities would be expanded under alternative C, compared to the no-action alternative. The north bay of the Tidal Basin would be filled and used for recreation fields. Additional types of watercraft, such as canoes and rowboats, would be available for rent at the Tidal Basin, as well as kites at the Washington Monument and ice skates at the Capitol Reflecting Pool. These additional choices would support healthy recreational activities, which could increase with new or improved opportunities in visible areas, resulting in long-term, minor to moderate, beneficial impacts.

The condition of open spaces available for pickup games (Frisbee, kickball, soccer, football, softball, kite flying) and organized team sports (softball, volleyball, etc.) would be improved, making play more pleasant, with long-term, moderate, beneficial impacts. Surfaces appropriate for jogging or running would be provided, a minor to moderate impact on individual joggers and running clubs. Bicycling would be improved with separate bike lanes or routes, supporting this recreational use of the National Mall (also see the "Access and Circulation" section).

Compared to the no-action alternative, alternative C would have long-term, moderate, beneficial impacts on opportunities for active recreation as a result of additional opportunities and improved facilities or conditions for active recreation.

Impacts of Visitor Facilities and Amenities

Under alternative C, like the preferred alternative, the National Mall would be refurbished, and adequate facilities and amenities would be provided to accommodate high levels of visitation. Visitor facilities would be conveniently located, well-dispersed, and designed to serve multiple purposes, such as restrooms near food service locations or seating and information by restrooms, in accordance with best practices used at other sites. Outdated visitor facilities would be replaced. All visitor facilities would have an educational, stewardship, or informational component. A consistent architectural style for most visitor facilities (including restrooms and refreshment stands) would make them immediately recognizable. Resulting impacts would be long-term, major, and beneficial.

Restrooms would be conveniently located near main pedestrian routes. Several restrooms would be self-cleaning so that they could be open for longer times. Facilities would be adequately sized for expected use. Restrooms would be generally located near destinations or spaced no more than one-third of a mile apart for visitor comfort and convenience. Family-friendly restrooms would be provided, and additional restrooms would be provided for women. The impact of improved, well-dispersed restrooms on visitor experiences would be long-term, major, and beneficial.

Drinking water would be provided near restrooms, and drinking fountains would facilitate filling water bottles or taking care of pet water needs. Free-standing drinking fountains would be removed because they are difficult to maintain.

Food service under alternative C would remain focused on refreshment stands and mobile carts, and as previously mentioned, all facilities (including mobile carts) would use an appropriate design that would be easily recognizable. While food service areas would continue to rely on refreshment stands, surrounding areas would be designed to be pleasant, attractive places for visitors to linger, enjoy views and watching activities, and be near trash and recycling containers, subtly encouraging visitors not to litter and reducing impacts on memorials. Outdoor seating areas would have shade options and could include potted flowering plants, small ornamental fountains, or music.

Other facilities throughout the National Mall that would improve the visitor experience would include the following:

- ***Union Square*** — Facilities at Union Square would include self-cleaning restrooms, food service, and retail. This would be a convenient location for visitors at the east end of the National Mall.
- ***The Mall*** — Outdoor areas adjacent to the refreshment stands on the Mall would be redesigned to accommodate more users, and restrooms would be located near each refreshment stand.
- ***Washington Monument*** — Temporary facilities (food, retail, and restrooms) at the Washington Monument would be relocated north of Independence Avenue between 14th and 15th streets. This location, however, would be less convenient for visitors getting tickets for the monument and for tour bus drop-offs. In addition to two existing restrooms (Monument Lodge, Survey Lodge), restrooms would be replaced near the rebuilt Sylvan Theater, and self-cleaning restrooms would be located on the northwest corner of the grounds between 17th and Constitution Avenue.
- ***World War II Memorial*** — The restrooms, which are convenient to tour bus drop-offs, would remain.
- ***Constitution Gardens*** — At Constitution Gardens the existing restroom and refreshment stand would be removed and replaced by a garden café/restroom at the east end of the lake. However, removal of restrooms would mean the next nearest public restrooms for visitors touring the National Mall would be near the Lincoln Memorial.

- ***Lincoln Memorial*** — A restroom would be added near the south refreshment stand.
- ***Ash Woods*** — Restrooms would be replaced or relocated to better disperse facilities.
- ***Tidal Basin*** — The outdated refreshment stand in the parking lot would be replaced and would include restrooms.
- ***Franklin Delano Roosevelt Memorial*** — A refreshment stand without restrooms that would also be convenient to the future Martin Luther King, Jr. Memorial would be provided. A bookstore and restrooms would remain at the memorial and would be provided at the future King Memorial.
- ***Thomas Jefferson Memorial*** — Restrooms would be replaced; the bookstore and retail would continue; the nearby refreshment stand would be replaced and relocated to be more convenient to the tour bus drop-off, but would not include restrooms. Additional seating would be well dispersed, some located for enjoyment of views as well as to meet the needs of groups.

Alternative C, compared to the no-action alternative, would makes substantial changes to visitor facilities by providing more visitor facilities that would be adequately sized, conveniently located, well dispersed, and designed to be pleasant and to contribute to enjoyment of the National Mall, Resulting impacts would be long-term, major, and beneficial, and all visitors would be affected.

Impacts on Public Health and Safety

Under alternative C several changes would be made in how public health and safety concerns would be addressed. Removing gravel from walkway surfaces and using universally accessible materials on all walkways would make it easier for all visitors to move around and would reduce dust and related breathing problems for some visitors. Elevators would continue to be provided at the Lincoln Memorial, the Thomas Jefferson Memorial, and the Washington Monument. To modify the impact of weather extremes and hot humid weather, visitors would find more seating in shade, indoor food service, and access to ornamental water features designed to accommodate visitor play. Occasionally temporary misters could be used to help cool people during hot humid weather. Water bottles would continue to be provided during some events.

To improve public safety and prevent accidents, pedestrian crosswalks would be improved. Also, pedestrian lighting would be improved throughout the National Mall. Providing pedestrian lighting around the Tidal Basin would improve the pedestrian experience, as well as opportunities to visit the Franklin Delano Roosevelt, Thomas Jefferson, and George Mason memorials. All light fixtures on the National Mall would be coordinated, and lighting would be directed at pathways and not shine into visitors' eyes, making it easier for people to see surface conditions as well as other people in the area or their immediate surroundings. This would help night visitors feel safer and more comfortable

Roads would continue to be illuminated, and the highly developed edges of the National Mall would be more brightly lit than interior areas, with appropriate transitions so people could adjust to lower lighting levels. Some crosswalks would also be more brightly lit to increase the visibility of pedestrians. The impact of existing road and pedestrian lighting on public health and safety would be long-term, moderate to major, and beneficial.

Emergency care would continue to be provided by park rangers; and designated first-aid tents would continue to be frequently provided at national celebrations and events. Emergency call boxes would be dispersed near logical areas or intersections. A mass notification system would be provided.

Changes to public health and safety under alternative C would result in long-term, major, beneficial impacts because of improved access, safer night and pedestrian experiences, amenities to help people cope with weather extremes, and an emergency announcement system.

Impacts on User Capacity

Alternative C would make changes in the ability to accommodate people on the National Mall. Changes at various venues would benefit general visitors. For example, wider walks around the Tidal Basin would create pleasanter conditions

for visitors throughout the year, not only during the National Cherry Blossom Festival. Capacities at national memorials would not change.

Like the no-action alternative, technology would continue to be used to increase the capacity of various venues and to extend venue areas. Technology could also be used to provide opportunities for people to vicariously participate in offsite demonstrations through simulcasts or to take part in multi-venue events. This action would be consistent with NPS policies to use websites to reach a worldwide audience.

Compared to the no-action alternative, alternative C would result in long-term, major, beneficial impacts on general visitors.

Cumulative Impacts

Past, present, and reasonably foreseeable actions would be the same as those described under the no-action alternative, and impacts would result in long-term, major, and beneficial. The impacts of alternative C would be long-term, major, and beneficial. Cumulative impacts on visitor experiences would be long-term, major, and beneficial. Alternative C would make a substantial beneficial contribution to cumulative impacts because of the prominence of the National Mall in the city.

Conclusion

Compared to the no-action alternative, alternative C would have long-term, major, beneficial impacts on visitor experiences because of improved conditions on the National Mall, better website information, educational themes focused on memorials along with stewardship and healthy lifestyles, well-dispersed and pleasant facilities that were adequately sized to meet user needs, more food service choice, an improved pedestrian and bicycling environment, increased opportunities for informal enjoyment, additional recreational opportunities and improved playing fields, more shaded seating, additional pedestrian lighting, and an emergency notification system. Cumulative impacts would be long-term, major, and beneficial, with a substantial beneficial contribution from alternative C.

SOCIOECONOMIC ENVIRONMENT

METHODOLOGY FOR IMPACT ANALYSIS

This section analyzes the impacts of the alternatives on the socioeconomic environment of the National Mall and surrounding areas. The parks' commercial and economic influence, while centered in Washington, D.C., extends west to Arlington and Fairfax counties in Virginia, and east to Montgomery and Prince George's counties in Maryland. While the description of the socioeconomic impacts focuses on Washington, D.C., regional impacts are also addressed. The analysis takes into consideration NPS *Management Policies 2006,* comments made during the 2007 public scoping period, and a 2008 National Mall visitor study that addressed socioeconomic issues.

The following categories of impacts are evaluated:

- ***Impacts of increased visitation*** —The beneficial and adverse impacts of visitation generated by the alternatives on the local and regional economy are analyzed.
- ***Impacts on commercial business opportunities*** — This analysis looks at the beneficial and adverse impacts of commercial service opportunities on the National Mall, including nonprofit bookstores, commercial facilities (recreation, food service, and transit), and the type and dispersal of facilities. It also looks at the beneficial and adverse impacts on commercial opportunities adjacent to the National Mall and in surrounding areas.
- ***Impacts of construction opportunities*** — The beneficial and adverse impacts of new construction opportunities for local and regional businesses are analyzed.

Impact Intensity Levels

The following impact intensity levels were established for impacts on the socioeconomic environment:

- ***Negligible*** — The impact would not be detectable or would be barely detectable to the local or regional socioeconomic environment or most commercial opportunities.
- ***Minor*** — The impact would be detectable to the local or regional socioeconomic environment or on commercial opportunities.
- ***Moderate*** — The impact would be readily apparent and would have an appreciable impact, either beneficial or adverse, on the local and regional economy or on commercial opportunities.
- ***Major*** — The impact would be severely adverse or exceptionally beneficial to the local or regional economy or on commercial opportunities.

Type of Impact

Impacts could be either beneficial or adverse. Beneficial impacts would support the park mission and purpose, would comply with federal regulations and NPS or local policies, or would positively affect the local and regional economy or commercial opportunities. Adverse impacts would not support the park mission or purpose, would be inconsistent with federal regulations or with NPS or local policies, or would negatively affect the local and regional economy or commercial opportunities.

Duration of Impacts

Impacts could be temporary, short-term, or long-term; no permanent economic impacts are expected.

- ***Temporary*** — The impact would usually last for a few hours or up to two days, such as a road closure for a day or less or limited access to an area during a demonstration or special event.
- ***Short-term*** — The impact would generally last up to one year or the life of a construction project.

- ***Long-term*** — The impact would last longer than one year or for the life of the plan (up to 50 years).

Regulations and Policies

The NPS *Management Policies 2006* recognize that commercial services may be needed in parks, and guidance is provided for any such facilities.

> Through the use of concession contracts or commercial use authorizations, the National Park Service will provide commercial visitor services that are necessary and appropriate for public use and enjoyment. Concession operations will be consistent to the highest practicable degree with the preservation and conservation of resources and values of the park unit. Concession operations will demonstrate sound environmental management and stewardship (NPS 2006e, ch. 10).

Concession operations are subject to the provisions of the National Park Service Concessions Management Improvement Act of 1998, NPS regulations (36 CFR Part 51), *Director's Order #48A: Concession Management* (NPS 2004b), and other specific guidance issued by the NPS director (NPS 2006e, sec. 10.2.1).

A park commercial services strategy must be in place to ensure that concession facilities and services are necessary and appropriate for public enjoyment, complementary to the park mission and visitor service goals, financially viable, use sustainable principles and green building practices, and are addressed in an approved management plan. A viability study / analysis will be prepared to ensure that the overall contract is feasible (NPS 2006e, sec. 10.2.2).

To obtain the best service provider and maximize benefits to the government, the National Park Service encourages competition in the awarding of concession contracts (NPS 2006e, sec. 10.2.3.4).

Visitor services will be provided in a manner that is consistent with and supportive of the interpretive themes, goals, and objectives articulated in each park's planning documents, mission statement, and/or interpretive plan. Commercial services should instill in visitors an appreciation of the park. This could be accomplished through guided activities; the design, architecture, landscape, and decor of facilities; and educational programs. Retail merchandise (such as souvenirs) and displays also present opportunities to educate visitors about park history; natural, cultural, and historical resources; and sustainable environmental management (NPS 2006e, sec. 10.2.4.4).

Impacts Common to All Alternatives

Direct and Indirect Impacts

Impacts of Increased Visitation

As discussed under visitation projections (see page 333), projects planned by the National Park Service and others on the National Mall would contribute to increased visitation to the National Mall. New sites such as the Vietnam Veterans Memorial Center and the Martin Luther King, Jr. Memorial would attract more visitors and lengthen stays on the National Mall, as well as in the local area. These facilities would provide additional services and increased overall satisfaction. Impacts would be long-term, minor, and beneficial. New memorials could initially increase visitor use by an estimated 4% (see page 333).

Impacts on Commercial Business Opportunities

Business opportunities on the National Mall, such as retail, food service, recreation services, and transit, would be created under all alternatives. Commercial services are provided through multiple commercial contracts that are periodically bid through a competitive process. New commercial opportunities on the National Mall would be assessed for economic feasibility, necessity, and appropriateness by the National Park Service before any new services were offered for bid.

Under all alternatives a new facility would be developed for food service and retail at the Washington Monument to replace the temporary facility that will be removed when the National Museum for African American History and Culture is constructed.

Impacts on commercial business opportunities would be long-term, minor, and beneficial for individual businesses that successfully bid on the contracts. Under all alternatives bookstores (which are operated by Eastern National as a nonprofit enterprise) would continue to offer educational publications for visitors.

Improved conditions on the National Mall would also increase visitor use in surrounding areas because visitors would continue to use commercial businesses such as restaurants, lodging, and other services. Impacts would be long-term, minor, and beneficial.

Costs to Visitors

The National Mall and its memorials would remain free to the public; there would be no entrance or gate fees to visit historic attractions on the National Mall, which is authorized by 16 USC 6802(d)(3)(C). This is a long-term, major, beneficial impact that affects all users.

Costs to Concessioners

Tax amounts for concessioners are contractually based and are determined as a percentage of gross revenue, while taking into account operating costs and providing a reasonable opportunity to make a profit. Most contracts increase the franchise fees at a certain dollar threshold, so they can vary widely.

These parameters will most likely change with new contract requirements, which are set in law. The franchise fees will be based on the financial analysis that will be completed during prospectus development and will take into account possessory interest (leasehold surrender interest), expenses (including a dedicated repair and maintenance reserve necessary to ensure park assets are properly maintained.

Because a number of variables must be considered, concessioner tax rates cannot readily be compared with other business tax rates. For example, certain types of older contracts include a possessory interest provision, where the concessioner is reimbursed for capital improvements they make to government facilities, less depreciation. This is a liability that has to be reconciled at the end of the contract in some fashion, the impact of which is not figured until the end of the contract.

Impacts on Construction Opportunities

Construction projects under all alternatives would include deferred maintenance projects, which total more than $400 million (in 2008 dollars). These projects include walk and site furnishing repairs, as well as larger projects such as the replacement of the concession facility at the Washington Monument and seawall repairs at the Tidal Basin and along the Potomac River. Projects would be accomplished as they were funded, presumably over several years rather than all at once. Assuming that these projects were accomplished over 10 years, annual construction expenditures would amount to about $40 million.

In 2007 construction-related earnings in the Washington, D.C., area amounted to about $899 million, or 1.2% of total regional earnings of $73 billion (see Table 30, page 356). Annual expenditures of $40 million on National Mall related projects would contribute less than 5% to construction-related earnings in the D.C. area. While these projects would positively influence individual construction businesses who successfully bid on projects, the overall impact on the local and regional economy would be short-term and beneficial but minor in intensity because construction contributes about 1.25% to the economy.

The Trust for the National Mall is the authorized nonprofit fundraising partner for the National Park Service. The trust's goal is to raise funds to help restore the National Mall. For example, in 2008 the trust provided $1.1 million in matching funds for an improved sign and wayfinding system that is part of the NPS Centennial Initiative. Their final fundraising goals will depend on the outcome of the National Mall plan, but are expected to total several hundred million dollars, which would reduce federal expenditures.

Conclusion

Impacts on the local and regional economy would be long-term, minor, and beneficial as a result of visitation to existing monuments and memorials on the National Mall. Impacts on

commercial business opportunities in and around the National Mall, as well as in the metropolitan area, would be long-term, minor, and beneficial as a result of new business opportunities for retail and food service near the National Mall and ongoing use of businesses in adjacent destinations and surrounding areas. The construction of previously approved projects would result in short-term, minor, beneficial impacts on the local and regional economy.

Impacts of the No-Action Alternative

Direct and Indirect Impacts

Under the no-action alternative the National Park Service would continue current measures of managing and preserving the National Mall. Standard maintenance activities would continue, and deferred maintenance projects would be undertaken as funding permits. No major new initiatives would be undertaken.

Impacts of Increased Visitation

Based on general visitation patterns over the last five years, visitation under the no-action alternative is projected to grow at about 1.25% per year, and the impact on the local and regional economy would be long-term, negligible, and beneficial since changes would likely not be detectable in the local and regional economy.

Impacts on Commercial Business Opportunities

Current commercial opportunities on the National Mall for food service, retail, and recreational activities are very limited, and the level of business opportunities would likely not change under the no-action alternative. However, the long-term competitiveness of commercial businesses could be diminished if visitors patronized businesses in adjacent museums and galleries, which provide more diverse and desired visitor services. Based on the 2008 survey, visitors desired more choice and spent substantially more money at restaurants than at food stands (see Table 35). Based on public scoping comments, visitors want larger facilities that can accommodate more people and more areas with protection from the weather while touring the National Mall, and they want an increased variety of food types and venues (NPS 2007d).

Commercial opportunities in adjacent areas would continue to be affected under the no-action alternative as a result of many National Mall visitors seeking a variety of food services, retail, and recreational activities because of insufficient services on the Mall. Resulting impacts would be long-term, negligible, and beneficial to businesses in surrounding areas.

Impacts on Construction Opportunities

Actions under the no-action alternative would provide some construction business opportunities with planned maintenance and repairs, as described under "Impacts Common to All Alternatives." Construction-related expenditures under the no-action alternative would total more than $400 million (in 2008 dollars). While these projects would positively influence individual construction businesses in the local or regional area, the overall impact would be short-term and minor.

Cumulative Impacts

Past Actions

Past planning efforts for the National Mall were largely guided by L'Enfant and McMillan plans, the 1973 *Washington Mall Plan,* and the 1981 *Capitol Master Plan*. L'Enfant's plan was based on formal design principles, including axial lines, vistas, terminal focal points, and rectilinear shapes. Since the early 1900s the McMillan plan has guided the majority of new developments and renovations and included the original vision of tree-lined walkways and open public grounds. Existing memorials reflect the original character and visions of the L'Enfant and MacMillan plans, and the construction of approved memorials would complete that concept. Currently, the memorials and monuments of the National Mall are the main attractions to tourists and are the primary reason for visitation to the area. Based on the 2008 visitor study, 31.7% of visitors said that the memorials and monuments were the primary reason they visited the area (see Table 18), nearly double the next most common reason for visiting. Further, 96.9% of visitors made a point of viewing the monuments and memorials during their visit, with the next most

common activity being visiting museum sites (74.6%, see Table 33).

Present Actions

Comprehensive or cooperative planning efforts that are interrelated with the current NPS planning effort for the National Mall involve multiple agencies and include several projects and plans that involve various areas in or around central Washington, D.C. Currently, most commercial opportunities, including retail shops, gift shops, food courts and restaurants, movies, and rides, are provided by museums and galleries near the National Mall.

Some planning actions and projects (the NCPC *Extending the Legacy* and *Monumental Core Framework Plan;* the *Capitol Complex Master Plan;* and the NPS *Comprehensive Design Plan for the White House and President's Park,* the *Urban Flooding Study,* and the Rock Creek *General Management Plan*) would not directly contribute to an economic impact on the local and regional area. However, together these plans would positively affect the local and regional area by providing guidance for a higher quality visitor environment in the future, which could attract more visitors.

Installing upgraded signs and information would help visitors find their way around the National Mall, resulting in pleasanter experiences. This in turn could be expected to encourage visitors to stay longer and make greater use of commercial opportunities for food, retail, and commercial recreation on and near the National Mall.

Ongoing repairs, deferred maintenance, and projects supported by the 2009 American Recovery and Reinvestment Act and the NPS Centennial Initiative are underway and common to all alternatives. Through the 2009 American Recovery and Reinvestment Act, $60.8 million was appropriated to maintain and upgrade areas of the National Mall, including the D.C. War Memorial, the Lincoln Reflecting Pool area, and the Thomas Jefferson Memorial plaza. The visitor sign and wayfinding system is being replaced through the NPS Centennial Initiative, with matching funding provided by the Trust for the National Mall. Additional road projects have been funded through programs under the jurisdiction of the Federal Highway Administration. Projects that are being undertaken by the Smithsonian Institution include renovation of the Arts and Industries Building and completion of Mallwide security projects.

Overall, the cumulative impact of these projects on the local and regional economy is expected to be long-term, minor, and beneficial. Projects such as the renovation of Lincoln Reflecting Pool, Ford's Theatre, the National Museum of American History, the National Portrait Gallery, the National Museum of American Art, the D.C. War Memorial, and the Thomas Jefferson Memorial, along with new attractions such as the Newseum, Madame Tussauds Wax Museum, and the Museum of Crime and Punishment, would have direct impacts on the local and regional economy by bringing in more visitors to the area. Based on past visitor use trends, total visitation increased noticeably when new memorials on the National Mall opened (see "Past Visitor Use Trends" page 333). Thus, as these plans are fully implemented, total visitation levels could be expected to increase.

Reasonably Foreseeable Actions

Reasonably foreseeable actions that are being considered by the National Park Service include completing perimeter security at the Thomas Jefferson Memorial and stabilizing the plaza in front of the memorial, and completing the Potomac Park levee project in cooperation with the U.S. Army Corps of Engineers.

Future construction projects on and near the National Mall that would come under the management of the National Park Service include the Martin Luther King, Jr. Memorial (including a bookstore), the Vietnam Veterans Memorial Center (including a bookstore), and the Dwight D. Eisenhower Memorial. These projects would be expected to have a long-term, minor, beneficial impact on the local and regional economy.

Implementing recommendations from the NPS *Visitor Transportation Study* would convert free parking on about 950 spaces on the National Mall to paid parking, thus reducing parking use by local workers and making parking more available to visitors. Lots south of the Thomas Jefferson Memorial (approximately 230 spaces) would remain free. The impact on visitors accus-

tomed to free parking in these spaces would be long-term, minor, and adverse because only a few visitors would be affected; impacts on the local and regional economy would be negligible. Parking fees could be used to reduce the overall cost of a visitor transportation service.

Other projects that would have a socioeconomic effect from construction include the National Museum of African American History and Culture, the consolidation and relocation of the 14th Street bridges to improve access to the downtown areas, and the construction of the U.S. Institute of Peace headquarters northwest of the intersection of Constitution Avenue and 23rd Street NW. It is expected that commercial opportunities would be provided at these facilities.

New attractions such as Martin Luther King, Jr. Memorial, the National Museum of African American History and Culture, and the Vietnam Veterans Memorial Center could increase visitation levels on the National Mall by up to 4% annually as each project opened, and then would presumably level off. In addition, increased tourist attractions would encourage visitors to stay longer and spend more in the local and regional area since there would be more things to see and do. Earnings in the D.C. area related to increases in the tourist-related sectors — accommodation (lodging) and food service; and arts, entertainment, and recreation — amount to about 3% of total regional earnings. So the additional impact of increased visitation on the local and regional economy is expected to be long-term, minor, and beneficial because of resource improvements on and near the National Mall, wayfinding information, visitor facilities, and more tourist attractions in the region.

The construction of all these future facilities and memorials would result in short-term, minor, beneficial impacts on the local and regional economy because construction-related earnings contributed only about 1.2% to the D.C. economy in 2007. However, cumulatively these projects, including reconstruction of the 14th Street bridge corridor, could make a significant contribution to construction-related spending.

Cumulative Impacts Summary

Past and present projects in and around the study area, including memorials, museums, and other visitor destinations, have contributed to increased visitation. All memorials and a great many past, present, and future visitor destinations would remain free to users. Future new visitor destinations such as the Martin Luther King, Jr. Memorial, the Vietnam Veterans Memorial Center, the National Museum of African American History and Culture, the Eisenhower National Memorial, and the National Museum of the American Latino would similarly increase tourism, and some could appeal to user groups that have not been traditionally drawn to the National Mall or its surroundings. Some new commercial opportunities for food service and retail would be provided at new facilities, offering more choices for visitors. These actions would not affect the commercial opportunities afforded street vendors on surrounding streets. Parking fees would be applied to free spaces on the National Mall to make parking spaces more available for visitors and support an improved visitor transportation service. Construction opportunities would have short-term, minor, beneficial impacts on the local and regional economy because of the economy's size.

Taken together, the impacts of past, present, and reasonably foreseeable actions would be long-term, minor, and beneficial due to the size of the local and regional economy. Impacts of the no-action alternative would be long-term, negligible, and beneficial. Cumulative impacts would be long-term, minor, and beneficial, with a slight beneficial contribution from actions under this alternative.

Conclusion

Impacts on the local and regional economy under the no-action alternative would be long-term, negligible, and beneficial because of slightly increased visitation levels to the National Mall and related visitor expenditures at commercial businesses. Cumulative impacts would be long-term, minor, and beneficial due to increased visitation, plus business and construction opportunities, with a slight beneficial contribution to cumulative impacts from the no-action alternative.

IMPACTS OF THE PREFERRED ALTERNATIVE

Direct and Indirect Impacts

Under the preferred alternative the National Mall would be refurbished to protect the historic landscape, accommodate high levels of use, and better meet visitor expectations. Temporary facilities and permanent infrastructure would be developed to facilitate improved civic forums and stages for special events and enjoyment.

Impacts of Increased Visitation

Compared to the no-action alternative, the preferred alternative would undertake actions to improve resource conditions, visitor facilities, and infrastructure throughout the National Mall, positively affecting local and nonlocal residents. Improved visitor information, services, and amenities would create safer and more comfortable conditions for all visitors. These actions could contribute to increased overall visitation levels.

Multipurpose facilities at Union Square, the Washington Monument, and Constitution Gardens would stimulate more visitation and also attract more local residents since a greater array of programs and events would be offered. Improved event facilities, logistics, and operations would facilitate the hosting of special events and demonstrations, and allow more people to attend events, which could result in more local visitation as well as longer stays on the National Mall. Increased daytime and evening programs at the Washington Monument grounds and Constitution Gardens would provide a variety of events that would enhance experiences, encouraging visitors to stay longer on the National Mall and also in the metropolitan area. Improved food facilities and food choice at these places would also increase visitor use on the National Mall.

Additional recreational opportunities would be provided for bicycling (with separate lanes or routes), as well as for rowboat, canoe, and kayak rentals in the Tidal Basin area. Improving the variety and quality of recreational activities could also lead to extended stays.

Increasing visitor parking availability on NPS roadways through metering and improving access for people with disabilities would enhance opportunities for a small portion of visitors.

Increasing the variety of guided tours, multiseasonal touring opportunities, bicycling tours, and multilingual tours would improve visitor understanding of and satisfaction with the National Mall. This could result in longer visitor seasons as well as attracting more international visitors to the local and regional area.

Compared to the no-action alternative, the preferred alternative would provide new and upgraded opportunities, services, and amenities for visitors that would tend to make them stay longer. Resulting impacts on the local and regional economy would be long-term and beneficial but minor because visitor expenditures related to recreation, entertainment, and food service amount to less than 3% of tourist-related earnings in the D.C. area.

Impacts on Commercial Business Opportunities

Commercial business opportunities on the National Mall would increase and be more diversified in several areas because different types of commercial opportunities, such as food service and recreation equipment rentals, would be offered. Multipurpose facilities at Union Square, the Washington Monument grounds, Constitution Gardens, and the Tidal Basin area would provide pleasant places for visitors to relax and enjoy programs, performances, and appropriate entertainment. In addition to providing restrooms and shaded rest areas, these multipurpose facilities would also offer commercial business opportunities for food service, shopping for souvenirs, and performance venues. These facilities would also meet the needs of different user groups, such as event participants, performers, and audiences, as well as general visitors to the National Mall. Additional commercial food service facilities could also be replaced or added at the Thomas Jefferson Memorial, along Ohio Drive or, in Ash Woods.

Diversifying food choices and venues (e.g., indoor/outdoor seating) on the National Mall would generate more commercial business

opportunities. Also, outdoor cafés or garden restaurants would better meet visitor desires as indicated in public scoping comments (NPS 2007d).

Improved interpretation/educational programs and facilities (multilingual programs) could increase some commercial opportunities for international or group tours on the National Mall.

It is possible that paid parking could be managed through a commercial services contract, which would be a long-term, minor, beneficial impact on commercial business opportunities.

Impacts under the preferred alternative on commercial business opportunities on the National Mall would be long-term, minor, and beneficial because increased services would both meet visitor needs and increase use of those services and facilities on the National Mall.

The demand for commercial opportunities in nearby and surrounding areas in Washington, D.C., would also increase with improved services of the National Mall because of increased visitation and potentially longer stays in the metropolitan area. This would create more business opportunities for lodging, restaurants, and retail in the region that would not be offered on the National Mall. Impacts would be long-term, minor, and beneficial because tourist-related sectors (lodging and food service) account for only about 3% of D.C. earnings.

Impacts on Construction Opportunities

Construction-related expenditures under the preferred alternative would amount to about $200 million to $240 million more than under the no-action alternative. Including more than $400 million in deferred maintenance, as noted under "Impacts Common to All Alternatives," total expenditures under the preferred alternative would be about $600 million to $650 million. Projects under the preferred alternative would include civic infrastructure, multipurpose facilities, a welcome area at the Mall Metro station, wider walks around the Tidal Basin, improved connections to the Kennedy Center, and better pedestrian and bicycle facilities. Key areas for major improvements would include Union Square, the Mall, the Washington Monument, Constitution Gardens, Ash Woods, the Tidal Basin, and the Potomac Riverfront.

It is assumed that expenditures would occur over several years. While impacts on individual businesses who successfully bid on projects could be substantial, the contribution to regional construction earnings would be about 6% per year, assuming that projects were phased over 10 years at $60–$65 million per year and that total construction earnings in the D.C. area would be $900 million per year or more. Resulting impacts would be short-term, minor, and beneficial.

Cumulative Impacts

The impacts of past, present, and reasonably foreseeable actions would be long-term and beneficial because of more tourist attractions and commercial business opportunities that could encourage visitors to stay longer and spend more in the local and regional area since there would be more things to see and do. However, the intensity would only be minor due to the size of the local and regional economy. Actions under the preferred alternative would result in long-term, minor, beneficial impacts on the local and regional economy because of increased and improved facilities and services across the National Mall. These impacts, in combination with the impacts of past, present, and reasonably foreseeable actions, would result in long-term, minor, beneficial impacts on the local and regional economy. Construction-related impacts would be short-term, minor, and beneficial. The preferred alternative would make a slight beneficial contribution to these impacts.

Conclusion

The preferred alternative would result in long-term, minor, and beneficial impacts on the local and regional economy because of longer visitor stays due to better resource conditions and new and improved visitor services and facilities, increased and diversified commercial business opportunities that would meet visitor needs on the National Mall and in surrounding areas, and minor increases in construction-related expenditures. These impacts, in combination with the impacts of past, present, and reasonably foreseeable actions, would result in long-term, minor, beneficial cumulative impacts on the local and

regional economy, with a slight beneficial contribution from the preferred alternative.

IMPACTS OF ALTERNATIVE A

Direct and Indirect Impacts

Alternative A would focus on the historic designed landscape and increased visitor education to create a sense of place that would reinforce the civic, historic, and symbolic role of the National Mall to our nation.

Impacts of Increased Visitation

Under alternative A visitation would be projected to continue to increase at an average rate of 1.25% per year since there would be no significant introduction of facilities or programs. Fewer local groups might use the National Mall because of limits on the number of special events and temporary facilities to protect natural resources and views. However, this would not affect national celebrations such as Fourth of July, the National Cherry Blossom Festival, the Festival of American Folklife, or First Amendment demonstrations.

Impacts on the local and regional economy would be long-term, negligible, and beneficial because actions under alternative A would affect different user groups. Most visitors would enjoy enhanced experiences with improved landscape conditions and the protection of historic vistas on the National Mall, but the number of visitor groups who come to the National Mall due to events could decrease because visitor needs would not be fully met.

Impacts on Commercial Business Opportunities

Improving food service facilities and diversifying food choices at the Washington Monument, Constitution Gardens, and the Tidal Basin area would maintain existing commercial business opportunities on the National Mall rather than providing new services, nor would visitor requests for more diversified food service options be met since refreshment stands would remain the primary locations for food service. However, constructing new restrooms and renovating outdated restrooms and visitor facilities throughout the National Mall could encourage visitors to stay longer because of a more pleasant atmosphere.

Impacts under alternative A on commercial business opportunities on the National Mall would be long-term, negligible, and beneficial, because while outdated food service facilities would be replaced or renovated, most food service would be at refreshment stands.

As described for the preferred alternative, it is possible that paid parking could be managed through a commercial services contract, which would be a long-term, minor, beneficial impact on commercial business opportunities.

Impacts under alternative A on commercial business opportunities in adjacent destinations and surrounding areas would be long-term, negligible, and beneficial because visitors would likely continue to seek commercial opportunities in adjacent areas for more diversity.

Impacts on Construction Opportunities

Construction-related expenditures under alternative A would amount to about $94 million to $136 million more than under the no-action alternative. Including more than $400 million in deferred maintenance, as noted under “Impacts Common to All Alternatives,” total expenditures under this alternative would be about $500 million to $540 million. Projects to improve resource conditions and address deferred maintenance would comprise most of the costs. Other projects include building new restrooms and renovating outdated restrooms and visitor facilities throughout the National Mall.

It is assumed that expenditures would occur over several years. While impacts on individual businesses who successfully bid on projects could be substantial, the contribution to regional construction earnings would be about 5% per year, assuming that projects were phased over 10 years at $50–$54 million per year and that total construction earnings in the D.C. area would be $900 million per year or more. Resulting impacts would be short-term, minor, and beneficial.

Cumulative Impacts

The impacts of past, present, and reasonably foreseeable actions would be the same as those

discussed under the no-action alternative and would be long-term, minor, and beneficial. The impacts of alternative A on the local and regional economy would also be long-term, minor, and beneficial. Cumulative impacts would be long-term, minor, and beneficial. There would be a slight beneficial contribution to cumulative impacts under alternative A.

Conclusion

Actions under alternative A would result in long-term, minor, beneficial impacts on the local and regional economy compared to the no-action alternative. Visitor experiences would be enhanced due to improved conditions of the historic landscape and vistas, but visitation levels would likely increase only slightly. Commercial business opportunities on the National Mall would increase slightly with improved food service facilities. There would be a minor increase in construction-related expenditures. These impacts, in combination with the impacts of past, present, and reasonably foreseeable actions, would result in long-term, minor, beneficial cumulative impacts on the local and regional economy, with a slight beneficial contribution from this alternative.

Impacts of Alternative B

Direct and Indirect Impacts

Alternative B would focus on creating a welcoming national civic space for public gatherings, events, and high-use levels.

Impacts of Increased Visitation

Compared to the no-action alternative, alternative B would undertake actions to improve resource conditions, visitor facilities, and infrastructure throughout the National Mall, positively affecting local and nonlocal visitors. Improved information, services, and amenities would create safer and more comfortable conditions for all visitors. These actions could contribute to increased overall visitation levels.

Similar to the preferred alternative, multipurpose visitor facilities at Union Square, the Washington Monument, and Constitution Gardens would stimulate more visitation and also attract more local residents since a greater array of programs and events would be offered. Improved event facilities, logistics, and operations for special events and demonstrations throughout the National Mall would accommodate more people, which could result in increased visitation from the local and regional area.

Impacts of increased visitation on the local and regional economy under alternative B would be long-term and beneficial because improved resources conditions, facilities, services, and amenities would encourage more people to come and stay longer. However, the intensity of the economic impact would be minor because visitor expenditures related to recreation, entertainment, and food service amount to less than 3% of tourist-related earnings in the D.C. area.

Impacts on Commercial Business Opportunities

Under alternative B commercial business opportunities would be increased and diversified at several locations across the National Mall. Food service opportunities would be added or expanded at Union Square, the Washington Monument, Constitution Gardens, the Franklin Delano Roosevelt Memorial, the Thomas Jefferson Memorial, and the Tidal Basin area.

Providing more restrooms on the Mall, as well as flexible performance facilities or stages at Union Square, Washington Monument, and Constitution Gardens would increase commercial business opportunities. Commercial equipment rentals would be increased in the Tidal Basin area.

Impacts of alternative B on food service opportunities on the National Mall would be long-term, minor, and beneficial because there would be more diverse types of food facilities and food options. Impacts on recreational business opportunities on the National Mall would be long-term, minor, and beneficial.

As described for the preferred alternative, it is possible that paid parking could be managed through a commercial services contract, which would be a long-term, minor, beneficial impact on commercial business opportunities.

Commercial opportunities in adjacent destinations and surrounding areas in Washington, D.C., would improve under alternative B. However, this benefit would be somewhat offset by the increased availability of more food service facilities and food choices on the National Mall, which could serve more visitors compared to the no-action alternative. Impacts would be long-term, minor, and beneficial because overall demand would be increased due to greater visitation, but improved services on the National Mall (e.g., food services) would reduce the need for visitors to go to businesses in adjacent areas.

Under this alternative underground parking garages would be built if feasible. The cost of developing garages is very high; one general industry estimate is $30,000 to $50,000 per space (compared to $15,000 per space in an above-ground parking structure); costs depend on design efficiency, construction method, labor costs, and geographical area (Parking Design Group 2008). An underground garage on the National Mall would also have to take geotechnical and security factors into consideration, possibly increasing the cost. Operating costs average about $650 per space per year (Urban Parking Concepts 2009), which would be reflected in high visitor parking fees.

Impacts on Construction Opportunities

Construction-related expenditures under alternative B would amount to about $190 million to $280 million more than under the no-action alternative. Including more than $400 million in deferred maintenance, as noted under "Impacts Common to All Alternatives," total expenditures under this alternative would be about $600 million to $650 million. In addition to projects to improve resource conditions and address deferred maintenance, other projects would include underground parking garages and rebuilding Constitution Gardens Lake as a drainable pool for events, along with new restrooms and visitor facilities.

It is assumed that expenditures would occur over several years. While impacts on individual businesses who successfully bid on projects could be substantial, the contribution to regional construction earnings would be about 6% per year, assuming that projects were phased over 10 years at $60–$65 million per year and that total construction earnings in the D.C. area would be $900 million per year or more. Resulting impacts would be short-term, minor, and beneficial.

Cumulative Impacts

The impacts of past, present, and reasonably foreseeable actions would be the same as those described under the no-action alternative and would be long-term, minor, and beneficial. Actions under alternative B would also result in long-term, minor, beneficial impacts on the local and regional economy because of increased and improved facilities and services across the National Mall and in surrounding areas that would likely increase visitor use since there would be more things to see and do. Construction-related impacts on the local and regional economy would be short-term, minor, and beneficial. These impacts, in combination with the impacts of past, present, and reasonably foreseeable actions, would result in long-term, beneficial cumulative impacts that would be minor in intensity because related expenditures and earnings would represent a very small percentage of the local and regional economy. Alternative B would make a slight beneficial contribution to these impacts.

Conclusion

Impacts on the local and regional economy under alternative B would be long-term, minor, and beneficial because of longer visitor stays due to better resource conditions and improved services and facilities, increased and diversified commercial business opportunities that would meet visitor needs, and minor increases in construction-related expenses. Parking costs for underground garages (if determined feasible) would result in long-term, minor, adverse impacts on visitor costs. These impacts, in combination with the impacts of past, present, and reasonably foreseeable actions, would result in long-term, minor, beneficial cumulative impacts on the local and regional economy, with a slight beneficial contribution from alternative B.

IMPACTS OF ALTERNATIVE C

Direct and Indirect Impacts

Alternative C would focus on urban open space, urban ecology, recreation, and healthy lifestyles.

Impacts of Increased Visitation

Compared to the no-action alternative, alternative C would offer more diverse recreational opportunities and activities to meet evolving recreational needs by redesigning or expanding areas, improving field conditions, and providing more recreation equipment rentals (watercraft and bicycles). These improvements would increase visitor use on the National Mall throughout the year, especially among local residents, but would not necessarily increase overall visitation levels, especially from outside the region.

Impacts of increased visitation on the local and regional economy under alternative C would be long-term and beneficial because improved resources conditions, facilities, services, and amenities would encourage more people to come and stay longer. However, the intensity of the economic impact would be negligible because visitor expenditures related to recreation, entertainment, and food service amount to less than 3% of tourist-related earnings in the D.C. area.

Impacts on Commercial Business Opportunities

Commercial business opportunities on the National Mall under alternative C, similar to alternative B, would be increased at many places. For example, food service opportunities would increase at Union Square, the Washington Monument, Constitution Gardens, the Franklin Delano Roosevelt Memorial, the Thomas Jefferson Memorial, and the Tidal Basin area.

In addition, commercial business opportunities for recreational services would increase at several locations, such as ice skate rentals at Union Square, model boat and lawn chair rentals at Constitution Gardens, and rental boats such as kayaks and rowboats at the Tidal Basin, in addition to paddleboats.

Like alternative B, impacts of alternative C on commercial business opportunities on the National Mall would be long-term, minor, and beneficial because of more diverse types of food facilities and food options, as well as year-round recreation equipment rentals.

As described for the preferred alternative, it is possible that paid parking could be managed through a commercial services contract, which would be a long-term, minor, beneficial impact on commercial business opportunities.

More recreational activities and opportunities on the National Mall would increase commercial business opportunities in adjacent destinations and surrounding areas in Washington, D.C. Impacts would be long-term, minor, and beneficial because of increased overall demand due to greater visitor use of the National Mall, but improved services (e.g., food services) on the National Mall would reduce the need for visitors to use commercial businesses in adjacent areas.

Impacts on Construction Opportunities

Construction-related expenditures under alternative C would amount to $255 million to $300 million more than under the no-action alternative. Including more than $400 million in deferred maintenance, as noted under "Impacts Common to All Alternatives," total expenditures under this alternative would be $655 million to $705 million. In addition to projects to improve resource conditions and address deferred maintenance, other projects would include filling in the north bay of the Tidal Basin for additional recreation space, developing separate bike routes and lanes, changing roads, constructing a vehicular tunnel, and adding playgrounds.

It is assumed that expenditures would occur over several years. While impacts on individual businesses who successfully bid on projects could be substantial, the contribution to regional construction earnings would be about 7% per year, assuming that projects were phased over 10 years at $65.5 million per year and that total construction earnings in the D.C. area would be $900 million per year or more. Resulting impacts would be short-term, minor, and beneficial.

Cumulative Impacts

The impacts of past, present, and reasonably foreseeable actions would be the same as those described under the no-alternative and would be long-term, minor, and beneficial. Actions under alternative C would also result in long-term, minor, beneficial impacts on the local and regional economy because of increased and improved facilities and services across the National Mall and in surrounding areas that would likely increase visitor use since there would be more things to see and do. Construction-related impacts on the local and regional economy would be short-term, minor, and beneficial. These impacts, in combination with the impacts of past, present, and reasonably foreseeable actions, would result in long-term, beneficial cumulative impacts that would be minor in intensity because related expenditures and earnings would represent a very small percentage of the local and regional economy. Alternative C would make a slight beneficial contribution to these impacts.

Conclusion

Impacts on the local and regional economy under alternative C would be long-term, minor, and beneficial because of longer visitor stays due to better resource conditions, improved services and facilities, and more year-round recreational opportunities; diversified commercial business opportunities that would meet visitor needs; and minor increases in construction-related expenses. These impacts, in combination with the impacts of past, present, and reasonably foreseeable actions, would result in long-term, minor, beneficial cumulative impacts on the local and regional economy, with a slight beneficial contribution from alternative C.

PARK OPERATIONS

METHODOLOGY FOR IMPACT ANALYSIS

The impacts of the alternatives on park operations are evaluated for their potential to affect the following park operational issues:

- *Impacts on park operations* — The beneficial or adverse impacts on park operations due to implementing quality standards, using best practices to make operations and maintenance more efficient, addressing deferred maintenance, maintaining assets and infrastructure, ensuring safe and efficient operations, and changing staffing focus are discussed.
- *Impacts on sustainability* — This analysis focuses on the degree to which the alternatives would either beneficially or adversely affect sustainability goals for facility design, recycling, water use, parking, and renewable energy.

Impact Intensity Levels

The following thresholds were established for impacts on park operations:

- *Negligible* — The impact on the ability to achieve most park standards, the efficiency of park operations, or sustainability would not be detectable or would be barely detectable.
- *Minor* — The impact on the ability to achieve most park standards, efficiency of park operations, or sustainability would be detectable or would affect less than 10 acres.
- *Moderate* — The impact on the ability to achieve most park standards, efficiency of park operations, or sustainability would be readily apparent or would affect less than 100 acres.
- *Major* — The impact on the ability to achieve most park standards, efficiency of park operations, or sustainability would be obvious to all users or would affect more than 100 acres, and would be severely adverse or exceptionally beneficial.

Type of Impact

Impacts could be either beneficial or adverse. A beneficial impact would be consistent with federal regulations and NPS policies, would incorporate acceptable best practices, or would improve the results and efficiency of park activities such as maintenance. An adverse impact would be inconsistent with federal regulations or NPS policies; would not improve sustainability, maintenance, communications, equipment, or technology; or would fail to incorporate relevant improvements from best practices.

Duration of Impacts

Impacts could be temporary, short-term, or long-term.

- *Temporary* — The impact would usually last for a few hours or up to two days, such as a road closure for a day or less or limited access to an area during a demonstration or maintenance operations.
- *Short-term* — The impact would generally last up to one year or the life of a construction project.
- *Long-term* — The impact would last longer than one year or for the life of the plan (up to 50 years).

Legislations, Regulations, and Policies

The Energy Policy Act of 1992 updated energy efficiency ratings, standards, codes and labels; established voluntary guidelines; provided technical assistance; and set energy conservation requirements for federal agencies.

The Energy Independence and Security Act of 2007 amended section 543 of the National Energy Conservation Policy Act by adding a new subsection to address “Use of Energy and Water Efficiency Measures in Federal Buildings” (42 USC 8253(f)).

The following executive orders and regulations apply:

- Executive Order 13101, "Greening the Government through Waste Prevention, Recycling, and Federal Acquisition" (September 14, 1998)
- Executive Order 13123, "Greening the Government through Efficient Energy Management" (June 3, 1999). The order addresses the importance of federal leadership and associated savings. It established various goals, such as reducing greenhouse gases by 30% by 2010 compared to such emissions levels in 1990; improving energy efficiency by 35% by 2010 relative to 1985; expanding renewable energy; reducing use of petroleum; and increasing water conservation.
- Executive Order 13149, "Greening the Government through Federal Fleet and Transportation Efficiency."
- "Facility Energy Management Guidelines and Criteria for Energy and Water Evaluations in Covered Facilities" specifies approaches for implementing the energy and water provisions of the Energy Independence and Security Act (U.S. Department of Energy 2008).
- Executive Order 13327, "Federal Real Property Asset Management" (February 4, 2004) establishes as policy of the United States the promotion of the efficient and economical use of America's real property assets and to assure management accountability for implementing federal real property management reforms. Based on this policy, executive branch departments and agencies are to recognize the importance of real property resources through increased management attention, the establishment of clear goals and objectives, improved policies and levels of accountability, and other appropriate action.
- Executive Order 13423, "Strengthening Federal Environmental, Energy, and Transportation Management" (January 24, 2007), requires federal agencies to "conduct their environmental, transportation, and energy-related activities under the law in support of their respective missions in an environmentally, economically, and fiscally sound, integrated, continuously improving, efficient, and sustainable manner." It includes requirements for the reduction of greenhouse gases and implementation of other energy and water conservation measures. The order requires agencies to reduce greenhouse gas emissions by 3% annually through the end of fiscal year 2015, or 30% by the end of fiscal year 2015, relative to the baseline of the agency's energy use in fiscal year 2003.
- Executive Order 13514, "Federal Leadership in Environmental, Energy, and Economic Performance" (October 5, 2009) requires federal agencies to increase energy efficiency; measure, report, and reduce their greenhouse gas emissions from direct and indirect activities; conserve and protect water resources through efficiency, reuse, and stormwater management; eliminate waste, recycle, and prevent pollution; leverage agency acquisitions to foster markets for sustainable technologies and environmentally preferable materials, products, and services; design, construct, maintain, and operate high-performance, sustainable buildings in sustainable locations; strengthen the vitality and livability of the communities in which federal facilities are located; and inform federal employees about and involve them in the achievement of these goals. Agencies are to prioritize actions based on a full accounting of economic and social benefits and costs and to annually evaluate performance, extending or expanding projects that have net benefits, and reassessing or discontinuing under-performing projects. Potable water consumption should be reduced by 2% annually and by 26% by 2020.

NPS Management Policies 2006

General Maintenance

The NPS *Management Policies 2006* require providing "a safe, sanitary, environmentally protective and esthetically pleasing environment for visitors and employees, protecting the physical integrity of facilities, and preserving and maintaining facilities in their optimum sustainable condition to the greatest extent possible"

(sec. 9.1.4). Preventive and rehabilitative maintenance programs will incorporate sustainable design elements, and practices.

Maintenance facilities are to be consistent in design, scale, texture, and details with other park facilities. Whenever feasible concession and park facilities should be integrated or provided adjacent to each other to reduce impacts (NPS 2006e, sec. 9.4.4).

Utilities

The National Park Service will use municipal systems, share in providing such systems, provide the least obtrusive systems, and use the least polluting power supply options (NPS 2006e, sec. 9.1.5).

Waste Management

Integrated solid and hazardous waste management practices will be implemented to reduce waste. Reuse and recycling will be maximized (NPS 2006e, sec. 9.1.6.1).

Soil Resource Management

Park managers will actively seek to understand and preserve the soil resources of parks, and to prevent, to the extent possible, the unnatural erosion, physical removal, or contamination of the soil or its contamination of other resources. Management action will be taken to prevent or at least minimize adverse, potentially irreversible impacts on soils. Soil conservation and soil amendment practices may be implemented to reduce impacts.

When use of a soil fertilizer or other soil amendment is an unavoidable part of maintaining an altered plant community, the use will be guided by a written prescription. The prescription will be designed to ensure that use of a soil fertilizer or soil amendment does not unacceptably alter the physical, chemical, or biological characteristics of the soil, biological community, or surface or groundwaters (NPS 2006e, sec. 4.8.2.4).

Sustainable Energy Design

Any facility development, whether it is a new building, a renovation, or an adaptive reuse of an existing facility, must include improvements in energy efficiency and reduction in greenhouse gas emissions for both the building envelope and the mechanical systems that support the facility (NPS 2006e, sec. 9.1.1.6).

In carrying out its maintenance responsibilities, the National Park Service will acquire environmentally preferable and energy-efficient products. A variety of attributes will be considered when purchasing products, including cost, energy efficiency, biodegradability, toxicity, recovered material content, packaging, transport cost, and other life-cycle environmental impacts, such as disposal. The National Park Service will actively pursue opportunities to test and demonstrate environmentally preferable and energy-efficient products, consistent with its goal of demonstrating sustainable practices that avoid or minimize environmental impacts (NPS 2006e, sec. 9.1.4.2).

The National Park Service will conduct its activities in ways that use energy wisely and economically (NPS 2006e, sec. 9.1.7). Major visitor service facilities must incorporate a minimum rating of silver in the LEED system (NPS 2006e, sec. 9.1.1.6).

Parking Areas

Parking should not unacceptably intrude by sight, sound, or other impact on park resources. When parking areas are necessary, they will be limited to the smallest size necessary (NPS 2006e, sec. 9.2.4). The National Park Service must find transportation solutions to provide high-quality experiences other than the traditional solutions to build more parking (NPS 2006e, sec. 9.2).

National Mall Goals for Sustainability

The National Park Service's goal for the National Mall is to be a role model in sustainable urban park development, resource protection, and management, with a focus on six areas — requirements and policy, resource health, water use, circulation, facilities, and park operations.

1. ***Requirements and Policy*** — Satisfy Executive Order 13514 ("Federal Leadership in Environmental, Energy, and Economic Performance"); satisfy NPS policy and program goals such as Climate Friendly Parks and meet minimum LEED silver standards.

Achieve NPS goals to reduce energy use, reduce greenhouse gases, maximize energy efficiency, and improve building envelopes, mechanical systems, and glazing.

2. ***Resource Health*** — Implement the Sustainable Sites Initiative™; restore soils and reverse soil compaction; improve tree health and growing conditions; continue tree planting and replacement; reduce impacts from high use levels on natural resources; protect special status trees (elm, cherry, and witness trees); preserve or restore plant biomass; and improve ecosystem health.
3. ***Water Use*** — Conserve water; reduce the use of potable water in compliance with Executive Order 13514; reduce the use of potable water in large designed water bodies; use nonpotable water sources when feasible; capture, store, and reuse storm and gray water for irrigation; filter and reuse water; complete the Potomac Park levee; use a vegetated shoreline along the Potomac River where feasible; and rely more on natural methods to improve water quality.
4. ***Circulation*** — Facilitate pedestrian activities; use clean alternative fuel sources in visitor transportation; maximize use of public transportation; facilitate multimodal coordination; separate bicycle routes and offer rentals; use sustainable approaches to walkway surfacing to facilitate water reuse or increase percolation.
5. ***Facilities*** — Strive to achieve the highest LEED standards possible for new facilities (the minimum LEED standard for NPS facilities is silver). Facilities should provide information about sustainable technologies and approaches.
6. ***Park Operations*** — Reduce energy consumption and seek renewable energy sources; maximize energy efficiency and convert inefficient approaches (e.g., using LED lighting instead of incandescent bulbs); increase recycling, reduce amount of solid waste, and increase use of biodegradable products. Additionally, the National Park Service has incorporated a staff bike-sharing program and uses alternative fuel vehicles as part of its fleet.

IMPACTS COMMON TO ALL ALTERNATIVES

Direct and Indirect Impacts

Impacts on Park Operations

Written Standards

NPS staff are developing new comprehensive standards and monitoring procedures for the National Mall and Memorial Parks. These procedures are based on grounds maintenance standards used by other organizations, but they have been customized for the particular challenges presented in Washington, D.C. This is consistent with NPS *Management Policies 2006,* as well as best practices. The previous NPS landscape maintenance standards were out of date and did not comprehensively address facilities, the landscape, or other areas where standards could be useful. The goal is to develop standards to achieve the desired visitor experience.

Written standards under all alternatives would provide a common understanding about the expected quality and desired level of care for areas within the National Mall. The standards cover grounds maintenance; maintenance of memorials, buildings, and visitor facilities; solid waste management and recycling; special events and other temporary uses; orientation, information, education, and interpretation; and customer service. Standards would also address appropriate levels of care for high maintenance vegetation, such as cherry trees that generate many offshoots and that require repeated pruning. Pilot projects are being used to ensure that the standards are clear, understandable, and achievable. Staff would also be assigned to certain geographic areas so they become knowledgeable about the area and take pride in its upkeep.

Developing written standards would affect most park operations and would support the achievement of desired standards and quality to enhance the visitor experience and protect park resources. Written standards would also unite park divisions for maintenance, resource management, park programs, partnerships, and education and interpretation. The impacts of uniform, commonly understood standards and criteria would result in long-term, moderate to

major, beneficial impacts in terms of achieving desired park conditions.

Visual Quality Team

The high profile location of the National Mall results in continuous unscheduled demands on staff to quickly improve areas. Demands continue to pull staff from regularly scheduled work, thwarting the ability to achieve desired standards that would enhance park conditions and benefit all visitors. Over the last year the park has instituted a visual quality team to identify problems and concerns. This best practice of monitoring and taking immediate action has resulted in repairs, repainting, and extensive resodding of areas. Most of these actions are readily apparent efforts to remedy impacts from high use levels; however they could be reversible, so the impact of the visual quality team and a quick response team on the ability to meet park standards and quality would be short-term, moderate, and beneficial.

Staffing

Increased staffing would be necessary under any alternative to achieve desired conditions. An increase in the operating budget would be sought to support staffing aligned with core operations and necessary to achieve desired conditions and industry standards. As a result of core operations planning that is being done throughout the National Park Service, staffing levels are to be aligned with essential operations. Current staffing levels are not commensurate with those needed to achieve desired conditions or standards, according to various best practices. The small staff in the programs office is unable to fully oversee special events to ensure that they meet permit conditions, resulting in overworked staff and many adverse resource impacts. Nor are staff able to track successful events and practices in order to pass that information on to other event organizers. In addition, all park staffing is near historic lows, which has affected park standards and quality as well as the efficiency of park operations.

To bring maintenance activities in line with peak hours of visitation, park staff have begun implementing multiple custodial and trash collection shifts, so staff are now on site from 6 a.m. to 10 p.m. The continued impact of this change would be long-term, moderate, and beneficial. Core operational staffing emphasis, which could vary by alternative, is conceptually analyzed.

Temporary Fencing

Over the last year the park has begun using a different type of fencing, in lieu of snow fencing, to create secured areas, to guide use along pathways, or to protect areas during rehabilitation. Park staff will continue to explore alternative fencing types that better meet quality expectations and are easy to install, maintain, and store. The continued impact of new fencing on a quality environment would be long-term, moderate to major, and beneficial while the impact on the efficiency of park operations would be long-term, major, and adverse or beneficial depending on the type of fencing since park staff would still be installing miles of temporary fencing for certain special events.

Solid Waste and Recycling

The National Park Service would continue to work with the Environmental Protection Agency and others for ongoing pilot projects and expanded recycling programs at special events. Since food packaging is a significant portion of waste (40%), the National Park Service would also continue working with concessioners to reduce excessive packaging. Developing a solid waste and recycling plan that would incorporate best practices for collection, retrieval, storage, and hauling would help expand recycling efforts, reduce waste hauled to landfills, allow green waste to be composted, and reuse materials as much as possible.

These changes would make park sanitation and waste management operations much more efficient, reduce injuries, improve park conditions, and establish a sustainable system. The impact on overall park operations would be long-term, major, and beneficial.

Construction

Normal park operations would be disrupted during any construction associated with implementing the selected alternative in this plan, or projects common to all alternatives. The impacts of construction on park operations would be short-term, minor to moderate, and adverse.

Impacts on Sustainability

Energy Use

The National Park Service has established targets to reduce energy and requires national park system units to show environmental leadership and maintain high standards for sustainable design, energy efficiency, and reduction of greenhouse gases. To reach these target goals, the park has submitted projects to replace HVAC systems and will continue to replace light bulbs or water feature pump systems with more efficient components or new technologies. New, upgraded, or replacement facilities would result in increased energy use, but would meet goals to reduce energy use or to use renewable resources. The National Park Service is participating in the EPA Climate Friendly Parks Program,* as well as serving as a pilot project for the Department of Energy's Audit Guideline, using sustainability indicators to reduce solid waste, water use, energy consumption, carbon footprint, greenhouse gases, and air pollutants. The goal is to use renewable energy sources and recycling practices, as well as to improve the long-term sustainability of resources. Keeping the Washington Monument open longer hours would be a long-term, negligible, adverse impact. Altogether these actions over time would increase energy efficiency and sustainability despite increased energy use, resulting in long-term, moderate, beneficial impacts.

Water Use

Aging water conveyance systems would be replaced through component renewal projects. While additional irrigation systems are proposed, the National Park Service would continually seek nonpotable water sources for irrigation as much as possible, use graywater or stormwater runoff where and when feasible, and reduce water loss through better or subsurface irrigation. Despite more irrigation, the volume of potable water would be reduced, and improved soil percolation would reduce stormwater runoff, resulting in long-term. moderate to major, beneficial impacts on water use.

Conclusion

Impacts common to all alternatives would be short- and long-term, moderate to major, and beneficial as a result of written standards and criteria, a visual quality team to identify high-profile problems and concerns that would be addressed promptly by a quick response team, staffing levels aligned with essential operations, less intrusive temporary fencing, a solid waste and recycling plan, and increased use of renewable energy sources and recycling practices. Construction-related impacts on the National Mall would generally be short-term, minor to moderate, and adverse.

IMPACTS OF THE NO-ACTION ALTERNATIVE

Direct and Indirect Impacts

Under the no-action alternative the numerous park operational challenges at the National Mall and inefficiencies that affect sustainability and the ability to achieve desired park conditions would continue.

Impacts on Park Operations

Deferred Maintenance

The National Park Service has asked all park units to identify ongoing regular and major maintenance and repairs that have not been done for lack of financial resources. On the National Mall this deferred maintenance backlog totals more than $400 million, including preservation and repair work on aging facilities from seawalls to irrigation systems and walks. The Tidal Basin seawalls are over 100 year old and require significant repairs, with the most severe conditions near the Thomas Jefferson Memorial and west to just south of the Franklin Delano Roosevelt Memorial. The maintenance backlog has also contributed substantially to the inability to meet desired standards and quality for park assets and resources. As described in "The Affected Environment" (see page 363), the

* In 2003 the National Park Service and the Environmental Protection Agency created a new program called Climate Friendly Parks. Through this program the two partner agencies are finding ways to reduce emissions from park activities. They are also educating the public about potential impacts in the parks and what the agencies are doing to address them.

National Mall's deferred maintenance would continue to be disproportionate to the number of assets, and the funding gap between the NAMA budget and industry benchmarks, currently estimated at $11.8 million per year, would be expected to continue, meaning that the park would fall further behind. Impacts would continue to be long-term, major, and adverse.

Assets, Infrastructure, and Amenities

As described under the "Affected Environment," the National Mall was not designed for the level of use it receives today; as a result, the park is being adversely affected. The following conditions would continue under the no-action alternative:

- Because walks are too narrow for maintenance vehicles, as well as pedestrians, impacts would continue, such as posts along walkways being pushed out of plumb by maintenance vehicles, and damaged curbs and landscape impacts because maintenance and delivery vehicles need to drive over curbs in several locations to get access.
- The damaged irrigation system on the Mall as a result of tent stakes driven into the ground to anchor tents would continue to make turf maintenance and renovation difficult.
- Vandalism and misuse of stand-alone drinking fountains would likely continue, and restrooms in some locations have also been vandalized, with broken doors and locks.
- Adverse impacts from water features (e.g., Constitution Gardens Lake and the Capitol Reflecting Pool) would continue, including the lack of water recirculation systems in shallow reflecting pools or lakes, resulting in algae and odors that require extensive resource work and additional cleaning. Changes in the chemical makeup of city water have increased algae growth. Despite scheduled twice yearly cleaning, these water features fail to meet desired standards. Additionally, these water features have extensive leaks that result in much greater use of the city's potable water resources.
- Lack of adequate staff would mean that maintenance tasks, such as ongoing pruning of cherry trees that generate many offshoots, scouting and treating for Dutch elm disease, and pruning for the health and safety of American elms, would not be performed as often as desired for optimal conditions.
- A great variety of uncoordinated site furnishings, such as benches, light fixtures, and trash containers, would continue to detract from an overall identity for the National Mall. These various elements would also continue to compound maintenance operations, making it extremely difficult to achieve a uniform quality and standard.

The overall impact on park conditions because of present asset conditions, inadequate amenities, and uncoordinated components would continue to be long-term, major, and adverse.

Soil Conditions

As described under "Natural Resources," compacted soil conditions in some areas, along with poor quality topsoils and subsoils that were brought into some areas, continue to limit vigorous and normal vegetation growth, adversely affecting both turf and trees. Poor conditions increase park maintenance demands on the Mall, the Washington Monument grounds, and Constitution Gardens. Because the underlying problems are not being addressed, the additional labor to try to achieve acceptable conditions is only providing temporary to short-term improvements. Until soil quality and conditions were improved by restoring and improving soils, impacts on park operations would continue to be long-term, major, and adverse.

Permitted Activities

National celebrations, special events, and demonstrations would continue to affect park operational priorities, limit access, or require overtime that affects staffing schedules. The lack of venues designed to withstand the impacts of intensive levels of use would mean that national celebrations, inaugurations, and some special events would continue to require substantial amounts of staff time in many divisions for planning and management, diverting time from

other activities directed at maintaining park conditions. Cost recovery for special events would continue to cover costs of restoring or rehabilitating areas. The National Park Service would continue to absorb periodic restoration costs following First Amendment demonstrations. The continued impact of permitted activities would be long-term, major, and adverse.

Staffing

Park staff levels have been reduced over time and are now near low levels. Contracted services for specialized maintenance, such as HVAC, elevator service, and security systems, are used to make up the shortfall, but a number of gaps remain. For example, in the Division of Facility Management there are fewer people doing painting, plumbing, grounds maintenance, large mower operations, and trash removal. The park programs office is very small for the volume of permitted activities and is not able to monitor all events. Contracting was largely provided through the regional office. This affects park operations and the ability to achieve desired conditions. This situation would continue under existing conditions.

Based on the "Park Asset Management Plan" (see Table 41, page 363) and comparisons with industry benchmarks, the category of maintained landscapes is funded at only 38% of need. Waterfronts, roads, and buildings are also insufficiently funded (22%–41%). Additionally, the park has 28% of the staff needed to achieve the highest quality turf conditions. The park programs office is understaffed for current permitting, monitoring, tracking, and recording activities. Present staffing levels for education and interpretation mean that park educational, informational, and welcome standards are not being met. Because of the volume of visitation, many visitors may not see a ranger or know about educational opportunities. While the intent of core operations planning is to align staff needs with essential tasks related to the park purpose, the present inadequate staffing levels would continue to have long-term, major, adverse impacts on the ability to achieve park standards.

Management Processes

The permit process for demonstrations and special events would continue to be labor intensive, making the issuing, recording, and monitoring or tracking of permits cumbersome. The coordination of permitted activities among park divisions (facility management, resource protection, and other park operations) would not be easily achieved. Insufficient staffing would continue to exacerbate these problems. Efficiencies for solid waste management and recycling might not be fully realized, adversely affecting operations. Inefficient processes would continue to result in long-term, major, adverse impacts because these actions affect most park staff, as well as park conditions that are seen by all visitors.

Maintainability

Narrow walks and a lack of street access would continue to hamper the efficient movement of maintenance and delivery vehicles, resulting in longer times to perform regular maintenance activities or other park operations. Trash receptacles would continue to be located in dispersed areas that would hamper efficient operations, and the manual emptying of heavy trash containers would continue to be time consuming and a health and safety concern for staff. Facilities that are not designed for easy maintenance would continue to make routine maintenance tasks take longer. For example, floor-mounted toilets are harder to clean around; paper towel dispensers generate a large amount of waste; and benches, trash containers, and wayside signs installed on unpaved surfaces require more work to maintain the surrounding area. Gravel walks require continual work, gravel that has migrated onto paved walks and into grates requires constant removal, and gravel in turf areas increases the potential for equipment to be damaged or people injured. The continued impacts on operational efficiency and safety would be long-term, moderate, and adverse.

The wide variety of nonstandardized systems or components related to display fountains (pumps, surface and underwater lights), light fixtures, and site furniture would continue to be inefficient since a large number of parts must be stockpiled and stored, along with multiple maintenance manuals. The impacts on operational

efficiency would remain long-term, minor to moderate, and adverse.

Historic or custom components and site furnishings, such as light fixtures or the NPS standard Washington bench, may make repair or finding replacement parts difficult. For example, the NPS bench has not been updated to meet accessibility standards. The National Park Service has the molds for some furnishings. In other cases, glass globes on light fixtures have been replaced with more durable plastic globes. The difficulties in maintaining historic or custom features on the efficiency of park operations would continue to be long-term, minor to moderate, and adverse.

Best Practices

Efficiencies as a result of best practices that are being used at other sites cannot easily be incorporated into maintenance practices at the National Mall without extensive infrastructure changes. For example, there is no comprehensive and secure communications infrastructure (including high-speed communications) throughout the National Mall, so less efficient communication methods (multiple phone systems, radio) are used for park staff and for law enforcement. This would continue to be a long-term, moderate to major, adverse impact on park operations.

Lighting outages and restroom usage are not electronically monitored, which could identify maintenance needs or support efficient scheduling. Trash containers are not designed to be mechanically emptied by sanitation trucks, so heavy trash bags are lifted by hand, a time-consuming, inefficient process that has the potential to result in staff injuries. Impacts would continue to be long-term, major, and adverse.

While recycling occurs during special events, there are no systems to collect, retrieve, store, and haul recyclable materials on a daily basis. The impacts would continue to be long-term, minor to moderate, and adverse.

Summary

The overall impact of the no-action alternative as a result of the maintenance backlog, current infrastructure and amenities, poor quality soils, and insufficient staffing would be long-term, moderate to major, and adverse due to outdated processes, designs that make maintenance difficult, a great variety of nonstandardized parts, difficulties in maintaining historic or custom components, and lack of applying common best practices that could improve efficiency or safety.

Impacts on Sustainability

Under the no-action alternative a limited number of sustainable practices, as described below, would be used on the National Mall.

Water Use

Millions of gallons of potable water would continue to be used to fill the reflecting pools at the Lincoln Memorial and Union Square as well as Constitution Gardens Lake. These pools are drained and refilled twice annually, diverting treated water from public uses. The continuing impact on water use would be long-term, moderate to major, and adverse.

Stormwater onsite is channeled into the municipal drainage system, rather than being filtered and reused in water features on the National Mall. This would continue to be a long-term, minor to moderate, adverse impact on sustainable water use.

Energy

Except for geothermal systems that are being used in two refreshment stands constructed in 2007 and 2008 for heating, air conditioning, refrigeration, and ice making, no other systems onsite are taking advantage of renewable energy sources. Major power uses include lighting and ornamental fountains. The continuing impact of using public energy sources would generally be long-term, moderate to major, and adverse.

Summary

The overall impact of the no-action alternative on sustainability would continue to be long-term, moderate, and adverse because of unsustainable use of potable water and the lack of sustainable stormwater holding onsite or graywater reuse, as well as minimal use of renewable energy sources.

Cumulative Impacts

Past Actions

Past projects that have affected and continue to affect the National Mall include the 1790s road systems, which have been updated and modified over time, but still affect public access and circulation within the National Mall, as well as operations. Roads, stormwater systems, sanitary sewers, and utilities and power systems developed in the late 1800s are becoming increasingly outdated, with long-term, moderate, adverse impacts on park operations.

The National Mall, with its high-profile location, places unique demands on park operational staff. A total of 126 assets on the National Mall must be maintained, including individual component parts. In addition to the National Mall, NAMA staff also manage many other areas and are responsible for over 300 park assets. While overall maintenance needs have increased, staffing levels have fluctuated and are near the lowest levels in a decade. Four memorials (the Korean War Veterans, Franklin Delano Roosevelt, George Memorial, and World War II memorials) have been constructed since the 1990s, and the landscape nature of some of these memorials requires different types of care than memorials that are primarily structures (such as the Washington Monument). Water features (at the George Mason, Franklin Delano Roosevelt, Korean War Veterans, and World War II memorials; the Capitol Reflecting Pool, Constitution Gardens Lake, German-American Friendship Garden, Lincoln Reflecting Pool, and John Paul Jones) require a great deal of seasonal work to maintain, and problems are compounded by both water quality and various operating systems. Small-scale commemorative features, such as the Japanese lantern, the John Paul Jones and John Ericcson memorials, signs, wayside exhibits, and plaques also increase workloads. Some memorials or areas are difficult to care for and were not designed for maintainability. For example, marble steps are more porous than granite and easily stain; gravel walks require high levels of maintenance; custom stone trash containers are difficult for staff to empty at the Franklin Delano Roosevelt Memorial; and incised and inpainted lettering on pavement is difficult to keep readable at the Lincoln Memorial and Constitution Gardens. The cumulative impact of additional maintenance on park operations is long-term, major, and adverse.

Present Actions

The National Park Service is working with the U.S. Army Corps of Engineers to develop a permanent solution for the Potomac Park levee. The impacts of an improved flood control system for the downtown area, as well as the National Park Service, would be long-term, moderate, and beneficial because of a more sustainable solution, improved efficiency of park operations, and reduced park labor needs during storm events.

Park staff have been replacing bulbs in light fixtures throughout the park with more energy-efficient bulbs, a long-term, major, beneficial impact on efficient operations and sustainable energy use. The 2009 American Recovery and Reinvestment Act includes funding for redesigning the Lincoln Reflecting Pool to use less water and to improve its quality by using recirculating pumps. The use of geothermal systems in two NPS refreshment stands near the Lincoln Memorial for heating, air conditioning, refrigeration, and ice making has demonstrated that it is possible to use alternative systems to reduce the use of more traditional energy sources. These present actions have long-term, moderate to major, beneficial impacts on park operations.

As a result of the American Recovery and Revitalization Act, the condition of park three important park assets would be improved — the Lincoln Reflecting Pool area, the Thomas Jefferson Memorial plaza, and the DC War Memorial. A non-potable and more sustainable water source for the Lincoln Reflecting Pool will reduce the use of potable water by more than half since the Lincoln Reflecting Pool is the largest single use of potable water. While additional pumping systems will be required, more efficient systems and energy sources will be sought and water recirculated, resulting in improved ease of maintenance. Resulting impacts to the park infrastructure and assets would be long-term, major, and beneficial, but deferred maintenance needs would be reduced by less than 20%.

Reasonably Foreseeable Actions

Plans are being developed for an underground Vietnam Veterans Memorial Center and the Martin Luther King, Jr. Memorial. These facilities will be managed by the National Park Service, resulting in additional staffing needs for maintenance, along with education and information. Future memorials for Dwight D. Eisenhower and American Veterans Disabled for Life will be future park responsibilities. The requirement for a maintenance fund will help keep these facilities to the desired standard, and the high quality of recent memorials has made them easier to maintain, so the long-term impacts are expected to be moderate and beneficial related to park operations and minor and adverse related to staffing needs.

It can be expected that over time the aging infrastructure (power, street lighting, water, sanitary and storm sewers) will be replaced. New systems can be expected to be more energy efficient and to incorporate renewable sources of energy and sustainable water management practices. The long-term impact on park operational efficiency and sustainability on the National Mall would be major and beneficial.

Normal park operations would be disrupted during any construction of previously approved projects (Martin Luther King, Jr. Memorial, Vietnam Veterans Memorial Center, the National Museum of African American History and Culture), in addition to the Thomas Jefferson perimeter security, Potomac Park levee, ongoing road projects, and future memorials outside the Reserve. The impacts of construction on park operations would be temporary to long-term, minor to moderate, and adverse.

The NCPC *Monumental Core Framework Plan's* recommendations for East Potomac Park includes the construction of a new events and recreation area south of the Thomas Jefferson Memorial, which would be undertaken in conjunction with consolidating and relocating bridges and Metro tunnels. The National Park Service would continue to manage and maintain this area. This action would require that the NPS regional office, maintenance yard, NAMA headquarters, and visitor transit facilities would need to be relocated or rebuilt. While this area is off the National Mall, it would have a major impact on NPS park and region operations, as well as operations of a park concessioner. The impacts of any construction or relocation would be short- to long-term, major, and adverse to park, region, and concession operations. However, the long-term impact could be beneficial because new facilities would be designed for sustainability and ease of maintenance.

Cumulative Impacts Conclusion

Park operations on the National Mall must provide excellent care for the large number of memorials on the National Mall. This challenge has been intensified by the addition of four more memorials since the 1990s, an aging infrastructure, hard-to-maintain facilities, reduced staffing levels, and unsustainable practices. This has led to a growing backlog of deferred maintenance, and recently funded projects would accomplish less than 20% of the deferred maintenance need. This current state of affairs is compounded by the National Mall's high visibility location in the center of Washington, D.C., which results in a great many demands to address issues and which continuously interrupt routine work schedules. The large number of demonstrations and special events also affects park operations and staffing. The overall impacts on park operations have been long-term, major, and adverse.

The impacts of present and reasonably foreseeable actions would help mitigate adverse impacts and enable park staff to improve operational efficiency and safety, and to achieve goals for sustainable operations. Some current projects, most notably the refreshment stands near the Lincoln Memorial, meet high standards for sustainability, and the future flood control solution with the Potomac Park levee would benefit the downtown area by providing greater flood protection. Future projects such as the Martin Luther King, Jr. Memorial, the Vietnam Veterans Memorial Center, the Eisenhower Memorial, and American Veterans Disabled for Life Memorial would increase demands on park operations, whether or not additional operating funds are provided. The possible future replacement of NPS and concession facilities could alter park operations, but could also improve sustainability with a minimum LEED silver standard and ease of maintenance. Taken as a whole the impacts of past, present, and

reasonably foreseeable actions on park operations would be long-term, major, and adverse because of ongoing demands on staff, despite moderate to major, beneficial impacts of individual facilities now and in the future, which would be easier to maintain and meet higher facility standards for energy efficiency and sustainability.

Under the no-action alternative the continued impacts of ongoing conditions would be long-term, major, and adverse because of the deferred maintenance backlog, difficult-to-maintain systems and infrastructure, reduced staffing levels, and unsustainable practices. While these adverse impacts would be offset somewhat by actions common to all alternatives, which would enable park staff to improve operational efficiency and safety, and that would make some sustainability goals easier to achieve, cumulative impacts would be long-term, major, and adverse, with a slight adverse contribution from the no-action alternative.

Conclusion

Impacts on park operations under the no-action alternative would continue to be long-term, moderate to major, and adverse because of not meeting desired standards (including a deferred maintenance backlog; difficult-to-maintain landscapes, systems, and infrastructure; and lack of venues designed to accommodate intensive levels of use), inefficient operations, and unsustainable practices. The gap in funding between what is required and the current park budget would continue to leave the entire park funded at about 54% of need. Any benefits to park operations or sustainability from past, present, and future projects would continue to be overwhelmed by these continuing impacts as well as by additional facilities and ongoing high-priority demands on the park because of its highly prominent and visible location. Despite the long-term, moderate to major, beneficial impacts of actions common to all alternatives, the no-action alternative would continue to cause ongoing operational challenges. Cumulative impacts would be long-term, major, and adverse, with a slight adverse contribution from the no-action alternative.

IMPACTS OF THE PREFERRED ALTERNATIVE

Direct and Indirect Impacts

Impacts on Park Operations

Proposed actions under the preferred alternative would address operational issues and seek to improve park conditions, as described below.

Deferred Maintenance

As described under the no-action alternative, the National Mall has a maintenance backlog of more than $400 million for preservation and repairs to aging facilities, from seawalls to irrigation systems and walks. Under the preferred alternative some projects would address deferred maintenance needs but would go beyond making routine repairs to resolve the cause of circulation and operational problems, as well as issues identified during planning. These include the following projects:

- New, renovated, or adaptively reused facilities would be designed to the highest LEED standard practicable, exceeding NPS policy guidelines.
- Widened walks would improve operational access and efficiency.
- The Tidal Basin seawalls would be rebuilt to allow wider walks.
- The Potomac River seawalls would be replaced by a natural shoreline using native plants where feasible.
- Separate bicycle trails would be added in many areas.

Reducing the maintenance backlog in a manner that would improve assets would contribute substantially to overall park conditions. Impacts would be long-term, major, and beneficial because they would be obvious to most visitors and would enhance the visitor experience.

Assets, Infrastructure, and Amenities

Areas within the National Mall would be redesigned for very high levels of use to meet current and future needs through the life of this plan. Design for the ease of maintenance would be an important criterion for any redesigned areas,

including Union Square, the Mall, the Tidal Basin, Constitution Gardens, and the Washington Monument grounds. As a result, maintenance operations on the National Mall would be better able to achieve quality standards and control undesired impacts.

Coordinated approaches to paving, lighting, and furnishings would improve park conditions and meet the high expectations of visitors. Specific actions would include the following:

- removing gravel walkways and using universally accessible and sustainable paving materials that would be suitable for all visitors and easy to maintain to high standards, thus creating a high-quality pedestrian environment
- widening narrow walks to better accommodate pedestrian use levels, as well as maintenance, delivery, or special event access
- restoring soils, removing social trails, and addressing the causes of social trails (such as narrow walkways, drainage puddles, or deteriorated surfaces) and providing surfaces appropriate to recreational uses, such as jogging, which would also help reduce the development of social trails
- providing paved spaces that could accommodate park, police, and concession vehicles or other operational needs to eliminate impacts on turf areas
- redesigning irrigation systems on the Mall and at other areas expected to see high levels of use so that the systems could not be damaged by tent stakes, making optimal turf maintenance easier
- replacing existing drinking fountains and relocating them near restrooms, designing all facilities to accommodate very high levels of use and be vandal resistant, and using high-quality ergonomic designs, as well as high-quality designs to encourage better treatment by users
- rehabilitating Constitution Gardens Lake to include water recirculation and filtration systems, thus improving water quality and reducing maintenance time, as well as sustainably redesigning and reducing the size of the Capitol Reflecting Pool at Union Square

The overall impact of better designs for assets, infrastructure, and amenities would correct flaws and unforeseen conditions, creating a high-quality environment that could be more efficiently maintained. The overall impact would be long-term, major, and beneficial.

Soil Conditions

The National Park Service has already defined a number of projects to restore poor quality soils, and they would be implemented as soon as funding became available. Soils in the center grass panels of the Mall would be replaced with soils engineered to be like those used on professional sports fields, which are capable of withstanding intensive use because soils are better able to withstand compaction, absorb water, and recover more quickly. Soils in other areas would be restored using methods that would not damage trees or other mature vegetation. Areas to be treated would include the elm tree panels on the Mall, Constitution Gardens, and the Washington Monument grounds. Benchmark standards from the Sustainable Sites Initiative™ would help guide restoration plans. Compared to current conditions, the impact of restoring poor quality soils and improving turf conditions would make park operations easier to accomplish and would be long-term, major, and beneficial.

Permitted Activities

National celebrations, special events, and demonstrations would continue to affect park operational priorities, limit access in some areas, or require overtime that would affect staffing schedules. Under the preferred alternative improving and redesigning venues for demonstrations and special events would facilitate park operations. Actions that would better accommodate intensive use levels would include additional paved areas, improved soils to reduce impacts on turf, and infrastructure and new facilities that would be designed not only to meet the needs of organizers, but to facilitate park operations during and after demonstrations and special events. Establishing comprehensive recycling programs would help reduce the amount of trash generated at permitted activi-

ties. As a result, while the adverse impact on park staff of scheduling and monitoring events would continue, actions under the preferred alternative would make it much easier to maintain park conditions at acceptable standards. The impact on park operations would be long-term, major, and beneficial.

Staffing

Under the preferred alternative additional staffing would be sought for resource management, communications, maintenance, programs and special events, and resource recovery teams to address the impacts of special events and national celebrations. Some activities would continue to be done by contract employees. Specialized skills would likely include event management, turf management, website design and maintenance, public affairs, contracting, horticulture, and irrigation. As described under "Impacts Common to All Alternatives," core operations planning would align staff needs with essential tasks related to the park purpose and plan implementation.

The gap in funding between what industry standards recommend and the park budgets would begin to be reduced as funding and staffing needs were better aligned to achieve desired quality standards. Chronically underfunded areas (landscapes, buildings and waterfront assets) would be prioritized for funding. Impacts on park operations would be long-term, major, and beneficial.

Management Processes

Replacing the permit process for demonstrations and special events with computer-based systems accessible on the Internet would improve efficiencies in the scheduling, issuing, recording, and monitoring or tracking of permits for demonstrations and special events. This would also allow permitted activities to be coordinated among all affected park divisions (facility management, resource protection, and other park operations) and partner organizations. More frequently restoring smaller areas would be more efficient than trying to rehabilitate larger areas, which has a correspondingly greater effect on park use. Incorporating best practices in solid waste management and recycling would result in safer operations for staff and visitors. The overall impacts would be long-term, major, and beneficial because these actions would affect most park staff.

Maintainability

Widening walks and providing operational access points from streets would facilitate the movement of maintenance and delivery vehicles, reduce damage to curbs and walks, and make the performance of regular maintenance activities and other park operations more efficient. The better distribution of trash containers and the mechanical emptying of heavy trash receptacles would be more efficient and would reduce safety concerns for staff. Providing facilities designed for easy maintenance would reduce the time needed to perform routine tasks, such as wall-mounted toilets that are easier to clean around and options to paper towels that would reduce waste. Installing site furnishings such as benches, trash containers, and wayside signs on paved surfaces would make it easier to keep up surrounding areas. Self-cleaning restrooms in some locations could also reduce custodial work while providing clean and sanitary facilities. Replacing gravel walks with new paving would reduce labor and other unwanted impacts caused by gravel. The impact of designing for ease of maintenance would result in long-term, moderate to major, beneficial impacts.

Any new designs or redesigns would emphasize the use of standardized parts or systems that have proven successful. These actions would allow for more efficient stockpiling of parts and equipment and would reduce the need for multiple maintenance manuals, a wide variety of tools used only for special tasks, and many types of expertise. The impact on operational efficiency would be long-term, minor to moderate, and beneficial.

Historic or custom features and furnishings at sites would be incorporated in newly developed coordinated suites of paving, lighting, and furniture. This would make it easier to keep replacement parts (such as light fixtures and benches) in stock, allowing repairs to be made more quickly. Site furnishings would meet accessibility standards. Like the no-action alternative, the park would retain the molds for some parts or historic or custom components to ensure that

parts would always be available. Durability of parts as well as quality and appearance would be important. Improving the ability to maintain historic or custom features would have long-term, moderate, beneficial impacts on the efficiency of park operations.

Best Practices

Providing a comprehensive and secure communications infrastructure, including high-speed Internet communications, throughout the National Mall would make communications more efficient for park staff and law enforcement, resulting in long-term, moderate to major, beneficial impacts. Electronically monitoring lighting outages or restroom usage would quickly identify maintenance needs and support efficient scheduling. Mechanically emptying trash containers would be more efficient and would reduce the potential for staff injuries from hand lifting heavy trash bags, resulting in long-term, major, beneficial impacts. Developing recycling systems for the collection, storage, and hauling of recyclable materials (an action common to all alternatives) would make operations more sustainable. Benchmark standards of the Sustainable Sites Initiative™ address landscape and site issues. The impact of using common best practices on the efficiency of operations and safety generally would be long-term, moderate to major, and beneficial.

Summary

Compared to the no-action alternative, the overall impacts of the preferred alternative as a result of addressing deferred maintenance, providing easily maintained infrastructure and amenities, better handling permitted activities, and assigning sufficient staffing to core activities would be long-term, major, and beneficial, making it much easier to achieve and maintain quality conditions on the National Mall.

The overall impact of the preferred alternative on efficiency and safety of park operations would be long-term, moderate to major, and beneficial due to updated processes, ease of maintenance, increased use of standardized parts, better ability to maintain historic or custom components, and using common best practices to improve efficiency or safety.

Impacts on Sustainability

The preferred alternative, in addition to the actions that are common to all alternatives, would seek to make operations on the National Mall more sustainable in terms of water use and renewable energy.

Water Use

Compared to the no-action alternative, the preferred alternative would incorporate a comprehensive sustainable water management plan throughout the National Mall to reduce the use of potable water, seek nonpotable water sources for ornamental water features, and provide onsite water filtering and cleansing so that gray water, water from dewatering activities at nearby buildings, and stormwater could be reused where feasible. Specific elements of the plan would include the following:

- reducing the size of the Capitol Reflecting Pool at Union Square and ensuring that recycled or nonpotable water could be used in any new ornamental water features
- rehabilitating Constitution Gardens Lake to make it self-sustaining

No longer using millions of gallons of potable water where feasible would reduce demands on municipal water supplies and set a standard for sustainable park operations.

A naturalized Potomac River shoreline would restore wetland characteristics to the river and would be more sustainable than dry-laid walls, a long-term, major, beneficial impact on park operations.

Under the preferred alternative the impacts of more sustainable water use on National Mall would be long-term, moderate to major, and beneficial.

Renewable Energy

Under the preferred alternative all new, renovated, or adaptively reused facilities would meet the highest LEED standard practicable, exceeding NPS policies. Seeking visible renewable energy sources for lighting and ornamental fountains would reduce energy costs over the long term and would offer opportunities for public education about renewable energy and

sustainability. As a result, the impact on renewable energy would generally be long-term, moderate to major, and beneficial.

Summary

Compared to the no-action alternative, the overall impact of the preferred alternative on sustainability would generally be long-term, major, and beneficial because of reduced use of potable water for water features, a sustainable river edge, a comprehensive approach to water use and management, and a greater reliance on renewable energy sources.

Cumulative Impacts

The impacts of past, present, and reasonably foreseeable actions would be the same as those described under the no-action alternative and would be long-term, major, and adverse. Actions under the preferred alternative and actions common to all alternatives would have long-term, major, beneficial impacts because of a reduced backlog of deferred maintenance, improved park conditions, increased maintainability of mechanical systems and infrastructure, improved operational access, a streamlined permitting process for demonstrations and special events, appropriate staffing levels aligned to core operations, and exceedance of sustainability standards for development, renewable energy, and water use. These impacts, combined with the impacts of past, present, and reasonably foreseeable actions, would result in long-term, moderate, beneficial cumulative impacts.

Conclusion

Compared to the no-action alternative, the overall impacts of the preferred alternative on park operations would be long-term, major, and beneficial as a result of improved park conditions, a reduced deferred maintenance backlog, increased maintainability of mechanical systems and infrastructure, improved operational access, a streamlined permitting process for demonstrations and special events, a reduced funding gap between desired conditions and park budgets, appropriate staffing levels aligned to core operations, and exceedance of sustainability standards for development, renewable energy, and water use. While the overall impacts of the past, present, and reasonably foreseeable actions would be long-term, major, and adverse, when combined with the substantial long-term, major, beneficial impacts of the preferred alternative, cumulative impacts would be long-term, moderate, and beneficial.

IMPACTS OF ALTERNATIVE A

Direct and Indirect Impacts

Alternative A, which focuses on the historic landscape and education, would address some of the National Mall's numerous park operational challenges and inefficiencies that challenge sustainability and the ability to achieve desired conditions.

Impacts on Park Operations

Compared to the no-action alternative, under alternative A significant obstacles to achieving desired park conditions on the National Mall would remain.

Deferred Maintenance

Under alternative A, similar to the no-action alternative, deferred maintenance projects would be addressed by repairing malfunctioning parts rather than addressing fundamental problems in some infrastructure systems. The Tidal Basin seawalls would be rebuilt, but the walks would still be too narrow for current levels of use. The dry-laid Potomac River seawalls would be rebuilt, requiring ongoing maintenance. Reducing the backlog without improving assets or resolving circulation problems would not contribute substantially to overall park conditions, resulting in long-term, minor to moderate, beneficial impacts.

Assets, Infrastructure, and Amenities

Under alternative A walkways would remain too narrow for current volumes of use in many areas, but maintenance access would be provided, and social trails would be obliterated and controlled by using methods such as edging, curbs, or post-and-chain fencing or some other type of barrier. The maintenance of park areas would be improved, but damage would continue to be caused by maintenance vehicles traveling on routes that are too narrow to accommodate

them. Replacing drinking fountains as needed would ensure that these amenities would be usable, but they would remain in locations away from other visitor amenities, and they would continue to be subject to vandalism and misuse, which makes maintenance more time-consuming.

The improvement of other park assets, infrastructure, and amenities under this alternative would facilitate maintenance and improve park conditions. Actions would include the following:

- redesigning the irrigation system on the Mall and at other high-use areas so that it could not be damaged by tent stakes
- replacing restrooms and adding more restrooms to help meet needs
- ensuring that new facilities would be energy efficient and sustainable as well as vandal resistant
- rehabilitating and improving designed water features to reduce algae and odors (providing recirculating pumps in the reflecting pools at the Lincoln Memorial and the Capitol and adding more pumps at Constitution Gardens Lake)
- coordinating site furnishings such as benches, light fixtures, and trash containers to establish a cohesive and unifying identity, quality, and standard for the National Mall
- making amenities easier to maintain because of standardized parts

Compared to the no-action alternative, the impact of maintaining assts, infrastructure, and amenities to improve park conditions under alternative A would be long-term, moderate to major, and beneficial.

Soil Conditions

The National Park Service has already defined a number of projects to restore poor quality soils, and they would be implemented as soon as funding became available. Soils in the center grass panels of the Mall would be replaced with soils engineered to be like those used on professional sports fields, which are capable of withstanding intensive use because soils are better able to withstand compaction, absorb water, and recover more quickly. Soils in other areas would be restored using methods that would not damage trees or other mature vegetation. Areas to be treated would include the elm tree panels on the Mall, Constitution Gardens, and the Washington Monument grounds. Benchmark standards from the Sustainable Sites Initiative™ would help guide restoration plans. Compared to current conditions, the impact of restoring poor quality soils and improving turf conditions would be long-term, major, and beneficial.

Permitted Activities

National celebrations, special events, and demonstrations would continue to affect park operational priorities, limit access, or require overtime that would affect staffing schedules and routine maintenance operations. A substantial amount of staff planning and time from many divisions would continue to be required for national celebrations, inaugurations, and some special events. Without infrastructure designed to accommodate permitted activities (such as hard-surface venues with utilities), impacts on park operations would continue to be long-term, major, and adverse under alternative A.

Staffing

Under alternative A staffing would focus on improving resource conditions, with additional staff for resource management, education, communications and web technology, and public information. Specialized skills would include preservation, turf management, horticulture, and irrigation. Core operations planning would align staff needs with the performance of essential tasks related to the park purpose and the emphasis of this alternative on historic preservation.

The gap in funding between what industry standards recommend and the park budgets would begin to be reduced as funding and staffing needs were better aligned to achieve desired quality standards. Chronically underfunded areas (landscapes, buildings and waterfront assets) would be prioritized for funding. Park staff levels would be realigned to meet standards and focus on essential tasks. Impacts would be long-term, major, and beneficial.

Management Processes

As described under the preferred alternative, replacing the outdated and labor intensive permit process for demonstrations and special events with computer-based systems and Internet access would make scheduling, permitting, and monitoring or tracking permits for demonstrations and special events more efficient. It would also allow permitted activities to be coordinated among various park divisions, including facility management, resource protection, and other park operations. Following best practices for solid waste management and recycling processes would result in safer, more efficient operations. The long-term impacts would be major and beneficial because these actions would affect most park staff, and the result would be obvious to visitors.

Maintainability

Providing vehicle access points would improve the efficient movement of maintenance and delivery vehicles, reducing the time needed to perform regular maintenance activities or other park operations. New solid waste and recycling systems would be adopted, and trash receptacles would be located so as to facilitate collection and reduce manual emptying of heavy trash receptacles. Routine maintenance tasks would be made more efficient through facility design, such as wall-mounted toilets that would be easier to clean around, alternatives to paper towels, and site furnishings such as benches, trash containers, and wayside signs installed on paved surfaces. Maintaining gravel walks under this alternative would require continued labor-intensive maintenance, including keeping gravel on pathways and off turf areas. Compared to the no-action alternative, impacts on efficient and safe operations would be long-term, moderate, and beneficial.

Under alternative A continued maintenance of a wide variety of nonstandardized systems, ornamental water features (pumps and lighting), light fixtures, and site furniture would require stocking a wide variety of parts, multiple maintenance manuals, and specific tools, along with retaining staff expertise to maintain the systems. The impact on operational efficiency would remain long-term, minor to moderate, and adverse.

Similar to the preferred alternative, some historic or custom components and site furnishings would be included in newly developed coordinated suites of site or park furniture. This would make it easier to keep replacement parts (such as light fixtures and benches) in stock, allowing repairs to be made more quickly. Site furnishings would meet accessibility standards. As described under the no-action alternative, the park would retain the molds for some parts or historic or custom components. Compared to the no-action alternative, alternative A would improve the ability to maintain historic or custom features, resulting in long-term, moderate, beneficial impacts on the efficiency of park operations.

Best Practices

Under alternative A, like the preferred alternative, a comprehensive and secure communications infrastructure (including high speed Internet communications) would be developed throughout the National Mall, resulting in more efficient communication methods for park staff and law enforcement. This would result in a long-term, moderate to major, beneficial impact. However, no measures would be taken to electronically monitor lighting outages or restroom usage to identify maintenance needs or support efficient scheduling, a long-term, minor, adverse impact on efficiency. New solid waste and recycling systems to collect, retrieve, store, and haul waste would be common to all alternatives. Compared to the no-action alternative, using some best practices would improve the efficiency of operations and safety, with long-term, minor to moderate, beneficial impacts.

Summary

The impact of alternative A on park operations would generally be long-term, moderate, and beneficial due to addressing the deferred maintenance backlog, remedying a limited number of infrastructure and amenity problems, providing skilled staffing, updated processes, removing some design obstacles to efficient operations, and implementing some best practices for efficiency. However, these benefits would be offset by the continuing long-term, major, adverse impact of not improving the management of permitted activities.

Impacts on Sustainability

Under alternative A some new, renovated, or adaptively reused facilities would meet NPS energy use and sustainability policies.

Water Use

Similar to the no-action alternative, treated potable water would continue to be used to fill the Lincoln and Capitol reflecting pools and Constitution Gardens Lake. These pools are drained and refilled twice annually, resulting in the use of millions of gallons of municipal water. Impacts on the wise and sustainable use of water sources would be long-term, moderate to major, and adverse. Stormwater systems would continue to move water offsite, a long-term, minor to moderate, adverse impact on sustainable water approaches.

Energy

Under alternative A as additional facilities such as restrooms were built, or facilities were renovated, rehabilitated, or adaptively used (such as the Lockkeeper's House), renewable energy sources would be incorporated to meet NPS policy requirements and LEED standards. Resulting impacts on renewable energy would be long-term, minor to moderate, and beneficial.

Summary

Compared to the no-action alternative, the overall impacts of alternative A on sustainability would be long-term, minor, and beneficial because only a few new or rehabilitated buildings would meet renewable energy or sustainability requirements and unsustainable water uses would continue.

Cumulative Impacts

The impacts of past, present, and reasonably foreseeable actions would be the same as those described under the no-action alternative and would be long-term, major, and adverse. These adverse impacts would be offset by the impacts of present and reasonably foreseeable actions and actions, as well as the impacts common to all alternatives, that would enable park staff to improve operational efficiency and safety, and would also make sustainable goals easier to achieve.

Compared to the no-action alternative, the impacts of alternative A on park operations, when combined with the impacts of past, present, and reasonably foreseeable actions, would result in long-term, moderate, adverse cumulative impacts because while park operations would be improved and deferred maintenance addressed, more sustainable solutions would not be developed for high-use areas or water features. The contribution of alternative A to cumulative impacts would be considerable and adverse.

Conclusion

Impacts under alternative A would be long-term, moderate, and adverse because impacts of high use would not be fully addressed, such as developing more sustainable venues for demonstrations, national celebrations, and special events or seeking sustainable water sources for large water features. However, actions common to all action alternatives would result in long-term, moderate to major, beneficial impacts because of better maintenance of desired park conditions (including the restoration of poor quality soils and improved turf conditions), a reduced deferred maintenance backlog, a reduced funding gap between desired conditions and park budgets, some more efficient park operations, and some use of renewable energy sources. These impacts, when combined with the impacts of past, present, and reasonably foreseeable actions, would result in long-term, moderate, adverse cumulative impacts because while park operations would be improved and deferred maintenance addressed, more sustainable solutions would not be developed for high-use areas or water features. The contribution of alternative A to cumulative impacts would be considerable and adverse.

Impacts of Alternative B

Direct and Indirect Impacts

Alternative B would seek to accommodate high levels of use in ways that would allow park areas to recover quickly. Like the preferred alternative, alternative B would address many park

operational challenges, inefficiencies, and safety concerns to achieve desired conditions.

Impacts on Park Operations

Proposed actions under alternative B, like the preferred alternative, would address operational issues and seek to improve park conditions, as described below.

Deferred Maintenance

As described under the no-action alternative, the National Mall has a maintenance backlog of more than $400 million for preservation and repairs to aging facilities, from seawalls to irrigation systems and walks. Under alternative B, similar to the preferred alternative, some projects would address deferred maintenance needs but would go beyond making routine repairs to resolve the cause of circulation and operational problems. Projects would include the following:

- widening walks to improve operational access and efficiency
- rebuilding the seawalls of the Tidal Basin to accommodate wider walks or be above high tide
- replacing the Potomac River dry-laid seawalls with taller, structural walls

Reducing the maintenance backlog in a manner that would improve assets would contribute substantially to the ability to meet desired conditions for park assets and resources. Impacts would be long-term, major, and beneficial.

Assets, Infrastructure, and Amenities

Areas within the National Mall would be redesigned for very high levels of use to meet present and future needs during the life of this plan. Ease of maintenance would be an important criterion for any redesign of areas such as Union Square, the Mall, the Tidal Basin, Constitution Gardens, and the Washington Monument grounds. As described for the preferred alternative, maintenance operations on the National Mall would be better able to achieve quality standards and control undesired impacts.

Coordinated approaches to paving, lighting, and furnishings would improve park conditions and meet the high expectations of visitors. As described for the preferred alternative, specific actions would include the following:

- removing gravel walkways and using universally accessible paving materials suitable for all visitors and easy to maintain to high standards, thus creating a high-quality pedestrian environment
- widening narrow walks to better accommodate pedestrian use levels, along with designing them to accommodate maintenance, delivery, or special event access
- restoring soils, removing social trails, and addressing the causes of social trails (such as narrow walkways, drainage puddles, or deteriorated surfaces) and providing surfaces appropriate to recreational uses, such as jogging, to help address the development of social trails
- providing paved spaces to accommodate park, police, or concession vehicles to eliminate impacts from vehicles having to be parked on turf areas
- redesigning irrigation systems on the Mall and at other areas expected to see high levels of use so that the systems could not be damaged by tent stakes, making it easier for optimal turf maintenance
- replacing existing drinking fountains and relocating them so they are near restrooms, designing all facilities to accommodate very high levels of use and be vandal resistant, and using high-quality ergonomic designs, as well as high-quality designs to encourage better treatment by users
- rehabilitating the Lincoln Reflecting Pool and the Constitution Gardens Lake to include water recirculation systems to improve water quality and reduce maintenance time (however, unlike the preferred alternative, potable water would continue to be used)

The overall impact of better designs for assets, infrastructure, and amenities would correct flaws in previous designs and create a high-quality environment that could be more efficiently maintained to meet visitor expectations. The overall impact would be long-term, major, and beneficial.

If it was determined that an underground parking garage would be feasible based on engineering, security, geotechnical, and economic studies, visitor-related impacts would be analyzed as during subsequent environmental studies.

Soil Conditions

The National Park Service has already defined a number of projects to restore poor quality soils, and they would be implemented as soon as funding became available. Soils in the center grass panels of the Mall would be replaced with soils engineered to be like those used on professional sports fields. Soils in other areas would be restored using methods that would not damage trees or other mature vegetation. Areas to be treated would include the elm tree panels on the Mall, Constitution Gardens, and the Washington Monument grounds. Benchmark standards from the Sustainable Sites Initiative™ would help guide restoration plans. Compared to current conditions, the impact of restoring poor quality soils and improving turf conditions would be long-term, major, and beneficial.

Permitted Activities

National celebrations, special events, and demonstrations would continue to affect park operational priorities, limit access, or require overtime that would affect staffing schedules. However, under alternative B, like the preferred alternative, some venues would be substantially redesigned and improved to facilitate park operations. These would include additional paved areas where high use could be concentrated, improved soil conditions to withstand intensive use levels, and infrastructure and new facilities designed to meet the needs of event organizers as well as maintenance operations during and after demonstrations and special events. Establishing comprehensive recycling programs would help reduce the amount of trash generated at permitted activities. As a result, while the adverse impact on park staff of scheduling and monitoring events would continue, actions under alternative B would make it much easier to maintain park conditions at acceptable standards. The impact on park operations would be long-term, major, and beneficial.

Staffing

Under alternative B, like the preferred alternative, additional staffing would be sought for resource management, communications, maintenance, programs and special events, and resource recovery teams to address the impacts of special events and national celebrations. Specialized skills would likely include turf management, horticulture, and irrigation. As described under "Impacts Common to All Alternatives," core operations planning would align staff needs with essential tasks related to the park purpose and plan implementation. Impacts on park operations would be long-term, major, and beneficial.

The gap in funding between what industry standards recommend and the park budgets would begin to be reduced as funding and staffing needs were better aligned to achieve desired quality standards. Chronically underfunded areas (landscapes, buildings and waterfront assets) would be prioritized for funding. Impacts on park operations would be long-term, major, and beneficial.

Management Processes

As described under the preferred alternative and alternative A, replacing the permit process for demonstrations and special events with Internet based systems would improve efficiencies in the scheduling, issuing, recording, and monitoring or tracking of permits. This would also allow permitted activities to be coordinated among all affected park divisions (facility management, resource protection, and other park operations). Incorporating best practices in solid waste management and recycling would result in safer operations for staff and visitors. The overall impacts would be long-term, major, and beneficial because these actions would affect most park staff.

Maintainability

Actions to improve operational efficiency and safety would be similar to those described for the preferred alternative and would include the following:

- widening walks and providing operational access points from streets to facilitate the movement of maintenance and delivery

vehicles, reduce damage to curbs and walks, and make the performance of regular maintenance activities and other park operations more efficient

- better distributing trash containers and mechanically emptying heavy trash receptacles
- providing facilities designed for easy maintenance to reduce the time needed to perform routine tasks (such as wall-mounted toilets and options to paper towels that would reduce waste)
- installing site furnishings such as benches, trash containers, and wayside signs on paved surfaces to make it easier to keep up surrounding areas (unlike the preferred alternative, alternative B would not propose the use of self-cleaning restrooms)
- replacing gravel walks with new paving to reduce labor and other unwanted impacts
- emphasizing the use of standardized parts or equipment that have proven successful in any new designs or redesigns, thus allowing for more efficient stockpiling of parts and equipment and reducing the need for multiple maintenance manuals, a wide variety of tools used only for special tasks, and many types of expertise
- incorporating historic or custom features and furnishings into coordinated suites of paving, lighting, and furniture, thus making it easier to keep replacement parts (such as light fixtures and benches) in stock and allowing repairs to be made more quickly
- ensuring that site furnishings meet accessibility standards, and retaining the molds for some parts or historic or custom components to ensure that parts would always be available

As described for the preferred alternative, the impact of designing for ease of maintenance would result in long-term, moderate to major, beneficial impacts on park operations. Emphasizing the use of standards parts and systems would result in long-term, minor to moderate, beneficial impacts. Improving the ability to maintain historic or custom features would have long-term, moderate, beneficial impacts.

Best Practices

The adoption of best practices under alternative B, similar to the preferred alternative, would positively affect park operations by

- providing a comprehensive and secure communications infrastructure, including high-speed Internet communications, throughout the National Mall, making communications more efficient for park staff and law enforcement
- electronically monitoring lighting outages or restroom usage to quickly identify maintenance needs and support efficient scheduling
- mechanically emptying trash containers, reducing the potential for staff injuries from hand lifting heavy trash bags
- developing recycling systems for the collection, storage, and hauling of recyclable materials, an action common to all alternatives

The impact of using common best practices on the efficiency of operations and safety generally would be long-term, moderate to major, and beneficial, the same as the preferred alternative.

Summary

The overall impacts of alternative B would be similar to the preferred alternative as a result of addressing deferred maintenance, providing easily maintained infrastructure and amenities, better handling permitted activities, assigning sufficient staffing to core activities, and using common best practices to improve efficiency. Compared to the no-action alternative, impacts would be long-term, moderate to major, and beneficial, making it much easier to achieve and maintain desired conditions on the National Mall.

Impacts on Sustainability

Alternative B, in addition to the actions that are common to all, would make some progress toward using resources more sustainably.

Water Use

As described under the no-action alternative, millions of gallons of potable water would continue to be used to fill the reflecting pools at the

Lincoln Memorial and Union Square as well as Constitution Gardens Lake, wasting a valuable resource. These pools are drained and refilled twice annually. This use of potable water would continue to result in long-term, moderate to major, adverse impacts on sustainable water use. Stormwater would be channeled offsite through the municipal drainage system, precluding options of using this water onsite to meet needs such as irrigation and filling pools; this would result in long-term, minor to moderate, adverse impacts on sustainable water use.

Energy

Under alternative B all new, renovated, or adaptively reused facilities would meet the LEED standards, with long-term, moderate to major, beneficial impacts on renewable energy.

Underground Visitor Parking

Building additional underground parking under this alternative would not be a sustainable solution and would be contrary to the stated policies of the National Capital Planning Commission and the D.C. city government to encourage alternative modes of access in the downtown area.

Summary

Compared to the no-action alternative, alternative B would make greater use of sustainable solutions for new, renovated, or adaptively reused facilities, as well as paid parking on the National Mall. However, underground parking garages would be inconsistent with federal and local governmental policies to encourage sustainability, including greater use of alternative means of access, resulting in long-term, moderate, adverse impacts. The overall impact on sustainability would be long-term, moderate, and both beneficial and adverse.

Cumulative Impacts

The impacts of past, present, and reasonably foreseeable actions would be the same as those described under the no-action alternative and would be long-term, major, and adverse. Impacts under alternative B and actions common to all alternatives would be long-term, major, and beneficial because of improved park conditions, a reduced deferred maintenance backlog, increased maintainability of mechanical systems and infrastructure, improved operational access, a streamlined permitting process for demonstrations and special events, staffing aligned with core missions, and some sustainable practices. However, while the construction of underground parking garages would increase parking capacity on the National Mall, this solution would not be consistent with sustainability policies of the National Park Service and other federal and local agencies. Cumulative impacts would be long-term, moderate, and adverse, with a large adverse contribution from alternative B.

Conclusion

Compared to the no-action alternative, the overall impacts of alternative B on park operations would be long-term, major, and beneficial as a result of improved park conditions, a reduced deferred maintenance backlog, increased maintainability of mechanical systems and infrastructure, improved operational access, a streamlined permitting process for demonstrations and special events, a reduced funding gap between desired conditions and park budgets, appropriate staffing levels aligned to core operations, and greater reliance on renewable energy sources. However, unlike the preferred alternative and alternative C, no measures would be taken to make water use more sustainable or to support local goals to encourage greater use of alternative modes of access. The impacts of past, present, and reasonably foreseeable actions, in combination with those of alternative B, would result in long-term, moderate, adverse cumulative impacts as a result of treated water use and underground parking garages that would not meet sustainability goals. Alternative B would make a large adverse contribution to cumulative impacts.

Impacts of Alternative C

Direct and Indirect Impacts

Alternative C, like the preferred alternative, would make substantial progress to address numerous park operational challenges and inefficiencies that would affect sustainability and the ability to achieve desired conditions on the National Mall.

Impacts on Park Operations

Actions under alternative C, similar to those under the preferred alternative, would address operational issues and seek to improve park conditions, as described below.

Deferred Maintenance

As described under the no-action alternative, the National Mall has a maintenance backlog of more than $400 million for preservation and repairs to aging facilities, from seawalls to irrigation systems and walks. Under alternative C, like the preferred alternative, some projects would address deferred maintenance needs but would go beyond making routine repairs to resolve the cause of circulation and operational problems. These include the following projects:

- incorporating the highest LEED standard practicable into new, renovated, or adaptively reused facilities, exceeding NPS policy guidelines
- incorporating Sustainable Site Initiative™ benchmarks into landscape maintenance standards
- widening walks to improve operational access and efficiency
- rebuilding the seawalls of the Tidal Basin to accommodate wider walks
- replacing the Potomac River dry-laid seawalls with a natural shoreline using native plants where feasible
- adding separate bicycle trails

Reducing the maintenance backlog in a manner that would improve assets would contribute substantially to the ability to meet desired conditions for park assets and resources. Impacts would be long-term, major, and beneficial.

Assets, Infrastructure, and Amenities

Under alternative C areas within the National Mall would be redesigned as a sustainable urban park. Ease of maintenance would be an important criterion for any redesign of areas such as Union Square, the Mall, the Tidal Basin, Constitution Gardens, and the Washington Monument grounds. As described for the preferred alternative, maintenance operations on the National Mall would be better able to achieve quality standards and control undesired impacts.

Coordinated approaches to paving, lighting, and furnishings would improve park conditions and would meet the high expectations of visitors. As described for the preferred alternative, specific actions would include the following:

- removing gravel walkways and using universally accessible, sustainable paving materials suitable for all visitors and easy to maintain to high standards, thus creating a high-quality pedestrian environment
- widening narrow walks to better accommodate pedestrian use levels, along with designing them to accommodate maintenance, delivery, or special event access
- restoring soils, removing social trails, and addressing the causes of social trails (such as narrow walkways, drainage puddles, or deteriorated surfaces), and providing surfaces appropriate to recreational uses, such as jogging, to help address the development of social trails
- providing paved spaces to accommodate park, police, or concession vehicles to eliminate impacts from vehicles having to be parked on turf areas
- redesigning irrigation systems on the Mall and at other areas expected to see high levels of use so that the systems could not be damaged by tent stakes, making it easier for optimal turf maintenance
- replacing existing drinking fountains and relocating them so they are near restrooms, designing all facilities to accommodate very high levels of use and be vandal resistant, and using high-quality ergonomic designs, as well as high-quality designs to subtly encourage better treatment by users
- rehabilitating the Lincoln Reflecting Pool and the Constitution Gardens Lake to include water recirculation systems to improve water quality and reduce maintenance time
- redesigning the Capitol Reflecting Pool at Union Square to be shallower and drainable for special events and demonstrations

The overall impact of better designs for assets, infrastructure, and amenities would correct flaws and unforeseen conditions and create a high-quality environment that could be more efficiently maintained to meet visitor expectations. The overall impacts would be long-term, major, and beneficial.

Soil Conditions

The National Park Service has already defined a number of projects to restore poor quality soils, and they would be implemented as soon as funding became available. Soils in the center grass panels of the Mall would be replaced with soils engineered to be like those used on professional sports fields. Soils in other areas would be restored using methods that would not damage trees or other mature vegetation. Areas to be treated would include the elm tree panels on the Mall, Constitution Gardens, and the Washington Monument grounds. Benchmark standards from the Sustainable Sites Initiative™ would help guide restoration plans. Compared to current conditions, the impact of restoring poor quality soils and improving turf conditions would be long-term, major, and beneficial.

Permitted Activities

National celebrations, special events, and demonstrations would continue to affect park operational priorities, limit access, or require overtime that would affect staffing schedules. However, under alternative C, like the preferred alternative and alternative B, some venues would be substantially redesigned and improved to facilitate park operations. Actions would include additional paved areas where high use could be concentrated, improved soil conditions to withstand intensive use levels, and infrastructure and new facilities designed to meet the needs of event organizers as well as maintenance operations during and after demonstrations and special events. Establishing comprehensive recycling programs would help reduce the amount of trash generated at permitted activities. As a result, while the adverse impact on park staff of scheduling and monitoring events would continue, actions under alternative C would make it much easier to maintain acceptable standards. The impact on park operations would be long-term, major, and beneficial.

Staffing

Under alternative C staffing would be focused more on recreational and educational programs and imparting stewardship and sustainability messages, instead of addressing the impacts of high levels of use. As described under "Impacts Common to All Alternatives," core operations planning would align staff needs with essential tasks related to the park purpose and alternative C, an action that would have long-term, minor to moderate, beneficial impacts on the ability to achieve desired park conditions.

The gap in funding between what industry standards recommend and the park budgets would begin to be reduced as funding and staffing needs were better aligned to achieve desired quality standards. Chronically underfunded areas (landscapes, buildings and waterfront assets) would be prioritized for funding. Impacts on park operations would be long-term, major, and beneficial.

Management Processes

As described under the preferred alternative and alternative A, replacing the permit process for demonstrations and special events with computer-based systems and Internet access would improve efficiencies in the scheduling, issuing, recording, and monitoring or tracking of permits. This would also allow permitted activities to be coordinated among all affected park divisions (facility management, resource protection, and other park operations). More frequently restoring smaller areas would be more efficient than trying to rehabilitate larger areas, which would have a corresponding greater effect on park use. Incorporating best practices in solid waste management and recycling would result in safer operations for staff and visitors. The overall impacts would be long-term, major, and beneficial because these actions would affect most park staff.

Maintainability

Actions to improve operational efficiency and safety would be similar to those described for the preferred alternative and would include:

- widening walks and providing operational access points from streets to facilitate the movement of maintenance and delivery

vehicles, reduce damage to curbs and walks, and make the performance of regular maintenance activities and other park operations more efficient

- better distributing trash containers and mechanically emptying heavy trash receptacles
- providing facilities designed for easy maintenance to reduce the time needed to perform routine tasks (such as wall-mounted toilets and options to paper towels that would reduce waste)
- installing site furnishings such as benches, trash containers, and wayside signs on paved surfaces to make it easier to keep up surrounding areas
- using self-cleaning restrooms in a number of areas, which would reduce custodial work while providing clean, sanitary facilities
- replacing gravel walks with new paving to reduce labor and other impacts from gravel
- emphasizing the use of standardized parts or equipment that have proven successful in any new designs or redesigns, thus allowing for more efficient stockpiling of parts and equipment and reducing the need for multiple maintenance manuals, a wide variety of tools used only for special tasks, and many types of expertise
- incorporating historic or custom features and furnishings into coordinated suites of paving, lighting, and furniture, thus making it easier to keep replacement parts (such as light fixtures and benches) in stock and allowing repairs to be made more quickly
- ensuring that site furnishings meet accessibility standards, and retaining the molds for some parts or historic or custom components to ensure part availability

As described for the preferred alternative, the impact of designing for ease of maintenance would result in long-term, moderate to major, beneficial impacts on park operations. Emphasizing the use of standard parts and systems would result in long-term, minor to moderate, beneficial impacts. Improving the ability to maintain historic or custom features would have long-term, moderate, beneficial impacts.

Best Practices

The adoption of best practices under alternative C, similar to the preferred alternative, would positively affect park operations by

- providing a comprehensive and secure communications infrastructure, including high-speed Internet communications, throughout the National Mall, making communications more efficient for park staff and law enforcement
- electronically monitoring lighting outages or restroom usage to quickly identify maintenance needs and support efficient scheduling
- mechanically emptying trash containers, reducing the potential for staff injuries from hand lifting heavy trash bags
- developing recycling systems for the collection, storage, and hauling of recyclable materials, an action common to all alternatives

The impact of using common best practices on the efficiency of operations and safety generally would be long-term, moderate to major, and beneficial, the same as the preferred alternative.

Summary

The overall impacts of alternative C would be similar to the preferred alternative and alternative B due to addressing deferred maintenance, providing easily maintained infrastructure and amenities, better handling permitted activities, updated processes, and using common best practices to improve efficiency. However, staffing would be focused on recreational and educational programs, rather than on addressing the impacts of high levels of permitted uses. Nevertheless, impacts would be long-term, moderate to major, and beneficial, making it much easier to achieve and maintain quality conditions on the National Mall.

Impacts on Sustainability

Alternative C, in addition to the actions that would be common to all, would make substantial progress toward making the National Mall more sustainable in terms of water use and renewable energy.

Water Use

Compared to the no-action alternative, alternative C would incorporate a comprehensive sustainable water management plan throughout the National Mall to reduce the use of potable water. This would include finding other nonpotable sources for ornamental water features, such as onsite filtering and cleansing so that gray water, water from dewatering activities at nearby buildings, or stormwater could be used where feasible. These actions, as described below, would substantially reduce the use of potable water in water features:

- redesigning the Capitol Reflecting Pool at Union Square as a shallow reflecting pool that could be drained for special events or demonstrations, thus drawing attention to sustainable water management practices
- rehabilitating Constitution Gardens Lake to make it more self-sustaining

Finding sustainable sources of water for these features would not only save millions of gallons of potable water, thus benefiting municipal water supplies, it would also provide an educational opportunity for the National Park Service to demonstrate environmental stewardship.

A naturalized Potomac River shoreline would restore wetland characteristics and be more sustainable than dry-laid walls, a long-term, major, beneficial impact.

The impact of more sustainable water use on National Mall would be long-term, moderate to major, and beneficial.

Energy

Under alternative C, like the preferred alternative, all new, renovated, or adaptively reused facilities would meet the highest LEED standards practicable, exceeding NPS policies. In addition, seeking visible renewable energy sources for lighting and ornamental fountains would allow the National Park Service to present educational programs about renewable energy and sustainability. As a result, the impact on renewable energy would generally be long-term, moderate to major, and beneficial.

Summary

Compared to the no-action alternative, alternative C, like the preferred alternative, would maximize sustainable solutions for water use and renewable energy on the National Mall, setting an excellent example for using sustainable practices. The overall impacts on sustainability would generally be long-term, major, and beneficial because of much more sustainable water use and more renewable energy.

Cumulative Impacts

The impacts of past, present, and reasonably foreseeable actions would be the same as those described under the no-action alternative and would be long-term, major, and adverse. The impacts of alternative C would be long-term, major, and beneficial because of improved park conditions, a reduced deferred maintenance backlog, increased maintainability of mechanical systems and infrastructure, staffing aligned to support core missions, a streamlined permitting process for demonstrations and special events, and take advantage of sustainable practices. Resulting cumulative impacts would be long-term, moderate, and beneficial, with a substantial beneficial contribution from alternative C.

Conclusion

Compared to the no-action alternative, the overall impacts of alternative C on park operations would be long-term, major, and beneficial as a result of improved park conditions, a reduced deferred maintenance backlog, increased maintainability of mechanical systems and infrastructure, improved operational access, a streamlined permitting process for demonstrations and special events, a reduced funding gap between desired conditions and park budgets, appropriate staffing levels aligned to core operations, and exceedance of sustainability standards for development, renewable energy, and water use. While the overall impacts of the past, present, and reasonably foreseeable actions would be long-term, major, and adverse, when combined with the substantial long-term, major, beneficial impacts of alternative C, cumulative impacts would be long-term, moderate, and beneficial.

OTHER NEPA IMPACT ANALYSIS REQUIREMENTS

UNAVOIDABLE ADVERSE IMPACTS

Some vegetation would be lost as a result of widening and paving walkways or constructing hard surfaces for demonstration and special events under the preferred alternative and alternatives B and C. While this would be an unavoidable adverse impact, very little vegetation is expected to be lost under any of the alternatives.

Creating wider walkways around the Tidal Basin under the preferred alternative and alternative B would slightly reduce the size of the basin. Removing the north arm of the Tidal Basin under alternative C would be an avoidable loss.

RELATIONSHIP BETWEEN SHORT-TERM USES OF THE ENVIRONMENT AND LONG-TERM PRODUCTIVITY

All of the actions considered in this document would continue uses of the environment that were established over 200 years ago, and there would be no short-term uses of the environment that would adversely affect long-term productivity.

Long-term productivity of soils would be enhanced with reduced soil compaction under all action alternatives. Decreased use of potable water under the preferred alternative and alternative C would enhance water resources.

IRREVERSIBLE AND IRRETRIEVABLE RESOURCE COMMITMENTS

Irreversible commitments are those that cannot be reversed, except perhaps in the extreme long term. No irreversible resource commitments have been identified under any alternative for the National Mall plan.

In contrast, irretrievable commitments are those that are lost for a period of time, perhaps a long period of time.

Under the preferred alternative and alternatives B and C the walls of the Tidal Basin would potentially be relocated and the Tidal Basin made smaller in order to accommodate improved circulation for vehicles, pedestrians, and bicycles. Also, pedestrian and bicycle space could be added by either widening bridges, making lane changes, or constructing additional bridges. These circulation changes would be irretrievable commitments.

Filling the north bay of the Tidal Basin under alternative C would result in the irretrievable loss of this constructed water feature.

If continued soil compaction on the Mall under the no-action alterative resulted in the loss of American elm trees and a less consistent tree canopy, the impact would be irretrievable because of the effect on planned historic vistas. It could take 80 years or more to reestablish present conditions.

Energy used during construction would be irretrievable.

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THE PLANNING PROCESS AND PUBLIC ENGAGEMENT

The National Park Service announced the intent to prepare a management plan for the National Mall and Pennsylvania Avenue National Historic Park at a press conference on November 1, 2006, after a newsletter had been released describing the intent of the project. Subsequently, a *Federal Register* notice was printed on January 16, 2007, about the planning effort, stating the plan would provide a long-term vision for use and management for both park areas. On September 6, 2007, a notice was printed in the *Federal Register* stating that an environmental impact statement would be prepared as part of the planning process. It was subsequently determined that because the issues facing these areas are somewhat different, a separate environmental document will be prepared for Pennsylvania Avenue.

PUBLIC INVOLVEMENT

The public involvement process has paralleled the planning process and can be described as occurring in two phases. The first phase involved establishing the context for the plan, which included stating the purpose and significance of the National Mall, establishing the need for the plan through public scoping, and developing plan objectives. The second phase was the development of the alternatives, including the preferred alternative, that would be analyzed in the environmental impact statement. The newsletters, public meetings, and interagency cooperation involved in the planning process are further described below.

To reach diverse publics, extensive contacts have been made with the print and broadcast media. The planning effort has been covered by all media and in editorials and letters to the editor. An opinion editorial article by former NPS Director Mary Bomar encouraged participation in the planning effort and was printed in newspapers across the country. A number of magazines have also highlighted the planning effort, including *Architectural Digest, Landscape Architecture, National Park Foundation*, and *Scholastic Magazine*. Most media outlets have provided the planning website address for additional information.

All newsletters, along with other background information, were posted online at www.nps.gov/nationalmallplan.

Context for the Planning Effort

The planning effort for the National Mall has emphasized open and inclusive communications to engage the public and to understand their desires and concerns. The National Park Service has issued four newsletters at various stages of the planning process to keep people informed about what is happening.

Newsletter 1

The first newsletter, which was distributed in the fall of 2006 by mail and electronically, introduced the project and described the significance of the National Mall, as well as Pennsylvania Avenue National Historic Park, and how these places are used. The newsletter asked people to use the related National Mall planning website to comment on 15 open-ended questions about issues and concerns with public use on the National Mall and at Pennsylvania Avenue National Historic Park.

National Mall Symposium

The first newsletter invited the public to a symposium about the future use and management of the National Mall at the U.S. Navy Memorial. The symposium took place November 13–15, 2006, with the public included on November 15. Over 100 people attended. Speakers featured nationally recognized experts in architecture, landscape architecture, history, law enforcement, planning, and government. Discussions focused on the history and significance of the National Mall, protecting its resources, and best practices in managing similar areas.

As background information for symposium participants and for posting on the plan website, papers were done on the history of the National

Mall, planning, legal considerations (including First Amendment jurisprudence and commercial activities), and best management practices for landscape maintenance.

Public Scoping Meetings and Comments

The public comment period announced for the first newsletter extended from November 1, 2006, to March 16, 2007. In addition to the online survey, three public scoping meetings were held, on February 24, March 8, and March 10, 2007, in Washington, D.C. Background information was presented in a short video, with large display boards to show the planning area and to highlight issues. Study area maps were available on line and copies were provided. A total of about 60 people attended the meetings.

In all, more than 5,000 people from all 50 states and the District of Columbia provided on-line comments on the 15 scoping questions for the National Mall plan / environmental impact statement. Around 4,000 comments were variations of a form letter, and the 1,000 remaining communications offered more than 2,900 separate comments. Topics receiving the most comments included the landscape condition, visitor facilities, and orientation and information needs. George Mason University was contracted to analyze the comments and prepare a report (NPS 2007d), which was posted on the National Mall planning website. Respondents expressed a deep desire to sustain the openness and accessibility of the National Mall as well as upgrading the greenspace.

Newsletter 2

The second newsletter, released in the summer of 2007, summarized the public concerns and issues that were raised in response to the first newsletter. Concerns and issues included the appearance and landscape, facilities, services, activities, and regulations pertaining to crowd control, security, and public safety. The newsletter also introduced 21 planning principles to guide the plan, which were developed in cooperation with other federal and city agencies with planning responsibilities for the District of Columbia (see "Cooperating Agency Meetings" below). These principles, along with the statements of purpose and significance, formed the basis for the plan objectives presented in this document (see page 4).

Development of Alternatives

Newsletter 3 — Planning Workbook

The third newsletter was released in late fall 2007. It presented a range of draft conceptual alternatives for the future use and management of the National Mall. A no-action alternative that would continue current management direction was also described. Readers were asked to comment on the alternative concepts, and the feedback was used to begin developing a preferred alternative. A public comment form with 18 questions was posted on the planning website. The questions related to each area of the National Mall, asked for other ideas, and asked what ideas should be combined to become a preferred alternative. Public meetings were held at the Old Post Office Building in Washington, D.C., on January 8, 9, and 12, 2008.

The public comment period lasted from December 15, 2007, to February 15, 2008. During this period 17,758 comments were received; of these, 13,836 comments pertained to First Amendment rights, and there was widespread misunderstanding that the National Mall plan would change these fundamental rights. The website was updated to reflect and reinforce the commitment to First Amendment rights, as based on the Constitution and reaffirmed in legal decisions over the years. A second prominent area of response came from bicyclists.

Public comments were again analyzed by George Mason University, and a report was prepared (NPS 2008e).

Development of a Preferred Alternative through Choosing by Advantages

The draft preliminary alternatives that were presented to the public in newsletter 3 were refined, and a process known as "Choosing by Advantages" (CBA) was used to identify the most effective actions that would then be combined into a preliminary preferred alternative.

The planning team, park staff, and cooperating agencies participated in this process during a series of workshops in the winter and spring of

2008. Additional refinements were made, and a preliminary preferred alternative was developed that contained elements of all the alternatives and included additional ideas brought up by the public, consulting parties, cooperating agencies, and the ongoing examination of best practices used at other sites.

The CBA process focuses decision-making on the advantages of differences among alternatives and helps ensure that decisions consider the park's purpose, significance, issues, public and stakeholder viewpoints, and other relevant topics. The process assesses the advantages of differences and rates and ranks the importance of factors of groups of decisions. Standard factors that were considered included providing for public health, safety, and security; protecting cultural and natural resources; improving visitor experiences and enjoyment (education, information, access and circulation, and visitor amenities); improving park operations; and providing other benefits, such as for partnerships, concessioners, and the local economy. For the National Mall it is also important to improve the ability of the National Park Service to serve its unique civic role in addressing the full range of special events, including national celebrations, First Amendment gatherings, and special events.

The process is designed to make sure that nonmonetary factors are considered, and that planning level cost estimates* are also considered to maximize advantages to the government while keeping costs as low as possible. Planning cost estimates allowed the development of a preferred alternative that was less costly than other action alternatives while combining elements of all the alternatives to bring the highest level of advantage points.

The planning team and cooperating agencies determined that the most important factor for this planning effort is to provide a quality American experience. This includes enhancing visitors' abilities to understand and participate in First Amendment and/or civic activities, to have a welcoming experience, to understand core American values and history expressed by the memorials, to be able to enjoy the National Mall's beauty and vistas both by day and at night, and to be inspired. The second most important factor was the ability to improve natural resource conditions. It is important to note that all of the alternatives would protect cultural resources, so this factor ranked lower in terms of distinguishing differences between the alternatives.

Newsletter 4 — Preliminary Preferred Alternative

The preliminary preferred alternative was described for the public in newsletter 4, which was released in February 2009. People were asked to make comments on-line, and the comment period lasted from March 1 to May 15, 2009. In addition, two public meetings were held, on March 11 and 14, in Washington, D.C. This newsletter also explained that because the issues facing the National Mall and Pennsylvania Avenue are somewhat different, and in order not to lose focus of the importance of Pennsylvania Avenue, a separate environmental document will be prepared for Pennsylvania Avenue.

Cooperating Agency Meetings

In April 2006 the National Park Service invited the following federal and D.C. agencies to cooperate in the preparation of a National Mall plan.

Advisory Council on Historic Preservation
Architect of the Capitol
D.C. Department of Transportation
D.C. Office of Planning
D.C. Historic Preservation Office
The Federal Reserve Bank
General Services Administration
National Archives
National Capital Planning Commission
National Gallery of Art
Smithsonian Institution
U.S. Bureau of Engraving and Printing
U.S. Commission of Fine Arts
U.S. Department of Agriculture
U.S. Holocaust Memorial Museum
U.S. Park Police

* Planning level cost estimates are rough estimates that allow ideas to be compared to make decisions about alternative courses of action. Planning level cost estimates are not to be used for estimating projects for construction.

U.S. Secret Service, Department of Homeland Security
Washington Area Metropolitan Transit Authority

One result of this process was the cooperative development of planning principles, which in addition to overarching principles, addressed the National Mall's urban context and identity, future memorials, historic plans and resources, views and vistas, design standards, lighting, information, civic space, educational opportunities, pedestrian experiences, transportation, maintenance operations, law enforcement, business services, and health, safety, and security. The principles were printed in newsletter 2, and as previously described, they formed the basis of the plan objectives.

Throughout the planning process the National Park Service has been cooperating with the National Capital Planning Commission, the Commission of Fine Arts, the D.C. Office of Planning, and the Architect of the Capitol to discuss projects and how they interrelate. One result of this cooperative effort was the development of *Planning Together for Central Washington,* a pamphlet explaining the agencies' various planning efforts and common objectives.

Additional meetings were held to discuss planning principles (presented in newsletter 2), standards, event management, and the preliminary range of alternatives. CBA workshops were also held to develop the preliminary preferred alternative.

CULTURAL RESOURCE CONSULTATION

Approximately 60 organizations with an interest in the National Mall plan or historic preservation were asked to be consulting parties under the National Historic Preservation Act section 106 process. The following organizations responded that they would like to participate:

Advisory Council on Historic Preservation
American Civil Liberties Union of the National Capital Area
American Institute of Architects
American Society of Landscape Architects
Commission of Fine Arts
Committee of 100 on the Federal City
Cultural Tourism DC
District of Columbia Historic Preservation Office
D.C. Preservation League
Dwight D. Eisenhower Memorial Commission
Eastern National
Equal Honor for All
Friends of the National World War II Memorial
Guest Services, Inc
The Guild of Professional Tour Guides
Landmark Services, Inc.
Martin Luther King, Jr. National Memorial Project Foundation, Inc.
National Association for Olmsted Parks
National Capital Planning Commission
National Coalition to Save Our Mall
National Mall Conservancy
National Parks Conservation Association
National Trust for Historic Preservation
Organization of American States
Smithsonian Institution
Society of Architectural Historians – Latrobe Chapter
Trust for the National Mall
Washington DC Convention and Tourism Corporation
Willard Hotel
Downtown Business Improvement District

Beginning in January 2008, consulting parties worked with the National Park Service, the Advisory Council on Historic Preservation, and the D.C. Historic Preservation Office to examine the ramifications of planning alternatives on cultural landscapes, the NPS List of Classified Structures, historic districts, on sites listed on or eligible for listing on the National Register of Historic Places.

The consultation process is ongoing, and at least 10 meetings or opportunities to participate were held by April 1, 2009. A bus tour was provided in May 2007 to familiarize participants with planning issues. Background materials, maps, and studies were posted on the website and handed out at meetings. Consulting parties provided comments in April 2008 on the range of alternatives, with the National Park Service responding to the comments and incorporating ideas into a preliminary preferred alternative. Following internal briefings on the preliminary preferred alternative, the section 106 process was begun

again in March 2009, with a focus on the impacts of a preliminary preferred alternative.

This *Final Environmental Impact Statement* defines what would occur where and serves as an overarching organizational document for future project implementation that will generally include standard procedures of site-specific design, commission reviews, public engagement, and historic preservation consultation. Some specific actions could be called out in the programmatic agreement. Future compliance in accordance with the National Historic Preservation Act will be needed on certain proposed actions, as identified in Table 43.

TABLE 43: ACTIONS REQUIRING ADDITIONAL COMPLIANCE UNDER THE NATIONAL HISTORIC PRESERVATION ACT, SECTION 106

Ongoing NPS Actions
Complete Thomas Jefferson perimeter security
Construct Vietnam Veterans Memorial Center
Washington Monument security screening
National Mall Actions
Develop coordinated palette of paving materials, crosswalks, and site furnishings*
Develop bike routes
Specific Areas
Union Square
Redesign Union Square
Mall
Develop welcome plaza / 12th Street corridor
Rehabilitate soil, grass, irrigation for center panels
Install curbs, protection for elm tree panels
Provide restrooms
Provide civic infrastructure
Pave walkways, enhance pedestrian environments*
Provide additional lighting
Install parking meter stations
Washington Monument
Construct visitor facility / multipurpose facility
Provide civic infrastructure (utilities, etc.)
World War II Memorial
Constitution Gardens
Relocate Lockkeeper's House
Construct multipurpose area or food service facility
Rehabilitate lake
Rehabilitate / redesign walk areas*
Remove / rehabilitate concession facility
Vietnam Veterans Memorial
Rehabilitate existing walkways; provide seating
Lincoln Memorial
Renovate Lincoln Memorial restrooms, relocate bookstore, and rehabilitate / replace exhibits
Add restroom near south concession stand
Korean War Veterans Memorial
Revise walks
Ash Woods
Replace / relocate restroom
Replace USPP stables / add new road entry
Potentially add new concession facility
Revise road/walks
Tidal Basin Area
Rebuild Tidal Basin walls, widen walks and bridges, and provide pedestrian amenities*
Install pedestrian lighting
Provide concession food service / restrooms
Provide new recreation equipment rental facility
Provide bike lanes
West Potomac Park Riverfront Area
Add bike lanes
Rehabilitate shoreline
Redesign parking
Add walks
George Mason Memorial
Rehabilitate Fountain 4
Franklin Delano Roosevelt Memorial
Potentially provide concession facility
Improve ballfields
Thomas Jefferson Memorial
Provide civic infrastructure
Add restroom
Provide concession facility

U.S. FISH AND WILDLIFE SERVICE CONSULTATION

During preparation of this document, NPS staff informed the U.S. Fish and Wildlife Service Field Office for the District of Columbia area about the planning effort and requested a list of endangered or threatened species that might be in the area. A response was received in September 2007 that no federally listed endangered or threatened species are known to exist in the planning area.

In accordance with section 7 of the Endangered Species Act and relevant regulations at 50 CFR Part 402, the National Park Service determined that implementing the preferred alternative in this plan would have no effect on listed species and so will not require formal consultation.

The National Park Service has committed to consult on future specific actions conducted under the framework of this plan to ensure that such actions are not likely to adversely affect threatened or endangered species.

STAKEHOLDER AND INFORMATIONAL BRIEFINGS

Throughout the planning process meetings have been held with various federal and city agencies about the planning effort, including the following:

American Institute of Architects
American Planning Association
American Society of Landscape Architects
Catholic University (urban planning and architecture classes), Washington, D.C.
Cesar Chavez Public Charter Schools for Public Policy, Washington, D.C.
Clemson University, Clemson, S.C.
Denver Urban Explorers Association
Downtown D.C. Business Improvement District
Eastern National (cooperating association)
Foggy Bottom Neighborhood Association
Friends of the National World War II Memorial
Guild of Professional Tour Guides of Washington, D.C.
Guest Services, Inc., Washington, D.C.
Harvard Graduate School of Design / University of Virginia
Landmark Services Inc. (Tourmobile operator)
Martin Luther King, Jr. Memorial Foundation
Maturals, senior class at Community College, Northern Virginia
National Museum of African American History and Culture
National Parks Conservation Association
National Park Foundation
Penn Quarter Neighborhood Association
Interagency Initiative for National Mall Road Improvement Program, Streetscape Initiative Subgroup, Washington, D.C.
Summit Foundation, Washington, D.C.
Trust for the National Mall
U.S. Navy Memorial Foundation
Washington Convention and Tourism Corporation / Destination DC
Washington, D.C., Mayor's Summer Youth Program
Washington, D.C., Historical Society
William and Mary College, Semester in D.C.

DESIGN AND PLANNING PROFESSIONAL ASSOCIATION ASSESSMENT

The American Society of Landscape Architects convened a blue-ribbon panel of architects, planners, and landscape architects to examine "Reviving America's Front Yard" on March 19–20, 2009. The National Park Service provided background materials, a presentation, and a tour. Conclusions were announced at a press conference. The panel led to a semester-long design exploration focused on the National Mall by the Harvard Graduate School of Design and the University of Virginia.

COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT

The National Capital Planning Commission met on March 4, 2010, to receive testimony on the *Draft National Mall Plan / Environmental Impact Statement*. The following organizations made statements to the commission, and copies of their testimony were provided to the National Park Service:

American Society of Landscape Architects
Eisenhower Memorial Commission
National Coalition to Save Our Mall
Downtown DC Business Improvement District
D.C. Preservation League
Trust for the National Mall

The comments of these organizations are included in volume 2 as comments on the *Draft Environmental Impact Statement* and are so identified. NPS responses are also provided to these comments.

Additionally the Architect of the Capitol submitted a letter to the National Capital Planning Commission about their involvement in the National Mall planning effort. Two individuals also provided comments to the commission, but these comments were not made available to the National Park Service.

LIST OF REVIEWING AGENCIES AND ORGANIZATIONS

The following governmental agencies, businesses, and organizations were sent copies of the *Draft Environmental Impact Statement* for review and comment. An asterisk (*) denotes that comments were received and are reprinted in volume 2.

Cooperating Agencies

Advisory Council on Historic Preservation*

Architect of the Capitol*
Council on Environmental Quality
D.C. Department of Transportation
D.C. Office of Planning*
D.C. Historic Preservation Office*
Federal Reserve Board*
National Gallery of Art
National Capital Planning Commission*
Smithsonian Institution*
U.S. Commission of Fine Arts*
U.S. Department of Agriculture
U.S. Department of Defense, Arlington National Cemetery
U.S. General Services Administration*
U.S. Environmental Protection Agency*
Washington Metropolitan Area Transit Authority*

Consulting Parties

American Society of Landscape Architects*
Committee of 100 on the Federal City*
D.C. Preservation League*
Downtown D.C. Business Improvement District*
Eisenhower Memorial Commission*
Guest Services, Inc.*
Guild of Professional Tour Guides of Washington, D.C.*
National Coalition to Save Our Mall*
National Parks Conservation Association*
National Trust for Historic Preservation*
Society of Architectural Historians — Latrobe Chapter*
Trust for the National Mall*

Regional Governments

City of Alexandria, Virginia*
D.C. Department of Parks and Recreation
Loudoun County, Virginia*
Maryland Department of Transportation*
Virginia State Historic Preservation Office

Organizations and Businesses

American Civil Liberties Union of the National Capital Area
American Institute of Architects, Washington, D.C., Chapter*
American Planning Association
American Restroom Association*
Association of the Oldest Inhabitants of the District of Columbia*
Capitol Hill Business Improvement District
City Parks Alliance
Cultural Tourism DC
Detroit Model Yacht Club*
Eastern National
Equal Honor for All
Foggy Bottom Neighborhood Association
Friends of the National World War II Memorial
Gold Star Mothers National Monument Foundation, Inc.*
Golden Triangle Business Improvement District
Landmark Services, Inc.
Martin Luther King Jr. Memorial Project Foundation, Inc.
National Association for Olmsted Parks
National Coalition to Save Our Mall*
National Mall Conservancy
National Turfgrass Association*
Organization of American States
Penn Quarter Neighborhood Association
Penn Quarter Business Community
Public Hygiene Lets Us Stay Human (PHLUSH)*
Stars Unlimited*
Streetscape Committee
Trust for the National Mall*
University of Colorado*
U.S. Navy Memorial Foundation
Washington Area Bicycle Association
Washington DC Convention and Tourism Corporation
Washington Historical Society
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Russell Brayley Coordinator, Tourism and Events Management Program, George Mason University	Ph.D., Texas A&M University. Experience developing outdoor recreation management plans, and worked with the socioeconomic division of the Canadian Parks Service designing and conducting visitor surveys.	Conducted research and helped write socioeconomic sections.
Greg Sorensen, Senior Technical Writer / Editor URS Corporation	B.A., International Affairs, University of Colorado 34 years experience writing and editing (24 years with the National Park Service, 10 years with URS Corporation)	Developed newsletters; edited and formatted draft and final environmental impact statements; researched and wrote sections for access and circulation, visitation patterns and trends.

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PHOTO CREDITS

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DRAFT
NATIONAL MALL PLAN /
ENVIRONMENTAL IMPACT STATEMENT

THE NATIONAL MALL



KOREAN WAR
VETERANS
MEMORIAL

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APPENDIX A: THE NATIONAL MALL AND MEMORIAL PARKS: FOUNDATION STATEMENT

The National Mall and Memorial Parks, an organizational unit of the National Park Service's National Capital Region, manages several areas within Washington, D.C., including the National Mall, Pennsylvania Avenue National Historic Park, Ford's Theater National Historic Site, and numerous circles and squares throughout the city containing monuments, memorials, and fountains, such as those at DuPont, Logan, and Washington circles. To develop foundation elements for the National Mall plan, the first step was to understand the purpose and significance of the National Mall and Memorial Parks. The following purpose and significance statements were derived from court decisions; congressional statements; the laws, regulations, and policies that guide the National Park Service; and other laws and plans for Washington, D.C.

Purpose

The following are the purposes of the National Mall and Memorial Parks:

- Preserve, interpret, and manage federal park lands in the national capital on the land delineated by the L'Enfant plan and the 1902 *Senate Park Improvement Plan* (commonly referred to as the McMillan plan), including green spaces, vistas, monuments, memorials, statues, historic sites, cultural landscapes, and natural and recreation areas.
- Preserve places where important events in U.S. history occurred (e.g., Ford's Theater, the Petersen House, Pennsylvania Avenue).
- Provide opportunities for visitor contemplation, celebration, commemoration, citizen participation, recreation, and demonstration, where the full expression of the constitutional rights of speech and peaceful assembly occur.
- Maintain space for the symbols and icons of our nation and its ideals (e.g., equality, freedom, and democracy).
- "Washington, D.C. is more than the seat of government and residence of nearly one million citizens. It is a second home to every American, and the symbol of this nation to the world."

Significance

The National Mall and Memorial Parks are significant for the following reasons:

- The areas under NPS stewardship are some of the oldest public lands in our nation, dating from 1791 when the District was established; the L'Enfant plan guided the creation and development of park areas.
- Much of the area managed by the National Mall and Memorial Parks reflects the physical expression of the historic L'Enfant and McMillan plans for the federal city.
    - The L'Enfant plan of the capital represents the states as bound together by the constitutional authority.
- The areas managed by the National Mall and Memorial Parks are vital components of the historic federal city — the singular designed urban core that from inception has physically expressed its political role as the American national capital city and seat of government.
    - The park retains the major design features of the historic plan of Washington, the sole American example of a comprehensive baroque city plan with a coordinated system of radiating avenues, parks, and vistas laid over an orthogonal grid, which was both symbolic and innovative for the new nation.
    - The McMillan plan, the first comprehensive plan for modern city development, resulted in the most elegant example of City Beautiful tenets.
    - In the 1870s a major public works project enclosed Tiber Creek within the sewer system and created West Potomac Park. The McMillan plan conceived ideas for West Potomac Park on the reclaimed Potomac Flats with gardens and spaces for commemoration.
- The National Mall and Memorial Parks preserve the stage upon which historic events of national significance occurred, such as the assassination of President Lincoln at Ford's

Theater in 1865 and the "I Have a Dream" speech of Dr. Martin Luther King, Jr., at the Lincoln Memorial in 1963.

- The iconography, architecture, and open spaces within the National Mall and Memorial Parks are a source of national pride, and they commemorate individuals and events that symbolize our cherished values and ideals: democracy, freedom, justice, compassion, equality, unity, diversity, service, healing, citizenship, civil rights, liberty, service, dedication, courage, sacrifice, innovation, unity, and diversity, as well as struggles of the international community for freedom and democracy. A visit to the park sites is a pilgrimage to find inspiration among the principal symbols of America's heritage.
- The National Mall and Memorial Parks are the setting for national celebrations, parades, festivals, ceremonies, and rallies, as well as local and regional events.
- The National Mall and Memorial Parks comprise a globally recognized platform to exercise democratic First Amendment rights.
- The states within our nation are illustrated in:
    - street names and layout from the L'Enfant plan and successor plans
    - state stones in the Washington Monument
    - state listings on the Lincoln Memorial façade, the World War II Memorial, and the 56 Signers of the Declaration of Independence
    - state flags at Columbus Circle
- African American personages, history, and events have taken place or are commemorated here (Benjamin Banneker, Pearl Incident, segregation and desegregation, Marian Anderson, 1963 March of Washington, Dr. Martin Luther King Jr., Rosa Parks state funeral, headquarters of the National Council of Negro Women).
- The District of Columbia, as the capital of the nation, is an international city that is a melting pot where many cultures and languages come together.

FUNDAMENTAL RESOURCES

- The landmark L'Enfant and McMillan plans have become preeminent international examples of land use planning and design.
    - Pierre L'Enfant designed the plan of the City of Washington in 1791, and Andrew Ellicott mapped it the following year. Vistas for the most part relate to the course of avenues, street grid, monuments, and sites within the parks and the airspace up to the legal height-limit of Washington, D.C.
    - The McMillan plan components include the Lincoln Memorial and the reflecting pool, a site for a hero (the Thomas Jefferson Memorial), and the Arlington Memorial Bridge.
- There are numerous commemorative sites, such as Ford's Theater National Historic Site, Pershing Park, Freedom Plaza, the U.S. Navy Memorial, the General Meade statue, the Mellon Fountain, the Franklin Delano Roosevelt Memorial, the Benjamin Franklin statue, the Pulaski statue, and the General Pershing statue.

FUNDAMENTAL VALUES

- Park aesthetics contribute to the character of the capital city and its relationship with the people of the United States.
- Monuments and memorials honor individuals and events and reflect the core values of the country (citizenship, freedom, diversity, equality, civil rights, liberty, service, dedication, courage, sacrifice, innovation, unity, emotional healing, and struggles of the international community for freedom and democracy).
- Citizenship activities, visitor enjoyment, educational and recreational activities, as defined by the Constitution, laws, regulations, and judicial rulings.
- Opportunities for personal or emotional connections to the park.
- Public access and ownership and a sense of belonging.

Primary Interpretive Themes

- The national capital belongs to all citizens, and it provides citizens a sense of belonging to a nation.
- The National Mall and Memorial Parks tell stories about ideas, people, and events that have changed and guided our nation and that are commemorated here.
- Sites managed by the National Mall and Memorial Parks offer fundamental citizenship experiences so that all may understand, celebrate, and participate in being American.
- The National Mall and Memorial Parks provide the stage where constitutional rights of free speech and assembly find their fullest expression.
- The L'Enfant and McMillan plans guided city development.
- The park is a national park, part of the larger national park system of public ownership and stewardship of America's treasures.

Other Important Resources and Values

- The river systems surrounding the park are critical to the city's setting. The confluence of the Potomac and Anacostia rivers is at Hains Point.
- Park roads generally provide scenic driving experiences and open and unimpeded access across public land in the middle of the District of Columbia, in accordance with historic plans.

APPENDIX B: BEST PRACTICES

Best management practices used by others were researched to provide a foundation for determining what steps could be taken to improve maintenance and operations for the National Mall. The review of best practices has been an ongoing process as alternatives were developed, and the most applicable practices were included in the action alternatives. The best practices that have been considered are summarized below.

Design Features for Public Use and Maintenance

Destinations should be convenient and flexible, and they should be well used throughout the day so people are comfortable being there. Best practices for design include:

- Create a sense of place and enhance the landscape appearance through a hierarchy of design for site furniture (benches, trash cans, information stations, light fixtures, and orientation signs), with coordinated logos, color systems, signage, uniforms, and messages.
- Use high-quality and durable materials and details to attract users, contribute to respect and user stewardship, and deter vandalism. Quality is the result of design, construction, facility condition, and maintenance. All four are needed components to achieve the desired standards. Quality places are pleasant to be in and appeal to all five senses. Quality, comfort, cleanliness, and feelings of safety make a good first impression.
- Use design elements such as planting beds, cobblestone borders, raised curbs, placement of seating, mobile carts, groundcovers, and decorative or post-and-chain fencing to manage the movement of people and to protect landscape areas and reduce social trails and damage to trees and turf.
- Design public areas that incorporate the attributes of successful places:
    - *Access and linkages* — good visual access, walking environment, defined access routes that are convenient to entries, multimodal access, and convenient transit stops
    - *Comfort and image* — cleanliness, safety, places to sit
    - *Uses and activities* — many types of activities that appeal to diverse users and mixed ages, space for singles and groups, areas used throughout the day, and a management presence
    - *Sociability* — meeting places for singles and groups, pride in features, destinations that bring people together, smiling people who make eye contact
- Plan for certain types of visitor amenities that go together, such as signs, seating areas, cafés, restrooms, and places where paths cross. Functioning together, these elements have a bigger impact than they would alone. Combining activities and uses in one area can help create a comfortable and social place for people to relax, spend time, and attend to several needs at once (PPS 2008).
- Encourage visitors to linger at visitor service locations by making them pleasant places. This will help concentrate trash where it can be handled efficiently and reduce trash at memorials or other trash-free zones. For example, the following groupings of amenities would be suitable for areas of the National Mall:
    - *Entries* — identification and welcome signs, orientation /directional / wayfinding signs, seating, trash / recycling containers
    - *Memorials* — commemorative works, education and information, bookstores, restrooms / drinking water, seating for contemplation
    - *Connections / on-the-way experiences* — orientation maps, directional signs, walks, pleasant surroundings for enjoyment, seating, shade, education, interactive water features, restrooms / drinking water, food carts, refreshment stands with outdoor seating and tables, trash / recycling containers, limited retail, bike parking, transit access (sightseeing, tour bus, etc.)
    - *Visitor facility areas* — destinations where visitors can linger and recharge, views, food, gifts, bookstores, restrooms / drinking water, performance / entertainment

areas, trash / recycling containers, gardens, water features (including interactive features), seating and tables, convenient transit access (sightseeing and tour buses, etc.)

- *Events* — convenient to entries, programmable space for events, portable restrooms, event logistics, utilities, defined access routes
- *Restrooms* — seating, trash containers, walks, drinking water, wayfinding, and education

- Consider ease of maintenance and typical uses, and incorporate ergonomics that support employee safety.
- Ensure that access and circulation routes accommodate staff and maintenance vehicles, as well as pedestrians and other types of use.

Natural Resources

Soils

- Maintain or restore soil function to support healthy plants, biological communities, infiltration, and water storage.
- Alleviate erosion and compaction.
- Maintain or improve soil conditions in the top 12 inches of soil (constituting the root zone). Soils should contain the appropriate amount of organic matter to support infiltration and water storage. The least harmful soil amendments, such as compost, should be used, and conditions should be created to restore soil organisms (American Society of Landscape Architects [ASLA] et al. 2008).

Vegetation

- Green, organic landscapes are often safer, cleaner, and healthier for everyone. The public should understand "green" goals.
- Select plants that are suitable for the area to ensure that they will grow and that they can be easily maintained.

Event Management

To better accommodate events, spaces should be designed to sustainably accommodate events. This would include the following best management practices

- Pave surfaces in event venues.
- Design routes and areas to accommodate access and facilities such as stages or portable restrooms.
- Provide utility infrastructure and connections in certain areas to minimize resource damage.
- Provide permanent, regularly spaced tent anchor locations to eliminate the need for tent stakes.
- Replace turf with a sand-based soil system combined with an efficient irrigation system.
- Design areas to support temporary events fencing.

Successful event permit processing, operations, and management look at ways to address or control the impacts of high levels of use. Best practices include

- Develop on-line processes for permits and payment.
- Write an events policy that identifies the physical capacity of each area (numbers of people who can safely fit into the space).
- Limit the number, location, or duration of events (17–21 days is typical).
- Allow or prioritize events that have some relationship to specific identified goals or locations.
- Schedule events at non-peak times or seasons to attract use when resources can absorb more use.
- Require back-up plans in case of inclement or extreme climatic conditions (hot or cold, wet or dry).
- Provide maps or onsite marking for utilities and infrastructure, as well as resources that are to be protected.
- Build post-event recovery time into the event scheduling process.
- Use a tiered permit fee system.
- Recover the full costs to restore or repair areas.

Best practices for operations and management during events are varied and extensive. They include:

- Monitor events constantly and document pre- and post-event conditions.

- Utilize checklists to record compliance with permits.
- Prohibit event infrastructure or facilities within drip lines of trees
- Identify locations for temporary event facilities, such as trucks with portable restrooms or temporary walkways.
- Systematically provide information about and improve access to public transportation.
- Close roads to accommodate events.
- Limit events on turf or in vegetated areas.
- After events, quickly restore areas.

PUBLIC ACCESS

Pedestrian Environments — Walking environments should be safe, comfortable, convenient, efficient, and welcoming.

- Provide seating, human-scale street furniture, and interesting pedestrian amenities that make walking a pleasure.
- Ensure street crossings are safe, and use various traffic-calming measures.
- Treat motorists and pedestrians equitably; for example, make waits at stoplights equal for both pedestrians and drivers, and do not give vehicles priority in walkable urban areas.

Traffic Calming — Traffic calming is the use of techniques such as engineering design, education, and enforcement to reduce traffic speeds and improve conditions for nonmotorized users.

- Provide speed humps, raised crosswalks, raised intersections, textured surfaces, midblock crosswalks, and traffic circles at intersections.
- Engineer design solutions to reduce the volume of vehicles in an area by controlling directional movement.

Bicycling — Bicycling is a nonpolluting, healthy and sustainable mode of transportation, as well as a recreational activity.

- Promote bicycling through more equitable use of road space by converting some road lanes to bike use.
- Provide bike racks along with other should be provided, along with close-in bicycle parking spaces and valet parking for events.
- Give priority to clearing snow from bike trails.
- Foster bike-sharing rental programs to make bicycling more convenient.

Public Transportation — Better public transportation access equates with improved quality of life and better environmental quality.

- Facilitate connections between different modes of transit (subways, buses).
- Increase bicycle use and alternative public transportation as important components of sustainable, green urban areas.
- Use transit-oriented development to reduce automobile dependency and emphasize pedestrian-friendly experiences, quality of public spaces, place identity and character, and sustainable development.
- Concentrate development along transit corridors, generally within a 10-minute walk from subway, light rail, heavy rail, or commuter stations or along heavily used bus or bus rapid transit corridors.

Travel Demand Management — The goal of travel demand management is to manage congestion, improve air quality, and enhance quality of life.

- Reduce private vehicle use and use variable price parking meters.
- Use parking controls to reduce vehicle numbers in urban core areas, and discourage less efficient automobiles through parking policy.
- Provide parking cost incentives to promote free or close-in parking for green vehicles.

Tour Bus Management — Best practices to manage tour buses include

- Designate curbside loading / unloading areas, as well as prohibited parking/stopping areas.
- Enforce time limits for stopping or idling (3–10 minutes).
- Provide long-term parking in peripheral areas or at centrally located off-street, multimodal parking facilities, or provide parking locations with a single parking fee that allows in and out parking.
- Control use through daily permits, by prohibiting access to some roads or requiring the use of designated routes, limiting the

number of buses, and developing a tour bus registration system.

- Require tour bus users to transfer to local transit to reduce tour bus congestion in certain areas.

Visitor Experience

Memorable visitor experiences can be created by considering all aspects of how visitors get to the park, find out where to go, learn about what they are seeing, and move through the site. In addition, providing quality places that are pleasant to be in can help visitors enjoy being on site, knowing that they are in a safe environment and that they can easily take care of personal needs. Onsite staff, settings, and programs should all support memorable visitor experiences.

- Make visitor amenities (rest areas, water, bathrooms, food service, gift shops, and stroller and locker rentals) convenient, accessible, and sized and configured to meet the visitation levels on high-volume days.
- Incorporate educational messages into facilities.
- Provide many types of activities and choices of things to appeal to diverse users and mixed ages.
- To reduce congestion, encourage use during non-peak time with incentives and programs, such as pricing breaks, advanced reservation systems, timed ticketing, coordination with tour companies, and scheduling special events and programs during non-peak times or at locations that can accommodate more use.
- Utilize multiple types of food service, ranging from mobile carts, refreshment stands, concentration of fast food choices (food courts), order-ahead picnic or pickup food, and full service restaurants, to meet a variety of user needs. The recommended split between fast-food and full-service facilities is 80% fast-food to 20% full service. Mobile carts are generally around 5% of the 80%.
- Provide quality retail merchandise at all price ranges and ensure that it relates directly to the desired visitor experience.

Operations and Maintenance

Building public support and encouraging positive visitor behavior can help achieve higher maintenance standards. Well-maintained and clean areas encourage a higher standard of behavior.

- Prominently display visitor rules of behavior, and provide a visible management and staff presence.
- Take time to help users understand regulations, limits, and maintenance goals to help gain their cooperation and support.
- Use simple but visually unobtrusive systems, such as flags, to identify areas closed for restoration.
- To foster a greater sense of stewardship, involve the public in activities such as planting, volunteer projects, and cleanup.
- Develop written standards of care and criteria for all areas and types of facilities, ensuring that they are clear and understandable.
- Use photos to illustrate desired or satisfactory conditions as well as unsatisfactory conditions. Make sure all staff understand the desired standards or level of care and know their role in achieving them.
- To ensure that standards are achieved, use daily checklists, surprise or scheduled walk-through inspections, and peer reviews.
- When feasible, use or modify recognized standards developed or sanctioned by professional associations or organizations.
- Ensure that all staff members support standards through actions such as picking up trash.
- Make clean and “green” the goal.
- Assign staff to certain areas to help build pride as they take care of “their” site.
- Supplement geographic area teams with quick response teams to address immediate and high-profile needs.
- Have staff members ask visitors for immediate feedback that can be used to recognize good work as well as identify areas for improvement.
- Focus employee development on needed skills and building expertise to handle prominent activities.
- Use specialists for trees, horticulture, organic turf, irrigation, or display fountain pumps to supplement core staff functions.

- Take advantage of specialized training programs provided by organizations with historic landscape preservation experience, such as the nonprofit Olmsted Center for Landscape Preservation, to draw on their expertise.
- Cross train staff to maximize learning from best practices or to ensure a common knowledge and understanding of related tasks (e.g., grounds maintenance crews or those who provide directions and visitor information).
- For waste management, concentrate trash-generating activities at specific places, such as food service locations or refreshment stands so visitors will be more inclined to stay there to eat or take care of other needs and then deposit their trash and recyclables in appropriate receptacles.
- Locate trash and recycling containers together, and make sure they have restricted openings so the containers are not misused.
- Use highly visible symbols and messages on trash and recycling containers.
- Locate trash and recycling containers so that visitors can see them clearly and are not tempted to litter.
- Thank visitors for putting trash in containers, recycling, or picking up trash.
- Mechanize trash and recyclable pickups to promote efficiency and reduce the potential for staff injuries.
- Strategically locate pickup areas so they are easily accessible and make operations as efficient as possible.
- Conduct major trash pickups at night so the park is clean every morning.
- Provide regular maintenance during open hours.
- Monitor use levels in facilities such as restrooms so that facilities are cleaned in a timely fashion and the desired standard of care is achieved.
- Use electronic monitoring to identify maintenance needs (burned out light bulbs) or to set regular maintenance schedules (such as self-cleaning restrooms).
- Create a public website to help identify maintenance and repair needs, as well as to respond to public concerns.
- To simplify work and limit the types of expertise needed, standardize furnishings, component parts, and equipment to the extent feasible.

APPENDIX C: NATIONAL REGISTER PROPERTIES ON THE NATIONAL MALL

HISTORIC DISTRICTS NEAR PLAN AREA

17th Street

Downtown

East and West Potomac Park

Federal Triangle

Fifteenth Street Financial

Lafayette Square

L'Enfant Plan of the City of Washington, District of Columbia

Northwest Rectangle (determined eligible)

Pennsylvania Avenue National Historic Site

Potomac Annex (determined eligible)

Rock Creek and Potomac Parkway

The Mall

PLAN AREA — IDENTIFIED CULTURAL LANDSCAPES

Constitution Gardens

D.C. War Memorial

Lincoln Memorial Grounds

The Mall

Thomas Jefferson Memorial

Washington Monument and Grounds

Union Square

West Potomac Park

PLAN AREA — HISTORIC STRUCTURES

1. 56 Signers Memorial
2. Arts of Peace (Literature & Aspiration)
3. Arts of Peace (Music & Harvest)
4. Braddock's Memorial Rock Well
5. Canal Lockkeeper's House
6. Capitol Reflecting Pool
7. Constitution Avenue (Corridor)
8. D.C. War Memorial
9. D.C. War Memorial Pathway
10. Downing (Andrew Jackson) Urn
11. Ericcson (John) Monument
12. First Airmail Flight Marker
13. Franklin Delano Roosevelt Memorial
14. George Mason Memorial
15. George Mason Memorial — Fountain 4
16. German American Friendship Garden
17. Grant (General Ulysses S.) Memorial
18. Henry (Joseph) Memorial
19. Independence Avenue, SW (Corridor)
20. Japanese Lantern
21. Japanese Pagoda
22. Jefferson Drive, SW
23. Jefferson Memorial
24. Jefferson Memorial — Statue
25. Jefferson Pier
26. Jones (John Paul) Memorial
27. Korean War Veterans Memorial
28. Kutz Memorial Bridge
29. Lady Bird Johnson Beautification Program Plaque
30. Lincoln Memorial — Approachway
31. Lincoln Memorial
    a. Alaska-Hawaii Stone
    b. MLK Inscription
32. Lincoln Memorial — Statue
33. Lockkeeper's House — Plaque
34. Lockkeeper's House — Mounting Block
35. Madison Drive, NW
36. Mall — Olmsted Lights
37. National Grange Marker

38. Reflecting Pool (Lincoln)
39. Stone Seawalls — West Potomac Park
40. Survey Lodge
41. Sylvan Theatre
42. Tidal Basin
43. Tidal Basin Seawalls
44. Tidal Basin — Inlet Bridge
45. Tidal Basin — Outlet Bridge
46. Union Square
47. Bulfinch Gatepost (East)
48. Bulfinch Gatepost (West)
49. Vietnam Veteran's Memorial
    a. In Memory Plaque
50. Vietnam Veteran's Memorial — Statue
51. Women's Vietnam Veteran's Memorial
52. Washington Monument
    a. Washington Monument Dedication Plaque
    b. Elevation Benchmark
53. Washington Monument Lodge
54. Watergate Steps
55. World War II Memorial
56. Constitution Avenue Belvedere
57. Parkway Drive / Rock Creek and Potomac Parkway
58. Constitution Gardens

ADDITIONAL NPS RESOURCES NEARBY

59. Meade (General George C.) Statue
60. Mellon (Andrew) Park — Fountain
61. Mellon (Andrew) Park — Bench
62. Cuban American Friendship Urn
63. Stone Seawalls — East Potomac Park
64. U.S. Engineer's Storehouse — East Potomac Park

GEORGE WASHINGTON MEMORIAL PARKWAY

65. Memorial Bridge
66. Arts of War (Sacrifice)
67. Arts of War (Valor)

Historic Properties

The Mall and Surrounding Areas

National Mall Plan

National Mall and Memorial Parks • Washington, D.C.

National Park Service • US Department of the Interior

DSC • Oct. 2009 • 802 • 100472

North

0 200 400 600 800 1,000 Feet

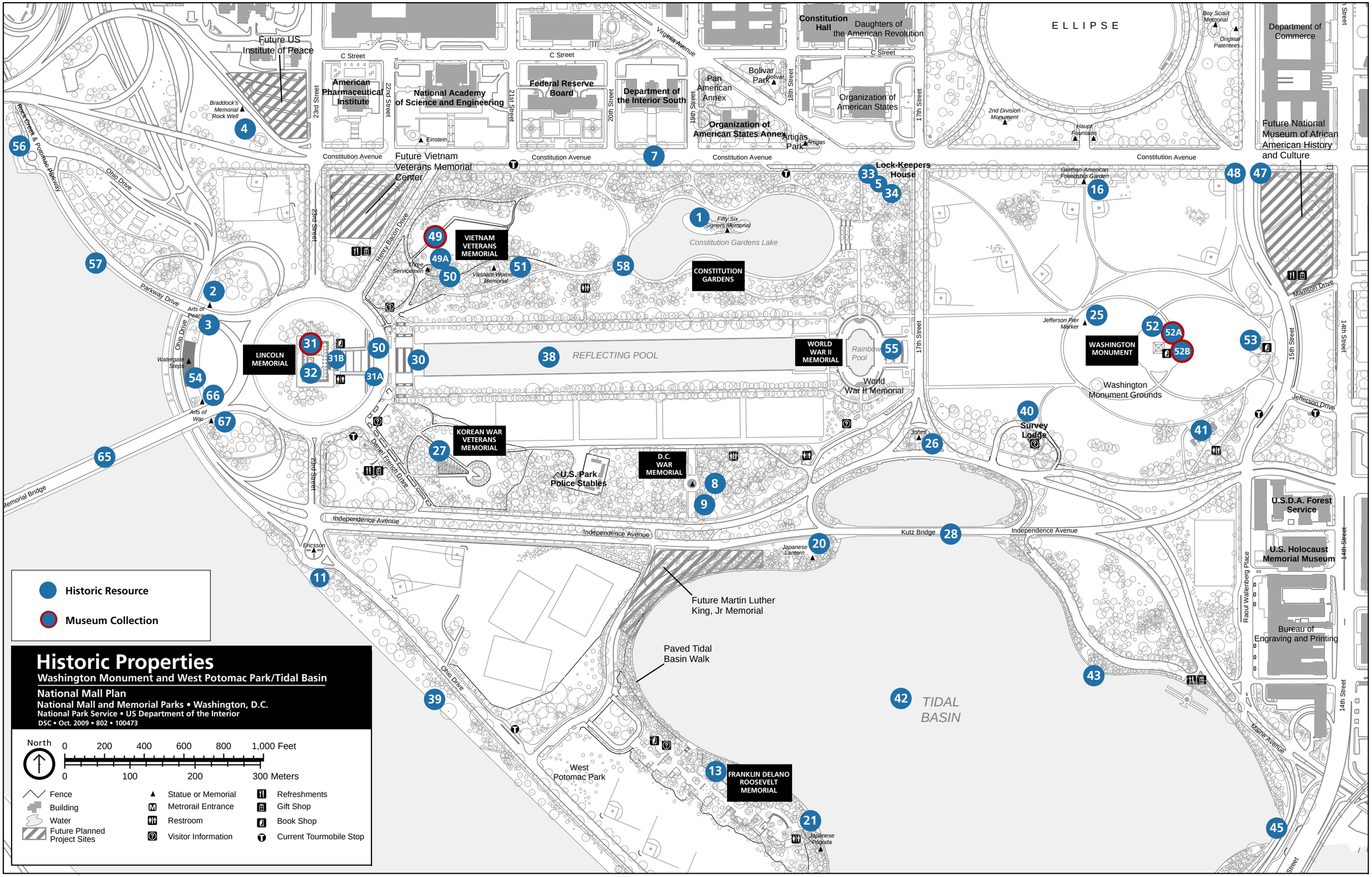
0 100 200 300 Meters

- Historic Resource
- Museum Collection
- Fence
- Building
- Water
- Approved Project Sites
- Light Post
- Statue or Memorial
- Metrorail Entrance
- Restroom
- Visitor Information
- Refreshments
- Gift Shop
- Book Shop
- Current Tourmobile Stop

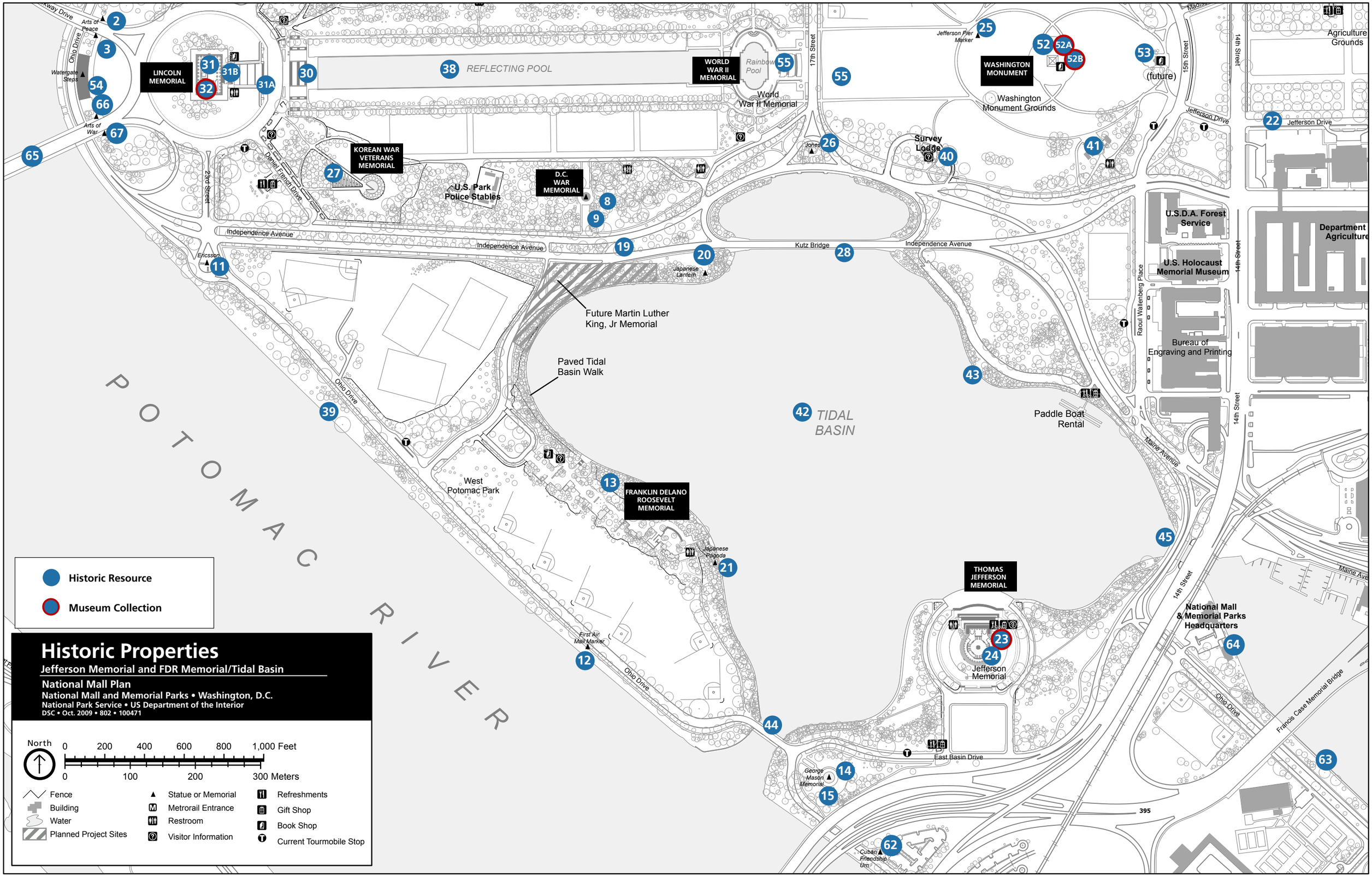
Note: Most museums and galleries have visitor facilities such as restrooms and food service

Alexander Hamilton Place
Sherman
15th Street
Eagle
Pershing Square
Pershing
14th Street
Pennsylvania Avenue
E Street
Freedom Plaza
Pulaski
13th Street
12th Street
11th Street
House Where Lincoln Died
10th Street
Ford's Theatre
9th Street
8th Street
7th Street
6th Street
5th Street
National Law Enforcement Officers Memorial
4th Street
3rd Street
2nd Street
1st Street
Mitch Snyder Place
New Jersey Avenue
D Street
Indiana Avenue
C Street
Boy Scout Memorial
Original Patentees
15th Street
District Building
13-1/2 Street
Department of Commerce
Ronald Reagan Building and International Trade Center
Pennsylvania National Historic Park
Franklin
Old Post Office Tower
Internal Revenue Service
Federal Bureau of Investigation Building
Department of Justice
Hale
Shakespeare Theatre
U.S. Navy Memorial
Hancock
FDR Stone Marker
National Archives
Temperance Fountain
Stephenson Memorial
Federal Trade Commission
Mellon Memorial Bench
Mellon Park
D.C. Court
Lincoln
District of Columbia Government
Pike
John Marshall Park Rehabilitation
Department of Labor
Canadian Embassy
Marshall
Chessmen
John Marshall Park
U.S. District Court
Meade
Louisiana Avenue
Constitution Avenue
Future National Museum of African American History and Culture
Madison Drive
National Museum of American History
National Museum of Natural History
National Gallery of Art Sculpture Garden
National Gallery of Art West Building
National Gallery of Art East Building
Agriculture Grounds
Smithsonian Grounds
THE MALL
L'Enfant Square
Henry
Jefferson Drive
Smithsonian Castle
S. Dillon Ripley Center
Downing
Freer Gallery of Art
Arthur M. Sackler Gallery
National Museum of African Art
Arts and Industries Building
Hirshhorn Museum
Independence Avenue
Henry Park
Seaton Park - West
Seaton Park - East
National Grange Marker
National Air and Space Museum
National Museum of the American Indian
UNION SQUARE
CAPITOL REFLECTING POOL
Peace Monument
Grant
Garfield
Maryland Avenue
U.S. Botanic Garden
Department of Energy
L'Enfant Promenade
Federal Aviation Administration
Department of Education
Future Eisenhower Memorial
Voice of America Studio
Department of Health and Human Services
Food and Drug Administration
Future Veterans Disabled for Life
Washington Avenue
Virginia Avenue
7 18 19 22 35 36 37 46 47 48 6 10 17 29 59 60 61

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Future US Institute of Peace
C Street
American Pharmaceutical Institute
National Academy of Science and Engineering
Federal Reserve Board
Department of the Interior South
Virginia Avenue
Constitution Hall
Daughters of the American Revolution
ELLIPSE
Boy Scout Memorial
Original Patentees
Department of Commerce
Future National Museum of African American History and Culture
Braddock's Memorial Rock Well
22nd Street
23rd Street
21st Street
20th Street
19th Street
18th Street
17th Street
Pan American Annex
Bolivar Park
Organization of American States
Organization of American States Annex
Artigas Park
2nd Division Monument
Haupt Fountains
Rock Creek & Potomac Parkway
Ohio Drive
Constitution Avenue
Future Vietnam Veterans Memorial Center
Lock-Keepers House
German-American Friendship Garden
Henry Bacon Drive
VIETNAM VETERANS MEMORIAL
Three Servicemen
Vietnam Women's Memorial
Fifty Six Signers Memorial
Constitution Gardens Lake
CONSTITUTION GARDENS
Parkway Drive
Arts of Peace
Madison Drive
Jefferson Pier Marker
WASHINGTON MONUMENT
Washington Monument Grounds
15th Street
14th Street
Jefferson Drive
Watergate Steps
LINCOLN MEMORIAL
REFLECTING POOL
WORLD WAR II MEMORIAL
Rainbow Pool
World War II Memorial
Arts of War
Survey Lodge
Jones
KOREAN WAR VETERANS MEMORIAL
Daniel French Drive
U.S. Park Police Stables
D.C. WAR MEMORIAL
Memorial Bridge
Independence Avenue
Ericsson
Kutz Bridge
Japanese Lantern
U.S.D.A. Forest Service
U.S. Holocaust Memorial Museum
Raoul Wallenberg Place
Bureau of Engraving and Printing
Future Martin Luther King, Jr Memorial
Paved Tidal Basin Walk
TIDAL BASIN
West Potomac Park
FRANKLIN DELANO ROOSEVELT MEMORIAL
Japanese Pagoda
Maine Avenue
Historic Resource
Museum Collection
Historic Properties
Washington Monument and West Potomac Park/Tidal Basin
National Mall Plan
National Mall and Memorial Parks • Washington, D.C.
National Park Service • US Department of the Interior
DSC • Oct. 2009 • 802 • 100473
North
0 200 400 600 800 1,000 Feet
0 100 200 300 Meters
Fence
Building
Water
Future Planned Project Sites
Statue or Memorial
Metrorail Entrance
Restroom
Visitor Information
Refreshments
Gift Shop
Book Shop
Current Tourmobile Stop

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Historic Resource

Museum Collection

Historic Properties

Jefferson Memorial and FDR Memorial/Tidal Basin

National Mall Plan
National Mall and Memorial Parks • Washington, D.C.
National Park Service • US Department of the Interior
DSC • Oct. 2009 • 802 • 100471

North

0 200 400 600 800 1,000 Feet

0 100 200 300 Meters

- Fence
- Building
- Water
- Planned Project Sites
- Statue or Memorial
- Metrorail Entrance
- Restroom
- Visitor Information
- Refreshments
- Gift Shop
- Book Shop
- Current Tourmobile Stop

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APPENDIX D: PARK FACILITIES GUIDANCE

POLICY GUIDANCE

The National Park Service provides visitor and administrative facilities and has policy guidance that relates to park facilities. The NPS *Management Policies 2006* address park facilities in chapter 9, which begins with the following statement.

> The National Park Service will provide visitor and administrative facilities that are necessary, appropriate, and consistent with the conservation of park resources and values. Facilities will be harmonious with park resources, compatible with natural processes, [a]esthetically pleasing, functional, energy- and water-efficient, cost-effective, universally designed, and as welcoming as possible to all segments of the population. NPS facilities and operations will demonstrate environmental leadership by incorporating sustainable practices to the maximum extent practicable in planning, design, siting, construction, and maintenance.

NECESSARY AND APPROPRIATE FACILITIES

Policy. Visitor facilities for park use and enjoyment will be limited to what is necessary and appropriate (*Management Policies 2006,* sec. 9.3). Necessary and appropriate are important criteria for determining whether facilities are needed. Park managers should consider whether a facility needs to be located within the park, or whether it could be provided or located outside the park boundary. Policies recommend that public input be sought at the earliest stages of decision-making, particularly in those areas where controversy is likely (*Management Policies 2006,* sec. 9.1.1). Guidance is provided for specific types of facilities.

Background. The National Mall provides a limited number and variety of visitor facilities, such as restrooms, food service facilities, bookstores, information stations, and retail. Many are located at or near memorials. In addition there are numerous small-scale site furnishings, such as seating, orientation maps, signs, and lighting.

Public facilities are also provided at adjacent visitor destinations, such as museums, galleries, and the National Archives. Adjacent destinations typically provide information, restrooms, a variety of food service, and merchandise (books, retail, postcards, convenience items) related to their purpose or theme. However, visitors need to clear security checkpoints to use these facilities, and hours of operation are shorter than on the National Mall.

The park has received repeated complaints about the lack, location, and quality of facilities. When planning for the National Mall plan began in November 2006, the National Park Service sought public comment on necessary and appropriate facilities.

Best Practices. In order to limit the development footprint, a best practice is to co-locate visitor services such as restrooms, bookstores, food, and retail. Additionally, it is a best practice to merge information, stewardship messages, and education throughout all visitor facilities, including restrooms.

LOCATION OF FACILITIES

Policy. A preferred location for visitor facilities within park boundaries minimizes impacts on resources and should be situated to stimulate use of alternative transportation systems, bicycle routes, and pedestrian walkways. Facility locations should be identified in an approved plan (*Management Policies 2006,* sec. 9.1.1.2).

Management facilities will be located outside the park whenever necessary functions can be adequately supported. When located inside the park, they will be located away from primary resources and features so as not to adversely affect resources and values or to detract from visitor experience. Historic properties will be adaptively reused (i.e., used for another purpose) to the maximum extent practicable if it does not affect their significance (*Management Policies 2006,* sec. 9.4).

Background. The National Mall facilities are generally located in accordance with policy, and several historic buildings are being adaptively reused for visitor services and office space. Because walking is the primary means of visiting multiple destinations on the National Mall, it is important to understand reasonable walking distances and necessary pedestrian site furnishings. Reasonable walking distances are assumed to range from 800 feet to 1,700 feet (1/3 mile) for most visitors.

HARMONIOUS, AESTHETICALLY PLEASING FACILITIES

Policy. If determined necessary within park boundaries, facilities will be integrated into the park landscape with sustainable designs and systems to minimize environmental impacts. Development or facilities will not compete with or dominate park features. Any desired cohesive design theme will reflect the park's purpose and character, whether for the whole park or an individual developed area (*Management Policies 2006,* sec. 9.1.1.2).

When important cultural resources are present, efforts will be made to use existing contributing structures. New structures will harmonize with the area and the cultural resources in proportion, color, and texture. No attempt will be made to duplicate or mimic a historic design, nor will any modern construction be portrayed to the public as being historic. However, vernacular styles of architecture are appropriate when they provide visual compatibility with the cultural landscape (*Management Policies 2006,* sec. 9.1.1.3).

Background / Existing Character. The character of Washington, D.C., and the National Mall is monumental and symbolic. Much of the character can be traced to the historic L'Enfant and McMillan plans, which identified locations for iconic structures such as the U.S. Capitol and the Lincoln Memorial. Each monument or memorial and its surrounding area have a unique character and may contain or provide facilities for visitors such as information, exhibits, restrooms, bookstores, or retail. In two cases historic structures (Monument Lodge and Survey Lodge at the Washington Monument) have been adaptively reused to provide visitor information, bookstores, and restrooms.

There are three general architectural styles of park facilities:

- Circular, flat roofed, restroom buildings date from the 1970s and are located on the Washington Monument grounds and at Constitution Gardens and Ash Woods. The exterior finishes and building sizes vary, and the modern design is not harmonious or sensitive to the context of the historic landscape.
- Small circular structures with metal roofs have been used for information and refreshment stands. While the roofs are higher quality materials, they project a somewhat circus tent appearance, and the exterior walls are painted.
- The most recent architectural style for visitor service facilities is a simple, square cruciform with hipped copper metal roofs, wood trim, and stucco walls. There are several variations and sizes on the National Mall. The quality, materials, colors, texture, scale, and detailing are compatible with the historic landscape.

Smaller scale site furnishings are diverse and reflect numerous uncoordinated designs. There are more than 1,000 benches or chairs in 10 or more styles, 9 styles of drinking fountains, 7 types of paved surfaces, and 8 types of trash containers. There are more than 1,000 light fixtures, with different sizes of bulbs. There are also more than 400 signs, but there is no comprehensive pedestrian guide or wayfinding system. The park is currently updating the sign system.

Best Practices. A cost-effective best practice is to use a recurring and recognizable architectural theme for visitor facilities. An easily identifiable style improves visitor experiences because visitors know what to look for, making them more self-sufficient and increasing their comfort level. High-quality and context-sensitive facilities and buildings generate visitor respect as well as encourage stewardship behavior on the part of visitors and staff.

RESTROOMS

Policy. NPS policies state that the level of use determines the size of facilities (*Management Policies 2006,* sec. 9.3.3).

Background. As a biological and public health necessity, restrooms within parks are both necessary and appropriate. The fact that the National Mall is a large area with multiple destinations, consistently high levels of visitation, and a number of large annual celebrations and events underscores the need for restrooms.

There are 10 restrooms west of 15th Street, including 5 that are within or part of memorials (the Lincoln, Thomas Jefferson, World War II, and Franklin Delano Roosevelt memorials) and 2 that are within information areas or bookstores (at the Washington Monument Lodge and Survey Lodge). These restrooms have 102 toilets (including 23 urinals). Family restrooms are provided in three locations (Survey Lodge and the World War II and Thomas Jefferson memorials). There are no NPS public restrooms east of 15th Street. While restrooms are available in nearby museums (see Table D-1), as previously mentioned users must go

through a security checkpoint and the hours of operation are limited.

TABLE D-1: PUBLIC RESTROOM AVAILABILITY ON AND NEAR THE NATIONAL MALL

	Number of Toilets / Urinals			
	Women	Men	Family	Total
National Park Service	52	46	4	102
Adjacent Museums and the National Archives	299	307	129	735

NOTE: This count does not include the Capitol Visitor Center, which will also have food service, restrooms, and retail.

Visitors are generally equally divided between males and females (a comprehensive survey in 2003 showed 51% of visitors were female). No restrooms are available near food service, a common requirement to support good public hygiene.

Best Practices. Several standards may provide useful guidance about the distribution and number of restrooms needed. One common best practice is to co-locate drinking fountains near restrooms. According to the National Standard Plumbing Code, there should be one drinking fountain for every 1,000 visitors.

The National Recreation and Park Association's *Park, Recreation and Leisure Facility Site Planning Guidelines* recommend that restrooms be located every 800 feet (1,000 feet at a maximum) at major tourist sites (such as National Mall memorials) and adjacent to food service. Restrooms should be located near entries at minor tourist sites (smaller or single destinations that attract tourists), or every 1,000 feet when minor tourist sites are dispersed. According to the American Restroom Association, for outdoor sites with more than 2,000 visitors daily, the maximum distance between public restrooms is 0.3 mile. At highly visited theme parks, such as Disneyworld, with very densely concentrated attractions, restrooms are located every 300 feet.

The American Restroom Association, the National Standard Plumbing Code, and the International Plumbing Code have criteria for numbers of toilets and urinals (see Table D-2). Typically more facilities should be provided for women than for men. Considering the National Plumbing Code, the National Mall may be most comparable to the category of museums / exhibits / food courts, or outdoor assembly areas / fairs.

TABLE D-2: NATIONAL GUIDELINES FOR PUBLIC RESTROOM FACILITIES

American Restroom Association Guidelines

Hourly Visitation	Toilets/Urinals for Men	Toilets for Women
<500	1/2	6
500–1,000	2/4	9
1,000–2,000	4/8	12
2,000–3,000	6/15	18
3,000–5,000	8/25	30

International Plumbing Code Guidelines

	Ratio of Facilities to Visitors		
	Men	Women	Generic
Assembly Areas	1/125	1/65	
Restaurants			1/75
Transportation Facilities			1/500

National Standard Plumbing Code Guidelines

	Number of Facilities for Men	Number of Facilities for Women
Outdoor Assembly / Fairs (peak hour)		
400	6	10
2,600	8	14
20,000	64	130
40,000	132	263
60,000	199	396
Museums, Exhibits, Food Courts		
100	2	2
300	2	3
900	5	9
1,500	7	13
3,000	11	21

FOOD SERVICES

Policy. Food and lodging may be provided if necessary and appropriate to achieve the park purpose, or in-park facilities or services may be justified when the distance and travel time are too great or leaving the park would detract from the overall visitor experience (*Management Policies 2006*, sec. 9.3.2)

Background. The pedestrian nature of the National Mall justifies the need for food service. Distances to facilities off the National Mall are not convenient for visitors during the day, and the capacity of food service venues at adjacent museums and the National Archives is limited (see Table D-3).

Currently the National Mall has 10 refreshment stands (none with restrooms located nearby), which also provide retail/souvenirs and convenience items such as rain ponchos, film, water bottles, and aspirin. Seven refreshment stands have outdoor

TABLE D-3: PUBLIC FOOD SERVICE AT ADJACENT MUSEUMS AND THE NATIONAL ARCHIVES

Venue	Seating
Café/Food Courts	1,155
Restaurants	824
Outdoor Cafés	116
Total Seating	2,095
Outdoor Carts	5 locations

NOTE: Does not include the Capitol Visitor Center, which will have food service, restrooms, and retail.

seating. Refreshment stands are supplemented by mobile food carts during the peak season.

A restaurant was planned and approved in the 1970s for Constitution Gardens but was not built because of inadequate funding. Commercial service plans examine in more detail the feasibility of alternative services.

Best Practices. The National Recreation and Park Association emphasizes that "eating out for pleasure is one of the primary leisure activities of many people" and that indoor and outdoor restaurants (food service) can enhance the visitor experience. Encouraging people to linger at food service locations can help concentrate waste at these locations and help protect memorials. (Recently, eating and drinking near cultural tourist destinations in Italy, such as memorials and fountains, were restricted for preservation reasons.) To get people to linger, pleasant environments, amenities, and seating are essential.

VISITOR CENTERS

Legislation. A law enacted in 2003 prohibits the addition of visitor centers within the Reserve, which contains the National Mall, except for the Vietnam Veterans Memorial Center, which was authorized in that same law. The memorial center is to provide for appropriate educational and interpretive functions.

Policy. Visitor centers may be provided when needed for visitor information and interpretive services. Visitor centers are not substitutes for on-site interpretation and will be constructed only when it has been determined that indoor media are the most effective means of communicating major elements of the park story. The size and scope of visitor centers will be evaluated using an NPS planning model tool (*Management Policies 2006,* sec. 9.3.1.3).

Visitor centers may provide indoor media, audio-visual programs, museums, museum collection storage, exhibits, information services, sales of educational materials and theme-related items, self-help programs, and spaces necessary for high-quality visitor experiences (*Management Policies 2006,* sec. 9.3.1.3).

Visitor centers have traditionally been used to encourage visitors to explore a full range of park resources. NPS visitor centers have been located near park entrances or near special attractions to provide an overview of resources, educate visitors about park resources, and inform visitors about the range of opportunities. Additionally, parks may have outdoor education areas, orientation / welcome areas, and amphitheaters. Today, there is widespread availability of websites that facilitate advance planning, understanding of park resources, and an overview of visitor opportunities. Multipurpose facilities provide information and education that may be integrated with other visitor services.

Background. A National Visitor Center was provided at Union Station for the 1976 Bicentennial but was later removed. When the Washington Monument was restored, a temporary visitor center was provided. Neither of these facilities proved to be well used.

There is no single entry point to the National Mall, and destinations are widespread, with visitors primarily walking to them. NPS information and education has been provided at major memorial destinations — the Thomas Jefferson Memorial, the Washington Monument, the Lincoln Memorial, the Vietnam Veterans Memorial, the World War II Memorial, the Korean War Veterans Memorial, and the Franklin Delano Roosevelt Memorial. Temporary and permanent wayside exhibits have been provided, along with small audiovisual components, at the Thomas Jefferson and Lincoln memorials, and interactive components have been provided at the World War II and Korean War Veterans memorials. Maps, area brochures, educational wayside panels, onsite radio information, guided walks, scheduled programs, and cell-phone tours are other means of providing information. Additional educational waysides are being developed. Currently, a cohesive system of National Mall signs, orientation maps, and pedestrian guide signs is being developed to update orientation signs and maps and to provide wayfinding information.

The Smithsonian Metro station is a primary pedestrian entrance to the National Mall. Surrounding museums and galleries also provide visitor information.

Best Practices. A best practice is to provide some level of information, stewardship messages, and

education at all visitor facilities. Traditional visitor centers, with auditoriums and extensive media or museum exhibits, have been occasionally replaced by open air facilities that provide these functions.

Accessibility for Persons with Disabilities

Policy. New and altered facilities will be accessible and comply with accessibility standards. They will incorporate universal design (*Management Policies 2006,* sec. 9.1.1) and be accessible and usable to the greatest extent reasonable (*Management Policies 2006,* sec. 9.1.2).

Background. Some memorials have elevators to provide access for visitors with disabilities. Wheelchairs are available upon request. The park provides more parking for the disabled than standards require, and staff are working to improve the park website to make it accessible for people with visual disabilities.

Sustainable Principles and Practices

Policy. The National Park Service will incorporate sustainable principles and practices into design, siting, construction, building materials, utility systems, recycling of all unusable materials, and waste management (*Management Policies 2006,* sec. 9.1.3).

Reduced greenhouse gases and improved energy efficiency are required for all facility designs. The incorporation of solar, photovoltaic, insulation, and glazing strategies, along with energy-efficient lighting and appliances and renewable energy technologies, are also recommended. Visitors should be educated about sustainable approaches. All projects must incorporate LEED (Leadership in Energy and Environmental Design) standards to achieve a silver level (*Management Policies 2006,* sec. 9.1.1.6).

Background. Refreshment stands near the Lincoln Memorial, completed in 2006 and 2007, meet these standards and include geothermal technology for cooling and ice making, saving millions of gallons of water annually.

Public comments indicate a common expectation that the government and the National Park Service should set an example of using sustainable, green development, including recycling. The park is working with the Environmental Protection Agency to examine trash makeup, identify ways to reduce waste, and improve recycling and solid waste management on a daily basis as well as during events.

Best Practices. Capital cities are expected to exemplify wise or sustainable development.

Efficient solid waste management systems utilize mechanized trash pickup, locate trash containers conveniently along visual lines of sight, use strong stewardship education messages, co-locate recycling and trash containers, but focus recycling containers near areas where recyclable materials are generated. Also, trash and recycling containers should be available in various sizes to meet demands in different areas, and they should be designed in coordinated, attractive styles so that they are immediately recognizable.

APPENDIX E: STATEMENT OF FINDINGS FOR FLOODPLAINS

Final

Statement of Findings

for

Executive Order 11988: Floodplain Management

Management Plan

The National Mall

Washington, D.C.

Executive Order 11988 ("Floodplain Management") requires the National Park Service and other agencies to evaluate the likely impacts of actions in floodplains. This statement of findings (SOF) has been prepared to comply with EO 11988.

In managing floodplains on park lands, the National Park Service policy is to (1) manage for the preservation of floodplain values; (2) minimize potentially hazardous conditions associated with flooding; and (3) comply with the NPS Organic Act and all other federal laws and Executive Orders related to the management of activities in flood-prone areas (*Management Policies* Sec. 4.6.4). This SOF is considered a part of the *Final National Mall Plan / Environmental Impact Statement.*

PROPOSED ACTION

The National Park Service would implement the preferred alternative in the *Final National Mall Plan / Environmental Impact Statement.*

The *National Mall Plan* performs two critical functions for Park Service managers. First, by describing specific desirable resource conditions and visitor experiences for the National Mall, it establishes a clear direction for management of resources and visitation. Second, the management plan provides a framework to guide park management decision-making for up to 50 years. The *National Mall Plan* was developed in consultation with interested parties including federal, state, and local agencies as well as the public.

The plan provides overall direction for park management but specific actions needed to implement the plan will be provided in subsequent plans. Because the plan is general in nature, floodplain analysis is also general. Site-specific environmental analysis would be completed for individual actions prescribed in the plan.

The preferred alternative would continue use and retain existing facilities in floodplain areas within the park. Three additional visitor facilities are planned within the floodplain. Other construction would be replacement of existing facilities. Land use patterns and visitation levels would not change appreciably from current situations.

SITE DESCRIPTION AND BACKGROUND

The National Mall is located along the Atlantic seaboard. The majority of precipitation comes in the form of rains with some typically minor winter snows. Extended storms are capable of dropping several inches of rain in a 24 to 48 hour period which can cause temporary flooding of low-lying areas.

Floodplains in the planning area are associated with the Potomac and Anacostia rivers. Most of the southern portions of the planning area were created from fill dredged from the rivers or the Washington Channel. These areas remain as low-elevation flats within the identified floodplains. Occasionally, extreme high tides will result in a tidal flow up the Potomac River from Chesapeake Bay and cause overflowing of the river banks or the Tidal Basin. High water events have led to inundation of relatively small areas of open lawns and playing fields.

The Federal Emergency Management Agency (FEMA) has identified 100-year and 500-year flood hazard areas in the District of Columbia (floodplains map, the 500-year floodplain is slightly larger than that shown).

Development within the floodplains include primary and secondary roads, monuments, visitor services (restrooms, information kiosks, food services, etc.), sidewalks, and park operation facilities. Some structures are historic and moving them would be considered an adverse effect. The Lincoln Memorial, Thomas Jefferson Memorial, and Washington Monument are built on elevated ground and are out of the floodplain.

These facilities are determined to be in Action Class I according to the definitions in Director's Order 77-2: "Class I includes the location or construction of administrative, residential, warehouse and maintenance buildings, non-excepted parking lots or other man-made features, which by their nature entice or require individuals to occupy the site, are prone to flood damage, or result in impacts to natural floodplain values. Actions in this class are subject to the floodplain policies and procedures if they lie within the 100-year regulatory floodplain (the base floodplain)."

JUSTIFICATION FOR CONTINUED USE OF THE FLOODPLAIN

As described above, some of the park development is in the 100-year or 500-year floodplains. Development and public use in these areas has been in place for many years. The situations that lead up to flooding of the rivers, and the scope and duration of high water events are well known by park staff.

Actions proposed in the preferred alternative include the retention of roads, monuments, visitor services, and park operation facilities within 100-

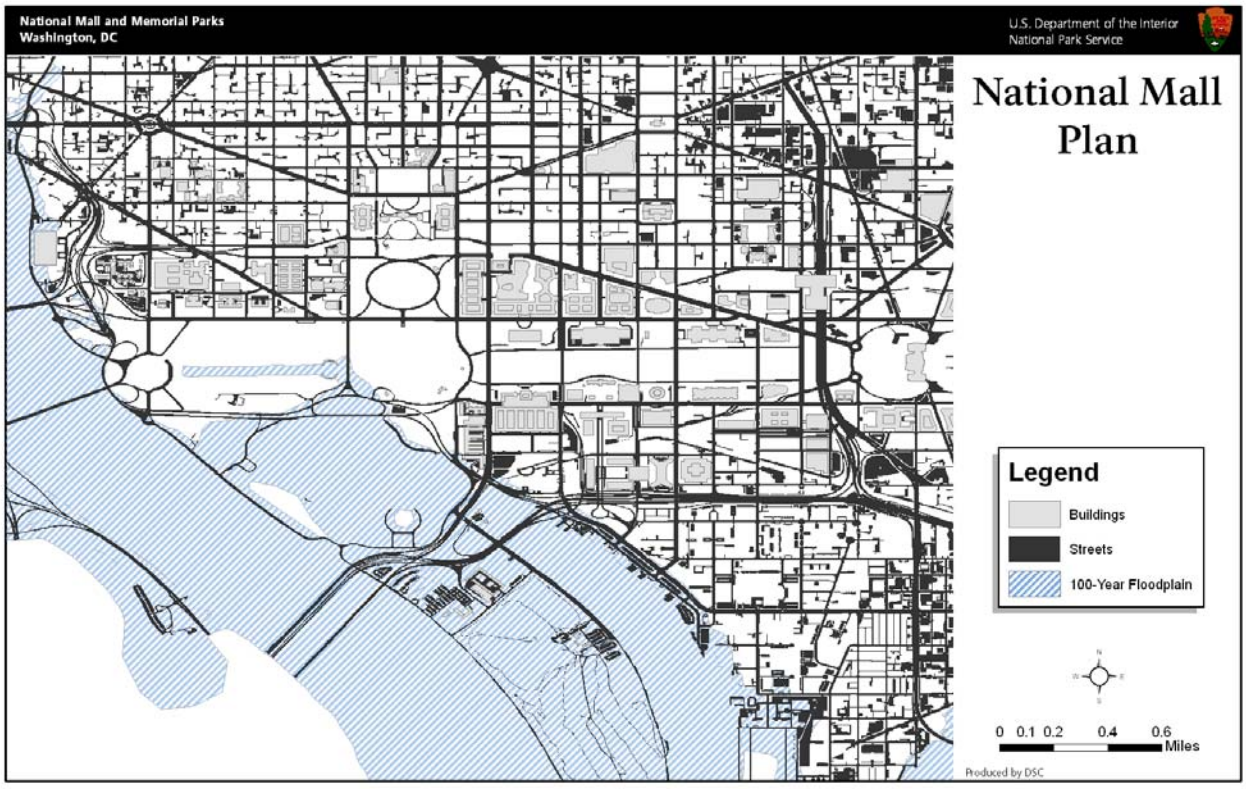


FIGURE SOF-1. FLOODPLAINS MAP

year and 500-year floodplains. The facilities are historically and functionally dependent on their locations.

Moving entire developed areas out of the floodplains would be cost-prohibitive and would adversely affect historic resources.

SPECIFIC FLOOD RISKS

Conditions associated with flooding in the locations discussed in this statement are not considered particularly hazardous to people or property. Flooding generally occurs gradually in the planning area as a result of prolonged rainfall, making warning and evacuation a practical option for protection of human life.

Park development in the floodplains has been in place for many decades and the situations, scope, and duration of flooding of the rivers are well known by park staff. The timing, depth, and velocity of floodwaters will be considered when preparing evacuation plans.

An evacuation plan would be prepared to identify high ground safe areas and evacuation routes for each area of visitor concentration. In the event that it should become necessary to evacuate visitors and NPS personnel, it could be readily accomplished along the many access roads.

There would be no additional storage facilities for fuels or toxic materials, or museum collections in a floodplain as a result of the preferred alternative.

MITIGATION

The National Park Service is working with the District of Columbia and the Army Corps of Engineers to implement flood control measures by creating a movable barrier across 17th Street. This will complete a raised levee and help prevent floodwaters from inundating the northern side of the National Mall and the adjacent neighborhood.

An evacuation plan for each developed area in a floodplain would be prepared to identify high ground safe areas and evacuation strategies. Water levels would be monitored by park staff and, if

flooding is imminent, visitors would be informed of evacuation procedures.

No major new construction in floodplains is prescribed in the preferred alternative. Nonetheless, site-specific environmental analysis would be conducted for all construction and would address potential impacts to floodplains.

SUMMARY

The National Park Service has determined that implementing the preferred alternative would not result in any additional disruption of floodplains. Risk to life from flooding is minimal and can be mitigated. The National Park Service would allow existing structures to remain in their current locations because there are no reasonable alternative locations. Three additional visitor facilities are planned within the floodplain. Other construction would be replacement of existing facilities. Water levels would continue to be monitored by park staff. Visitors would be informed of changes caused by heavy precipitation events through regular interpretation and local media.

Therefore, the proposed action would not have any additional adverse impacts on floodplains and their associated values.

The environmental impact statement, this statement of findings for Executive Order 11988, and the signed record of decision would complete the requirements of the National Environmental Policy Act for the *National Mall Plan*.

STATEMENT OF FINDINGS REFERENCES

Office of the President
1980 *Executive Order 11988" Floodplain Management* (May 28, 1980).

National Park Service
2003 *Director's Order 77-2: Floodplain Management*. Washington, D.C.

2006 *Management Policies*. Washington D.C.

APPENDIX F: PLANNING PRINCIPLES

Planning principles for the National Mall plan and for Pennsylvania Avenue National Historic Site were developed in 2007 in cooperation with other federal and city agencies with planning responsibilities for the District of Columbia. The principles are based on significance statements that were developed for the National Mall, and they respond to observations, issues identified, and comments heard during the initial public scoping process. The principles were initially printed in newsletter 2 in the summer of 2007.

Cooperating agencies include the National Capital Planning Commission, the National Gallery of Art, the Smithsonian Institution, the Department of Agriculture, the Architect of the Capitol, the D.C. Office of Planning, and others.

The following principles relate specifically to the National Mall.

Overarching Principles

1. The National Mall is the heart of our nation's capital. It is owned by all Americans and cared for by the National Park Service. In keeping with the National Mall's immense value to our nation, park spaces and structures will welcome all, and they will feature the highest quality of sustainable design, construction, and maintenance.
2. Historic and natural resources will be protected and maintained.
3. Managing entities will respect the design, as well as the civic, social, cultural, artistic, political, and symbolic character, of the nation's capital and the National Mall.
4. The National Park Service and cooperating agencies will work collaboratively to coordinate planning, information, and services for visitors, residents, and the local workforce.
5. Facilities will be clean, conveniently located, comfortable, and appropriately sized to meet a range of uses.

Context

6. ***Urban Patterns:*** The National Mall will remain integrated in the urban grid of Washington, D.C. — an open-space oasis that anchors the urban framework, establishes city character, and visually, physically, and symbolically enhances and connects neighborhoods.
7. ***Future Memorials:*** The National Mall will set a standard of excellence in commemoration, and the National Park Service will continue to play a cooperative role by working with other agencies and project groups to enrich the entire federal city and its neighborhoods as designs are developed to locate future memorials throughout the District of Columbia.
8. ***Identity:*** The public will know by means of visual clues when they are on the National Mall, and they will be able to distinguish between NPS facilities and those managed by others.

Park Resource Protection

9. ***Historic Plans and Resources:*** The historical significance and character of the National Mall, the L'Enfant and McMillan plans, and historic and ongoing civic uses, will be respected.
    - The social and civic purposes inherent in the historic plans will continue to evolve, including the dispersion of commemorative works throughout the capital.
    - Character-defining elements of historic resources and cultural landscapes that have evolved over the last two centuries will be respected as part of the historical context.
10. ***Views and Vistas:*** Views and vistas are essential components of the historic design and are integral to high-quality visitor experiences. Primary east-west vistas and several north-south views on the National Mall will be respected.
11. ***Design:*** The design of facilities, park areas, and furnishings will be enduring, exceptional, and sensitive to the overall historical context. Materials and workmanship will be of the highest quality suitable for the intended use.
12. ***Lighting:*** Lighting on the National Mall will evoke emotion, provide enjoyment, and contribute to safe use of park lands while respecting historic fixtures and existing lighting at memorials. The Washington Monument, Lincoln Memorial, and Thomas Jefferson Memorial (as well as the U.S. Capitol and the

White House) will continue to be the most prominent nighttime features.

Public Use

13. ***Information:*** Accurate information will be provided for wayfinding, orientation, and visitor services. Information will be consistent throughout the site, and it will be provided seamlessly through a variety of means, including on the Internet and on site.

14. ***National Civic Space:*** The National Mall will remain open to groups for political and social demonstrations and for national celebrations. Integral to its significance has been its use as a venue for major events that have touched, revitalized, and changed our nation.

    - First Amendment rights will continue to be allowed in accordance with court-approved restrictions as to reasonable time, place, or manner.
    - Physical and visual openness, access, and freedom will characterize the democratic nature of the National Mall.
    - The National Park Service will strive to manage and regulate special events in a manner that will allow event organizers to achieve their purposes, while also ensuring that the health of park resources is sustained and that the desires of all users are balanced. The Park Service will seek a balance where no one's enjoyment of the National Mall will be unacceptably compromised by others, now or in the future.
    - Event security will be managed in the most effective and least restrictive manner to ensure a safe environment and to retain the open, democratic character of the National Mall.

15. ***Educational Opportunities:*** Learning opportunities will be provided in a manner that engages all ages and abilities of an increasingly multicultural and technologically sophisticated society. Education will inspire current and future generations, including populations that have not typically visited national parks.

16. ***Pedestrian Experiences:*** Fully accessible and high-quality pedestrian experiences, with appropriate walking surfaces, seating, lighting, and amenities, will offer visitors comfortable and enjoyable opportunities for reflection, commemoration, celebration, and recreation.

17. ***Transportation:*** Safe and efficient multimodal travel will be available throughout the area (walking, bicycling, public transit, and sightseeing services). Transit services will be coordinated with the regional transportation network.

Park Operations

18. ***Maintenance Operations:*** Maintenance and stewardship will meet desired standards of excellence appropriate for public commemorative and symbolic spaces in our nation's capital. Maintenance and park operations by park staff, as well as by partners and volunteers, will use efficient, effective, and sustainable practices.

19. ***Sustainability:*** The National Park Service will maximize sustainability and use best practices to be a role model in sustainable urban park development, resource protection, and management, focusing on six areas: requirements and policy, resource health, water use, circulation, facilities, and park operations.

20. ***Health, Safety, and Security:*** Visitors will have access to safe, clean, sanitary, and well-maintained facilities. Emergency services will be well-planned, quick, and effective. Security measures will be commensurate with needed crowd control or security requirements.

21. ***Law Enforcement:*** Law enforcement will continue to safeguard lives and will protect our national treasures and symbols of democracy. Enforcement will be achieved in a manner that exemplifies good communication, causes the least amount of public inconvenience, and raises public understanding of the mission of the park and the National Park Service.

22. ***Business Services:*** Business services will provide a range of necessary and appropriate commercial visitor services and products of consistent high quality at a range of prices. Business services will support the NPS identity and park resource-related educational themes and events.

APPENDIX G: PERMIT DATA FOR NATIONAL MALL LOCATIONS — 2008 AND 2009

Data are from permits for locations within the National Mall planning area. Because multiple areas can be requested in one permit, each location is considered as a separate event when calculating event usage by location. Therefore, some permits were double counted to accurately represent how much projected use would be received at each location. There is no way to measure use at certain locations when a crowd moves from the location listed on the permit application to another location.

Permits for TV shoots, photo shoots, movie shoots, and music video shoots were not included because permit information did not include the estimated number of participants. In some cases, locations were also "various" and, therefore, not traceable.

Data do not include organized recreation permits issued by the D.C. Department of Parks and Recreation or the National Park Service.

TABLE G-1: PERMIT DATA FOR THE MOST POPULAR NATIONAL MALL LOCATIONS — 2008 AND 2009

	2008				2009			
Location	Number of Permits	Permit-Days	Event-Days	Estimated Participants	Number of Permits	Permit-Days	Event-Days	Estimated Participants
Union Square	39	149	142	84,332	28	178	178	128,939
Mall	113	630	601	1,032,734[2]	115	821	750	1,582,319[3]
•In Front of Air and Space Museum[1]	28	557	557	160	33	633	633	155
•In Front of National Gallery of Art[1]	7	125	125	92	13	231	231	492
•In Front of Natural History Museum[1]	19	341	341	90	34	664	664	106
•In Front of American History Museum[1]	9	218	218	31	9	175	175	141
Washington Monument and Grounds	65	241	240	309,943	74	471	465	1,565,634
•Sylvan Theater	33	171	162	53,646	30	59	49	44,419
•German-American Friendship Garden	1	1	1	50	1	1	1	50
World War II Memorial	112	487	487	14,462	90	339	339	12,128
Constitution Gardens	9	11	11	6,250	21	21	21	2,782
Vietnam Veterans Memorial[7]	51	185	184	62,678	56	93	93	65,977
Lincoln Memorial[7]	27	92	90	9,951	36	54	52	111,129
•Lincoln Reflecting Pool	58	301	297	57,454	138	203	202	418,650
•Henry Bacon Drive	na	na	na	na	8	12	12	113,070
•JFK Hockey Fields	5	32	32	11,800	7	254	254	252,700
Korean War Veterans Memorial	26	38	38	3,787	26	92	92	3,172
D.C. War Memorial	4	4	4	240	3	3	3	235
Franklin Delano Roosevelt Memorial	10	30	30	1,219	8	11	9	5,020
Tidal Basin	14	43	38	106,160	22	58	54	16,110
Thomas Jefferson Memorial[7]	87	136	136	79,679	57	122	120	16,739
West Potomac Park — Various Locations	27	70	63	32,069	20	58	51	94,615
Roadways and	22	42	37	151,994	19	48	38	258,876

	2008				2009			
Location	**Number of Permits**	**Permit-Days**	**Event-Days**	**Estimated Participants**	**Number of Permits**	**Permit-Days**	**Event-Days**	**Estimated Participants**
Sidewalks[4]								
Various Areas[5]	398	8698	7698	5478	341	6,213	6,213	8,383
All of National Mall[6]	1	160	160	100,000	2	14	14	370,000

SOURCE: National Mall and Memorial Parks.

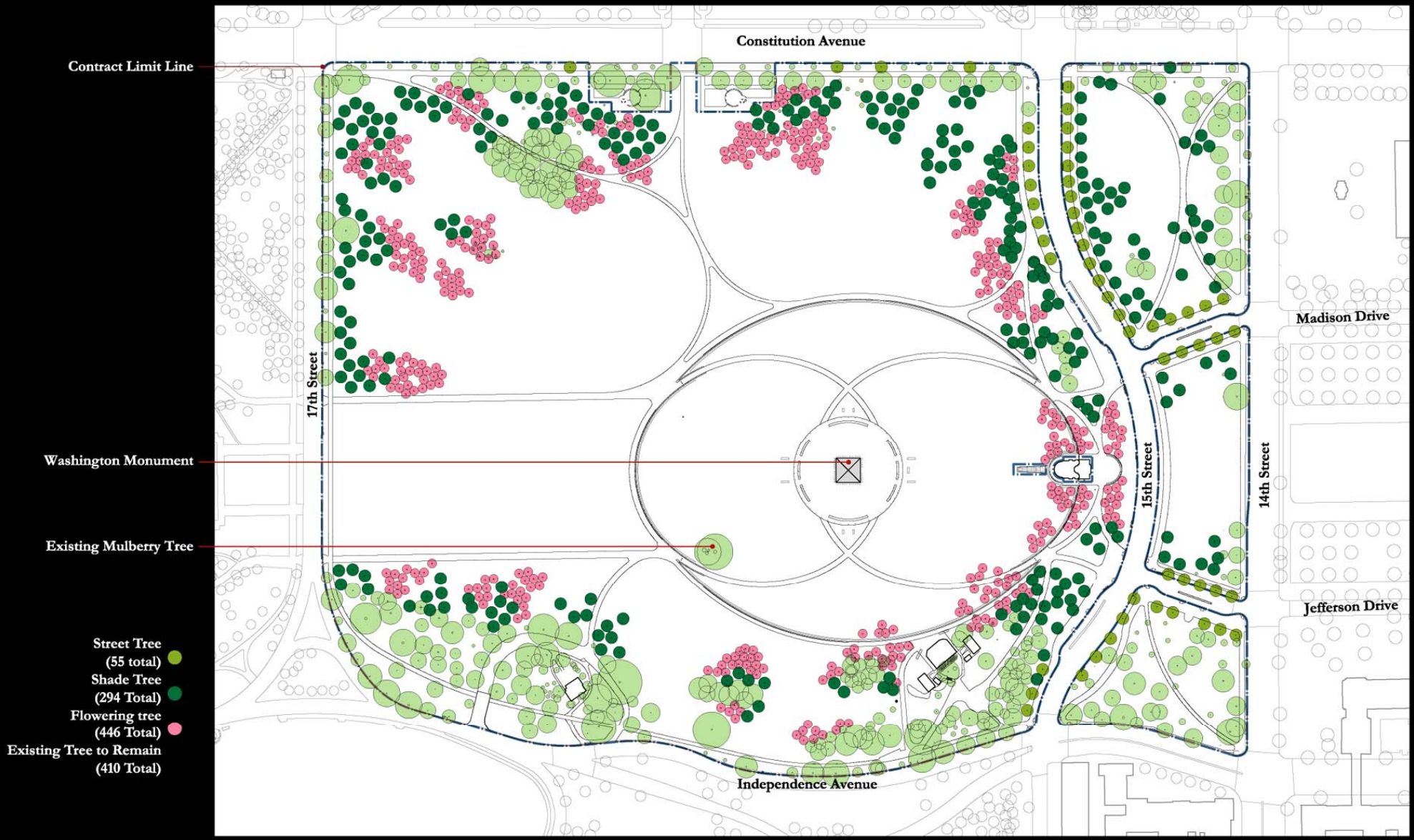
NOTES:

- Permit-days — the number of days for which a permit is issued.
- Event-days — the number of days that an event lasts.
- Participants are based on the numbers estimated by organizers at the time of the application, not actual participation. It is assumed that the number of estimated participants is the total number of participants over the course of the permit, rather than the number of estimated participants per day.
- na — Data not specifically collected for this location in 2008.

1. Generally permits for small First Amendment demonstrations.
2. The 2008 permit for the Smithsonian Folklife Festival listed 1,000 estimated participants. The total only includes the number listed in the permit.
3. The 2009 permit for the Smithsonian Folklife Festival listed 1,000 estimated participants, but the number was later revised to 100,000. The total only includes the 1,000 listed in the permit.
4. Permits are generally for parades and marches and list specific sidewalks or roadways.
5. Permits issued for various areas throughout the National Mall, generally for First Amendment demonstrations.
6. Permits for multiple areas of the National Mall for the 2009 inauguration, including setup in 2008; the original estimate was for 370,000.
7. Outside restrict area.

APPENDIX H: WASHINGTON MONUMENT GROUNDS TREE PLANTING PLAN

Under a contract to the National Park Service, the Olin Partnership completed a final landscape plan for the Washington Monument grounds and visitor facility in 2003. The plan, shown on the next page, calls for a total of 55 street trees, 294 shade trees , and 446 flowering trees. Approximately 400 trees would remain. Under the preferred alternative the plan would be updated and implemented.



Tree Planting Plan

GLOSSARY

Accessibility — Buildings, facilities, and programs are required to be made accessible to people with disabilities. Legislation that provides for this includes: the Architectural Barriers Act of 1968, the Rehabilitation Act of 1973, the 1984 Uniform Federal Accessibility Standards, and the Americans with Disabilities Act of 1990.

Architect of the Capitol — The Architect of the Capitol manages the U.S. Capitol Building, the Senate and House office buildings, the U.S. Supreme Court, the Library of Congress buildings, and the U.S. Botanic Garden, as well as Pennsylvania and Maryland avenues between 1st and 3rd streets.

Area I and Area II — These are the areas designated in the Commemorative Works Act that are north and south of the Reserve and where commemorative works may be sited.

Area of potential effect — The geographic area or areas within which an undertaking could directly or indirectly cause changes in the character or use of historic properties. The area of potential effects is influenced by the scale and nature of the undertaking and may be different for different kinds of effects caused by the undertaking.

Assessment of effect — Documentation to assist in completing the activities required under 36 CFR 800.5, "Assessment of Adverse Effects." This documentation applies the criteria of adverse effect to each property that is within the area of potential effect and that is eligible for listing on the National Register of Historic Places.

Best management practice / best practice — A technique or methodology that, through experience and research, has proven to reliably lead to a desired result. Best management practices may include schedules for activities, prohibitions, maintenance guidelines, and other management practices.

Choosing by Advantages — A process by which the differences of advantages for alternatives and their related costs are compared, ranked, and rated in order to make better and trackable decisions. The process can be used to develop alternatives that combine advantages from several alternatives while working to reduce associated costs.

Civic art — Art that is displayed in public spaces for the enjoyment of the people. In the case of the National Mall study area, civic art includes the present landscape design, which is based on the L'Enfant and McMillan plans, plus commemorative works, water features, and landscaped areas.

Commemorative work — As defined in the Commemorative Works Act, "any statue, monument, sculpture, plaque, memorial, inscription, or other structure or landscape feature, including a garden or memorial grove, designed to perpetuate the memory of an individual, group, event, or other significant element of history."

Commemorative Works Act (40 USC 8901 *et seq.*) — This is the federal law that governs the establishment and placement of commemorative works and memorials on the lands administered by the National Park Service and the General Service Administration in Washington, D.C. and a portion of northern Virginia. The purposes of the act are:

(a) to preserve the integrity of the comprehensive design of the L'Enfant and McMillan plans for the Nation's Capital;

(b) to ensure the continued public use and enjoyment of open space in the District of Columbia;

(c) to preserve, protect, and maintain the limited amount of open space available to residents of, and visitors to, the Nation's Capital; and

(d) to ensure that future commemorative works in areas administered by the National Park Service and the General Services Administration in the District of Columbia and its environs (1) are appropriately designed, constructed, and located, and (2) reflect a consensus of the lasting national significance of the subjects involved.

Conservation (management) zoning — Zones or districts that correspond to a description of the desired resource and visitor experience conditions for each area of a park. Management zoning will outline the criteria for (or describe the kind of) appropriate uses and facilities necessary to support these desired conditions. Some desired conditions may apply throughout a park, but the delineation of management zones will illustrate where there are differences in intended resource conditions, visitor experiences, and management activities (NPS 2006e, sec. 2.3.1.2).

Consulting parties — Vested organizations who under section 106 of the National Historic Preservation Act provide input in protecting cultural resources.

Cooperating agency — Any federal or local agency involved in joint planning conducted pursuant to the National Environmental Policy Act.

Cultural landscape — As defined by the National Park Service, a geographic area, including both cultural and natural resources and the wildlife or domestic animals therein, associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values. There are four general kinds of cultural landscape, not mutually exclusive:

- *Historic site:* a landscape significant for its association with a historic event, activity, or person.
- *Historic designed landscape:* a landscape significant as a design or work of art; was consciously designed and laid out either by a master gardener, landscape architect, architect, or horticulturist to a design principle, or by an owner or other amateur according to a recognized style or tradition; has a historical association with a significant person, trend or movement in landscape gardening or architecture, or a significant relationship to the theory or practice of landscape architecture.
- *Historic vernacular landscape:* a landscape whose use, construction, or physical layout reflects endemic traditions, customs, beliefs, or values; in which the expression of cultural values, social behavior, and individual actions over time is manifested in physical features and materials and their interrelationships, including patterns of spatial organization, land use, circulation, vegetation, structures, and objects; in which the physical, biological, and cultural features reflect the customs and everyday lives of people.
- *Ethnographic landscape:* areas containing a variety of natural and cultural resources that associated people define as heritage resources, including plant and animal communities, geographic features, and structures, each with their own special local names.

Cultural resources — As defined by the National Park Service, any archeological or historic resource, structure, statue, memorial, museum object, district, or landscape related to areas under NPS management. Resources over 50 years old and determined to have local, regional, or national significance may be listed on the National Register of Historic Places.

Cumulative effects (impacts) — Effects on the environment that result from the incremental impacts of an action when added to other past, present, and reasonably foreseeable actions, regardless of which agency (federal or non-federal) or person undertakes such actions. Cumulative effects can result from individually minor, but collectively significant, actions taking place over a period of time.

East Potomac Park — Three hundred and thirty acres of recreational open space managed by the National Mall and Memorial Parks south of the 14th Street Bridges to Hains Point. This area is not included in the planning study area. East Potomac Park, with its golf course, swimming pool, picnic areas, and thousands of cherry trees, was never considered part of the National Mall, and is not included in the planning study area.

Environmental impact statement (EIS) — A detailed analysis document that is prepared by a federal agency pursuant to the National Environmental Policy Act (NEPA) when a federally proposed action or alternatives have the potential for significant impacts on the human environment.

Event-days — The number of day an event actually takes place.

Federal Triangle — A triangular site bounded by Pennsylvania Avenue, Constitution Avenue, and 15th Street. Ten structures designed by different architects are located on the site, including the Old Post Office and the District Building, which were constructed between 1899 and 1908. The rest were constructed between 1926 and the 1930s except for the Ronald Reagan Building and International Trade Center, which was designed and constructed in the 1990s. The planning for the Federal Triangle was one of the last City Beautiful efforts on such a monumental scale in the nation.

First Amendment — The First Amendment to the United States Constitution protects the rights of freedom of speech and assembly.

Historic district — A significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development.

Historic site — The location of a significant event, a prehistoric or historic occupation or activity, or a

building or structure, whether standing, ruined, or vanished, where the location itself possesses historic, cultural, or archeological value regardless of the value of any existing structure.

Maintainability — "The relative ease and economy of time and resources with which an item can be retained in, or restored to, a specified condition when maintenance is performed by personnel having specified skill levels, using prescribed procedures and resources, at each prescribed level of maintenance and repair. In this context, it is a function of design" (U.S. Department of Defense 1997). Design for maintainability requires a product that is *serviceable* (must be easily repaired) and *supportable* (must be cost-effectively kept in or restored to a usable condition); it is better yet if the design includes a durability feature called *reliability* (absence of failures).

Mall — The area west of the United States Capitol between Madison and Jefferson Drives from 1st to 14th streets NW/SW. The east end of the Mall from 1st to 3rd streets NW/SW between Pennsylvania Avenue and Maryland Avenue and is also known as Union Square. The Mall is characterized by the east-west stretch of lawn bordered by rows of American elm trees. The Mall is managed by the National Mall and Memorial Parks.

Management Policies — The NPS directive governing management of the national park system. The current version is *Management Policies 2006*.

Management area — A planning term used by the National Park Service when referring to statements about desired resource conditions and visitor experiences, along with appropriate kinds and levels of management, use, and development for each park area.

Monumental core — A large area of land in central Washington, D.C. extending from the U.S. Capitol to the Lincoln Memorial, and including the Washington Monument; the Jefferson and Franklin Delano Roosevelt memorials; the White House complex; and the Korean War Veterans and Vietnam Veterans memorials.

Multipurpose facility — A facility that would provide more than one function, such as restrooms and food service/retail, or restrooms, information, and office space. A multipurpose space could also include flexible outdoor space that could be used for ranger programs or performances.

National Archives — The federal repository of the records of the U.S. government, located between 7th and 9th Streets NW, between Constitution and Pennsylvania avenues NW.

National Environmental Policy Act of 1969 (NEPA) — The public law that requires federal agencies to look at alternatives for proposed major federal actions and to fully analyze the impacts of those alternatives on the human environment before a decision is made.

National Gallery of Art — The National Gallery of Art East and West Buildings, as well as the Sculpture Garden, located between Constitution Avenue and Madison Drive from 3rd to 9th streets NW.

National Mall — The area comprised of the Mall, the Washington Monument, and West Potomac Park. It is managed by the National Park Service's National Mall and Memorials Parks. Specifically the areas are:

- the Mall, which extends from the grounds of the U.S. Capitol to the Washington Monument and include Union Square
- the Washington Monument and its grounds
- West Potomac Park, which is the setting for numerous memorials, including the Lincoln Memorial, the World War II Memorial, the Thomas Jefferson Memorial, the Vietnam Veterans Memorial, the Korean War Veterans Memorial, the Franklin Delano Roosevelt Memorial, and the Tidal Basin

Often the terms National Mall and the Mall are used interchangeably, and map labeling and references to the National Mall have further created public confusion.

National Mall and Memorial Parks — The NPS manager of the National Mall, East Potomac Park, and many circles, squares, and smaller park areas within Washington, D.C.

National Register of Historic Places — The comprehensive list of districts, sites, buildings, structures, and objects of national, regional, state, and local significance in American history, architecture, archeology, engineering, and culture kept by the National Park Service under authority of the National Historic Preservation Act of 1966.

Pedestrian — A person on foot or using an assistive device, such as a wheelchair, electric scooter, or Segway®HT.

Permit-days — The number of days an event sponsor requests, including setup and takedown time.

Rehabilitation — The act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values.

Reservation — Refers to a parcel of federal land in Washington, D.C., identified by its acquisition number.

Reserve — As defined in the 2003 amendments to the Commemorative Works Act, the great cross-axis of public space that extends west from the U.S. Capitol to the Lincoln Memorial, and from the White House to the Jefferson Memorial. Congress declared this area to be a substantially completed work of civic art.

Site furnishings — Landscape components, such as paving, lighting, seating, fencing (including bollards and post-and-chain fencing), tree grates and guards, trash containers, information stations, wayside displays, shelters, and signs.

Smithsonian Institution — The national museums of the Smithsonian Institution, and related grounds and gardens, flank the north and south edges of the Mall. Museums include:

- National Museum of American History
- National Museum of Natural History
- Freer Gallery of Art
- Arthur M. Sackler Gallery
- S. Dillon Ripley Center
- National Museum of African Art
- Smithsonian Castle
- Arts and Industries Building
- Hirshhorn Museum and Sculpture Garden
- National Air and Space Museum
- National Museum of the American Indian
- National Museum of African American History and Culture (future)

Social trail — A user-created trail off paved pathways, which may indicate an alternative circulation path.

Standards — Description of what is to be achieved for maintenance of landscapes, commemorative works, other facilities, education, etc.

State historic preservation office — Office in a state or territorial government that administers the preservation programs under the National Historic Preservation Act.

Sustainable development — According to the 1983 United Nations Bruntland report, "development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

Temporary event facilities — Facilities such as tents, stages, staging areas, and vehicles.

Tidal Basin — A partially man-made inlet adjacent to the Potomac River . It is part of West Potomac Park and is flanked by the Jefferson Memorial on the south side (on axis with the White House) and the Franklin Delano Roosevelt Memorial on the west side. The future site of the Martin Luther King, Jr. Memorial is on the northwest side. Cherry trees that were a gift of Japan were planted around the basin in 1912 and are now the focus of the National Cherry Blossom Festival.

Traffic calming — Various measures used to slow traffic to the posted speed and create a safer circulation system for vehicles, pedestrians, bicyclists, and other circulation modes.

Triangulation — A concept of using signs plus other park amenities, such as benches, cafés, restrooms, and path intersections, to create mini destinations in a park, where elements functioning together have a bigger impacts than they would separately. (See Project for Public Spaces at http://www.pps.org/parks_plazas_squares/info/).

Trust for the National Mall — Authorized fundraising partner of the National Park Service and dedicated to improving the appearance and facilities of the National Mall.

Travel Demand Management — Programs and policies that reduce and manage the demand within transportation corridors and by transportation modes, disperse peak-period traffic, and/or encourage transit usage and capacity. Elements include encouraging employers to provide flexible work hours, staggered work schedules, and alternative work schedules; encouraging van and car pools, or bus pass programs for major employers; and creating disincentives to drive, such as increasing the cost of parking.

Turf — The upper stratum of soil bound by grass and plant roots into a thick mat.

Union Square — The east end of the Mall from 1st to 3rd street NW/SW between Pennsylvania and Maryland Avenues and containing the Ulysses S. Grant Memorial and the Capitol Reflecting Pool.

Union Station — The railroad station was designed by architect Daniel Burnham and opened on October 27, 1907, and is considered to be one of the finest examples of the Beaux-Arts style of architecture. The National Park Service manages

the grounds. Union Station is not within the study area.

Universal design — Site design that includes provisions that address the needs of walkers, transit patrons, and bicyclists, especially in light of the Americans with Disabilities Act and federal transportation legislation that supports multiple modes of transportation.

User (visitor) capacity — The type and level of visitor use that can be accommodated while sustaining desired resource and visitor experience conditions in a park.

Views and vistas — The prospect afforded by a range of vision in a landscape, conferred by the composition of other landscape characteristics and associated features (NPS 2001c). The National Park Service distinguishes views and vistas as follows:

- A view is the expansive and/or panoramic prospect of a broad range of vision, which may be naturally occurring or deliberately contrived.
- A vista is the controlled prospect of a discrete, linear range of vision, which is deliberately contrived.

Vision — A broad philosophical statement that describes what a park should be with regard to future resource conditions and human experiences.

Visitor center — Visitor centers provide indoor media, audiovisual programs (auditoriums), museums, museum collection storage, exhibits, information services, sales of educational materials and theme-related items, self-help programs, and spaces necessary for high-quality visitor experiences (*Management Policies 2006,* sec. 9.3.1.3).

Visitor facilities — Visitor facilities provide convenient services for visitors, such as information and education, restrooms, bookstores, food service, retail, and recreation equipment rentals. Some facilities, such as food and education, could be mobile (e.g., roving interpreters and refreshment carts). Existing outdoor spaces can be adaptively used for educational programs and performances.

Washington Monument — The monument is located on U.S. Reservation 2, and it extends from 14th Street NW/SW west to 17th Street NW/SW and from Constitution Avenue NW south to the intersection of Maine Avenue and Raoul Wallenberg Place. In addition to the giant marble obelisk, facilities on the grounds include the Sylvan Theater, Survey Lodge, and NPS ranger station. It is managed by the National Mall and Memorial Parks.

Wayfinding — Systems of signs, maps, and other graphic or written materials, and audio methods, used to convey location, route finding, and directions to travelers.

Waysides / wayside exhibits — Free-standing educational exhibits about park features and structures that provide additional historic or interpretive information for visitors.

West Potomac Park — The portion of the National Mall west of the Washington Monument to the Potomac River. It contains a number of smaller commemorative works, along with the following memorials, which are managed by the National Mall and Memorial Parks:

- Constitution Gardens
- Franklin Delano Roosevelt Memorial
- George Mason Memorial
- Korean War Veterans Memorial
- Lincoln Memorial
- National World War II Memorial
- Thomas Jefferson Memorial
- Vietnam Veterans Memorial

White House and President's Park —U.S. Reservation 1, the northern portion of the Reserve, north of Constitution Avenue NW. It is managed by the National Park Service, but is not part of the National Mall and Memorial Parks.

Witness trees — Trees that were present when an area was originally developed.

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ASLA	American Society of Landscape Architects
CEQ	Council on Environmental Quality
CFA	Commission of fine Arts
FEMA	Federal Emergency Management Agency
NCPC	National Capital Planning Commission
NPS	National Park Service
SCS	Soil Conservation Service
US EPA	U.S. Environmental Protection Agency
USFS	U.S. Forest Service
USGS	U.S. Geological Survey
WMATA	Washington Metropolitan Area Transit Authority

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As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historical places; and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

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