1.0 Introduction and Background
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1.1 INTRODUCTION

The Smithsonian Institution is proposing to construct and operate a permanent facility for the National Museum of African American History and Culture (NMAAHC) on a five-acre parcel on the Washington Monument Grounds and the National Mall bounded by Constitution Avenue on the north, Madison Drive on the south, 14th Street NW on the east, and 15th Street NW on the west. The NMAAHC currently exists in the form of exhibits displayed within other Smithsonian Museums; there is no permanent exhibition facility dedicated to the containment of its collections and programs.

In 2003, the Smithsonian Institution began the process of identifying potential sites for a permanent facility for the NMAAHC within Washington, DC. This process resulted in the selection of the project site in 2006. Based on the selection of the preferred site, the Smithsonian Institution and the National Capital Planning Commission (NCPC), as joint leads, undertook preparation of a Tier I Environmental Impact Statement (EIS). The Tier I EIS addressed themes that included context, siting and mass, orientation, form, exterior spaces, and profiles for six massing alternatives, as well as a no build alternative. The Tier I EIS was prepared by Louis Berger Group, Inc. on behalf of the Smithsonian Institution (2008a). The Tier I EIS process concluded with a Record of Decision (ROD) in 2008 and a set of design principles to guide the development of specific building concepts that would permanently exhibit the museum collection.

Using the design principles as a guideline, a competition was held in 2009 to select an architect (Smithsonian Institution, 2008b). The team of Freelon Adjaye Bond/SmithGroup was selected. Beginning in November 2009, the design team developed a series of architectural concepts for the NMAAHC. This Tier II Draft EIS analyzes the environmental effects associated with construction and operation of specific build alternatives, as well as a No Action Alternative. Together, the EISs and source materials from the Tier I and Tier II NEPA processes will constitute the complete administrative record for the NMAAHC project.

The Tier I Final EIS analyzed the potential effects of the massing alternatives on the natural and manmade environments including but not limited to cultural resources, aesthetics and visual resources, distribution and movement of groundwater, surface water resources, air quality, noise, transportation, land use and planning policies, visitor use and experience, communities and businesses, infrastructure and utilities, public health and safety, cumulative effects, and irretrievable and irreversible resource commitments. As stated in the Tier I Final EIS, “the Tier I Preferred Alternative includes the range of all reasonable alternatives which were rigorously explored and objectively evaluated in the first tier. As long as the Tier II concept designs fit within the physical envelope defined by the Tier I Build Alternatives and conform to the design principles developed in Tier I, it will be unnecessary to revisit, in Tier II, the analysis of effects resolved in Tier I. By carrying forward this analysis, Tier II can ‘eliminate repetitive discussions of the same issues’ and focus on ‘the actual issues ripe for decision’ (CEQ Section 1502.20).” The Tier I Final EIS is available for review at: http://www.nmaahceis.com/tier-i-eis.
This Tier II Draft EIS builds upon the environmental analysis completed in Tier I EIS process and incorporates the Tier I Final EIS by reference. In addition, mitigation measures developed during the Tier I EIS process are carried forward in this Tier II Draft EIS. The analysis in this Tier II Draft EIS is focused on the issues that were not resolved in the Tier I EIS process including:

- Land Use, Planning Policies and Visitor Experience
- Historic Resources
- Visual Resources
- Geology, Soils and Groundwater Resources
- Conservation of Natural Resources
- Transportation

The first two chapters of this Tier II Draft EIS provide the foundation for the document. Chapter 1 includes the Introduction and Purpose and Need for the proposed action based on the Tier I EIS process. Chapter 2 describes the process used to develop the alternatives and those alternatives that are not carried forward for detailed analysis in this EIS. Chapter 3 presents the existing conditions and impact analysis for the Tier II resource areas listed above. Where applicable, a summary of the relevant information from the Tier I Final EIS is provided to give the reader background on the subject without providing the complete discussion included in the Tier I Final EIS. References to the specific section of the Tier I Final EIS are provided for ease of use by the reader.

Chapter 4 of this Tier II Draft EIS describes the role of the public and external agencies that were contacted during the preparation of this EIS. Chapter 5 includes the references for data sources used in the preparation of this Tier II Draft EIS. Chapter 6 provides a list of acronyms and abbreviations used throughout this document. Chapter 7 includes the list of preparers.

### 1.2 WHAT IS THE NATIONAL MUSEUM OF AFRICAN AMERICAN HISTORY AND CULTURE?

As discussed in the Tier I Final EIS, “the effort to build a national museum centered on the history and achievements of African Americans dates back more than 90 years to the commemoration of the 50th anniversary of the end of the Civil War. In 1915, difficulties in finding accommodation for a contingent of black Civil War veterans planning to join in the conflict’s 50th anniversary victory parade along Pennsylvania Avenue in Washington, DC led African American community leaders to collect money and organize a National Memorial Association” (Smithsonian Institution, 2008a). According to A Time Has Come: Report to the President and Congress (Smithsonian Institution, 2003a), the Association’s appeal was as follows:

> It is the purpose of the National Memorial Association to erect a beautiful building to depict the Negro’s contribution to America in the military service, in art, literature, invention, science, industry, etc. – a fitting tribute to the Negro’s contributions and achievements, and which would serve as an educational center giving inspiration and pride to the present and future generations ...
As explained in *The Time Has Come: Report to the President and Congress* (Smithsonian Institution, 2003a), a series of starts was made over the course of nearly a century to realize the proposal. Each one advanced further, but none resulted in a dedicated facility. Congress held hearings in 1919, but no action was taken. In 1929, Congress passed legislation to create a national commission to build the memorial. However, the legislation did not include funding for the museum. Claims were advanced unsuccessfully by the national commission for financial support in connection with the unclaimed pay to black Civil War soldiers and the collapse of the Freedmen’s Bank in 1874. Nonetheless, by 1933 little had been accomplished and the commission’s duties were transferred to the Interior Department, a tacit acknowledgement of its lack of progress.

Nothing of further importance to the matter occurred until 1968 when, in the midst of the civil rights movement and the wake of the assassination of Dr. Martin Luther King, Jr., legislative initiatives resumed. In 1986, under the leadership of Representative Mickey Leland, Congress passed a Joint Resolution "to encourage and support" private efforts to build what was now thought of as both a memorial and a museum in Washington (Smithsonian Institution, 2003a).

In 1988 and 1989, bills were introduced to create a "National African American Heritage Museum and Memorial" within the Smithsonian Institution. Also in 1989, the Smithsonian Institution hired Claudine K. Brown to create its Center for African American History and to lead the "African American Institutional Study," to be performed by a blue-ribbon commission appointed by the Smithsonian Institution.

In 1991, the commission recommended the creation of a national museum, concluding that "[t]here exists no single institution devoted to African Americans which collects, analyzes, researches, and organizes exhibitions on a scale and definition comparable to those of the major museums devoted to other aspects of American life." The blue-ribbon commission recommended that the African American museum be temporarily located in the Arts and Industries Building until a new, larger facility could be built. Nevertheless, controversy about funding and the appropriateness of the Arts and Industries Building prevented passage of legislation (Smithsonian Institution, 2003a).

In 2001, Representative John Lewis, Representative J.C. Watts, Jr., Senator Sam Brownback and Senator Max Cleland led a new bipartisan coalition to establish a National Museum of African American History and Culture within the Smithsonian Institution. Renewed questions about funding and the feasibility of using the Arts and Industries Building resulted in the formation of the NMAAHC Plan for Action Presidential Commission (Commission) on December 28, 2001 by P.L. 107-106 (see Appendix A of the Tier I Draft EIS) to develop a feasible plan to move forward on the NMAAHC (Smithsonian Institution, 2008a).

In April 2003, after a yearlong study and the convening of more than 50 national and local meetings, the Commission released its first report, *The Time Has Come, Report to the President and to the Congress* (Smithsonian Institution, 2003a). The report included some of these findings:
The Commission found that there were many nationally significant art and cultural history collections available for loan or purchase to support the programming of the NMAAHC.

The Commission's survey of regional African American museums found strong support for the National Museum with 87 percent reporting that they supported the idea of establishing the NMAAHC.

The Commission studied several possible sites for the NMAAHC and recommended the site on the Capitol Grounds between Pennsylvania Avenue, Constitution Avenue, and 1st and 3rd Streets (the marshalling point for the 1915 march of the African American Civil War veterans and their white comrades in arms). As an alternative, the Commission recommended the "Monument" site immediately west of the National Museum of American History (NMAH) between Constitution Avenue, Madison Drive, and 14th and 15th Streets.

The Commission studied the possibility of using the Arts and Industries Building for the NMAAHC. The cost to use the building for the NMAAHC was estimated to be approximately $379 million in 2003 dollars and $480 million in 2011 dollars. Because of the excessive cost and general unsuitability of the structure, the Commission did not recommend using the Arts and Industries Building.

The Commission recommended that the NMAAHC be part of the Smithsonian Institution with certain governance provisions designed to ensure strong community participation in the NMAAHC’s programs.

In September 2003, the Commission issued its Final Site Report (Smithsonian Institution, 2003b) which presented detailed planning analysis of the four possible sites for the NMAAHC: the Capitol Grounds site, the Monument site, the Liberty Loan site, and the Banneker Overlook site, having already discounted the feasibility of reusing the Arts and Industries Building. The report confirmed the Commission's preference for the Capitol Grounds site and the Monument site as an alternative.

Following the completion of the Final Site Report, the National Museum of African American History and Culture Act, P.L. 108-184, enacted by the Congress on December 16, 2003, established a museum within the Smithsonian Institution to be known as the National Museum of African American History and Culture (see Appendix A of the Tier I Draft EIS). The Act required the Smithsonian Institution Board of Regents to select a final site.
1.3 WHICH AGENCIES ARE LEADING THIS PROJECT?

This project is jointly led by the Smithsonian Institution and NCPC. The Smithsonian Institution is a trust instrumentality of the United States, established by Congress in 1846 for the “increase and diffusion of knowledge among men.” The Smithsonian Institution is not a “federal agency” within the meaning of the National Environmental Policy Act (NEPA) or the Council of Environmental Quality’s (CEQ) implementing regulations. However, it is the policy and intent of the Smithsonian Institution to inform and involve a host of communities in the planning of its facilities. Additionally, the Smithsonian Institution is concurrently assessing effects on relevant historic and cultural resources in accordance with the Section 106 process of the National Historic Preservation Act (NHPA).

Certain Smithsonian Institution projects in Washington, DC are subject to review by NCPC, the central planning agency for federal land and buildings in the National Capital Region. NCPC is a federal agency under NEPA and has its own guidance for implementing its NEPA compliance obligations.

For this project, the Smithsonian Institution and NCPC are acting as Joint Lead Agencies, with NCPC in the role of responsible lead federal agency for NEPA purposes. Because the Smithsonian is not a federal agency for the purposes of NEPA, it is following NCPC’s NEPA guidance, outlined in Section 4(D) of NCPC’s Environmental and Historic Preservation Policies and Procedures (69 Federal Regulation [F.R.] 41299). NCPC’s guidelines require applicants to prepare the necessary NEPA and Section 106 of the NHPA documents, in conformance with respective CEQ and Advisory Council on Historic Preservation (ACHP) requirements. NCPC will make an independent evaluation of the NEPA and NHPA documents (Smithsonian Institution, 2008a).

A federal, state, tribal or local agency having special expertise with respect to an environmental issue or jurisdiction by law may be a cooperating agency in the NEPA process. A cooperating agency has the responsibility to assist the lead agency by participating in the NEPA process at the earliest possible time; by participating in the scoping process; in developing information and preparing environmental analyses, including portions of the environmental impact statement concerning which the cooperating agency has special expertise; and in making available staff support at the lead agency’s request to enhance the lead agency’s interdisciplinary capabilities.

Because of NPS’s role in managing this property and managing the open space and monuments on the National Mall surrounding the NMAAHC, the Smithsonian Institution invited NPS to be a cooperating agency during the Tier I EIS process. NPS has agreed to be a cooperating agency during the Tier II EIS process.
1.4 WHERE IS THE SITE LOCATED?

The project site consists of a 5.3-acre parcel (approximately 233,349 square feet) extending approximately 642 feet from Constitution Avenue on the north to Madison Drive on the south, and approximately 422 feet from 14th Street on the east to 15th Street on the west (see Figure 1.4.1).

The NMAAHC site is part of the Washington Monument Grounds on the National Mall. It is public open space designated as parkland for a variety of uses, including recreation, special events, and celebrations and it is part of a larger commemorative landscape.

The project site is owned by the United States and maintained by NPS. Administrative jurisdiction of the property was transferred from NPS to the Smithsonian Institution on June 1, 2007. However, NPS continues to operate the site as a public recreation resource and parkland until construction of the NMAAHC commences.
Figure 1.4.1 Site Location Map
Source: AECOM, 2010
The project site currently can be characterized as primarily open space. It contains a concessionaire’s temporary trailer offering food, beverage and other items for sale near the southern boundary of the site. Until recently, the site contained a larger blue concessionaire’s temporary tent in this same location. A Bulfinch Gatepost is located in the northwest corner. Mature trees are concentrated in the northeast corner of the site and along Constitution Avenue and 14th Street. A bus drop-off and Tourmobile stop is located on the southern portion of the site at the lay-by on Madison Drive. The site also includes walkways and grass. The topography of the site slopes up from Constitution Avenue towards the southern boundary along Madison Drive and the National Mall. The elevation of the site changes by approximately 13 feet.

The Washington Monument is located approximately 670 feet southwest of the site. The Herbert C. Hoover Commerce Building is located to the north, NMAH is to the east, and the central spine of the National Mall as it extends across the Washington Monument Grounds to the south.

Provisions contained within Section 8 of the National Museum of African American History and Culture Act, P.L. 108-184 (2003), ("Building for the National Museum of African American History and Culture") directed the Smithsonian Board of Regents to select one site among four on or near the National Mall for the construction of the museum. As discussed in the Tier I Final EIS, the four identified sites included the Monument site, the Arts and Industries Building site, the Liberty Loan site, and the Banneker Overlook site. To facilitate the site selection process by the Board of Regents, the Smithsonian Institution produced a two-volume Site Evaluation Study (Smithsonian Institution, 2005a). In addition, the Board of Regents consulted with a variety of groups through the Smithsonian Institution’s website and at a November 2005 Town Hall meeting.

After undertaking a site evaluation study and consultation with parties specified in the legislation, the Board of Regents of the Smithsonian Institution voted to select the area bounded by Constitution Avenue, Madison Drive, and 14th and 15th Streets, now commonly known as the Monument site. The decision was announced on January 30, 2006. This decision by the Smithsonian Institution Board of Regents completed the site selection process as directed by Congress in the National Museum of African American History and Culture Act.
1.5 WHAT IS THE PURPOSE OF AND NEED FOR THE NATIONAL MUSEUM OF AFRICAN AMERICAN HISTORY AND CULTURE?

The purpose of the proposed action is to fulfill the mandate of the National Museum of African American History and Culture Act, P.L. 108-184 (2003). The Act states: “[Such a museum] would be dedicated to the collection, preservation, research, and exhibition of the African American historical and cultural materials reflecting the breadth and depth of the experience of individuals of African descent living in the United States.”

As set out in Section 4 of the Act, the NMAAHC must provide for:

(1) The collection, study, and establishment of programs relating to African American life, art, history, and culture that encompass
   a) the period of slavery
   b) the era of Reconstruction
   c) the Harlem Renaissance
   d) the Civil Rights movement
   e) other periods of the African American diaspora

(2) The creation and maintenance of permanent and temporary exhibits documenting the history of slavery in America, and African American life, art, history, and culture; and

(3) The collection and study of artifacts and documents relating to African American life, art, history, and culture; and

(4) Collaboration between the NMAAHC and other museums, historically black colleges and universities, historical societies, educational institutions, and other organizations that promote the study of or appreciation of African American life, art, history, or culture, including collaboration concerning
   a) development of cooperative programs and exhibitions
   b) identification, management, and care of collections; and
   c) training of museum professionals

Section 2 of the NMAAHC Act set out the findings of Congress as to why such a museum was needed.

(1) Since its founding, the United States has grown into a symbol of democracy and freedom around the world, and the legacy of African Americans is rooted in the very fabric of the democracy and freedom of the United States.

(2) There exists no national museum within the Smithsonian Institution that-
   a) is devoted to the documentation of African American life, art, history, and culture; and
   b) encompasses on a national level- [the key time periods associated with African American life, art, history, and culture.]

(3) A National Museum of African American History and Culture would be dedicated to the collection, preservation, research, and exhibition of African American historical and cultural material reflecting the breadth and depth of the experience of individuals of African descent living in the United States.

The findings of Congress were based in large part on the conclusions of the Presidential Commission in its 2003 study The Time Has Come: Report to the President and Congress (Smithsonian Institution, 2003a). This Commission, known as the NMAAHC Plan for Action Presidential Commission, stated that:
“the time has come to establish the National Museum of African American History and Culture because the NMAAHC is important not only for African Americans but for all Americans. It is the only institution that can provide a national meeting place for all Americans to learn about the history and culture of African Americans and their contributions to and relationship with every aspect of our national life. Further, the NMAAHC is the only national venue that can respond to the interests and needs of diverse racial constituencies who share a common commitment to a full and accurate telling of our country’s past as we prepare for our country’s future. And, even more importantly, it is the only national venue that can serve as an educational healing space to further racial reconciliation.”

This Tier II Draft EIS assesses certain impacts associated with constructing and operating a permanent facility for the NMAAHC within the Smithsonian Institution’s approved site to meet this purpose and need. Overall, the purpose and need statements are consistent between the Tier I and Tier II EIS processes.
1.6 WHAT IS AN EIS AND WHAT WILL IT ACCOMPLISH?

NEPA was passed by Congress in 1969 and took effect on January 1, 1970. This legislation established this country’s environmental policies, including the goal of achieving productive harmony between human beings and the physical environment for present and future generations. It provided the tools to implement these goals by requiring that every federal agency prepare an in-depth study of the impacts of “major federal actions having a significant effect on the environment” and alternatives to those actions, and requiring that each agency make that information an integral part of its decisions.

The purpose of NEPA is to provide decision-makers with information on the environmental impacts associated with a decision before the decision is made. Federal agencies are also required to use the NEPA process to identify and assess the reasonable alternatives to proposed actions that will avoid or minimize adverse effects of these actions upon the quality of the human environment. NEPA also requires that agencies make a diligent effort to involve the interested and affected public before they make decisions affecting the environment.

The proposed action is to construct and operate a permanent facility for the NMAAHC within the Smithsonian Institution on the five-acre parcel bounded by Constitution Avenue on the north, Madison Drive on the south, 14th Street on the east, and 15th Street on the west. Because of the importance of the setting of the NMAAHC site on the Washington Monument Grounds and the National Mall and the public interest in the site, the Smithsonian Institution made the decision with NCPC to prepare an EIS, as suggested by NCPC’s Environmental and Historic Preservation Policies and Procedures.

This Draft EIS analyzes alternative building concepts to exhibit the museum collections and programming, as well as a No Action Alternative. This document complies with NEPA and requires review by CEQ pursuant to 42 U.S.C. §4321 through 42 U.S.C. §4347 and Title 40 of the Code of Federal Regulations (40 CFR 1500 – 1508 (1986), as amended). A Record Of Decision (ROD) will be the end product of the Tier II NEPA process.
1.7 WHY IS THE EIS TIERED?

As explained in the Tier I Final EIS, “if a federal agency anticipates that the proposed project’s timeline will extend over a lengthy period and will require a phased decision making process, a federal agency may choose to identify elements to be carried forward in the near term and identify other elements which will warrant more detailed study in a future environmental document” (Smithsonian Institution, 2008a). CEQ regulations, 40 C.F.R. § 1502.20 state that:

*Agencies are encouraged to tier their environmental impact statements to eliminate repetitive discussions of the same issues and to focus on the actual issues ripe for decision [emphasis added] at each level of environmental review (Sec. 1508.28). Whenever a broad environmental impact statement has been prepared... and a subsequent statement or environmental assessment is then prepared on an action included within the entire program or policy (such as a site specific action) the subsequent statement or environmental assessment need only summarize the issues discussed in the broader statement... and shall concentrate on the issues specific to the subsequent action. The subsequent document shall state where the earlier document is available (CEQ, 1978).*

In order to focus on “issues ripe for decision” and encourage continued dialogue on cultural resource effects and other appropriate effects as architectural design concepts are developed, the Smithsonian Institution and NCPC, in consultation with the CEQ, elected to pursue a two-tiered NEPA process.

The Tier I Final EIS analyzed the potential effects of a range of massing alternatives with different heights, setbacks and configurations on the natural and manmade environments. The Tier I NEPA process included a Draft EIS and a Final EIS. The Smithsonian Institution concluded the Tier I NEPA process by issuing a ROD in 2008. NCPC did not issue a Tier I decision document because it will take action on the NMAAHC when the Smithsonian Institution submits the project to NCPC for approval, following completion of the Tier II NEPA process.

As stated in the Tier I Final EIS, “following the generation of conceptual designs by the NMAAHC design architect, there will be a Tier II EA or EIS that would analyze the historic and aesthetic/visual effects and any other significant effects found to be important to the final decision. Included in the Smithsonian Institution’s decision will be design principles, which will inform the subsequent design process and serve as guidance for the design architect. The design principles acknowledge the dialogue between stakeholders and consulting parties that occurred through the Tier I process” (Smithsonian Institution, 2008a).

As part of the Tier II NEPA process, the Smithsonian and NCPC are assessing a full range of viable alternative concept designs for viewshed impacts, possible historic resource effects, and certain geotechnical, transportation, and other effects.
1.8 WHAT ARE THE RESULTS OF THE TIER I EIS?

The Tier I EIS process was completed with a Final EIS issued on June 27, 2008, and a ROD, issued on August 8, 2008. The Tier I Final EIS analyzed a “no build” alternative along with six diagrammatic massing alternatives on the site (see Figure 1.8.1). The alternatives presented variations in context, siting and mass, orientation, form, square footage of interior spaces, exterior spaces, and profiles.

The Tier I Final EIS concluded that the massing alternatives all had comparable effects on the majority of resources analyzed, which included cultural resources, aesthetics and visual resources, distribution and movement of groundwater, surface water resources, air quality, noise, transportation, land use and planning policies, visitor use and experience, communities and businesses, infrastructure and utilities, public health and security, and cumulative impacts (see Section 1.8.1). The Smithsonian Institution and NCPC chose to assess more concrete design concepts for the NMAAHC for viewshed impacts, possible historic resource effects, site-specific geotechnical impacts, transportation impacts and other impacts in the Tier II Draft EIS (see Section 2.2.4). An expanded discussion of the tiered EIS process is provided in Section 1.7 above. The Tier I Final EIS is available for review at http://www.nmaahceis.com/tier-i-eis.

The Smithsonian Institution chose to express the Tier I Preferred Alternative as a set of physical parameters related to size, heights, setbacks and configuration. The program requirements and physical parameters resulted in a Smithsonian Preferred Alternative that consisted of the following:

- Approximately 350,000 gross square feet provided in buildings ranging in height from 60 to 105 feet;
- A minimum 50-foot setback from the inside face of the sidewalk of the surrounding streets for preliminary security planning purposes; and
- A subsurface volume not lower than 45 feet.

As shown in Figure 1.8.1 below, the massing parameters ranged from orthogonal and contextual to free-form and non-contextual. In addition to the physical parameters, the Smithsonian Institution, in coordination with the Section 106 consulting parties, developed a set of design principles to help guide architects and minimize adverse effects on historic resources. The design principles reflect the importance of relating to and respecting the character, views, and spatial arrangements of the National Mall; the character, scale, and historic context of the Washington Monument Grounds; and the relationship of the NMAAHC to adjacent architectural and urban contexts (Smithsonian Institution, 2008a).

The Smithsonian Institution used the decisions described in the ROD for the Tier I EIS as instructions to the design architects in developing concept designs for the NMAAHC. The environmental impacts of the resulting concept designs are evaluated in this Tier II Draft EIS. The final decisions on the design of the NMAAHC will not be made until the Tier II NEPA analysis is complete.
### Figure 1.8.1 Tier I Massing Alternatives

*Source: Smithsonian Institution, 2008a*

<table>
<thead>
<tr>
<th>Height</th>
<th>Contextual Building Alignment</th>
<th>Washington Monument Orientation</th>
<th>Free Form</th>
<th>Terraced Roof</th>
<th>Enframing</th>
<th>Low Profile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Floors Above Grade</td>
<td>75'</td>
<td>90'</td>
<td>105'</td>
<td>90'</td>
<td>90'</td>
<td>60'</td>
</tr>
<tr>
<td>Floors Below Grade</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>6</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Total GSF</td>
<td>415,000 gsf</td>
<td>376,000 gsf</td>
<td>411,000 gsf</td>
<td>385,500 gsf</td>
<td>430,000 gsf</td>
<td>350,000 gsf</td>
</tr>
</tbody>
</table>

*For planning purposes the alternatives use a generic 15 foot floor to floor height.*
1.8.1 What Issues Were Evaluated in the Tier I EIS?

The following is a summary of the impacts associated with each of the resource areas evaluated in the Tier I EIS and subsequently eliminated from the Tier II Draft EIS. These eliminated resource areas include air quality, archaeological resources, communities and businesses, infrastructure and utilities, noise, public health and security, surface water resources, and threatened and endangered species.

**Air Quality**

National Ambient Air Quality Standards, established by the U.S. Environmental Protection Agency (EPA) in compliance with the 1970 Clean Air Act and the 1977 and 1990 Clean Air Act Amendments, were enacted for the protection of the public health and welfare within an adequate margin of safety. The EPA has issued National Ambient Air Quality Standards for several pollutants which set *de minimis* levels for their presence. Air-quality Control Regions are monitored for their attainment or non-attainment of the standards. The Metropolitan Washington Council of Governments is the agency responsible for coordinating the air quality planning initiatives for Washington, DC, Virginia and Maryland in the Washington, DC metropolitan statistical area.

The area is currently in moderate nonattainment for the criteria pollutant ozone (O<sub>3</sub>), and nonattainment for particulate matter up to 2.5 micrometers in size (PM<sub>2.5</sub>): the area is in attainment for all other criteria pollutants.

Federal actions that take place in a nonattainment area are required to demonstrate compliance with the General Conformity Rule (40 CFR Part 93 Determining Conformity of Federal Actions to State or Federal Implementation Plans). The General Conformity Applicability analysis performed as part of the Tier I Final EIS involved estimating the level of potential air emissions for oxides of nitrogen (NO<sub>x</sub>), volatile organic compounds (VOC), sulfur dioxide (SO<sub>2</sub>) and PM<sub>2.5</sub> under moderate eight-hour *de minimis* levels and severe one-hour *de minimis* levels, as well as for regional significance. The Tier I Final EIS (Smithsonian Institution, 2008a) concluded that no significant impacts on air quality would occur on either a local or regional level during construction or operation of the NMAAHC.

**Archaeological Resources**

The Smithsonian Institution commissioned Phase I and Phase II archaeological studies of the entire NMAAHC site since no previous archaeological studies of the site had been completed. The Phase I archaeological study primarily focused on archival research of the site’s physical development and its historic uses, as well as some geo-archaeological investigation and standard archaeological survey of the site. The Phase II archaeological study involved field investigations of the site through manually excavated test pits and mechanical trenching. Phase II shovel tests produced a small number of prehistoric and early-nineteenth century artifacts.

Prehistoric items consisted of waste flakes that resulted from the manufacture of stone tools; the early-nineteenth century artifacts included items such as ceramics, bottle glass, oyster shell and animal bone. As part of the Tier I Final EIS the Smithsonian Institution, in consultation with the State Historic Preservation
Office (SHPO), determined no significant impacts on archaeological resources were expected as a result of the NMAAHC project because construction of the proposed action would not limit future historic or archaeological study or interpretation of this area of the city.

Communities and Businesses

The Tier I Final EIS examined the potential impacts that the proposed action would have on local communities and businesses in the area. In addition, Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations calls on federal agencies to take appropriate steps, to the greatest extent practicable and permitted by law, to identify and address disproportionately high and adverse impacts of federal projects on the health or environment of minority and low-income populations. Executive Order 13045, Protection of Children from Environmental Health and Safety Risk requires federal agencies to identify and assess risks to child health and safety from proposed actions that have the potential to disproportionately affect children. The Tier I Final EIS used a model to evaluate the significance of the impact that the construction and operation of the NMAAHC would have on the region of influence.

According to this Tier I analysis, the construction and the operation of the NMAAHC facility would not significantly impact local economic development, demographics, housing, further burden community services such as schools, fire and rescue services or hospitals and it would not significantly impact environmental justice populations or children. In addition, a traffic control plan will be prepared to determine the routes construction vehicles will take to and from the site during construction to avoid residential neighborhoods.

Infrastructure and Utilities

The NMAAHC site is currently served by several utilities and urban systems in the area including water, sewer (sanitary and storm), electricity, natural gas, communications, solid waste and hazardous waste. Some infrastructure improvements would be necessary to connect to the various utilities.

The District of Columbia Water and Sewer Authority (WASA, now known as DC Water) provides potable water and sewer service at the project site. Sufficient potable water resources and capacity are available to meet additional treatment demand. According to the Tier I Final EIS, WASA (DC Water) indicated that there is adequate capacity to accommodate the projected demand from the project site. PEPCO provides electric service in Washington, DC and has sufficient service capacity available to accommodate current and future electricity of the proposed action. Washington Gas supplies natural gas to the NMAAHC site and has sufficient capacity available to accommodate the proposed action. It should be noted there is a subsurface elevated pressure gas transmission line that passes along the northern edge of the site that would require a 10- to 12-foot service easement.

Verizon provides private and commercial voice, data and cable service in Washington, DC and would be the Local Exchange Carrier contracted to provide service to the NMAAHC site. The Smithsonian Institution maintains contracts with service providers for trash collection, and the removal and disposal of solid waste and hazardous waste from museums on the National Mall (Smithsonian Institution, 2008a).
This topic was eliminated from further detailed study in the Tier II Draft EIS because construction and operation of the proposed action would not significantly alter the existing infrastructure or utilities, or exceed the capacities of those systems within the project area.

**Noise**

The NMAAHC site is located on the National Mall and is surrounded by numerous buildings, monuments, museums, roadways, and open spaces. There are no residential uses in the site vicinity. The biggest source of noise in the area is currently vehicular traffic on Constitution Avenue and 14th and 15th Streets. This noise is not confined to rush hour on the weekdays as there is heavy vehicular traffic and congestion on these roadways throughout the week and over the weekend. Noise levels on busy streets are estimated to range between 65 and 80 decibels (dB); noise levels on the land uses adjacent to the NMAAHC site range between 67 to 72 dB based on the Federal Highway Administration criteria. The project site is subject to some noise attributable to flights in and out of the Ronald Reagan Washington National Airport, although the higher noise exposure contours do not reach the site.

Finally, given the site's proximity to the National Mall and public spaces that often host special events, large crowds, motorcades, police and emergency services, the area is subject to activities that produce additional noise.

According to the Tier I Final EIS, construction noise from NMAAHC would be temporary and would not violate applicable regulations. Mitigation measures such as restricting construction and the arrival of heavy equipment and materials to permitted work hours, adhering to local District of Columbia regulations, and using equipment that meets EPA standards would reduce noise levels to acceptable levels. Operation of the NMAAHC would not substantially increase noise levels in the project vicinity. Increased noise from mechanical systems, such as the heating, ventilation and air condition (HVAC), would be minimal. The Tier I Final EIS determined that long-term impacts from noise associated with vehicular traffic generated by the proposed action would be minimal because of the underground loading deck and because most visitors would access the site via Metro.

**Public Health and Safety**

Public health and safety considerations exist for the construction phase of the facility, as well as during operation. During construction, the sidewalks near the site would remain open to pedestrian traffic, but signage would be used to safely redirect pedestrians and bicyclists away from the construction area. Furthermore, all construction activities would adhere to applicable regulations and standards to ensure the safety and health of workers. Enhanced signalization, signage, and improved pavement markings would be installed to reduce potential safety issues.

The building itself would incorporate a number of risk and security features into the design such as appropriate setbacks or installing window and glass systems with the appropriate level of blast-resistance. The building design would also comply with fire, life safety and environmental standards as set forth in applicable regulations. The Tier I Final EIS concluded that demand for public safety services would increase during project operation; however, it would not be significant given the historic pattern of demand at other Smithsonian Institution museums and the high volume of pedestrians currently accessing the monumental core.
**Surface Water Resources**

As stated in the Tier I Final EIS, there are no permanent bodies of water present on, or near, the five-acre site. The closest water body is the Tidal Basin, located approximately 2,000 feet (approximately 0.4 miles) to the southwest. All surface waters in the District flow to the Potomac River either directly or indirectly, through tributaries including Rock Creek and the Anacostia River. Appropriate mitigation measures during construction, including stormwater best management practices (BMPs) and compliance with local regulations, and operation of NMAAHC would be implemented to minimize any potential adverse impacts on water quality.

As stated in the Tier I Final EIS, *Executive Order 11988, Floodplain Management*, directs federal agencies to consider the risks, danger, and potential impacts of locating projects within floodplains and to minimize potential harm on, or within, the floodplain when alternatives are not practical. According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (Washington, DC, Community Panel Number 1100010020B; effective date November 15, 1985) that was official during the Tier I EIS process, the project site was located outside the boundaries of both the 100-year and 500-year floodplains (FEMA, 1985). However, FEMA recently modified the limits of the 100-year floodplain to include the project site. However, the Potomac Park levee project will be constructed by NPS at 17th Street to protect the Federal Triangle and downtown Washington. The levee project will keep the majority of the project site out of the 100-year floodplain (Smithsonian Institution, 2008a; updated DDOE, 2010). Nevertheless, requirements under *Executive Order 11988, Floodplain Management*, apply to NMAAHC and have been incorporated into the design of the build alternatives. Compliance with Executive Order 11988 would ensure a less than significant adverse impact to the museum from flooding. As a result, surface water resources have been eliminated as a topic from detailed analysis in the Tier II Draft EIS.

**Threatened and Endangered Species**

During the internal scoping process of the Tier I EIS, the Smithsonian Institution, NCPC and NPS determined that biological resources, including wetlands, wildlife and vegetation, would be dismissed from further review. The U.S. Fish and Wildlife Service confirmed that there are no proposed or federally-listed endangered or threatened species known to occur in the project area. Therefore, no biological assessment or a Section 7 consultation with the agency would be required.
1.8.2 What cumulative projects were evaluated in the Tier I EIS?

CEQ regulations (42 USC 4321 et seq.) require assessment of cumulative impacts in the decision-making process for federal projects. Cumulative impacts are 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). The Tier I Final EIS included an evaluation of the impacts of the NMAAHC in conjunction with the following cumulative projects:

- National Museum of American History, Kenneth E. Behring Center Public Space Revitalization
- National Mall Road Improvements
- Smithsonian Mall-Wide Perimeter Security Project
- Department of Commerce, Herbert C. Hoover Building Modernization
- Relocation of the National Aquarium Entrance
- Martin Luther King Jr. National Memorial
- American Veterans Disabled for Life Memorial
- Dwight D. Eisenhower Memorial
- Vietnam Veterans Memorial Visitors Center
- United States Institute of Peace Headquarters
- Fourteenth Street Bridge Corridor Traffic Studies
- City Center Action Agenda

According to the Tier I Final EIS, the combination of the proposed museum and these cumulative projects on the National Mall and surrounding monumental core could have an adverse effect on the historic plans for the city and the logic for the design of the National Mall. However, given the location of the project site, there were no current projects in the vicinity of the NMAAHC site that would adversely affect aesthetics or visual resources.

The Tier I Final EIS concluded that there were no cumulative impacts with respect to geology and soils because they are site-specific resources. The overall cumulative impact on groundwater was determined to be negligible, and thus, not significant, primarily because the cumulative projects would be expected to mitigate their potential impacts to the groundwater table to ensure equilibrium, similar to the requirements for the proposed action. The adverse cumulative impact on surface water was considered negligible, and thus, not significant, because, as with the proposed action, the cumulative projects would be required to comply with water quality regulations and treat surface runoff prior to discharge from a site. The adverse cumulative impact on floodplains was not considered significant because structures located within a potential flood area would be designed to flood or to withstand flooding and would not reduce the capacity of the floodplain.

The Tier I EIS concluded that the proposed action, in conjunction with the other cumulative projects, would cumulatively contribute to the continued exceedance of state and federal ambient air quality standards, but that the cumulative effect on air quality would not be significant. Heavy reliance on automobiles and the urban infrastructure that generates pollution was determined to be primarily the result of past developments that have generated the region’s population and land use patterns.
According to the Tier I Final EIS, additional noise generated by the cumulative projects would not create a significant noise impact because the site is located in an already noisy commercial and public area, and is not in close proximity to residential uses.

Although the related projects would be expected to generate new vehicular trips, the combination of the additional traffic generated by the cumulative projects and the traffic generated by the proposed action would be well-distributed. As such, the cumulative impacts were determined to be not adverse. Long-term, it was anticipated that the NMAAHC site would benefit from the improvements to the streets in the surrounding area from other actions such as the National Mall Road Improvements Project and the 14th Street Bridge Corridor Traffic Project (Smithsonian Institution, 2008a).

It was assumed that planned projects in the area, including the proposed action, would comply with land use policies and zoning of the National Mall and the downtown Washington, DC area. As a result, the cumulative effect on land use and zoning was determined to be not significant (Smithsonian Institution, 2008a). The increase of other cultural destinations within and near the National Mall, combined with the proposed action, would have an overall beneficial cumulative impact with respect to increasing visitor use and experience in Washington, DC.

According to the Tier I Final EIS, there would be a temporary increase in local spending that would result from the proposed action and cumulative projects leading to short-term benefits, but there would be no significant long-term effects to local businesses. No cumulative impact was expected on environmental justice because the listed projects are not adjacent to census tracts that may be characterized as low-income or minority and construction traffic would not traverse environmental justice communities.

While the proposed action and the cumulative projects would add to the service requirements for utility companies, it was determined in the Tier I Final EIS that the comparative loading numbers would not be significant and adequate capacity would be available. Based on the existing demand for the U.S. Park Police and DC Fire and Emergency services, the construction and operation of the NMAAHC was not anticipated to contribute significantly to a cumulative demand for such services. No adverse impact on public health and security was anticipated.
1.8.3 **What cumulative projects are being evaluated in the Tier II Draft EIS?**

The CEQ regulations to implement NEPA require the assessment of cumulative impacts in the decision making process for federal actions. Cumulative impacts are 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). As stated in the CEQ handbook, “Considering Cumulative Effects” (1997), cumulative impacts need to be analyzed in terms of the specific resource, ecosystem, and human community being affected and should focus on effects that are truly meaningful. Cumulative impacts are considered for all alternatives, including the No Action Alternative.

The NMAAHC site is located on the Washington Monument Grounds and the National Mall, a highly visible and culturally rich area. As such, a significant number of other public projects are underway or proposed in the vicinity. Additionally, because the site is located within an urban area, there are other ongoing private projects.

Cumulative impacts were determined by combining the impacts of the alternative being considered with other present and reasonably foreseeable future actions. Therefore, it was necessary to identify the relevant ongoing or reasonably foreseeable projects and plans on the National Mall and surrounding area. This analysis also incorporated the findings and analysis of the Tier I Final EIS. Some projects that were considered reasonably foreseeable during the Tier I EIS process are currently under construction and considered present projects. Table 1.1 summarizes actions that could affect resources at the site. Additional explanation for a portion of these actions is provided in the narrative following the table.
Table 1.1 Cumulative Impact Projects

<table>
<thead>
<tr>
<th>Present Projects</th>
<th>Description</th>
<th>Percent Complete (approximate)</th>
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</thead>
<tbody>
<tr>
<td><strong>Potomac Park Levee Project</strong></td>
<td>The National Park Service (NPS) is improving the West Potomac Park Levee located near the intersection of 17th Street NW and Constitution Avenue. The USACE de-certified the levee system in 2007 after it was determined that it did not meet stricter policies for levees adopted after hurricane Katrina. As a result, the Federal Emergency Management Administration (FEMA) proposed to issue a new 100-year floodplain map that would place portions of downtown Washington, including the Federal Triangle and museums along the north side of the Mall, within the floodplain. The project is divided into two Phases, Phase I will include construction of a post and panel closure system across 17th Street an on-site post and panel storage facility, and concrete retaining walls. Phase II will include permanent earthwork, surface treatments and landscaping necessary to ensure that the improvements are compatible with their surroundings (NCPC, 2008). The project is scheduled to begin in October 2010 with a completion date of October 2011 (NPS, 2010)</td>
<td>10%</td>
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<tr>
<td><strong>United States Institute of Peace Headquarters</strong></td>
<td>This project proposes to construct a new headquarters for the United States Institute of Peace at the corner of 23rd Street NW and Constitution Avenue NW on an approximately two acre parcel of land. The building will contain working spaces for program and administrative staff and research fellows, a research library and archives, a state-of-the-art conference center that includes classrooms and professional training rooms, and a public education center (Smithsonian Institution, 2008).</td>
<td>90%</td>
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### Present Projects

<table>
<thead>
<tr>
<th>Present Projects</th>
<th>Description</th>
<th>Percent Complete (approximate)</th>
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<tbody>
<tr>
<td>Martin Luther King, Jr. Memorial</td>
<td>This project involves the construction of a memorial dedicated to the legacy of Martin Luther King, Jr. The memorial is located in West Potomac Park between the Tidal Basin and Independence Avenue SW. The three main design elements include the Mountain of Despair, the crescent Inscripton Wall forming the main plaza area of the memorial interior, and the Stone of Hope that features the likeness of Dr. King centered within the plaza. Additionally, a Visitor Contact/Bookstore/Restroom Building will be located at the west side of West Basin Drive. The project broke ground in 2006 and is expected to be completed in 2011 (NCPC, 2008; MLK Jr. Memorial Foundation, 2010).</td>
<td>50%</td>
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<tr>
<td>Thomas Jefferson Memorial Plaza and Seawall Improvements</td>
<td>The National Park Service is continuing to work on repairing the seawalls near the plaza on the north side of the Memorial. 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 (NPS, 2010).</td>
<td>40%</td>
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<tr>
<td>Smithsonian Institution Mall-Wide Perimeter Security Improvements</td>
<td>The Smithsonian Institution is constructing permanent perimeter security barriers for nine of the museums located on or near Constitution Avenue and Independence Avenue. As part of the project, temporary security elements would be removed and replaced by a variety of landscape elements and site amenities that will provide more attractive vehicular access control points. Additionally, Jefferson Drive will be realigned in front of the Smithsonian Castle. The project began in 2004 and is an ongoing initiative (NCPC, 2004)</td>
<td>50%</td>
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<tr>
<td>Future Projects</td>
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<tr>
<td>National Museum of American History, Kenneth E. Behring Center Public Space Revitalization/Expansion (Includes exploration of underground connections to NMAAHC)</td>
<td>The Smithsonian Institution proposes to construct infill space within the existing garage under the museum's terrace and adjacent to the Mall. The proposal includes building glass vestibules on the east and west driveway entries to bring daylight into the space. The proposed uses of this space will include the Lemelson Center for the Study of Invention and Innovation; the SI Office of Protection Services; shared swing office space for visiting Fellows; Information Technology Group Exhibits Technology Group, NMAH Collections Documentation Services and the Smithsonian Early Enrichment Center (SEEC) child care facility adjacent to its playground. Sub-grade connections to the NMAAHC are also being investigated as part of this project and being addressed in other parts of this document (NCPC, 2009).</td>
<td>2007-2012 (per Tier I)</td>
</tr>
<tr>
<td>Department of Commerce, Herbert C. Hoover Building Modernization</td>
<td>The General Services Administration proposes to enhance the exterior site and building features of the Herbert C. Hoover Building, bring the building into compliance with American Disabilities Act (ADA) requirements, and provide Level IV protection for the facility. Improvements would include handicapped accessible ramps at six entrances; raised crosswalks at the four entrances to the motor courts; curb ramps at each of the four corners of the site and at the north and south entrances to the motor courts on 14th Street; and permanent perimeter security barriers provided around the exterior of the building (GSA, 2010).</td>
<td>2007-2012 (per Tier I)</td>
</tr>
<tr>
<td>Department of Commerce, Herbert C. Hoover Building, National Aquarium Entrance</td>
<td>The General Services Administration proposes to relocate the entrance to the National Aquarium along the Constitution Avenue, NW side of the Herbert C. Hoover Department of Commerce Headquarters Building. The proposed entrance is necessary to provide access to the Aquarium which will be relocated to a portion of the basement-level at the southern end of the building. The entrance will be located along the existing inside edge of the sidewalk and consist of two granite-clad walls. The wall immediately adjacent to the sidewalk will incorporate perimeter security. Signage will be located at either end of the entrance. Finally, the proposal also includes the placement of a public art element near the intersection of 14th Street and Constitution Avenue. The public art has yet to be designed though it is anticipated that it will relate to the mission of the National Aquarium (NCPC, 2010).</td>
<td>2011</td>
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<td>Future Projects</td>
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<tr>
<td>Washington Monument Permanent Security Improvements (Monument Lodge Underground Security Screening and Entryway)</td>
<td>The National Park Service proposes to build upon a previously completed effort to improve the landscaping and perimeter security around the Washington Monument Grounds. With this project, the current Washington Monument Lodge would be extended undergrounds towards 15th Street NW allowing for the construction of a security screening area and entryway (NPS, 2010).</td>
<td>2008-2012</td>
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<tr>
<td>Washington Monument Steamlines</td>
<td>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 (NPS, 2010). This project proposes to build upon the recent repair of steam and condensate piping at the Washington Monument.</td>
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<td>Madison Drive Roadwork</td>
<td>The National Park Service proposes to mill and repave Madison Drive (NPS, 2010).</td>
<td>2010</td>
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<td>Constitution Avenue Roadwork</td>
<td>The National Park Service proposes to repair and resurface the travel lanes and concrete lane for bus drop-offs from 17th to 19th Street NW along Constitution Avenue. Additionally, 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 will also be provided (NPS, 2010).</td>
<td>2014+</td>
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<tr>
<td>Visitor Transportation Study for the National Mall and Surrounding Park Areas</td>
<td>The National Park Service evaluated alternative approaches for visitor transportation in and around the National Mall in Washington, D.C. and within Arlington National Cemetery in Arlington, VA. The purpose of the project is to plan for a convenient, well-connected interpretive visit transportation service to national park sites in the D.C. area. The selected alternative includes two new interconnected routes within the visitor core. Basic orientation on the new routes will be provided via drivers, maps, and brochures. Optional interpretation would be provided by audio/electronic information systems, limited metered parking, and other amenities (NPS, 2010)</td>
<td>2003-2010</td>
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<td>National Mall and Memorial Park Concession Contracts and Commercial Services</td>
<td>The National Park Service maintains a contracting program that allows vendors to provide concessions to park visitors. These concessions would include food and retail items along with equipment rentals. Economic feasibility assessments would determine the nature and scope of commercial business services (NPS, 2010).</td>
<td>Ongoing</td>
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<tr>
<td>National Mall Turf Study</td>
<td>The National Park Service, as one of the top priorities included in the National Mall Plan, proposes to improve the health, appearance, durability, sustainability, and recoverability of the Mall turf. The soil on the Mall has been heavily compacted and has lost much of its drainage capabilities due to over use. The turf is often worn away and presents an irregular and uneven appearance, and the irrigation system no longer functions. There have been no major reconstruction efforts on the Mall since the Bicentennial and since that time, demands have increased with more frequent and longer events and higher levels of visitation. Improvements would include a curb and gutter around the perimeter of the center panels to provide structural support and containment for the engineered soil, while also directing the run-off to the below-grade water management system (NCPC, 2010).</td>
<td>2010+</td>
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<tr>
<td>Centennial Initiative/Wayfinding and New Pedestrian Guides</td>
<td>The National Park Service proposes to install a comprehensive sign and wayfinding program for Mall and off-Mall destinations. The project is funded by the Centennial Fund, matched by funds raised by the Trust for the National Mall. Comprehensive wayfinding is a component of the preferred alternative in the National Mall Plan (NCPC, 2010).</td>
<td>Ongoing</td>
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<tr>
<td>The District of Columbia Tour Bus Management Initiative</td>
<td>The DC Department of Transportation prepared a plan to alleviate many of the demands that tour buses place on the local roadway infrastructure within the District of Columbia. Issues of concern include noise, traffic congestion, safety risks, illegal parking, visual blight, and wear and tear on residential roadways (USDOT, 2003).</td>
<td>Ongoing</td>
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<td>Future Projects</td>
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<tr>
<td>Lincoln Memorial Reflecting Pool and Grounds</td>
<td>The National Park Service is proposing a comprehensive design for circulation and access, security, and rehabilitation on the Lincoln Memorial Grounds and in West Potomac Park, including the Reflecting Pool and Elm Walks. The proposal includes provision of accessible circulations paths throughout the site; incorporation of a security barrier for the east side of the Memorial; integrated with the circulation improvements; repair of structure damage to the Reflecting Pool and its coping stones and the addition of paved walkways along the north and south sides of the pool where visitors walk; replacement of the water intake source and drainage system for the Reflecting Pool; and refurbishment and relocation of site furnishings such as benches and trash receptacles along the Elm Walks and the provision of lighting (NPS, 2009).</td>
<td>2010-2012</td>
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<tr>
<td>Thomas Jefferson Memorial Permanent Security Improvements</td>
<td>The National Park Service proposes the construction of a vehicular barrier system to provide permanent perimeter security for the Thomas Jefferson Memorial. The proposed plan also includes the provision of parking for handicapped visitors, spaces for tour bus loading and unloading, and a new kiosk in a new location for continued food service (NCPC, 2010).</td>
<td>2010-2011</td>
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<tr>
<td>D.C. War Memorial Rehabilitation</td>
<td>The National Park Service proposes to rehabilitate the District of Columbia War Memorial located in West Potomac Park along Independence Avenue SW. The memorial was built in 1931 to memorialize the residents of Washington, D.C. who fought in World War I. The proposed project includes cleaning and repairing of the memorial stone, replacement of deteriorating bluestone paving, removal of vegetation close to the structure to restore its open setting, and the planting of elm trees according to the original landscape plan (NCPC, 2010)</td>
<td>2010-2011</td>
</tr>
<tr>
<td>Arts and Industries Building Renovation</td>
<td>The Smithsonian Institution is using ARRA funds to make necessary repairs to the Arts and Industries Building, including the proposed replacement of the (non-original) roof and windows, and repairs to the exterior and interior building fabric. SI is considering possible future uses for the now-vacant building, including a possible location for a new national museum (NCPC, 2010).</td>
<td>2008+</td>
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<td>Future Projects</td>
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<tr>
<td>U.S. Department of Agriculture - Jamie L. Whitten Building</td>
<td>The Jamie L. Whitten Building, the central administration headquarters for the U.S. Department of Agriculture, is located at 1400 Independence Avenue. 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. Such action would require congressional legislation (NPS, 2010).</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Vietnam Veterans Memorial Visitors Center</td>
<td>The Vietnam Veterans Memorial Foundation and the National Park Service propose to construct a Visitor Center for the Vietnam Veterans Memorial on the northern grounds of the Lincoln Memorial. This site was approved by NCPC in 2006 and is currently in use as active recreation space, containing two softball fields and a National Park Service concession facility. The proposed facility would occupy 34,100 square feet and include exhibit space, public amenities, administration offices, public programs, and maintenance (NCPC, 2009).</td>
<td>2009+</td>
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<tr>
<td>Dwight D. Eisenhower Memorial</td>
<td>The Eisenhower Memorial Commission and the National Park Service are proposing a national memorial to Dwight D. Eisenhower that is currently in the design-review process. The site was approved by NCPC in 2006. It consists of approximately 4 acres located south of the National Air and Space Museum, and bounded by Independence Avenue on the north, 4th and 6th Streets SW on the east and west, and the U.S. Department of Education Headquarters on the south. The site is bisected into two smaller parcels by Maryland Avenue, which runs roughly from the southwest corner to the northeast corner. The intent of the memorial is to honor the former President and educate the public on his accomplishments both in and out of office (NCPC, 2006).</td>
<td>2006+</td>
</tr>
<tr>
<td>American Veterans Disabled for Life Memorial</td>
<td>The National Park Service and the Disabled Veterans’ Life Memorial Foundation have proposed a national memorial for disabled veterans on a 1.16 acre triangular piece of land located at Washington Avenue and 2nd Street SW near the National Mall. This site was approved by NCPC in August 2001. There are also two smaller parcels of land that will be used for supporting services for the Memorial. The Memorial will consist of a reflecting pool, a grove of trees, and a central fire in the middle of a water element. There will also be stone and glass walls that enclose the site and define pathways. The Memorial will be completely accessible to disabled visitors (NPS, 2006; KCT Technologies, 2007; Smithsonian Institution, 2008a).</td>
<td>2001+</td>
</tr>
</tbody>
</table>
1.8.4 What determinations have been made regarding Irretrievable and Irreversible Resource Commitments?

As discussed in the Tier I Final EIS, both natural and man-made resources would be expended in the construction and operation of the NMAAHC. These irretrievable resources would include the building materials, energy, and the human effort required to design, construct, and operate the proposed facility. The construction and operation of the NMAAHC on the project site would irretrievably and irreversibly commit the land use to be changed from open space resources to developed land. In addition, the public services required to operate the NMAAHC, would include commitments that might otherwise be used for other programs by the Smithsonian Institution, NPS, or the District of Columbia government. According to the Tier I Final EIS, while the proposed action would not directly generate tax revenues or other sources of public funds to offset these expenditures, the NMAAHC would serve as a destination and attraction for visitors from all over the world and indirectly generate spending. As a result, this topic was eliminated from further detailed study in the Tier II Draft EIS because it was determined not to be significant in the Tier I Final EIS.
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