



2.0 Alternatives

Alternatives

2.1 INTRODUCTION

This chapter describes four potential management alternatives for Jefferson National Expansion Memorial, including the preferred alternative. Through an intensive public involvement process, the alternatives were revised and narrowed from five to four, with the elimination of alternative 2. The resulting alternatives illustrate how the Memorial might look and function in the future and how the visitor experience could change.

The revised alternatives are described in detail in this chapter. Each is consistent with the Memorial's purpose, significance, and fundamental resources and values. Alternative 1 – No Action provides a baseline for comparing the alternatives and the environmental consequences of implementing each of the “action” alternatives. The “action” alternatives include alternative 3 – Program Expansion, alternative 4 – Portals, and alternative 5 – Park into the City.

Before introducing the vision and management approaches for each alternative, this chapter describes the proposed management zones developed as part of this plan, which are applied geographically to the Memorial in each of the alternatives. Specific actions that would affect Memorial resources, visitor experiences, opportunities and activities, and NPS operations are described for each alternative, followed by a discussion of the associated costs and staffing required to implement each alternative. A description of a proposed boundary modification in East St. Louis is provided for each alternative.

Following the descriptions of each of the alternatives, another section addresses

implementation of the *Jefferson National Expansion Memorial General Management Plan and Environmental Impact Statement*, which includes funding, user capacity, and the generation of subsequent implementation plans. The chapter concludes with a discussion of mitigation measures needed for each of the alternatives, as well as a description of the environmentally preferred alternative and rationale behind the identification of the preferred alternative. Tables that compare the alternatives and delineate expected impacts are also included.

2.2 MANAGEMENT ZONES

One of the tools used in planning for units of the national park system is management zoning. Management zones are descriptions of desired conditions for the resources and visitor experiences at the Memorial. These zones identify how different areas in Jefferson National Expansion Memorial could be managed to achieve resource preservation, provide visitor access and use, and serve operational purposes. Each management zone also specifies the appropriate facilities to achieve the desired conditions. The management zones identify the range of potential appropriate resource conditions, visitor experiences, and facilities for the Memorial that fall within the scope of the Memorial's purpose, significance, and special mandates. As such, management zones give an indication of the management priorities for various areas. Each of the action alternatives has an overall management concept and a description of how different areas of the Memorial would be managed.

Six management zones have been developed for use within the Memorial. Because the

Memorial is not currently zoned, management zones only apply to action alternatives (alternatives 3, 4, and 5). The action alternatives presented later in this chapter each propose a different configuration of the management zones within the Memorial based on the concept for each alternative. In every management zone, the Memorial intends to preserve and protect resources to the greatest extent possible and would not allow an action that would cause the National Historic Landmark (NHL) to be delisted. A description for each management zone is provided in the following descriptions. An overview table comparing the purpose of each zone and how each zone would manage resources, desired visitor experiences, and associated facilities follows written descriptions.

Heritage Education and Visitor Amenities Zone

The purpose of the Heritage Education and Visitor Amenities zone is to provide visitor education, interpretation, orientation, and amenities. This zone is characterized by the cultural resources and visitor facilities that serve the educational and practical needs of the visitor. It is situated so as to have little impact on the designed landscape/National Historic Landmark. In this zone, the character-defining features of historic structures and landscapes are preserved or rehabilitated to provide safe visitor access and security. Historic structures and landscapes may be rehabilitated as defined by the *Secretary of the Interior's Standards* (compatible materials, design, and features) to accommodate adaptive reuses, provided that alterations do not destroy character-defining features. A secondary purpose of this zone is to provide space for administrative activities.

The primary goals of the visitor experience in this zone are conveying Memorial interpretive themes and educating visitors. This zone also provides orientation, many opportunities for interpretation, education programs, and research activities. It is moderately self-directed and frequent visitor-to-visitor and visitor-to-staff contacts are expected. The visitor time commitment for this zone varies, but is anticipated to be approximately 30 minutes to 4 hours.

Appropriate types of facilities in this zone may include interior and exterior interpretive exhibits, museums, library, archives, theaters, classrooms, restrooms, visitor centers, tram/transit facilities, a multimodal transit center, security checkpoints, food service, and staff offices. Buildings, non-historic additions, and other development would be compatible with the landscape and may be used for visitor or administrative purposes.

Original Landscape Zone

The purpose of the Original Landscape zone is to preserve the integrity of the National Historic Landmark (NHL). This zone is characterized by landscape features as envisioned by the Saarinen-Kiley design team. The NHL landscape may be rehabilitated as necessary, as defined by the *Secretary of the Interior's Standards* (compatible materials, design, and features) only to provide safe visitor access and security.

In this zone the visitor experience is primarily self-directed. There are opportunities for passive and active recreation as well as opportunities for self-directed learning. This zone is accessible and secure and there are frequent visitor-to-visitor contacts (although less than in the Heritage Education and Visitor Amenities zone) and occasional visitor-to-staff contacts. The visitors are able to connect with and appreciate the sights, sounds, and activities intended by the Memorial designers. The landmark design and significance would be preserved and maintained to evoke contemplation and inspiration. The visitor time commitment in this zone varies, but is anticipated to be approximately 30 minutes to 2 hours.

Appropriate types of amenities and landscape elements in this zone may include accessible walkways, overlooks, ramps, benches, wayside exhibits, informal/formal plantings, exterior lighting, and security checkpoints. The outdoor lighting provides adequate illumination for visibility, while minimizing light pollution and interference with the Memorial lighting.

Orientation Zone

The purpose of the Orientation zone is to provide visitor orientation, enhance visual and physical connectivity, and to support Memorial operations. This zone is characterized by visitor orientation, parking, and practical needs. It is situated so as to have little impact on the designed landscape/NHL. Its character-defining features of historic structures and landscapes are preserved. The historic structures and landscapes in this zone may be rehabilitated as defined by the *Secretary of the Interior's Standards* (compatible materials, design, and features) as necessary to accommodate adaptive reuse, provided that alterations do not destroy character-defining features.

The visitor experience in this zone is primarily self-directed orientation and wayfinding. It is a transitional zone that is functional, safe and enjoyable. There are frequent visitor-to-visitor and visitor-to-staff contacts. The visitor time commitment in this zone is typically 10 to 30 minutes.

Appropriate types of facilities in this zone may include restrooms, signage, orientation exhibits and kiosks, tram/transit facilities, parking, and a multimodal transit center. Appropriate commercial services may include limited convenience concessions and shuttle services. Buildings, non-historic additions, and other development in this zone would be compatible with the cultural and physical landscape.

Streetscape/Riverscape Zone

The purpose of the Streetscape/Riverscape zone is to create visual and physical connectivity between the city streets, the riverfront, and the Memorial. This zone is characterized by the formal, pedestrian-oriented avenues, and/or riverfront the visitor passes through when approaching, entering, leaving, or walking by the Memorial. This zone is managed so as to enhance the urban interface with the Memorial, and to create a visual and physical thematic identity whose treatments are compatible with the NHL. This zone affords the opportunity for site enhancements that both revitalize the street scenes and riverfronts and provide appropriate transitions

from the adjacent urban areas and the riverfronts to and from the Memorial.

The visitor experience in this zone is primarily visual. It is self-directed, safe, and enjoyable. Although there is considerable pedestrian activity and movement, it is a transitional zone and therefore does not require visitor time commitment.

Appropriate types of facilities in this zone may include lighting, signage, wayside exhibits, plantings, accessible walkways, site furnishings, and food service (temporary/seasonal). Outdoor lighting provides adequate illumination for visibility, while minimizing light pollution and interference with the monument lighting. Appropriate commercial services may include limited convenience concessions, shuttle services, and guided services such as vehicle, boat, and bicycle tours.

Service Zone

The purpose of the Service zone is to support Memorial operations. This zone is characterized as the support zone for Memorial operations. It is situated so as to have little impact on the designed landscape and NHL, and thus uses compatible materials and design, and is well maintained. In this zone, historic structures and landscapes may be rehabilitated as necessary, to accommodate Memorial operations, provided that alterations do not destroy character-defining features.

The visitor experience in this zone is incidental, as its function is to support Memorial operations and visitor functions. This zone is subservient to the overall purpose and significance of the Memorial. It is a functional zone that is used primarily to conduct Memorial business and provide staff parking. Visitor parking is provided only for visitors on official business with Memorial administration.

Appropriate types of facilities in this zone may include administrative and operational facilities; parking, storage, roads, and security checkpoints. Buildings and other development are used for administrative functions that support the operation and maintenance of the Memorial and visitor parking.

Design Competition Zone

The purpose of the Design Competition zone is to provide opportunities for a design competition that would explore innovative approaches to revitalizing the Memorial. This zone is characterized by visitor programs and facilities that serve the educational needs of the visitor. It is situated so as to have as minimal an impact as possible on the essential character-defining features of the NHL. The historic landscapes may be rehabilitated, as defined by the *Secretary of the Interior's Standards* (compatible materials, design, and features), to accommodate adaptive reuses, and may go so far as to incorporate new elements for visitor opportunities and use.

The primary goals of the visitor experience in this zone are conveying Memorial interpretive

themes and educating visitors. There are many opportunities for interpretation and education programs. This zone provides for both self-directed and active learning and recreation. Frequent visitor-to-visitor and varied visitor-to-staff contacts are expected in this zone. The visitor time commitment varies, but would typically entail 30 minutes to 4 hours.

Appropriate types of facilities in this zone may include interior and exterior interpretive exhibits, museums, libraries, archives, theaters, classrooms, restrooms, visitor centers, tram/transit facilities, a multimodal transit center, security checkpoints, food service, and staff offices. Buildings, non-historic additions, and other development in this zone would be compatible with the cultural and physical landscape.

Management Zones	Heritage Education and Visitor Amenities	Original Landscape	Orientation	Streetscape/Riverscape	Service	Design Competition
Purpose	Provide visitor education, interpretation, orientation facilities and amenities.	Preserve National Historic Landmark (NHL) status.	Provide visitor orientation, enhance visual and physical connectivity and support Memorial operations (parking).	Create visual and physical connectivity between the city streets, riverfront and the Memorial.	Support Memorial operations.	Provide opportunities to explore innovative approaches for revitalizing the Memorial.
Resource Condition	<ul style="list-style-type: none"> This zone is characterized by the historic resources and visitor facilities that serve the educational and practical needs of the visitor. Situated in such a manner as to have little impact on the designed landscape/NHL. Character-defining features of historic structures and landscapes are preserved. Historic structures and landscapes may be rehabilitated as defined by the <i>Secretary of the Interior's Standards</i> (compatible materials, design and features) only to provide safe visitor access and security. The landmark design and significance would be preserved and maintained to evoke contemplation and inspiration. Historic structures and landscapes may be rehabilitated as defined by the <i>Secretary of the Interior's Standards</i> (compatible materials, design and features) to accommodate adaptive reuses, provided that alterations do not destroy character-defining features. 	<ul style="list-style-type: none"> This zone is characterized by the NHL as designated, the integrity of which is preserved. The NHL landscape may be rehabilitated as necessary, as defined by the <i>Secretary of the Interior's Standards</i> (compatible materials, design and features) only to provide safe visitor access and security. The landmark design and significance would be preserved and maintained to evoke contemplation and inspiration. Historic structures and landscapes may be rehabilitated as defined by the <i>Secretary of the Interior's Standards</i> (compatible materials, design and features) to accommodate adaptive reuses, provided that alterations do not destroy character-defining features. 	<ul style="list-style-type: none"> Situated in such a manner as to have little impact on the designed landscape/NHL. Character-defining features of historic structures and landscapes are preserved. Historic structures and landscapes may be rehabilitated as defined by the <i>Secretary of the Interior's Standards</i> (compatible materials, design and features) as necessary to accommodate adaptive reuse, provided that alterations do not destroy character-defining features. 	<ul style="list-style-type: none"> Managed in such a manner as to enhance the urban interface with the Memorial and to create a visual and physical thematic identity. Treatments are compatible with the NHL. This zone affords the opportunity for site enhancements that both revitalize the street scenes and riverfronts and provide appropriate transition from the adjacent urban areas and riverfronts to and from the Memorial. 	<ul style="list-style-type: none"> This zone is characterized as the support zone for Memorial operations and visitor functions. Situated in such a manner as to have little impact on the designed landscape/NHL. Historic structures and landscapes may be rehabilitated as necessary, to accommodate Memorial operations, provided that alterations do not destroy character-defining features. 	<ul style="list-style-type: none"> Situated in such a manner as to have as minimal impact as possible on the designed landscape/NHL. Essential character-defining features of the historic landscapes and structures in adjacent zones are preserved. Historic landscapes may be rehabilitated as defined by the <i>Secretary of the Interior's Standards</i> (compatible materials, design and features), to accommodate adaptive reuses, provided that alterations do not destroy essential character-defining features.

Table 2.1 Management Zones

Management Zones	Heritage Education and Visitor Amenities	Original Landscape	Orientation	Streetscape/Riverscape	Service	Design Competition
Visitor Experience	<ul style="list-style-type: none"> • Priority is on educating and conveying Memorial interpretive themes to visitors. • Many opportunities for interpretation and education programs. • Personal visitor research opportunities. • Moderately self-directed. • Provides orientation. • Frequent visitor-to-visitor and visitor-to-staff contacts. • Time commitment varies, but typically 30 minutes to 4 hours. 	<ul style="list-style-type: none"> • Visitors connect with and appreciate the sights, sounds and activities intended by the Memorial designers. • Opportunities for self-directed learning. • Opportunities for some passive and active recreation. • Primarily self-directed. • Accessible and secure. • Frequent visitor-to-visitor contacts (although less than in the Heritage Education and Visitor Amenities zone) and occasional visitor-to-staff contacts. • Time commitment varies, but typically 30 minutes to 2 hours. 	<ul style="list-style-type: none"> • This zone is a transitional zone characterized by visitor orientation and wayfinding, parking and practical visitor needs • Primarily self-directed. • Functional, safe and enjoyable. • Frequent visitor-to-visitor and visitor-to-staff contacts. • Time commitment is typically 10 to 30 minutes. 	<ul style="list-style-type: none"> • This zone is characterized by the formal, pedestrian-oriented avenues and/or riverfronts the visitor passes through when approaching, entering, leaving or walking by the Memorial. • Considerable pedestrian activity and movement. • Primarily a visual experience. • Self-directed. • Safe and enjoyable. • A transitional zone and therefore no time commitment. 	<ul style="list-style-type: none"> • Incidental; this zone supports Memorial operations and visitor functions necessary to manage and visit the Memorial. • This zone is incidental and subservient to the overall purpose and significance of the Memorial. • Primarily for the conduct of Memorial business and/or to provide visitor and staff parking. 	<ul style="list-style-type: none"> • This zone is characterized by visitor programs and facilities that serve the educational needs of the visitor. • The priority is on educating and conveying Memorial interpretive themes to visitors. • Many opportunities for interpretation and education programs. • Provides for both self-directed and active learning and recreation. • Frequent visitor-to-visitor and varied visitor-to-staff contacts. • Time commitment varies, but typically 30 minutes to 4 hours.

Management Zones	Heritage Education and Visitor Amenities	Original Landscape	Orientation	Streetscape/Riverscape	Service	Design Competition
Associated Facilities	<ul style="list-style-type: none"> Appropriate types of facilities may include interior and exterior interpretive exhibits, museums, library, archives, theaters, classrooms, restrooms, visitor centers, tram/transit facilities, a multimodal transit center, security checkpoints, food service, staff offices. Buildings, non-historic additions and other development would be compatible within the cultural and physical landscape. Buildings and other development may be used for visitor or administrative purposes. Types and levels of services and activities are necessary and appropriate for the Memorial and visitors. 	<ul style="list-style-type: none"> Appropriate types of amenities and landscape elements may include accessible walkways, overlooks, ramps, benches, wayside exhibits, informal/formal plantings, exterior lighting, security checkpoints. Outdoor lighting provides adequate illumination for visibility while minimizing light pollution or interfering with the Memorial lighting. 	<ul style="list-style-type: none"> Appropriate types of facilities may include restrooms, signage, orientation exhibits and kiosks, tram/transit facilities, parking and a multimodal transit center. Appropriate commercial services may include limited convenience concessions and shuttle services. Buildings, non-historic additions and other development would be compatible with the landscape. 	<ul style="list-style-type: none"> Appropriate types of facilities may include lighting, signage, wayside exhibits, plantings, accessible walkways, site furnishings, food service (temporary/seasonal). Outdoor lighting provides adequate illumination for visibility while minimizing light pollution or interfering with the Memorial lighting. Appropriate commercial services may include limited convenience concessions, shuttle services, and guided services such as vehicle, boat and bicycle tours. 	<ul style="list-style-type: none"> Appropriate types of facilities may include administrative and operational facilities, parking, storage, roads, security checkpoints. Buildings and other development are used for administrative functions that support the operation and maintenance of the Memorial and visitor parking. 	<ul style="list-style-type: none"> Appropriate types of facilities may include interior and exterior interpretive exhibits, museums, libraries, archives, theaters, classrooms, restrooms, visitor centers, tram/transit facilities, a multimodal transit center, security checkpoints, food service, staff offices. Buildings, non-historic additions and other development would be compatible with the landscape. Types and levels of services and activities are necessary and appropriate for the Memorial and visitors.

2.3 ALTERNATIVES

The alternatives in this general management plan are alternative methods of applying the prescriptive management zones on the grounds and to facilities and include alternative actions that could be taken at Jefferson National Expansion Memorial. Each of the action alternatives described below consists of an overall management concept and a description of how different areas of the Memorial would be managed.

In June 2008, the National Park Service released a set of five preliminary alternatives outlining potential management scenarios for Jefferson National Expansion Memorial. Based on public review and comment, alternative 2 was considered and dismissed. The rationale for the elimination of this alternative is described in Section 2.10. The remaining three preliminary action alternatives, including the preferred alternative, were revised based on public review and comment and are described in detail in this chapter.

The alternatives were developed through an intensive public involvement process, described in detail in the “Public Involvement, Including Scoping” section in Chapter 5.

The four alternatives are designated as follows: alternative 1 - No Action, alternative 3 – Program Expansion, alternative 4 - Portals, and alternative 5 – Park into the City.

The concept of the no action alternative is a continuation of current management and trends and is required by the National Environmental Policy Act (NEPA). The purpose of the no action alternative is to establish a baseline for comparing the impacts of existing actions with those proposed. The inclusion of the no action alternative is also helpful in understanding why the National Park Service or the public may believe that certain future changes are necessary or advisable. No action alternative implies that no change in activity would be undertaken and that existing management strategies would be sustained. No action is a viable management alternative and may be considered for future management.

The action alternatives are new proposals that differ from the current management of the Memorial. The action alternatives present different ways to manage resources and visitor use and propose new facilities and infrastructure improvements. The three action alternatives embody a range of what the public and the National Park Service want to see accomplished with regard to cultural and natural resource conditions, visitor opportunities and use, transportation and access, and NPS operations.

The alternatives focus on what resource conditions and visitor uses and experiences/opportunities should be at Jefferson National Expansion Memorial rather than on details of how these conditions and uses/experiences should be achieved. Thus, the alternatives do not include many details on resource or visitor use management. More detailed plans or studies would be required before most conditions proposed in the alternatives are achieved. The implementation of any alternative also depends on future funding and staffing and environmental compliance. This plan does not guarantee that this funding would be forthcoming. The plan establishes a vision of the future to guide day-to-day and year-to-year management of the Memorial, but full implementation could take many years.

The National Park Service would continue to follow existing agreements and agency mandates, laws, and policies noted in chapter 1, regardless of the alternatives considered in this plan. Actions or desired conditions not mandated by policy, law, or agreements can differ among the alternatives.

The alternatives described on the following pages, each of which is consistent with maintaining the Memorial’s purpose, significance, and fundamental resources and values, present different choices for how to manage resources, visitor use, and facilities within the Memorial.

2.4 ALTERNATIVE 1: NO ACTION

Overall Vision

The no action alternative primarily reflects current conditions and activities at the Memorial. This alternative is provided as a baseline against which to compare the other “action” alternatives.

The Memorial would continue to function much the way it does today, and the NPS management of the site remains based upon the 1964 final Conceptual Master Plan, which guides park managers on the completion and preservation of the Memorial grounds. As funding permits, the National Park Service continues to look for opportunities to complete unfinished portions of the design, according to *Secretary of the Interior’s Standards for the Treatment of Historic Properties* and the treatment recommendations of the *Jefferson National Expansion Memorial Cultural Landscape Report* (1996).

Management Zones

As the concept of management zoning is applied in NPS general management plans, zones are *prescriptive* of the desired conditions park managers are trying to achieve. Management zones, in essence, are a set of goal statements that describe the future condition of resources and visitor experiences for the specific park. Because the Memorial was not zoned in the past and because no explicit prescriptive management direction was applied, there is no management zoning for the no action alternative.

Cultural Resources

Efforts to preserve the NHL and the Old Courthouse (listed within the Memorial National Register of Historic Places historic district) would continue, and management would consider the Memorial’s fundamental resources and values in decision-making for operations. In addition, the National Park Service would continue to preserve natural resource values in support of cultural landscape integrity.

The look of the Gateway Arch grounds and overlooks (a NHL) would remain on the whole unchanged, although repairs and maintenance of site walkways, benches, and plantings to their original crisp finish would be accomplished over time. The Old Courthouse and its associated landscaping would continue to look much as it does today. Routine maintenance and repairs to the façade and interior of the Old Courthouse and landscaping would be done as needed to keep the structure in good condition. Luther Ely Smith Square retains its current form, with seasonal plantings, trees, lawns, walks, and benches.

The museum collections and archives currently housed at the Old Courthouse would remain in a temperature-controlled storage facility when not on exhibit in the Museum of Westward Expansion or in the Old Courthouse. Access to the collections and archives by researchers, the public and staff would continue to be accommodated in the library as staffing permits.

Natural Resources

The emerald ash borer and other threats to the predominant species of ash trees would be responded to with direction provided in the cultural landscape report (NPS 1996a). The alignment and spacing of the trees is a character-defining feature of the Memorial and would be a priority for treatment. The no action alternative would not result in any changes to natural resources at the Memorial.

Visitor Opportunities and Use

The Memorial currently offers more than 5,000 programs each year. Educational groups and other organized tour groups make up the bulk of special programming at the site, and 154,000 Memorial visitors participate in these activities annually. In addition, one to four special events are provided on the Memorial grounds each year. Under the no action alternative, these educational and interpretive programs would continue to be provided to the same extent in this alternative, and the exhibits at the Old Courthouse and the Museum of Westward Expansion would remain as they are today.

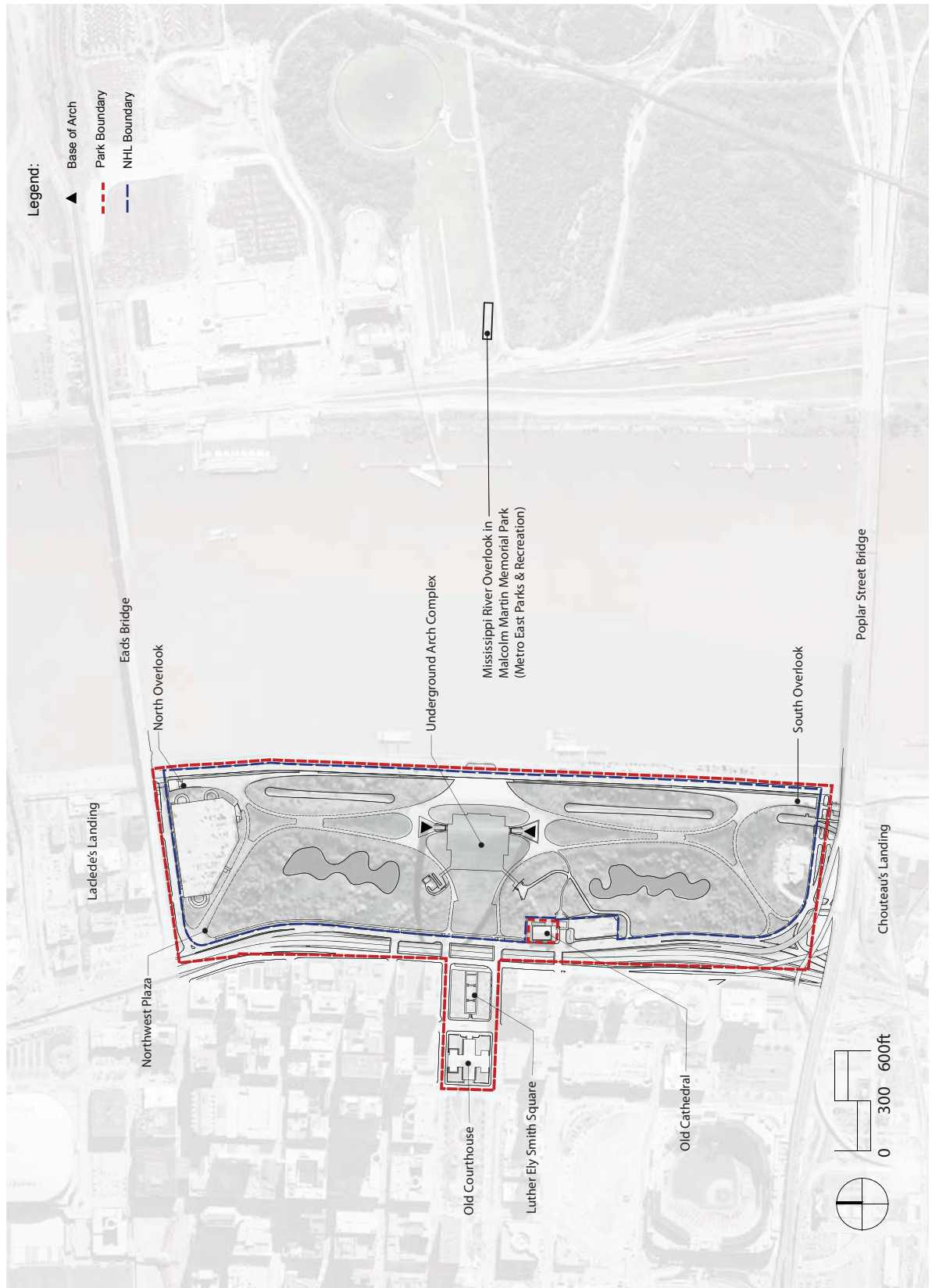


Figure 2.1 Management Alternative 1: No Action

Transportation and Access

Presently, access to the Memorial is primarily from the north at Eads Bridge via car and Metro and by pedestrians from the west at the Old Courthouse. Current connections between the Old Courthouse and the Gateway Arch are the at-grade crossings at Memorial Drive. Under the no action alternative visitors would continue to access various parts of the Memorial in the same manner. Visitor parking would continue to occupy the multi-story Arch Parking Garage at the north end of the Memorial on Washington Avenue, as would handicapped accessible parking occupy the parking lot adjacent to the Old Cathedral. No accommodations for oversize vehicle parking would be planned, but such facilities would continue to be available at a short distance from the Memorial.

Continuing current practice, the National Park Service would attempt to enhance the pedestrian environment, primarily to increase public safety, in collaboration with the City and State. As funding allows and priorities dictate, the National Park Service would continue in partnership with the City of St. Louis to unify the streetscape along the Memorial's boundary including the Gateway Mall and Leonor K. Sullivan Boulevard. Under a long-standing agreement the National Park Service would work with the City of St. Louis to proactively encourage compatible riverfront improvements on the west bank of the Mississippi River.

At present there are no barrier-free routes from the Gateway Arch grounds to the riverfront within the Memorial and the existing entrances to the visitor center and the Museum of Westward Expansion do not meet code for barrier-free access. Under this alternative handicapped-accessible routes from the Gateway Arch to the riverfront would not be provided and the entrances under the Gateway Arch would not be updated to meet the Americans with Disabilities Act/Architectural Barriers Act Accessibility Standard (ADA/ABAAS). Visitor screening for security under the Gateway Arch would continue to be accommodated at the current building entrances.

NPS Operations

The Memorial's operations would remain the same. The limited food items and drink vending currently offered in the existing visitor center under the Gateway Arch would be maintained. The maintenance facility for the Memorial would remain at the south end of the site on Poplar Street.

The National Park Service would continue to sustain existing partnerships for the provision of educational and interpretive programs, visitor services, riverfront development, and transportation.

Proposed Boundary Adjustments

The no action alternative proposes no changes to the current 91-acre Memorial boundary. The Memorial's focus would remain on the west side of the Mississippi River, though the National Park Service retains the authorization to establish a boundary of approximately 100 acres on the East St. Louis riverfront in the future (Appendix A).

Staffing and Costs

The staffing level under the no action alternative would continue to be 282 FTE (full-time equivalent staff positions). Volunteers and partnership activities currently account for 110 FTE, and would be assumed to remain at that rate and continue to be key contributors to NPS operations. In this alternative, current staff levels would remain at approximately 16 administrative FTE; 48.5 interpretive FTE; 39.2 facilities and grounds management and maintenance FTE; and 68 law enforcement FTE.

The Memorial has proposed several projects related to accessibility, security, and technology improvements, but those projects have not been funded. They would be undertaken only if funding were to become available. There are therefore no one-time capital costs in this alternative. Deferred maintenance costs of the no action alternative are estimated at \$22.0 million. Annual operating costs under this alternative would be \$19.7 million. These costs are summarized in Table 2.2, which follows the description of alternative 5.

These cost estimates are in 2009 dollars and are provided for comparison to other alternatives only; they are not to be used for budgeting purposes. Although the numbers appear to be absolutes, they represent a midpoint in a possible range of costs. Presentation of these costs in this plan does not guarantee future NPS funding. Project funding would not come all at once; it would likely take many years to secure and may be provided by partners, donations, or other non-federal sources. Although the Memorial hopes to secure this funding and will prepare itself accordingly, the Memorial may not receive enough funding to achieve all desired conditions within the timeframe of the this plan (the next 15 to 20 years).

2.5 PREFERRED ALTERNATIVE 3: PROGRAM EXPANSION

(See Section 2.12 for an explanation of the preferred alternative identification process.)

Overall Vision

The Memorial is revitalized by expanded programming, facilities, and partnerships. In this alternative, the National Park Service capitalizes on multiple opportunities to expand the visitor experience throughout the Memorial. In order to gain the widest breadth of ideas for expanding interpretation, education opportunities, and visitor amenities at the Memorial, a design competition, akin to the 1947 competition, would be initiated by the National Park Service in close coordination with partners. In addition to considering the “winning” ideas from the competition, the National Park Service would continue the educational and interpretive programs currently offered at the Memorial and expand opportunities for visitors to participate in more interactive experiences across the Memorial. The grounds surrounding the Gateway Arch would be managed in such a way as to accommodate and promote more visitor activities and special events than are currently provided. The National Park Service would actively coordinate with the City and State to enhance the pedestrian environment around the Memorial by developing a unifying streetscape along the Gateway Mall and the other streets adjacent to the Memorial, including Leonor K. Sullivan Boulevard and the riverfront levee.

Design Competition

The major action of this alternative would be a design competition. In the future, the National Park Service, in partnership with others, would initiate a design competition and select a competition advisor. In close coordination with partners and the advisor, the National Park Service would develop a detailed competition program outlining the rules and parameters of a competition, in accordance with agency policies.

The boundaries of the design competition zone as presented in this draft plan are

preliminary and would be further adjusted based on public review and comment on the Cultural Landscape Report. The goal of the competition would be to gather a wide range of ideas for the revitalization of the Memorial, within the confines of the design competition zone. All registered participants would receive a competition program (manual) - prepared by a professional design competition advisor/administrator - that outlines the Memorial’s foundation statement (see Chapter 1), site description and parameters to which design entries should adhere. These would include a detailed description of the essential character-defining features of the National Historic Landmark for the Gateway Arch and Memorial grounds. All entries would need to demonstrate how their design preserves the essential character-defining features of the Memorial. While the design solutions could include the development of above ground structures, the National Park Service would not allow the implementation of a project that would cause the National Historic Landmark to be delisted. The National Park Service would put into place three levels of intervention that would assure the Memorial’s fundamental resources would be protected: careful placement of the design competition zone, careful development of the parameters and criteria for the design competition program, and NPS concurrence of the final selected design.

Through the design competition, the following goals would be achieved:

- Increased connectivity between the Old Courthouse and the Gateway Arch (including any combination of a single elevated deck, multiple bridges, and improved at-grade pedestrian crossings across Memorial Drive).
- Increased connectivity between the Memorial and downtown St. Louis, and the Laclede’s and Chouteau’s Landings neighborhoods and the East St. Louis addition.
- Increased opportunities, through programs and facilities, for the public to be more engaged with the primary themes and stories of the Memorial.
- Increased opportunities for the public to feel more welcomed to the Memorial with

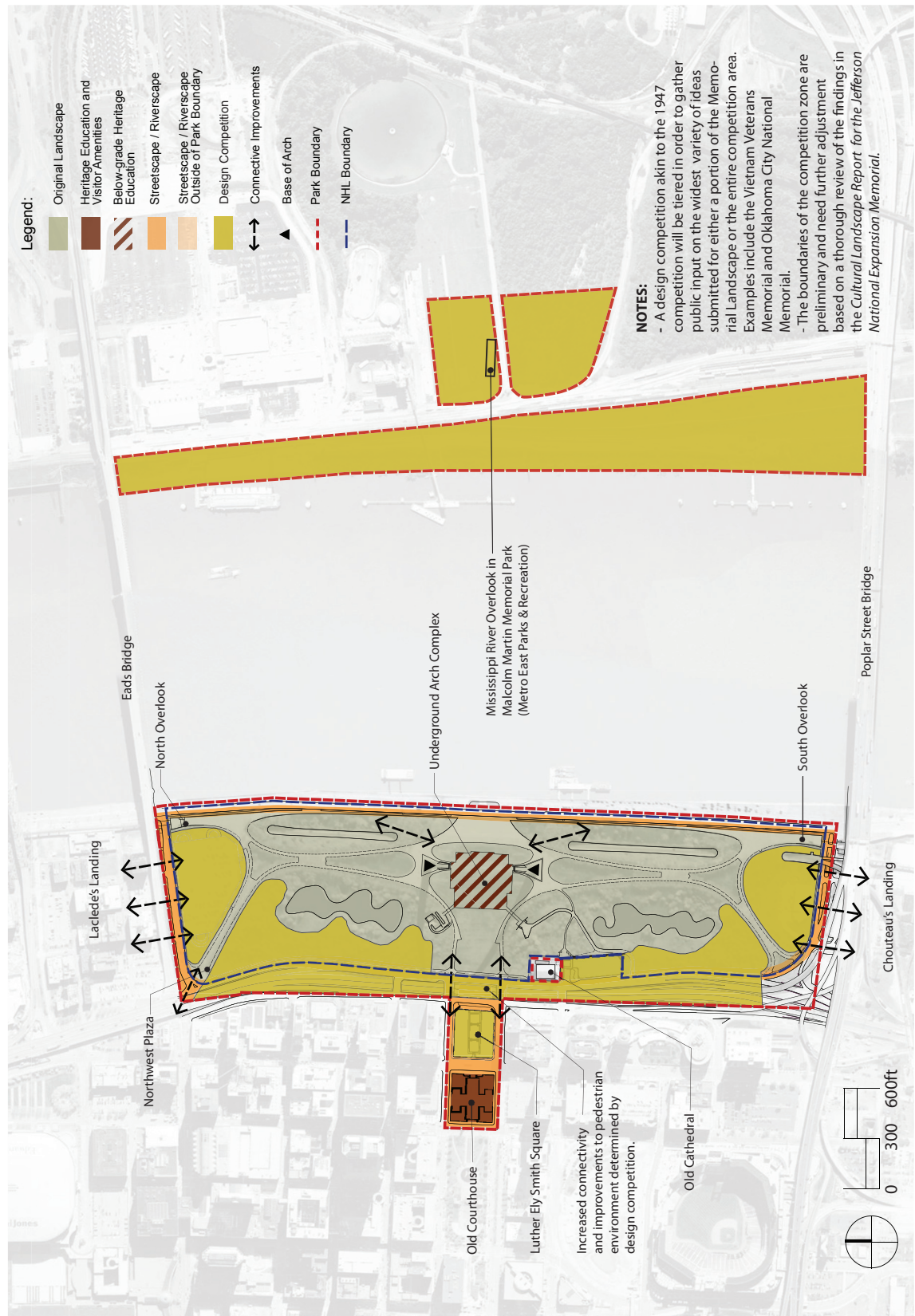


Figure 2.2. Management Alternative 3: Program Expansion

the provision of amenities and services that support a safe and enjoyable experience.

- Operational efficiency and effectiveness for the Memorial's operation in a sustainable manner.
- Protection of the National Historic Landmark designation.

Management Zones

The western edge, north, and south nodes of the Memorial would be zoned Design Competition. The placement of this zone was determined after a thorough analysis of the essential character-defining features of the National Historic Landmark, which include:

- Topography
- Spatial organization
- Views and vistas
- Buildings and structures
- Vegetation
- Circulation
- Water features

This zoning would provide a way to explore creative approaches to revitalizing the Memorial, while continuing to preserve the important character-defining features of the significant cultural landscape. Within the expanded boundary in East St. Louis, the Design Competition zoning allows the greatest deal of flexibility to envision a future for the east riverfront area. Although the area in East St. Louis is still in private ownership, the intention is to show how the National Park Service would like to manage the area should the boundary be expanded and agreements with private landowners be negotiated. The area west of the riverfront and encompassing the reflecting ponds would be zoned Original Landscape to preserve the essential character-defining features of the National Historic Landmark. The Old Courthouse and the visitor center and the Museum of Westward Expansion (underground) would be zoned for Heritage Education and Visitor Amenities; and the edges of the Memorial on the north, south, and west are zoned to be managed under Streetscape/Riverscape.

Cultural Resources

The National Park Service would strive to preserve the essential character-defining

features of the NHL and Saarinen-Kiley designed landscape and structures, and protect the Old Courthouse (listed within the Memorial National Register of Historic Places historic district) and the full range of fundamental resources and values through guidelines provided within the competition program. In addition, the National Park Service would seek to preserve natural resource values in support of cultural landscape integrity within the original Memorial boundary.

The look of the Memorial grounds and overlooks may be changed over time. This would be provided for through goals and criteria delineated in the design competition program. The Old Courthouse and its associated landscaping would continue to look much as it does today, although the exhibits would be rehabilitated. Routine maintenance and repairs to the façade and interior of the Old Courthouse and landscaping would be undertaken as needed to keep the structure in good condition. Any changes to the historic structure and landscape would be in accordance with the *Secretary of the Interior's Standards for the Preservation of Historic Structures and Cultural Landscapes*.

The look of Luther Ely Smith Square would most likely be transformed as focus is given to establishing a greater connection between the Old Courthouse and the Gateway Arch. As a direct result of the design competition, Luther Ely Smith Square may be the location for one end of an elevated pedestrian bridge or bridges across Memorial Drive, or could be the site of a new visitor facility. A decision on the ultimate look of the Square would not be forthcoming until the close of the competition.

The museum collections and archives currently housed at the Old Courthouse would remain in a temperature-controlled storage facility when not on exhibit in the Museum of Westward Expansion or in the Old Courthouse. Under this alternative, the Old Courthouse roof would be repaired, electrical systems would be upgraded to meet existing curatorial storage facility needs, and a new appropriately designed climate control system would be installed to replace existing window air conditioning units and steam heat radiators. These changes to the existing curatorial storage

facilities with the Old Courthouse would better meet NPS collections standards than current conditions. Additionally, the exhibits at the Old Courthouse and in the Museum of Westward Expansion would be redesigned to encourage more interaction. Access to the collections and archives by researchers, the public, and staff would continue to be accommodated in the library as staffing permits.

Natural Resources

On the east side of the Mississippi River (East St. Louis) the National Park Service would preserve and enhance the natural resources of the expanded boundary while providing for new visitor uses. The emerald ash borer and other threats to the predominant species of ash trees would be responded to with direction provided in the Cultural Landscape Report (NPS 1996a). The alignment and spacing of the trees is a character-defining feature of the Memorial and is a priority for treatment.

The decurrent false aster (*Boltonia decurrens*) is a federally-designated Threatened plant species that inhabits moist, sandy floodplains along the Illinois and Mississippi Rivers. There are known populations of the decurrent false aster in St. Clair County, Illinois, and there is potential habitat for this species along the east bank of the Mississippi River within the project study area. Surveys for this species would be conducted prior to any construction within potential habitat areas.

Visitor Opportunities and Use

In the preferred alternative, the National Park Service would continue much of the same programming directed at educational groups and organized tour groups, strengthen the educational and interpretive program currently offered at the Memorial for all types of visitors, and expand the number and variety of opportunities for visitors to participate in new interactive experiences. The grounds surrounding the Gateway Arch would accommodate and promote more activity and special events than are currently provided. Additionally, the exhibits at the Old Courthouse and in the Museum of Westward Expansion under the Gateway Arch would be redesigned to engage visitors in more interactive participation.

Transportation and Access

Access to the Memorial likely would be focused on a new entry from the west across Memorial Drive, although access from the north at Eads Bridge via car and Metro is expected to remain. Design competitors would be directed to take into account the need to provide solutions that increase connectivity between the Old Courthouse and the Gateway Arch and between the Memorial grounds and their surroundings. Proposals for increased connectivity could include a single or double elevated bridge and/or improved at-grade pedestrian crossings across Memorial Drive. In addition, through the design competition, the National Park Service would look for ways to increase connectivity between the Memorial and adjacent downtown neighborhoods, like Laclede's and Chouteau's Landings.

Based on the design parameters that would be given to competition entrants, visitor parking may be retained on-site for passenger vehicles and expanded to provide for oversized recreational vehicles to park at the Memorial. Parking may still be provided in a location adjacent to the Old Cathedral, provided landscape integrity and visual compatibility are addressed. Ultimately, the location of parking would be determined as a result of the design competition.

The National Park Service would actively coordinate with the City and State to enhance the pedestrian environment around the Memorial by developing a unifying streetscape along the Gateway Mall and the other streets adjacent to the Memorial including Leonor K. Sullivan Boulevard, Memorial Drive and the riverfront levee. The National Park Service would continue to work with the City of St. Louis to proactively encourage compatible riverfront improvements on the west bank of the Mississippi River and initiate similar partnerships with the City of East St. Louis and others on the east bank of the Mississippi River.

Under the preferred alternative, handicapped-accessible/barrier-free routes from the Gateway Arch grounds to the riverfront would be established and the existing entrances to the visitor center and the Museum of Westward

Expansion would be redesigned to meet ADA/ABAAS. Visitor screening for security under the Gateway Arch would remain at the current entrances. Any new facilities developed as a result of the design competition would be designed to include both barrier-free access and heightened security requirements.

NPS Operations

New visitor orientation facilities would be added under this alternative as well as a multimodal portal into the Memorial from the MetroLink station. The limited food items and drink vending currently available in the existing visitor center under the Gateway Arch would be expanded and food service may be provided for elsewhere at the Memorial. The Memorial's maintenance facility may move outside of the Memorial boundary; ultimately, the location of the NPS maintenance operations would be determined through the design competition.

The Memorial's operations would likely change under the preferred alternative as a result of the design competition.

The National Park Service would continue to sustain existing partnerships for the provision of educational and interpretive programs, visitor services, riverfront development, and transportation, and develop new partnerships to similarly manage the East St. Louis addition.

Potential Boundary Modifications

Based on the two acts of Congress authorizing an expansion of the Memorial boundary (Appendix A), the NPS proposes to expand the 91-acre boundary of the Memorial by approximately 70 acres in East St. Louis. These lands, once within the boundary, could be managed in cooperation with the current landowner or acquired by the National Park Service. Any parcels would be acquired only through willing seller or donation. The intention of the National Park Service would be to include these lands within the area zoned "Design Competition" in order to take advantage of the opportunity to engage with the public and designers to determine a vision for the area.

Staffing and Costs

The staffing level under alternative 3 would be 346 FTE (full-time equivalent staff positions). Volunteers and partnership activities currently account for 110 FTE, and would be assumed to remain at that rate and continue to be key contributors to NPS operations. In this alternative new staff, in addition to current staff levels, would result in approximately 24 administrative FTE; 65.4 interpretive FTE; 57 facilities and grounds management and maintenance FTE; and 89.5 law enforcement FTE.

The one-time capital costs of this alternative would be \$154.6 million. Deferred maintenance costs of alternative 3 would remain at \$22.0 million, but are subject to change based on the design competition proposals. Annual operating costs under this alternative would be \$25.2 million. These costs do not include any new facilities or programming that would result from the design competition. Staffing levels and annual operating costs are estimated to be the minimum that would be required to implement this alternative. These costs are summarized in Table 2.2, which follows the description of alternative 5.

The full costs of this alternative would not be known until the results of the design competition are completed. The estimates provided are projected minimum costs.

The cost estimates are in 2009 dollars and are provided for comparison to other alternatives only; they are not to be used for budgeting purposes. Although the numbers appear to be absolutes, they represent a midpoint in a possible range of costs. Presentation of these costs in this plan does not guarantee future NPS funding. Project funding would not come all at once; it most likely would be provided from partners, donations and other non-federal sources and federal sources. Private funding would be required in order to implement the winning entry of the design competition. Although the Memorial hopes to secure this funding and would prepare itself accordingly, the Memorial may not receive enough funding to achieve all desired conditions within the timeframe of this plan (the next 15 to 20 years).

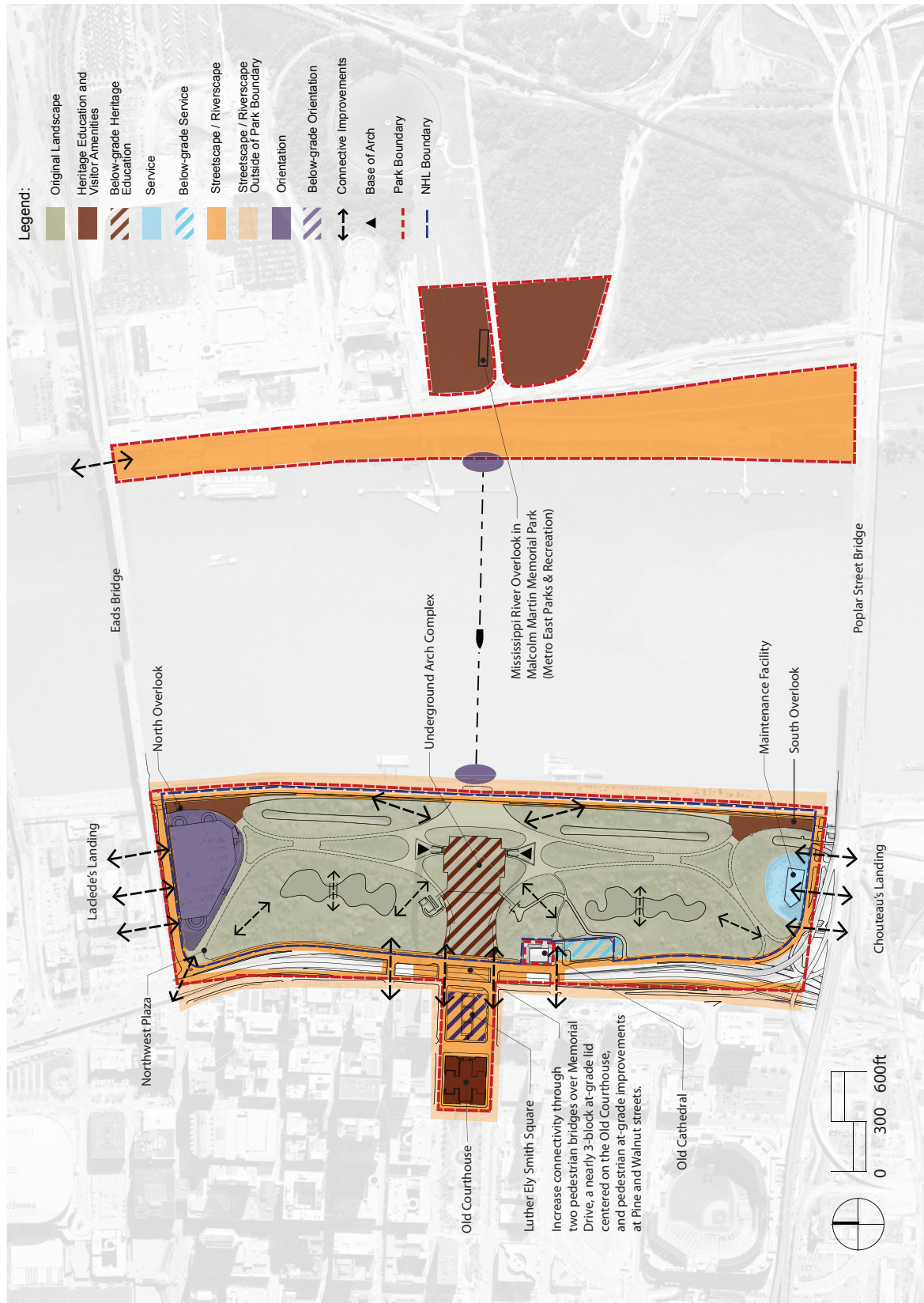


Figure 2.3. Management Alternative 4: Portals

2.6 ALTERNATIVE 4: PORTALS

Overall Vision

This alternative focuses on revitalizing the Memorial through enhanced visual and physical connections from the surrounding neighborhoods to the Memorial. It features portals from the north, south, east, and west as formal entrances into the Memorial. Capitalizing on the established visual link between the Old Courthouse and the Gateway Arch, the east-west axis would be strengthened with a new east portal linking East St. Louis to the Gateway Arch grounds by water taxi, and the creation of an expanded west portal that includes a wide at-grade lid or deck above the channelized interstate to provide additional open space. Directly above the lid/deck, two elevated pedestrian bridges would be constructed for visitors to walk between Luther Ely Smith Square and the Gateway Arch grounds. The north portal would be improved at both the northwest plaza (at Memorial Drive and Washington Avenue) and in the vicinity of the MetroLink station at Eads Bridge. The south portal would provide improved visitor access and orientation to the south end of the Gateway Arch grounds and riverfront. Pedestrian at-grade improvements would be made at all major entrances. Further connectivity would be promoted with a new transportation system linking visitor attractions within and outside of the Memorial. The National Park Service would actively coordinate with the City and State to enhance the pedestrian environment around the Memorial by developing a unifying streetscape along the Gateway Mall and the other streets adjacent to the Memorial, including Leonor K. Sullivan Boulevard and the riverfront levee.

Management Zones

The Memorial would be primarily zoned Original Landscape to preserve the integrity of the entire National Historic Landmark. The Old Courthouse and the visitor center, the Museum of Westward Expansion (underground), and portions of East St. Louis are zoned for Heritage Education and Visitor Amenities to provide for enhanced visitor

education, opportunities, and amenities. The edges of the Memorial on the north, south, and west and along the riverfront in East St. Louis are zoned Streetscape/Riverscape to improve visual and physical connections between city streets, the riverfront, and the Memorial and to provide revitalization opportunities in the transitional zone between the Memorial and adjacent city neighborhoods. Luther Ely Smith Square and the north end of the Memorial and passenger transit stations for the seasonal water taxi are zoned Orientation to allow for the rehabilitation of these locations with the provision of visitor orientation services and facilities. The very south end of the Memorial is zoned Service to show continuance of the Memorial's maintenance facility in that location.

Within the expanded boundary in East St. Louis, the Streetscape/Riverscape zone provides for future development of the river's edge as a pedestrian oriented avenue, providing visual linkages to the rest of the Memorial on the other side of the Mississippi River. The Heritage Education and Visitor Amenities zone is situated to illustrate the NPS intention to cooperatively work with Metro East Parks and Recreation and others on the practical and educational needs of visitors. Although the area in East St. Louis is still in private ownership, the intention is to show how the National Park Service would like to manage the area, should the boundary be expanded and agreements with private landowners be negotiated.

Cultural Resources

Cultural resources at the Memorial would be managed in such a way as to preserve and protect these important resources. The fundamental resources and values of the Memorial would be protected. Significant cultural resources within the Memorial grounds would remain on the whole unchanged although sensitive rehabilitation of the designed landscape and structures would be allowed to improve accessibility and security and to offer a modest increase in heritage education, provided the integrity of the National Historic Landmark is preserved.

In the renovation of the Museum of Westward Expansion under the Gateway Arch, a new, state-of-the-art storage facility for collections and archives would be provided to better address the current conditions of Memorial collections and archives and to best meet NPS standards related to the curation of these resources. The expanded facility would be located below-ground to maintain the surface appearance of this portion of the cultural landscape and a new pedestrian entrance would be constructed near Memorial Drive. The new entry would be located in such a manner as to not disrupt the open visual axis of the cultural landscape between the Gateway Arch and the Old Courthouse.

The Old Courthouse and its associated landscaping would continue to look much as it does today, although the exhibits would be rehabilitated. Routine maintenance and repairs to the façade and interior of the Old Courthouse and landscaping would be undertaken as needed to keep the structure in good condition. Any changes to the historic structure and landscape would be in accordance with the *Secretary of the Interior's Standards for the Preservation of Historic Structures and Cultural Landscapes*.

Luther Ely Smith Square would continue to function as an open green space park, but the look would be likely transformed as the entire square would be rehabilitated to include subterranean visitor services. The North and South Overlooks would be rehabilitated to provide better visitor orientation, education, appropriate and necessary visitor amenities and potential restrooms.

Natural Resources

On the east side of the Mississippi River (East St. Louis) the National Park Service would preserve and enhance the natural resources of the expanded boundary while providing for new visitor uses. The emerald ash borer and other threats to the predominant species of ash trees would be responded to with direction provided in the Cultural Landscape Report (NPS 1996a). The alignment and spacing of the trees is a character-defining feature of the Memorial and is a priority for treatment.

The decurrent false aster is a federally designated Threatened plant species that inhabits moist, sandy floodplains along the Illinois and Mississippi Rivers. There are known populations of the decurrent false aster in St. Clair County, Illinois, and there is potential habitat for this species along the east bank of the Mississippi River within the project study area. Surveys for this species would be conducted prior to any construction within potential habitat areas.

Visitor Opportunities and Use

Under this alternative many of the same programs directed to educational groups and organized tour groups would continue. Visitor activities, programs, and services would be expanded to provide more opportunities, conveniences, and services than are currently provided at the Memorial. The exhibits at the Old Courthouse and in the Museum of Westward Expansion under the Gateway Arch would be redesigned to engage visitors in more interactive participation. An expanded and renovated Museum of Westward Expansion including a new state-of-the-art storage facility for collections and archives would provide greater educational opportunities for visitors.

Transportation and Access

Opportunities for visitors to access the Memorial from multiple entry points would be enhanced with the improvements proposed in this alternative. The intent of this alternative is to provide four primary portals for visitors between the Memorial and surrounding environs. The enhanced connections are intended to improve visitor safety, accessibility, and visitor experience. Centered on the axis between the Gateway Arch and the Old Courthouse, a nearly three-block wide lid would be constructed over the channelized Interstate highway along with two elevated pedestrian bridges between the Memorial grounds and Luther Ely Smith Square. The lid would provide, in essence, three square plazas framed by Memorial Drive on the east and west, and Pine, Chestnut and Walnut Streets on the north and south. These plazas (zoned Streetscape/Riverscape) would be used as transitional places between the city and the

Memorial grounds and could provide space for additional visitor services and amenities.

Luther Ely Smith Square would be zoned to provide for a total rehabilitation of the landscape to include visitor orientation and services such as site information, parking, and restrooms. The area at the north end of the Memorial would be renovated to provide visitor orientation and services. Connections between the Memorial and the Eads Bridge MetroLink rail station would also be improved to provide a more direct and accessible route between these two locations. Street level pedestrian connections would be improved at all major crossings providing safe, accessible, formal entryways into the Memorial.

Visitor parking at the north end of the Memorial grounds would remain but the Arch Parking Garage would be reconstructed to place all parking facilities below-grade and to allow for a moderate amount of oversized recreational vehicle parking, while providing orientation services as well on upper levels (though still potentially underground). Parking could also be installed underground at Luther Ely Smith Square. The parking lot adjacent to the Old Cathedral would be reconstructed as a new underground facility, with the surface renovated to enhance visual compatibility with the Memorial landscape and to provide improved bus/shuttle drop-off and pick-up.

The proposed visitor transportation system would provide a shuttle service around the Memorial down to the riverfront and out to surrounding locations within the City of St. Louis to enhance the ability of visitors to safely and conveniently access the Memorial. The proposed seasonal water taxi would provide visitors an opportunity to cross the Mississippi by boat and further connect the Memorial to East St. Louis.

The National Park Service would actively coordinate with the City and State to enhance the pedestrian environment around the Memorial by developing a unifying streetscape along the Gateway Mall and the other streets adjacent to the Memorial, including Leonor K. Sullivan Boulevard and Memorial Drive. The National Park Service would continue to work with the City of St. Louis to proactively encourage

compatible riverfront improvements on the west bank of the Mississippi River and would initiate similar partnerships with the City of East St. Louis and others for assistance with the design and management the East St. Louis addition.

Under this alternative, barrier-free routes from the Memorial grounds to the riverfront would be established. Those new routes and the new entrances to the visitor center and the Museum of Westward Expansion would be designed to meet ADA/ABAAS. Visitor screening for security under the Gateway Arch would move to the new entrance and would be provided for in a comfortable and expedient manner. The new entrance would not preclude use of the original entrances beneath the Gateway Arch legs, but would direct the majority of visitors to a new universally accessible entrance that would better meet security screening requirements and would provide a largely sheltered entryway. Any new facilities developed under this alternative would include barrier-free access and meet heightened security requirements.

NPS Operations

New visitor facilities would be added under this alternative for orientation at the north end of the Memorial, beneath Luther Ely Smith Square (partially or mostly underground) and at both the passenger transit terminals for the new water taxi, and for interpretation and visitor services at both overlooks and in East St. Louis. In addition, the Museum of Westward Expansion would be greatly expanded to provide visitors more interactive exhibits and programming. The expanded and renovated Museum of Westward Expansion also would include a new storage facility for collections and archives. The North and South Overlooks would be zoned and renovated for Heritage Education and Visitor Amenities. Facilities at the overlooks could include educational exhibits, visitor contact stations, spaces designed for educational programs, restrooms, and food service. Regardless, the design of the overlooks would appear symmetrical, in order to maintain the symmetry of the Saarinen-Kiley design. The East St. Louis addition could potentially include a pedestrian riverwalk,

wayside exhibits, a visitor contact facility, restrooms and transit hub to provide visitors an easy transition between the water taxi, riverwalk, MetroLink, and personal vehicles. The limited food items and drink vending currently available in the existing visitor center under the Gateway Arch would be expanded and food service could be provided in the new orientation facilities at the north end of the Memorial grounds, as well as at Luther Ely Smith Square, the overlooks, and the East St. Louis addition.

The Memorial's maintenance facility would remain at the south end of the Memorial grounds.

The National Park Service would continue to sustain existing partnerships for the provision of educational and interpretive programs, visitor services, riverfront development, and transportation, and develop new partnerships to similarly manage the East St. Louis addition.

Proposed Boundary Modifications

Based on the two acts of Congress authorizing and establishing an expansion of the Memorial boundary (Appendix A), the National Park Service proposes to expand the 91-acre boundary of the Memorial by approximately 70 acres in East St. Louis. These lands, once within the boundary could be managed in cooperation with the current landowner or acquired by the National Park Service. Any parcels would be acquired only through willing seller or donation. The possible expansion of the Memorial boundaries in East St. Louis would include portions of Malcolm Martin Memorial Park and property immediately south and west of this park, on axis with the Gateway Arch across the river in St. Louis.

Staffing and Costs

The staffing level under alternative 4 would be 359 FTE (full-time equivalent staff positions). Volunteers and partnership activities currently account for 110 FTE, and would be assumed to remain at that rate and continue to be key contributors to NPS operations. In this alternative new staff in addition to current staff levels would result in approximately 21 administrative FTE, 66.15 interpretive FTE, 58.5 facilities and grounds management and maintenance FTE, and 103 law enforcement FTE.

The one-time capital costs of this alternative would be \$368.5 million. Deferred maintenance costs of this alternative would be reduced to approximately \$19.0 million due to proposed actions that would change or eliminate some infrastructure needs at the existing museum. Annual operating costs under this alternative would be \$26.1 million. These costs are summarized in Table 2.2, which follows the description of alternative 5.

These cost estimates are in 2009 dollars and are provided for comparison to other alternatives only; they are not to be used for budgeting purposes. Although the numbers appear to be absolutes, they represent a midpoint in a possible range of costs. Presentation of these costs in this plan does not guarantee future NPS funding. Project funding would not come all at once; it most likely would be provided from partners, donations and other non-federal sources and federal sources. Although the Memorial hopes to secure this funding and would prepare itself accordingly, the Memorial may not receive enough funding to achieve all desired conditions within the timeframe of this plan (the next 15 to 20 years).

2.7 ALTERNATIVE 5: PARK INTO THE CITY

Overall Vision

The focus on this alternative is to extend the visitor's experience of the Memorial into the surrounding cities. In this alternative the Memorial would be revitalized by emphasizing enhanced services and visual themes that begin and continue into adjacent neighborhoods and areas, and addressing the transportation and access challenges of the Memorial. The single largest change in the look and feel of the Memorial would be caused by the removal and rerouting of Memorial Drive away from the Memorial between Poplar Street and Locust Street. With the removal of this major thoroughfare from within the Memorial boundary, the edge of the Memorial could be transformed into a series of large pedestrian plazas, increasing connectivity between the Old Courthouse and the Gateway Arch, centered on Luther Ely Smith Square. Further connectivity would be promoted with a new transportation system linking visitor attractions within and outside the Memorial. The National Park Service would actively coordinate with the City and State to enhance the pedestrian environment around the Memorial by developing a unifying streetscape along the Gateway Mall and the other streets adjacent to the Memorial, including Leonor K. Sullivan Boulevard and the riverfront levee.

Management Zones

The north and south ends of the Memorial would be zoned to allow for new educational/cultural facilities and visitor amenities. The Memorial would be primarily zoned Original Landscape. The Old Courthouse, the visitor center and the Museum of Westward Expansion (underground), the north and south ends of the Memorial, and portions of East St. Louis would be zoned Heritage Education and Visitor Amenities to provide for new educational/cultural facilities and enhanced visitor amenities. The edges of the Memorial are zoned Streetscape/Riverscape to improve visual and physical connections between city streets, the riverfront, and the Memorial and to provide revitalization opportunities in the transitional area between the Memorial

grounds and adjacent city neighborhoods. The Streetscape/Riverscape zone includes the reclaimed Memorial Drive, Luther Ely Smith Square, and the riverfront in both St. Louis and East St. Louis.

Within the East St. Louis addition, the Streetscape/Riverscape zoning would provide for the future development of the river's edge as a pedestrian oriented avenue, providing visual linkages to the rest of the Memorial on the other side of the Mississippi River. The Heritage Education and Visitor Amenities zone is situated to illustrate the NPS intention to cooperatively work with Metro East Parks and Recreation and others on the practical and educational needs of visitors. Although the area in East St. Louis is still in private ownership, the intention is to show how the National Park Service would like to manage the area, should the boundary be expanded and agreements with private landowners be negotiated.

Cultural Resources

Cultural resources at the Memorial would be managed in such a way as to preserve and protect these important resources. The fundamental resources and values of the Memorial would be protected. Significant cultural resources within the Memorial grounds would remain on the whole unchanged although sensitive rehabilitation of the designed landscape and structures would be allowed to improve accessibility and security, and to offer a modest increase in heritage education, provided the integrity of the National Historic Landmark is preserved.

Museum collections and archives would be moved into a state-of-the-art storage space to better address the current conditions and to best meet NPS standards related to the preservation of these resources when not on exhibit in the Museum of Westward Expansion or in the Old Courthouse. This facility would be located within a newly designed and constructed education and research facility at the south end of the Memorial.

The Old Courthouse and its associated landscaping would continue to look much as it does today, although the exhibits would be rehabilitated. Routine maintenance and

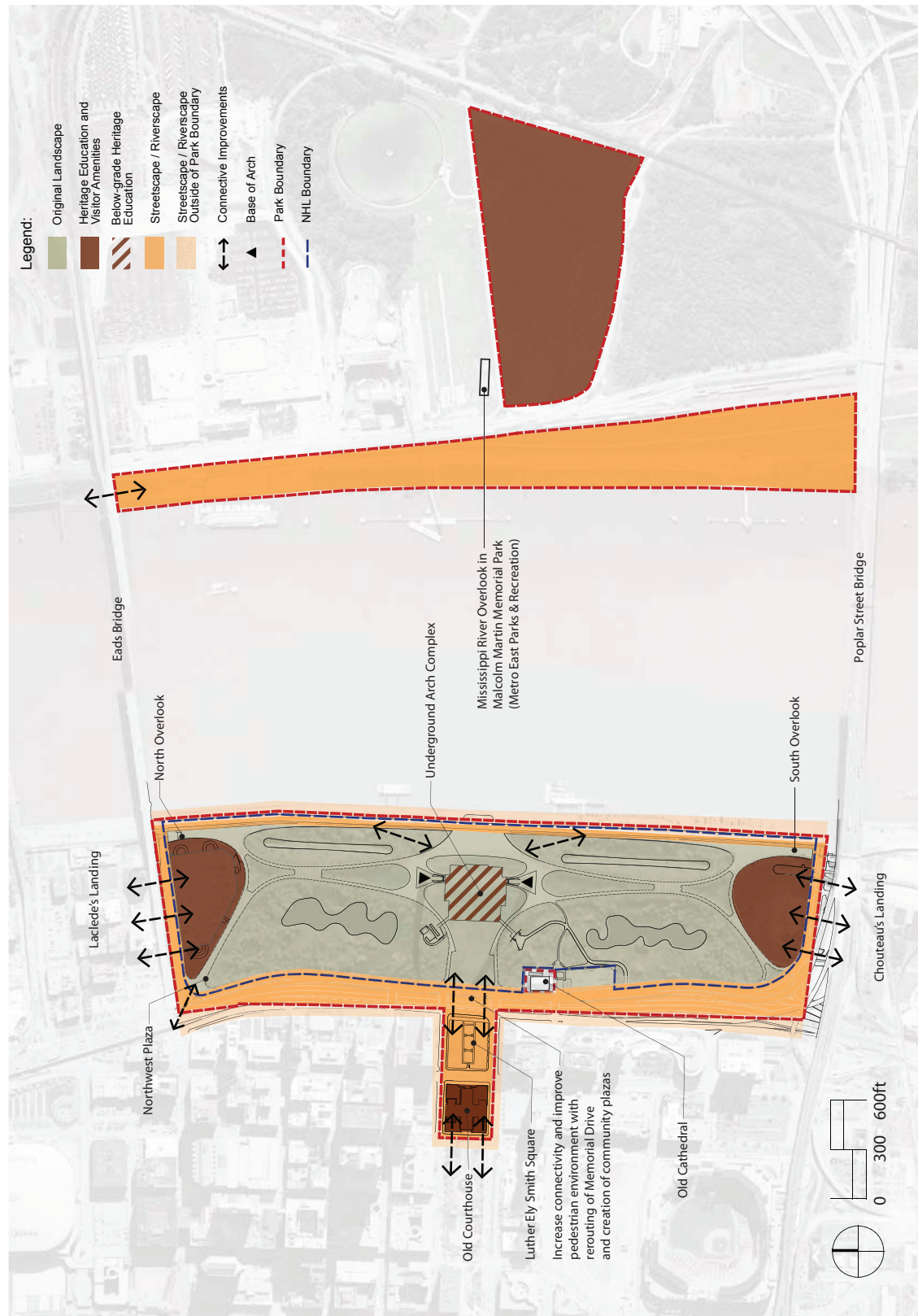


Figure 2.4. Management Alternative 5: Park into the City

repairs to the façade and interior of the Old Courthouse and landscaping would be undertaken as needed to keep the structure in good condition. Any changes to the historic structure and landscape would be in accordance with the *Secretary of the Interior's Standards for the Preservation of Historic Structures and Cultural Landscapes*.

Luther Ely Smith Square would continue to function as an open green space park but the look would likely be transformed as the entire square would be zoned Streetscape/Riverscape allowing for rehabilitation.

Natural Resources

On the east side of the Mississippi River (East St. Louis addition) the National Park Service would preserve and enhance the natural resources of the expanded boundary while providing for new visitor uses. The emerald ash borer and other threats to the predominant species of ash trees would be responded to with direction provided in the Cultural Landscape Report (NPS 1996a). The alignment and spacing of the trees is a character-defining feature of the Memorial and is a priority for treatment.

The decurrent false aster is a federally designated Threatened plant species that inhabits moist, sandy floodplains along the Illinois and Mississippi Rivers. There are known populations of the decurrent false aster in St. Clair County, Illinois, and there is potential habitat for this species along the east bank of the Mississippi River within the project study area. Surveys for this species would be conducted prior to any construction within potential habitat areas.

Visitor Opportunities and Use

Under this alternative many of the same programs directed to educational groups and organized tour groups would continue, along with an increase and expanded range of visitor activities, programs, and services than are currently provided at the Memorial. The exhibits at the Old Courthouse and in the Museum of Westward Expansion under the Gateway Arch would be redesigned to provide visitors more interactive experiences. A new

state-of-the-art curatorial storage facility for collections and archives would provide greater educational opportunities for visitors. The grounds surrounding the Gateway Arch would be managed in such a way as to accommodate and promote more visitor activity and special events than are currently provided.

The new education and research facility would provide programs for students and organized groups of all ages as well as provide space for students, historians, and researchers to better access the vast array of historical documents and architectural objects housed in the Memorial's collections. This new facility would be located at the south end of the Memorial to help distribute visitors to this lesser used portion of the Memorial.

Transportation and Access

The single largest change in the look and feel of the Memorial would be caused by the rerouting of Memorial Drive away from the Memorial between Poplar Street and Locust Street utilizing Fourth Street northbound and Broadway Street southbound. These streets and the surrounding street grid have adequate capacity and the level of service would not be diminished. With the removal of this major thoroughfare from within the Memorial boundary, the edge of the Memorial could be transformed into a series of large pedestrian plazas, thereby increasing connectivity between the Old Courthouse and the Gateway Arch, centered on Luther Ely Smith Square.

At the north end of the Memorial the existing Arch Parking Garage would be renovated and converted to accommodate a new visitor orientation and heritage education center providing greater visitor educational opportunities. This same location would serve as the central hub for a multimodal portal and transit center that would provide a transportation system linking visitor attractions within the Memorial to sites outside of the Memorial boundary. Because parking would be removed at this location, this new transportation system would provide a more accessible means for visitors to connect with the Memorial and outside sites, integrating the Memorial and city experiences for visitors. Opportunities for the visitor to access the Memorial from adjacent neighborhoods at

multiple entry points would be enhanced with the improvements proposed in this alternative. The intent of this alternative is to provide a seamless flow for visitors to and from the Memorial grounds. The enhanced connections are intended to improve visitor safety, accessibility, and the visitor experience.

Under this alternative on-site visitor parking would be eliminated at the north end of the Memorial and adjacent to the Old Cathedral. Visitors would be directed to use existing parking lots and garages outside the Memorial and would either walk to the Memorial or make use of the new transportation system. An improved bus/shuttle drop-off and pick-up would be added adjacent to the Old Cathedral.

The National Park Service would actively coordinate with the City and State to enhance the pedestrian environment around the Memorial by developing a unifying streetscape along the Gateway Mall and the other streets adjacent to the Memorial including Leonor K. Sullivan Boulevard, Poplar and Washington Streets, and Memorial Boulevard. The National Park Service would continue to work with the City of St. Louis to proactively encourage compatible riverfront development on the west bank of the Mississippi River and would initiate similar partnerships with the City of East St. Louis and others for assistance with the design and management of the East St. Louis addition.

Similar to alternative 4, barrier-free routes from the Gateway Arch grounds to the riverfront would be established, and existing entrances to the visitor center and the Museum of Westward Expansion would be redesigned to meet ADA/ABAAS. Visitor screening for security under the Gateway Arch would remain at the current entrances or in close proximity to the existing entrance of the visitor center. All new facilities developed under this alternative would include barrier-free access and heightened security requirements.

NPS Operations

New visitor facilities would be added under this alternative for interpretation and visitor services at the north and south ends of the Memorial and in East St. Louis. The new education and research center at the south end of the

Memorial would include a new storage facility for collections and archives. Development in East St. Louis could potentially include a pedestrian riverwalk, wayside exhibits, a visitor contact facility, restrooms, and a transit hub to provide visitors an easy transition between the water taxi, riverwalk, MetroLink, and personal vehicles. The limited food items and drink vending currently available in the existing visitor center under the Gateway Arch would be expanded and food service could be provided in the new orientation facilities at the north end of the Memorial as well as at Luther Ely Smith Square and the East St. Louis addition.

The Memorial's maintenance facility would be moved off-site to make way for the new education and research center.

The National Park Service would continue to work with the City of St. Louis to proactively encourage compatible riverfront improvements on the west bank of the Mississippi River and would initiate similar partnerships for the east bank of the Mississippi River. The National Park Service would sustain existing partnerships for the provision of educational and interpretive programs, visitor services, and transportation service for the Gateway Arch tram. The National Park Service would develop new partnerships in support of the new education and research center, the multimodal transit center, and the management of the East St. Louis addition.

Potential Boundary Modifications

Based on the two acts of Congress authorizing and establishing an expansion of the Memorial boundary (Appendix A), this alternative proposes to expand the 91-acre boundary of the Memorial by approximately 100 acres in East St. Louis. These lands, after being added to the boundary, could be managed in cooperation with the current landowner or acquired by the National Park Service. Any parcels would be acquired only through willing seller or donation. The possible expansion of the Memorial boundaries in East St. Louis would include a portion or portions of Malcolm Martin Memorial Park and the property immediately south and west of this park on axis with the Gateway Arch to the west bank of the river in St. Louis.

Staffing and Costs

The staffing level under alternative 5 would be 350 FTE (full-time equivalent staff positions). Volunteers and partnership activities currently account for 110 FTE, and would be assumed to remain at that rate and continue to be key contributors to NPS operations. In this alternative new staff in addition to current staff levels would result in approximately 21 administrative FTE, 65.4 interpretive FTE, 61.2 facilities and grounds management and maintenance FTE, and 92.5 law enforcement FTE.

The one-time capital costs of this alternative would be approximately \$379.4 million. Deferred maintenance costs of this alternative would be reduced to approximately \$ 17.0 million due to proposed actions that would change or eliminate some infrastructure needs at the Memorial maintenance facility, Old Cathedral parking lot and bus/shuttle drop

off zone. Annual operating costs under this alternative would be \$26.3 million. These costs are summarized in Table 2.2, which follows the description of alternative 5.

These cost estimates are in 2009 dollars and are provided for comparison to other alternatives only; they are not to be used for budgeting purposes. Although the numbers appear to be absolutes, they represent a midpoint in a possible range of costs. Presentation of these costs in this plan does not guarantee future NPS funding. Project funding would not come all at once; it most likely would be provided from partners, donations and other non-federal sources and federal sources. Although the Memorial hopes to secure this funding and would prepare itself accordingly, the Memorial may not receive enough funding to achieve all desired conditions within the timeframe of this plan (the next 15 to 20 years).

Table 2.2 Cost Comparison

	Alternative 1: No Action	Alternative 3: Program Expansion	Alternative 4: Portals	Alternative 5: Park into the City
One-Time Capital Costs ¹	\$0	\$154,614,150*	\$368,541,633	\$379,378,600
Deferred Maintenance ²	\$22,000,000	\$22,000,000*	\$19,000,000	\$17,000,000
Annual Operating Costs ³	\$19,739,969	\$25,174,542*	\$26,102,040	\$26,267,295
Staffing (FTE) ⁴	282	346*	359	350

All costs are presented in 2009 dollars; boundary expansion costs are not included

Table 2.2 Notes:

*Costs for alternative 3 do not include new costs that would result from the design competition. Staffing levels and annual operating costs are estimated at the minimum that would be required to implement this alternative, and could be higher. *The full costs of the preferred alternative would not be known until the results of a design competition were completed. The estimates provided are projected minimum costs.*

1. One-time capital costs include new construction and the associated costs for proposed new structures, facilities, and landscape improvements. The no action alternative does not include funding for any new capital investment projects. Unfunded projects include accessibility improvements, security improvements, and exhibits renovations. Land acquisition costs for the proposed boundary expansion are not included for any alternative.
2. Deferred maintenance costs are those needed to improve Memorial assets (structures and facilities) to a good condition based on NPS standards and calculating tools. Deferred maintenance is reduced in alternatives 4 and 5 due to proposals to eliminate facilities that currently have deferred maintenance needs.
3. Annual operating costs are the total annual costs for maintenance and operations associated with each alternative. Included are all costs related to maintenance (e.g.,

utilities, materials, supplies, and leasing) and visitor services, law enforcement, resource management, and administration operations (including staff salaries and benefits). Costs for the no action alternative are based on the current budget and partnership assistance. The costs shown do not account for any annual escalation due to cost of living increases or other economic factors.

4. Total full-time equivalents (FTE) are the number of staff required to maintain Memorial assets and provide acceptable visitor services, protection of resources, and other operational support. Most full-time equivalent staff would likely be NPS employees. However, managers would explore opportunities to work with partners, volunteers, and other federal agencies to assist in the effective and efficient management of the Memorial. Volunteers and partnership activities currently account for 110 FTE, and are assumed to remain at that rate. Those hours might be in addition to or instead of NPS employees.

The following applies to all costs presented in this general management plan:

- The costs are presented as estimates intended for alternative comparison purposes only and are not appropriate for budgeting purposes.
- The cost estimates are presented in 2009 dollars.

- The cost estimates were developed using industry standards to the extent available and they represent the total costs of projects. However, due to cost estimating uncertainty, actual costs could be as much as 30% lower or 50% higher than noted.
- Actual costs would be determined at a later date and would take into consideration the design of facilities, identification of detailed resource protection needs, changing visitor expectations, and the final decision of a preferred management proposal.
- Initial construction was assumed to occur in year one.
- Approval of the General Management Plan does not guarantee funding or staffing for proposed actions.
- Project funding would not come all at once; it would likely take many years to secure and may be provided by partners, donations, or other non-federal sources.
- Some proposals may not be funded within the life of this plan and full implementation may occur many years into the future.

2.8 IMPLEMENTATION OF THE GENERAL MANAGEMENT PLAN

Introduction

The implementation of the approved General Management Plan (GMP) would be managed and administered by the National Park Service at the local and regional level. The Memorial's superintendent has wide discretion to prioritize actions needed to implement the GMP. Actions – whether projects or policies – are any variety of program activities or development projects that occur as an outcome of the final *Jefferson National Expansion Memorial General Management Plan and Environmental Impact Statement*. Allowable actions are outlined first in the description of the management zones and subsequently in the narrative text of the final selected alternative. The narrative does not attempt to describe a definitive list of actions that could result from the selected alternative. Rather, the descriptions of the allowable actions are meant to illustrate the

far edge of the continuum of potential actions. Although the National Park Service would be responsible for implementing the General Management Plan, any number of actions could be carried out by the NPS alone or in partnership with others.

The implementation of the approved GMP would depend on future funding. Approval of the plan does not guarantee the funding needed to implement the plan would be forthcoming, and indeed, full implementation of the approved plan could be many years in the future. The implementation of the approved plan also could be affected by other external and internal factors. Some parts of implementation plans are prepared for parks in response to NPS policies. As well, once the General Management Plan has been approved, additional legislation, additional feasibility studies and more detailed planning and appropriate environmental documentation may be required before any proposed actions can be appropriately finalized and carried out. These more detailed plans would develop from the General Management Plan through the description of specific actions managers are intended to take in order to achieve desired conditions and long-term goals.

Implementation Funding

The *Jefferson National Expansion Memorial General Management Plan and Environmental Impact Statement* provides the framework for deciding which alternative, and thereby which future projects, is chosen for implementation. While this plan provides a justification for future funding proposals, it does not guarantee any future funding. Many actions would be necessary to achieve the desired conditions for historic buildings and structures, the cultural landscape, education opportunities, and facilities as envisioned in this plan. The National Park Service intends to request funding to achieve these desired conditions; although the Memorial hopes to secure this funding and would prepare itself accordingly, the Memorial may not receive enough funding to achieve all desired conditions. Because NPS funding may be insufficient to accomplish the goals set by the plan, Memorial managers need to continue to pursue other options, including expanding the service of volunteers, drawing

upon existing and new partnerships, and seeking alternative funding sources, including the philanthropic community. Many people care deeply about their national parks (and the Memorial in particular), and these people are likely to continue to offer assistance in meeting NPS goals that matter most to them. Many potential partner groups exist whose missions are compatible with that of the Memorial, and these groups are likely to offer to work with the Memorial for mutual benefit. Even with assistance from supplemental sources, Memorial managers may be faced with difficult choices when setting priorities. The General Management Plan provides the framework within which to make these choices.

The cost figures shown here and throughout the plan are intended only to provide an estimate of the relative costs of alternatives. The National Park Service and industry cost estimating guidelines were used to develop the costs (in 2009 dollars) to the extent possible, but the estimates should not be used for budgeting purposes. Specific costs may be determined in subsequent, more detailed planning and design exercises, and would consider the design of facilities, identification of detailed resource protection needs, and changing visitor expectations. Actual costs to the National Park Service may vary depending on if and when the actions are implemented, and on contributions by partners and volunteers.

Key Implementation Plans to Follow This General Management Plan

COMPREHENSIVE INTERPRETATION

Staff at the Memorial were in the process of updating the Memorial's Comprehensive Interpretive Plan just prior to undertaking the *Jefferson National Expansion Memorial General Management Plan and Environmental Impact Statement*. At the conclusion of this planning effort, the National Park Service will resume the development and implementation of a comprehensive interpretive plan that incorporates the goals for interpretation and education generated here. The emphasis will be on providing information, orientation, and interpretive services in the most effective manner possible through the use of both personal

(involving authorized staff) and non-personal (not involving staff) services, including state-of-the-art technologies, as appropriate. The National Park Service will cooperate with partners, other governmental agencies, educational institutions, and other organizations to enrich interpretive and educational opportunities locally, regionally, and nationally.

STRATEGIC PLAN

Every five years, each unit of the national park system updates its Strategic Plan. The Strategic Plan for Jefferson National Expansion Memorial was last updated in 2007. The objectives of the Strategic Plan derive from the Memorial's General Management Plan and other program management plans. The Strategic Plan makes decisions about which of the desired conditions identified in those plans should be the highest priorities in the foreseeable future and usually addresses a three to five years time span. Based on current local conditions such as threats to resources, opportunities for collaboration, and agency priorities, the Strategic Plan looks for the best fit between priorities. Information in a strategic plan is used to compile NPS achievements and to meet requirements of the Government Performance and Results Act of 1993 (GPRA).

ACCESSIBILITY

The National Park Service is committed to providing universal accessibility to each of its park units, and to modifying historic structures to meet Architectural Barriers Act Accessibility Standards (ABAAS), which apply to federally funded facilities. In addition, the Americans with Disabilities Act (ADA) applies to places of public accommodation and commercial facilities, as well as state and local government facilities, which include places adjacent to the Memorial. The Saarinen-Kiley concept for the Memorial was to physically connect the Gateway Arch grounds with the Mississippi riverfront, which has been accomplished with the completion of the Grand Staircase in 2003. In order to more fully incorporate the Memorial into the surrounding areas and bring the entrances to the underground facilities up to current standards, an accessibility plan will be developed. This plan would provide park managers with a means to prioritize scheduling and funding for the design and construction

of multiple aspects of the work. The plan will follow agency guidance for compliance with the ADA, the ABAAS, the National Environmental Policy Act, Sections 106 and 110 of the National Historic Preservation Act, and other applicable laws and policies.

User Capacity Management

General management plans for national park system units must address user capacity management. The National Park Service defines user capacity as the type and level of use that can be accommodated while sustaining the quality of a park unit's resources and visitor opportunities consistent with the purposes of the park unit.

User capacity management involves establishing, monitoring, evaluating, and implementing (managing visitor use) desired conditions to ensure that Memorial values are protected. The premise of user capacity management is that any use of public lands results in some level of impact that must be accepted; therefore, it is the responsibility of the National Park Service to determine what level of impact is acceptable and what management actions are needed to keep impacts within acceptable limits. Instead of simply tracking and controlling user numbers, NPS staff manages the levels, types, and patterns of visitor use and other public uses as needed to preserve the condition of the resources and quality of the visitor experience. The monitoring component of this process enables NPS staff to evaluate the effectiveness of management actions and provides a basis for informed management of public use.

With limited staff and budget, NPS managers must focus on areas of marked concern and/or clear evidence of impacts. This means monitoring should generally take place when conditions are approaching or currently violating standards, conditions are changing rapidly, specific and important values are threatened by visitation, and/or the impacts of management actions taken to address impacts are uncertain.

Because Jefferson National Expansion Memorial is an urban park and a nationally

and internationally recognized icon, high levels of visitation are expected and consistent with the purpose of the Memorial. As such, the grounds were generally designed to accommodate an influx of pedestrian traffic. Most of the standards applied to the Memorial are dictated by physical capacity, fire code, and general health and safety needs.

This plan addresses user capacity in the following ways:

- It outlines management zones that provide the foundation for user capacity management. The management zones prescribe desired resource conditions, visitor experience opportunities, and types of facilities to support the resource conditions and visitor experiences for different areas.
- It describes the Memorial's most pressing use-related resource and visitor experience concerns. This helps NPS managers focus limited resources on specific potential indicators and determine what kinds of baseline information to collect.
- It identifies potential indicators that could be monitored as needed in the future to determine if desired conditions are not being met due to unacceptable impacts from public use.
- It outlines representative examples of management actions that might be used to avoid or minimize unacceptable impacts from public use.
- It identifies specific geographic areas for special monitoring attention.

The last steps in the user capacity process, which will continue indefinitely, involve monitoring the Memorial's resources and visitor experience opportunities and taking management actions as needed to minimize impacts. If new use-related resource or visitor experience and safety concerns arise in the future, additional indicators and standards would be identified as needed to address these concerns.

INDICATORS AND STANDARDS

Indicators are specific measurable resources or social variables that can be measured to track changes in conditions caused by public use. Indicators are measured for assessment of progress toward attaining a specified desired condition. *Standards* mark the measurable point at which an indicator changes from an acceptable condition to an unacceptable condition. Standards define the maximum acceptable level of adverse impact on the indicators. Standards for each indicator would be derived from baseline conditions and Memorial design, as well as NPS guidelines and standards. For this General Management Plan, standards are not established; rather, this plan sets forth qualitative descriptions of the desired conditions the National Park Service would achieve for resources and visitor experiences. Once standards were established, or if on-the-ground conditions degrade as a result of regular visitor use, special events, or natural events, specific management actions would be taken to improve conditions.

POTENTIAL USER CAPACITY INDICATORS AND RELATED MANAGEMENT ACTIONS

The following indicators and potential management actions have been developed for managing visitor use at Jefferson National Expansion Memorial. Resource and visitor experience monitoring would be used as part of this process and if new knowledge is gained or visitor use patterns differ substantially from those projected, these indicators would be modified.

VEGETATION AND OTHER RESOURCES (ALL ZONES)

Lawn and turf conditions are most affected by the amount and frequency of use which may disturb these resources. A certain degree of wear and tear occurs and is expected to occur on the Memorial grounds through normal visitor use; therefore, maintenance of these resources is programmed regularly. The frequency and intensity of large concentrations of visitors often creates adverse impacts to turf and vegetation in the form of damage or loss. This is primarily seen in the spring and summer with regular high volumes of use and crowded special events. During natural

events associated with Mississippi River flooding, social trails often develop through planted beds on the hillsides leading from the Memorial grounds to the river, creating resource damage in the form of erosion and trampling of vegetation. Vegetation management also tiers from treatment recommendations in the 1996 Cultural Landscape Report.

Indicator: Creation of social trails, erosion, and trampled vegetation.

Management Action: Management actions that may be considered to avoid or minimize impacts to these resources include directing visitors to other designated areas or facilities, the use of temporary fencing during flood events to prevent damage to resources as soon as visitors are observed cutting through planted beds, with removal occurring at the subsidence of flood events, repairing and reestablishing damaged vegetation, and the issuance of citations.

Indicator: Damage to trees as a direct result of concentrated use due to special events.

Management Action: Management actions that may be considered to prevent or minimize impacts include managing access to certain areas with natural barriers, redistributing use to lesser used areas or off-peak times, rehabilitating some sites, requiring special use permits to include payment for damage to vegetation clause as a result of special events, and the issuance of citations

Indicator: Bare ground or damaged turf due to normal, heavy or concentrated use.

Management Action: General provisions for maintenance during and following scheduled events are programmed and typically incorporate soil nourishment, seeding, and replacement of sod. Temporary fencing is an effective management technique used during special events to direct visitors to desired locations along designated pedestrian thoroughfares, and to minimize social trails from developing or excessive pedestrian traffic from occurring in areas not capable of withstanding high levels of foot traffic.

2.9 MITIGATION MEASURES FOR THE ACTION ALTERNATIVES

In the legislation that created the National Park Service, Congress charged the agency with managing lands under its stewardship “in such manner and by such means as will leave them unimpaired for the enjoyment of future generations” (*National Park Service Organic Act*). As a result the National Park Service routinely evaluates and implements mitigation whenever conditions occur that could adversely affect the sustainability of NPS resources. To ensure that implementation of the action alternatives protects unimpaired natural and cultural resources and the quality of the visitor experience, a consistent set of mitigative measures would be applied to actions proposed in this plan. The National Park Service would prepare appropriate review (i.e., those required by the National Environmental Policy Act (NEPA), National Historic Preservation Act (NHPA), and other relevant legislation) for these future actions. As part of the environmental review the National Park Service would avoid, minimize, and mitigate adverse impacts when practicable. The implementation of a compliance-monitoring program would be considered to stay within the parameters of National Environmental Policy Act and National Historic Preservation Act compliance documents, and U.S. Army Corps of Engineers Section 404 and Section 10 permits. The compliance-monitoring program would oversee these mitigative measures and would include reporting protocols.

The following mitigative measures and best management practices would be applied to avoid or minimize potential impacts from implementation of the alternatives. These measures would apply to all alternatives.

Cultural Resources

The Memorial staff would work with the Missouri and Illinois State Historic Preservation Officers (SHPOs) on management strategies for all types of cultural resources, including minimizing adverse impacts resulting from visitor use. All mitigation measures would be undertaken in consultation with the Missouri and Illinois SHPOs and the Advisory Council on Historic

Preservation. The Memorial’s resources would be managed according to federal regulations and NPS standards and guidelines. Management would restrict visitor access in all instances where visitor use appears to adversely affect resources or conflicts with the Memorial’s purpose and significance.

HISTORIC STRUCTURES AND LANDSCAPES

All structures and landscapes in the Memorial have been inventoried and evaluated using the criteria of the National Register of Historic Places. Not all of these structures and landscapes have been fully documented and submitted to the Keeper of the National Register. Until that action has occurred, however, all properties listed in or appearing to meet National Register criteria would be treated as though they are listed. The National Park Service and SHPOs would consult on strategies for the protection, stabilization, and treatment of cultural resources such as the Gateway Arch, the Old Courthouse, Eads Bridge, and the Old Cathedral. All actions would be guided by *Director’s Order 28*, *Cultural Resources Management Guideline*, the *Secretary of the Interior’s Standards for the Treatment of Historic Properties*, and other NPS and agency policies and regulations. Archeological data recovery would precede and be completed before physical intervention into any archeological resource, including sites associated with historic structures.

The National Park Service would preserve and protect, to the greatest extent possible, resources and values that reflect the modern architecture and designed landscape of the Memorial, and the adjacent Mississippi riverfront and urban districts surrounding the Memorial. Specific mitigative measures would include the following:

- Complete any required documentation to update the Cultural Landscape Report prepared for the National Historic Landmark and identify treatments to ensure its preservation.
- Complete any required documentation, including the possible completion of a Cultural Landscape Report, of the Old Courthouse grounds and identify treat-

ments to ensure the preservation of the courthouse environs.

- Rehabilitate and/or restore cultural landscape resources within the Memorial to the extent feasible. This could entail incorporating new additions using compatible design.
- Wherever possible, locate projects and facilities in previously disturbed or existing developed areas.
- Whenever possible, modify project design features to avoid affecting cultural resources. New developments would be relatively limited and would be located on sites and blend with cultural landscapes. If necessary, use the designed topography and vegetation to minimize impacts on cultural landscapes.
- Strictly adhere to NPS standards and guidelines on the display and care of artifacts.

ARCHEOLOGICAL RESOURCES

The Archeological Resources Protection Act of 1979 requires that all federal land managers develop plans for surveying lands under their control to determine the nature and extent of archeological resources on those lands. Funding for a comprehensive survey has been requested and site-specific surveys continue to be conducted in the interim. As appropriate, archeological surveys and/or monitoring would precede any construction. Known archeological resources would be avoided to the greatest extent possible. If archeological resources listed in or eligible for listing in the National Register could not be avoided, an appropriate mitigation strategy would be developed in consultation with the SHPO and, if necessary, associated American Indian tribes. If during construction previously undiscovered archeological resources are uncovered, 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 Missouri and Illinois SHPOs.

Natural Resources

LIGHTSCAPE

Outdoor lighting for new or rehabilitated facilities would incorporate the need for personal safety while providing innovative solutions that enhance the aesthetics of the Memorial. Lights would also be shielded and/or directed downward to minimize impact on the night sky.

SOUNDSCAPE

Standard noise abatement measures would be implemented, as appropriate, during Memorial operations and construction activities. Examples include: scheduling activities so that impacts are minimized, use of the best available noise control techniques, use of hydraulically or electrically powered tools, and situating noise-producing machinery as far as possible from sensitive uses or resources.

THREATENED AND ENDANGERED SPECIES

Mitigative actions would occur during normal Memorial operations as well as before, during, and after construction to minimize immediate and long-term impacts to rare, threatened, and endangered species. These actions would vary by specific project and area of the Memorial affected. Surveys would be conducted, as appropriate, for threatened and endangered species and species of concern before ground-disturbing activities are undertaken. Potential impacts on the decurrent false aster, a federally designated Threatened species, are analyzed in detail in this document (see Chapter 4). Conservation measures would be undertaken to reduce potential impacts on this federally listed species as needed and would be implemented in consultation with the U.S. Fish and Wildlife Service. Conservation measures would be required if activities expected to have impacts beyond those addressed in this document are initiated, and if additional occurrences of recurrent false aster or any other federally designated Threatened and Endangered species are identified within the Memorial. Should any of the above events occur, renewed discussion and consultation with the U.S. Fish and Wildlife Service would

focus on development of specific conservation measures to reduce potential impacts on these species and/or designated critical habitat. Such conservation measures would be based on the recommendations provided by the U.S. Fish and Wildlife Service.

WATER RESOURCES

All state and federal regulations would be followed, and best management practices would be utilized. To prevent water pollution during construction measures such as erosion control, the minimization of discharge to water bodies, and the regular inspection of construction equipment for leaks of petroleum and other chemicals would be implemented.

WETLANDS A search of the Natural Resources Conservation Service (NRCS) wetlands database and subsequent field survey did not result in the identification of wetlands at the Memorial (see Chapter 3). Hence, a statement of findings for wetlands has not been prepared. If wetlands are identified within the Memorial in the future, all facilities would be located to avoid wetlands, if feasible, and best management practices would be implemented to ensure construction-related impacts are minimal and to prevent long-term impacts on water quality, wetlands, and aquatic species from displacement of soils. If avoiding wetlands is not feasible, other actions would be taken to comply with Executive Order 11990 (*Protection of Wetlands*), the Clean Water Act, and Director's Order (DO) 77-1 (*Wetland Protection*).

Visitor Safety and Experiences

During construction of visitor facilities and parking areas the National Park Service would implement a traffic control plan, as warranted, to maintain safe and efficient traffic flow during construction. Strategies to reduce adverse impacts of construction on visitor safety and experience would be undertaken. Outdoor lighting for new or rehabilitated facilities would incorporate the need for personal safety while providing innovative solutions that enhance the aesthetics of the Memorial.

Relationships with the Surrounding Communities

During the future planning and implementation of the approved management plan the National Park Service would work with the surrounding metropolitan communities and governments to further identify potential impacts and mitigative measures.

Sustainable Design and Aesthetics

Projects would avoid or minimize adverse impacts to natural and cultural resources. Development projects (e.g., buildings, facilities, utilities, and roads) and reconstruction projects (e.g., road reconstruction, building rehabilitation, and utility upgrades) would be designed to work in harmony with the surroundings, particularly National Register of Historic Places properties. Projects would reduce, minimize, or eliminate air and water nonpoint-source pollution. Projects would be sustainable whenever practicable, by recycling and reusing materials, by minimizing materials, and by minimizing energy consumption throughout the lifespan of the project. All new facilities should strive to be certified by the U.S. Green Building Council. Leadership in Energy and Environmental Design (LEED™) certification provides independent, third-party verification that a building project meets the highest green building and performance measures.

2.10 ALTERNATIVES AND ACTIONS DISMISSED FROM FURTHER CONSIDERATION

The planning team considered another alternative and its attendant actions for managing the Memorial, but these were eliminated from further analysis. These ideas and the reason for their omission are described below.

Concept

Alternative 2, the Connections alternative, was intended to revitalize the Memorial by focusing on programmatic solutions to “connect” the Memorial and the City of St. Louis. Exhibits at the Old Courthouse and the Museum

of Westward Expansion would have been redesigned and current programs augmented by an increase in special events. The greatest differences between this alternative and those advanced are the renovation of the parking structure completely below grade with a “green” roof and the small East St. Louis addition without any future acquisition of lands. Improvements in the physical connection of the Old Courthouse, Luther Ely Smith Square, and the Monument grounds would have been at street level and incorporated traffic calming measures. The Memorial maintenance facility would have remained at its current location.

Rationale

After public scoping and further analysis by the planning team, the benefits of this alternative, with the exception of the “green” roof on the Arch Parking Garage, already existed or were incorporated into the other alternatives (resource preservation, additional programming, and retaining the Memorial maintenance facility at its current location). The planning challenges identified in this alternative (pedestrian safety concerns with the at-grade crossing and lack of visitor amenities) were better addressed in other alternatives, which were retained after scoping and moved forward into the draft plan.

2.11 THE ENVIRONMENTALLY PREFERABLE ALTERNATIVE

Council on Environmental Quality (CEQ) regulations implementing the National Environmental Policy Act (NEPA) require that an agency identify the alternative that is considered to be environmentally preferable. According to CEQ guidance (*Forty Most Asked Questions Concerning CEQ’s NEPA Regulations*, 23 March 1981), the environmentally preferable alternative is “... the alternative that causes the least damage to the biological and physical environment; it also means the alternative which best protects, preserves, and enhances historic, cultural, and natural resources” (Q6a). For the National Park Service, the no action alternative can be considered in identifying the environmentally preferable alternative. Thus, the environmentally preferable alternative at Jefferson National Expansion Memorial is that which best meets these goals.

Alternative 5 – Park into the City has been identified as the environmentally preferable alternative for this study because it is the alternative that would best protect, preserve, and enhance historic, cultural, and natural resources, especially in regard to enhancing the physical resources. While alternative 1 would simply cause the least damage to the biological and physical environment because it represents little change over current conditions, most damage resulting from alternative 5 would be short-term and would result in an overall enhancement of Memorial resources. Alternative 1 would not enhance the Memorial above the existing conditions. Additionally, short-term effects would generally not adversely affect resources central to its listing as a National Historic Landmark and National Register District, but would create long-term beneficial effects of these same resources by realizing many of the original design concepts for the Memorial as a whole.

Alternatives 3, 4 and 5 would focus on revitalizing the Memorial through increased connections with the surrounding neighborhoods. Of the three action alternatives, alternatives 4 and 5 would preserve important cultural and natural features of the Memorial equally well. Overall, alternative 5 would most successfully balance natural and cultural resources with the enhanced use of the Memorial. Alternative 3 was not considered environmentally preferable because of the large area of potential change to elements central to the significance of the National Historic Landmark and National Register District. Alternative 4 was not considered environmentally preferable because of the greater amounts of ground disturbance, and potential for impacts to archeological resources due to the enlargement of the Museum of Westward Expansion, the construction of a new visitor facility under Luther Ely Smith Square, and placing the parking lot next to the Old Cathedral underground.

2.12 RATIONALE FOR IDENTIFICATION OF THE NPS PREFERRED ALTERNATIVE

The National Environmental Policy Act (NEPA) established a national policy to “...encourage a productive and enjoyable harmony between man and his environment...” in order to promote efforts that would prevent or elimi-

nate damage to the environment, stimulate human health and welfare, and enrich public understanding of the ecological systems and resources important to the nation. NEPA directs Federal decision makers to incorporate environmental information (natural, cultural and socioeconomic resources) into agency decision making, in order to better understand the consequences of taking Federal actions.

The CEQ then established regulations requiring agencies to identify the alternative that is considered to be environmentally preferable, but did not require the Federal agency to adopt the environmentally preferable alternative as the agency's preferred alternative. Agencies have wide latitude in making difficult judgments to discuss its preferences among the alternatives considered based on relevant factors including economic and technical considerations and agency statutory missions. An agency shall identify and discuss all such factors including any essential considerations of national policy which were balanced by the agency in making its decision and state how those considerations entered into its decision. When the public and agencies are clearly faced with a choice, the decision maker and others must consider whether the decision is in accordance with the congressionally declared policies of the act.

In this instance, the National Park Service considered a no action alternative and three

action alternatives, each of which provided different scenarios for meeting the purpose and need objectives of this plan (stated in Chapter 1). In addition to the impact topics discussed at some length, and the planning issues which generated the need for this plan, the National Park Service also took into consideration the strong local preference for riverfront redevelopment and downtown economic stimulus.

The original competition and construction for the Gateway Arch led to a revitalization of the downtown area sixty years ago. Another design competition on a national scale would give the National Park Service an excellent opportunity to connect the Memorial to the American public in a multiplicity of ways. It would benefit the agency with ideas from wide spectrum of creative design professionals toward resolving the Memorial's greatest challenge of continuing to make a physical, emotional and intellectual connection with the visiting public. The NPS believes that a design competition would once again serve as a catalyst for civic and economic rebirth.

For these reasons the NPS has identified alternative 3 as the preferred alternative, rather than alternative 5, which is the environmentally preferable alternative. The NPS believes the identification of alternative 3 is in accordance with the congressionally declared policies of the National Environmental Policy Act.

Table 2.3 Alternatives Comparison

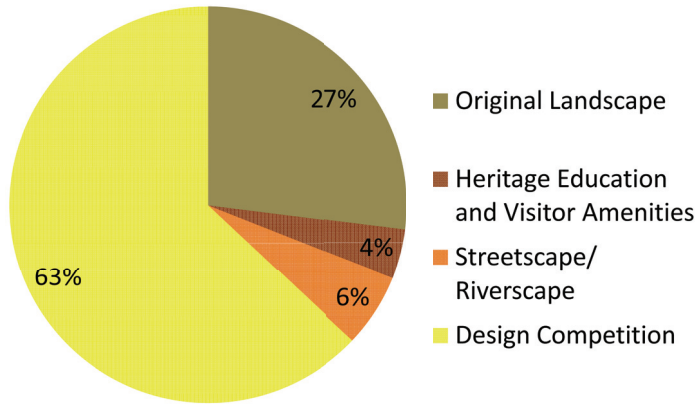
Alternative 1: No Action	Alternative 3: Program Expansion	Alternative 4: Portals	Alternative 5: Park into the City
Concept			
The Memorial would be managed much as it is today. The Memorial would be primarily accessed by car and Metro from the north at Eads Bridge, and from the west at the Old Courthouse.	The Memorial would be revitalized by expanded programming, facilities and partnerships. The National Park Service would capitalize on multiple opportunities to expand visitor experience throughout the Memorial. A design competition akin to the 1947 competition would be held to generate ideas to revitalize Memorial grounds, expand interpretation, education opportunities and visitor amenities (e.g., restaurant, restrooms) in an area bounded by Memorial Drive, Washington Avenue, Poplar Street, Luther Ely Smith Square and the north and south reflecting ponds.	The Memorial would be revitalized by opening four gateways (north, south, east, west) to enter the Memorial, featuring a new main west entry into the Museum of Westward Expansion that includes a nearly 3-block, at-grade lid centered on the Old Courthouse and two elevated pedestrian bridges. Visitors would access the Memorial from the east via commercial water taxi from East St. Louis, Illinois.	The Memorial would be revitalized by extending the visitor's experience of the Memorial into downtown St. Louis and the surrounding neighborhoods and East St. Louis by the provision of parking, services, and visual themes that would begin and continue into adjacent neighborhoods and areas.
Percent of each management zone in the Alternatives			
Please see pie charts at the end of this Table.			
Resource Stewardship / Design Integrity			
• The National Park Service would preserve the NHL; the full range of fundamental resources and values would be protected.	• To the greatest extent possible, the National Park Service would preserve the full range of fundamental resources and values.	• The National Park Service would preserve the NHL; the full range of fundamental resources and values would be protected.	
• Opportunities to complete portions of the design, as documented in the master plan, begun in 1960, approved in 1966, and centered on the 1964 final Conceptual Master Plan—contingent on project approval and funding.	• The essential character-defining features of the designed landscape and structures would be retained.	• Sensitive rehabilitation of the designed landscape and structures while protecting the integrity of the Memorial.	
• The National Park Service would continue to protect natural resource values in support of cultural landscape integrity.			
	• Increased opportunities for natural resource protection and enhancement in East St. Louis addition.		
• Museum collections storage would remain at Old Courthouse.		• Museum collections storage would be moved to expanded Museum of Westward Expansion.	• Museum collections storage would be moved to new education and research facility at south end of the Memorial.
Program / Visitor Services			
• Current programs and special events continue.	• The grounds surrounding the Gateway Arch would accommodate and promote increased visitor activities and more special events than provided in alternatives 4 and 5.	• The grounds surrounding the Gateway Arch would accommodate and promote increased visitor activities and special events.	
• Exhibits at the Old Courthouse and Museum of Westward Expansion would remain as they are today.	• Exhibits would be redesigned to provide more interactive experiences for visitors and programming would be expanded at the Old Courthouse and the Museum of Westward Expansion.		

Alternative 1: No Action	Alternative 3: Program Expansion	Alternative 4: Portals	Alternative 5: Park into the City
Program / Visitor Services			
<ul style="list-style-type: none"> • The Old Courthouse and the Museum of Westward Expansion would remain as they are today; exhibits and other educational and interpretive programs as provided. • Luther Ely Smith Square would be maintained; walks, seasonal plantings, trees, lawn, and benches would be provided. • The north end of the Memorial would remain as a multi-story parking garage above- and below-grade. • The south end of the Memorial would remain primarily a service area, housing the Memorial's maintenance facility. • The North and South Overlooks would be managed as originally designed. • Limited food service (vending) would be available in the existing Museum of Westward Expansion. • The parking lot at the Old Cathedral would remain unchanged and continue to provide parking. 	<ul style="list-style-type: none"> • The Old Courthouse and the Museum of Westward Expansion would be zoned to allow for rehabilitation of educational/cultural facilities. Six areas would be zoned to allow for a design competition to determine the appropriate program and facilities - including Luther Ely Smith Square, portions of the Memorial Grounds on the north and south, the Memorial Drive/I-70 corridor fronting the Memorial, the Old Cathedral Parking Lot, and the East St. Louis side of the Mississippi River. • The North and South Overlooks would be managed as Memorial Landscape. • Expanded vending could be accommodated in the existing Museum of Westward Expansion. 	<ul style="list-style-type: none"> • The Museum of Westward Expansion would be renovated to expand its size and better accommodate its associated functions, and would incorporate a new pedestrian entrance on Memorial Drive. • In addition to the Old Courthouse, the Museum of Westward Expansion would be zoned to allow for new (or expanded) educational/cultural facilities. • Luther Ely Smith Square would be zoned to include visitor orientation and services, practical needs and parking below-grade. • The north end of the Memorial Grounds would be renovated for visitor orientation and services, and parking would be accommodated below-grade. • A visitor transportation system would be provided that links visitor facilities within the Memorial as well as visitor facilities outside of the Memorial. • The south end of the Memorial would remain primarily a service area, housing the Memorial's maintenance facility. • The North and South Overlooks would be renovated for heritage education and visitor amenities. • Food service could be accommodated in the new education /cultural facilities as well as portable carts, including at Luther Ely Smith Square and North and South Overlooks. • The existing parking lot at the Old Cathedral would be redeveloped with new underground parking and the surface renovated as a planted area compatible with the Memorial landscape. 	<ul style="list-style-type: none"> • In addition to the Old Courthouse and the Museum of Westward Expansion, two areas would be zoned to allow for new educational/cultural facilities: the north end and the south end. • The north end of the Memorial would be renovated for visitor contact and orientation and for heritage education and as a multimodal gateway below grade. • A visitor transportation system would be provided that links visitor facilities within the Memorial as well as visitor facilities outside of the Memorial. • The south end of the Memorial would be renovated for new education and research center. • North and South Overlooks would be managed as Memorial landscape. • Expanded vending could be accommodated in the existing Museum of Westward Expansion. Luther Ely Smith Square could accommodate portable food carts. • The parking lot at the Old Cathedral would be eliminated and replaced with planted area compatible with the Memorial landscape.

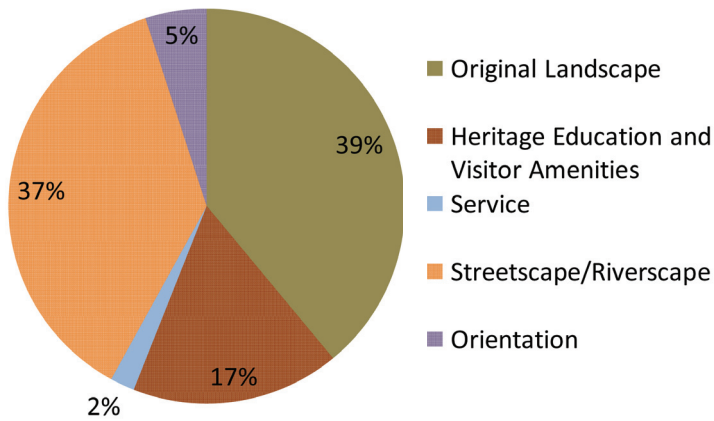
Alternative 1: No Action	Alternative 3: Program Expansion	Alternative 4: Portals	Alternative 5: Park into the City
Access / Security			
<ul style="list-style-type: none">Barrier-free routes from the Memorial grounds to the riverfront would not exist within the Memorial.	<ul style="list-style-type: none">Barrier-free routes from the Memorial grounds to the riverfront would be established within the Memorial.		
<ul style="list-style-type: none">Perimeter security and public safety issues would continue to be addressed to the level required for an icon park.			
<ul style="list-style-type: none">The existing entrances to the visitor center and Museum of Westward Expansion would not meet codes for barrier-free access.Visitor screening for security to the visitor center under the Gateway Arch would be accommodated at current entrances.	<ul style="list-style-type: none">Existing entrances into the visitor center and Museum of Westward Expansion would be renovated to meet current access codes, or provided for near the current location.Visitor screening for security would remain at current entrances or in close proximity to the existing entrance of the visitor center under the Gateway Arch.	<ul style="list-style-type: none">Access into the visitor center and Museum of Westward Expansion would be incorporated into a new entrance to the facility on Memorial Drive.Existing entrances into the visitor center and Museum of Westward Expansion would be renovated to meet current access codes, or provided for near the current location.Visitor screening for security into the visitor center under the Gateway Arch would remain at current entrances or in close proximity to the existing entrance of the visitor center and would be added to a new entrance on Memorial Drive.	<ul style="list-style-type: none">Accessibility into the visitor center and Museum of Westward Expansion would be renovated to meet current codes.Visitor screening for security would remain at the current entrance or in close proximity to the existing entrance of the visitor center under the Gateway Arch.
	<ul style="list-style-type: none">All new facilities would incorporate accessibility and heightened security design requirements.		
Connectivity / Urban Interface			
<ul style="list-style-type: none">Connectivity between Old Courthouse and Gateway Arch would remain as it is currently; pedestrians would cross Memorial Drive at grade.	<ul style="list-style-type: none">Increased connectivity between the Old Courthouse and Gateway Arch would be provided.	<ul style="list-style-type: none">Increased connectivity between Old Courthouse and Gateway Arch at Luther Ely Smith Square would be provided with the construction of two pedestrian bridges over Memorial Drive, a nearly 3-block at-grade lid centered on the Courthouse, and pedestrian at-grade improvements at Pine and Walnut streets.	<ul style="list-style-type: none">Increased connectivity between Old Courthouse and Gateway Arch at Luther Ely Smith Square would be provided by removing and rerouting Memorial Drive traffic northbound and southbound and by renovating the vacated corridor of Memorial Drive into a series of large civic/community plazas.

Alternative 1: No Action	Alternative 3: Program Expansion	Alternative 4: Portals	Alternative 5: Park into the City
Connectivity / Urban Interface			
<ul style="list-style-type: none">• The National Park Service would continue to coordinate with the City and State to enhance the pedestrian environment.	<ul style="list-style-type: none">• The National Park Service would coordinate with the City and State to increase connectivity between adjacent neighborhoods with improvements to the at-grade crossing at Washington Avenue and the NW Plaza and with visual and physical linkages to Laclede’s Landing.• The National Park Service and partners would coordinate with the City and State to increase connectivity along and across Memorial Drive/I-70 corridor.	<ul style="list-style-type: none">• The National Park Service would coordinate with the City and State to increase connectivity between adjacent neighborhoods with improvements to the at-grade crossings at Washington Avenue and the NW Plaza and at Walnut and Pine streets (across Memorial Drive) for two additional linkages to the Memorial grounds, and with visual and physical linkages to Laclede’s and Chouteau’s Landings.• A seasonal water taxi would be established linking the east and west units of the Memorial.	<ul style="list-style-type: none">• The National Park Service would coordinate with the City and State to increase connectivity between adjacent neighborhoods with improvements to the at-grade crossing at Washington Avenue and the NW Plaza and with visual and physical linkages to Laclede’s and Chouteau’s Landings.
<ul style="list-style-type: none">• Partner with the City of St. Louis and the State of Missouri to unify streetscape along Gateway Mall and streets adjacent to the Memorial, including Leonor K. Sullivan Boulevard and Memorial Drive.			
<ul style="list-style-type: none">• Partner with the City of St. Louis and the State of Missouri to unify streetscape along Gateway Mall and streets adjacent to the Memorial, including Leonor K. Sullivan Boulevard and Memorial Drive.	<ul style="list-style-type: none">• Proactively encourage compatible riverfront improvements on the west and east sides of the Mississippi River.• Sustain and develop partnerships to provide the National Park Service a means for working closely with adjacent stakeholders and enhance the visitor experience in the East St. Louis addition.		
Operations			
<ul style="list-style-type: none">• The Memorial’s maintenance facility would remain at the south end of the Memorial.	<ul style="list-style-type: none">• The Memorial’s maintenance facility may move outside of the Memorial boundary.	<ul style="list-style-type: none">• The Memorial’s maintenance facility would remain at the south end of the Memorial.	<ul style="list-style-type: none">• The Memorial’s maintenance facility would be moved outside the Memorial boundary.
<ul style="list-style-type: none">• Visitor parking at the north end of the Memorial would remain; would encourage parking proximate to Memorial for oversized vehicles.• Parking for Old Cathedral patrons would remain.	<ul style="list-style-type: none">• Visitor parking would be retained and location of maintenance operations to be determined through design competition.• The visitor transportation system operations and maintenance facility would be located off-site.	<ul style="list-style-type: none">• Visitor parking at the north end of the Memorial would remain. Garage would be reconstructed to allow for some moderate amount of oversized RV parking.• Parking would be relocated to a new underground facility at the Old Cathedral and the surface would be renovated to improve bus drop-off and enhance visual quality.• Luther Ely Smith Square would be redeveloped to provide visitor orientation, including underground parking.• The visitor transportation system operations and maintenance facility would be located off-site.	<ul style="list-style-type: none">• Visitor parking at the north end of the Memorial would be eliminated; visitor parking would be accommodated outside the Memorial at existing facilities.• Parking would be eliminated at the Old Cathedral and the surface would be renovated to improve bus drop-off and to enhance visual quality.• The visitor transportation system operations and maintenance facility would be located off-site.

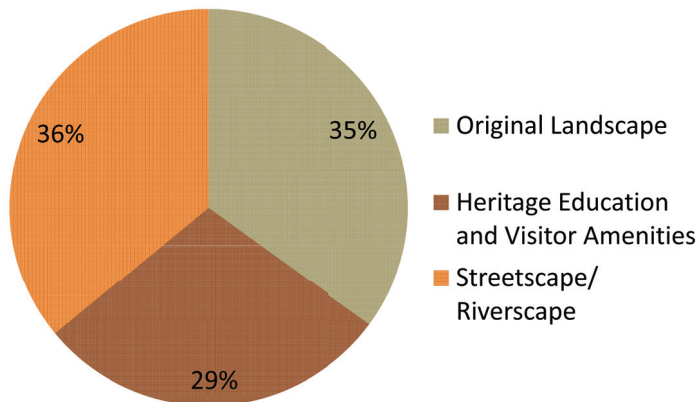
Alternative 1: No Action	Alternative 3: Program Expansion	Alternative 4: Portals	Alternative 5: Park into the City
Memorial Boundary			
<ul style="list-style-type: none"> • The 91-acre boundary of the Memorial would remain unchanged on the west side; the National Park Service would retain the authorization to establish a boundary in East St. Louis in the future. • The focus would remain west of the Mississippi River. 	<ul style="list-style-type: none"> • The 91-acre boundary of the Memorial would remain unchanged on the west side; The boundary of the Memorial would be amended to add acreage in East St. Louis (approximately 70 acres). Potential acquisition would be by willing seller only. Total boundary: 161 acres. • Partner with landowners to manage the riverfront for compatible visual context and development (viewshed), and to provide for visitor services in conjunction with Metro East Parks and Recreation District. 	<ul style="list-style-type: none"> • The 91-acre boundary of the Memorial would remain unchanged on the west side; The boundary of the Memorial would be amended to add acreage in East St. Louis (approximately 70 acres). Potential acquisition would be by willing seller only. Total boundary: 161 acres. • Partner with landowners to manage the riverfront for compatible visual context and development (viewshed), and to provide for visitor services in conjunction with Metro East Parks and Recreation District. 	<ul style="list-style-type: none"> • The 91-acre boundary of the Memorial would remain unchanged on the west side; The boundary of the Memorial would be amended to add acreage in East St. Louis (approximately 100 acres). Potential acquisition would be by willing seller only. Total boundary: 191 acres. • Partner with landowners to manage for compatible visual context and development (viewshed) and to provide for visitor services, heritage education, and natural resource protection.
Estimated Full Time Equivalent staff			
282	346	359	350
Estimated capital costs in millions			
\$0	\$154.6	\$368.5	\$379.4



Percent of each Management Zone in Alternative 3: Program Expansion



Percent of each Management Zone in Alternative 4: Portals



Percent of each Management Zone in Alternative 5: Park into the City

Table 2.4 Impacts

Impact Topic	Alternative 1: No Action	Alternative 3: Program Expansion	Alternative 4: Portals	Alternative 5: Park into the City
Impacts on Cultural Resources				
Historic Buildings, Structures, Sites, Objects and Districts	The no action alternative would have moderate to major long-term local impacts to historic buildings, structures, sites, objects, and districts. There could be an adverse effect under Section 106 of NHPA.	The Program Expansion alternative would have minor beneficial to major long-term local adverse impacts to historic buildings, structures, sites, objects, and districts. There could be an adverse effect under Section 106 of NHPA.	The Portals alternative would have negligible to minor short and long-term local adverse impact and moderate long-term local beneficial impacts to historic buildings, structures, sites, objects, and districts. There would be no adverse effect under Section 106 of NHPA.	The Park into the City alternative would have moderate beneficial to moderate adverse short and long-term local impacts to historic buildings, structures, sites, objects, and districts. There would be no adverse effect under Section 106 of NHPA.
Cultural Landscapes	The no action alternative would have short-term and long-term minor to moderate beneficial local impacts to cultural landscapes. There would be no adverse effect under Section 106 of NHPA.	The Program Expansion alternative would have short and long-term major beneficial to major adverse local impacts to cultural landscapes. There would be an adverse effect under Section 106 of NHPA.	The Portals alternative would have local minor long-term adverse and moderate to major long-term beneficial impacts to cultural landscapes. There would be no adverse effect under Section 106 of NHPA.	The Park into the City Alternative would have long-term moderate to major beneficial and moderate adverse local impacts to cultural landscapes. There would be no adverse effect under Section 106 of NHPA.
Archeological Resources	The no action alternative would have negligible adverse impacts on archeological resources. Under Section 106, there would be no adverse effect.	Depending on the locations of the design elements and the extent of ground disturbing activities, impacts on archeological resources could range from minor beneficial to major adverse. Adverse impacts on archeological resources could be avoided through mitigation and by having cultural resource observers present during ground disturbing activities. If unmitigated adverse effects were to occur to archeological resources, this would be considered an adverse effect under Section 106. However, the recording of previously undiscovered sites would be considered a beneficial impact.	Under Alternative 4, impacts on archeological resources could range from minor beneficial to major adverse. Adverse impacts on archeological resources could be avoided through mitigation and by having cultural resource observers present during ground disturbing activities. If unmitigated adverse effects were to occur to archeological resources, this would be considered an adverse effect under Section 106. However, the recording of previously undiscovered sites would be considered a beneficial impact.	Under Alternative 5, impacts on archeological resources could range from minor beneficial to major adverse. Adverse impacts on archeological resources could be avoided through mitigation and by having cultural resource observers present during ground disturbing activities. If unmitigated adverse effects were to occur to archeological resources, this would be considered an adverse effect under Section 106. However, the recording of previously undiscovered sites would be considered a beneficial impact.

Impact Topic	Alternative 1: No Action	Alternative 3: Program Expansion	Alternative 4: Portals	Alternative 5: Park into the City
Curatorial Resources and Museum Collections	The no action alternative would have minor to moderate long-term local adverse impacts to curatorial resources and museum collections.	The Program Expansion alternative would have long-term local moderate adverse to moderate beneficial impacts to curatorial resources and museum collections.	The Portals alternative would have moderate long-term beneficial impacts to curatorial resources and museum collections.	The Park into the City alternative would have local moderate long-term beneficial impacts to curatorial resources and museum collections.
Impacts on Natural Resources				
Vegetation	Under the no action alternative, there would be no new construction or change to management or maintenance policies within the study area and no cumulative impacts to vegetation communities. There would be no impairment of vegetation communities in East St. Louis.	Potential impacts on vegetation communities range from minor beneficial to moderate adverse. Final design entries would undergo additional environmental review by the National Park Service to determine the impacts of various design alternatives with greater specificity. Thus, there would be no impairment of park resources.	The implementation of the Portals alternative would have moderate short-term adverse impacts and long-term beneficial impacts on the vegetation communities of the East St. Louis addition. The short-term impacts would involve removal of successional habitat communities in the areas of construction. In the long term, this impact would be considered beneficial since invasive species on the East St. Louis addition would be removed.	The implementation of the Portals alternative would have moderate short-term adverse impacts and long-term beneficial impacts on the vegetation communities of the East St. Louis addition. The short-term impacts would involve removal of successional habitat communities in the areas of construction. In the long term, this impact would be considered beneficial since invasive species on the East St. Louis addition would be removed.

Impact Topic	Alternative 1: No Action	Alternative 3: Program Expansion	Alternative 4: Portals	Alternative 5: Park into the City
Impacts on Natural Resources				
Threatened and Endangered Species	<p>Since there would be no additional development, loss of habitat, or changes in maintenance or management practices that may disturb decurrent false aster populations that may be present on the east side of the river, there would be no effect to this Threatened species and no impairment of park resources within the study area from the no action alternative.</p>	<p>Until the design competition is completed, there would be no additional development, loss of habitat, or changes in maintenance or management practices in the near term in decurrent false aster habitat areas on the east side of the river. Any future development that might result from the design competition would be preceded by a site survey to determine if the species is present within the study area. If the species is determined to be present, consultation with USFWS on potential protection measures would be required. Since surveys would be conducted prior to construction, impacts on this Threatened species are unlikely and no impairment of park resources within the study area would occur.</p>	<p>Future development within potential decurrent false aster habitat areas in East St. Louis would be preceded by a site survey to determine if the species is present within the study area. If the species is determined to be present, consultation with USFWS on potential protection measures would be required. Since surveys would be conducted prior to construction, impacts on this Threatened species are unlikely and no impairment of park resources within the study area would occur.</p>	<p>Future development within potential decurrent false aster habitat areas in East St. Louis would be preceded by a site survey to determine if the species is present within the study area. If the species is determined to be present, consultation with USFWS on potential protection measures would be required. Since surveys would be conducted prior to construction, impacts on this Threatened species are unlikely and no impairment of park resources within the study area would occur.</p>

Impact Topic	Alternative 1: No Action	Alternative 3: Program Expansion	Alternative 4: Portals	Alternative 5: Park into the City
Impacts on Natural Resources				
Soundscape	The no action alternative would have short- and long-term minor adverse impacts on the soundscape of the Memorial from construction activities and existing maintenance activities.	Alternative 3 would have negligible to moderate short-term adverse impacts and minor long-term adverse impacts on the soundscape of the Memorial. Moderate short-term adverse impacts would result from crowd noise and amplified music or public address systems associated with increased programming.	Alternative 4 would have minor short-term adverse impacts from construction activities and minor long-term adverse impacts from existing maintenance activities and from implementing a water taxi and visitor transportation system. The addition of the nearly three-block lid over Interstate 70 may have a minor to moderate long-term beneficial impact on the soundscape of the Memorial grounds.	Alternative 5 would have minor short-term adverse impacts from construction activities and minor long-term adverse impacts from existing maintenance activities, moving the grounds maintenance facility off the Memorial grounds, and implementing a visitor transportation system. Increased special events programming would result in minor to moderate short-term adverse impacts. The removal of traffic from Memorial Drive and the creation of the pedestrian plaza would have a minor to moderate beneficial impact on the soundscape of the Memorial grounds.

Impact Topic	Alternative 1: No Action	Alternative 3: Program Expansion	Alternative 4: Portals	Alternative 5: Park into the City
Impacts on Visitor Opportunity and Use				
Visitor Opportunities and Use	The no action alternative is expected to have a moderate adverse long-term impact on visitor opportunities and use due to a lack of barrier-free access points, and a lack of planned modification or rehabilitation to exhibits and education programs. This alternative is expected to result in underutilization of some facilities such as the Museum of Westward Expansion and the Old Courthouse. Unfriendly streetscapes to and from the Memorial into downtown are expected to have a long-term adverse impact on visitor experience.	Alternative 3 would have moderate to major beneficial short-term impacts on visitor use and moderate long-term beneficial impacts. The development of new facilities would encourage considerable increases in visitation in the short-term but visitation would be expected to decline over the long-term. Improvements in barrier-free access points are likely to increase some visitor use. Modification and rehabilitation of exhibits and heritage programs, including more interactive experiences is expected to improve visitor opportunities, attracting new visitors and encouraging more use of underutilized facilities. Improvements in streetscapes are expected to increase connectivity to downtown St. Louis and to have a long-term beneficial impact on local visitor opportunities and use.	Alternative 4 would have moderate long-term beneficial impacts on visitor opportunity and use. Visitor opportunities and use are expected to improve with the redesign of exhibits at the Museum of Westward Expansion and the Old Courthouse, with the development of barrier-free access to the riverfront and museum including a new entrance on Memorial Drive. Improvements in streetscapes, the introduction of a new visitor transportation system, and a water taxi service are expected to increase connectivity to downtown St. Louis and East St. Louis, and have a long-term beneficial impact on visitor opportunities and use.	Alternative 5 would have moderate long-term beneficial impact on visitor opportunity and use. Visitor opportunities are expected to improve with the redesign of exhibits at the Museum of Westward Expansion and the Old Courthouse and with the development of barrier-free access to the riverfront and the museum. Improvements in streetscapes and the introduction of a new visitor transportation system are expected to increase connectivity to downtown St. Louis, and to have a long-term beneficial impact on visitor opportunities and use.

Impact Topic	Alternative 1: No Action	Alternative 3: Program Expansion	Alternative 4: Portals	Alternative 5: Park into the City
Impacts on Socioeconomics				
Land Use	The no action alternative is expected to have a minor long-term adverse impact on local land use. With a lack of focus on planning activities in East St. Louis, the National Park Service may lose the ability to influence compatible land use development in East St. Louis. Under the no action alternative, no substantial changes in land use on the Memorial grounds or in East St. Louis are proposed.	Alternative 3 is expected to have both beneficial and adverse impacts on land use. Improvements to streetscapes and connectivity with local neighborhoods is expected to have long-term beneficial impacts on land use within and immediately adjacent to the Memorial. Development of new elements could lead to long-term adverse impacts to green spaces within the Memorial. Changes in management in the East St. Louis addition are expected to have long-term beneficial impacts on local land use.	Alternative 4 is expected to have a long-term moderate beneficial impact on land use. Development of a new barrier-free entrance to the Museum of Westward Expansion would have adverse impacts with the loss in green space, though impacts are expected to be localized to that specific area of the Memorial. Beneficial impacts are expected with the development of barrier-free access points in other parts of the Memorial, development of a nearly three-block deck of Memorial Drive and pedestrian walkways improving compatibility of the Memorial with adjacent major roadways. Moderate beneficial impacts would occur with the expansion of the Memorial's boundary into East St. Louis, encouraging compatible development with Metro Parks and other potential partners.	Alternative 5 would have a long-term moderate beneficial impact on land use. The rerouting of Memorial Drive has the potential to generate long-term moderate beneficial impacts on land use in and around the Memorial by improving connectivity and compatibility with downtown and enhancing the Gateway Mall corridor. Eliminating on-site parking would allow the Memorial to expand opportunities for heritage education and visitor amenities. Moderate beneficial impacts would occur with the expansion of the Memorial's boundary into East St. Louis, which would encourage compatible development with Metro Parks and other potential partners.

Impact Topic	Alternative 1: No Action	Alternative 3: Program Expansion	Alternative 4: Portals	Alternative 5: Park into the City
Impacts on Socioeconomics				
Socioeconomics	Management of the Memorial would not extensively change from current conditions under the no action alternative. The Memorial would continue to be a major attraction for visitors coming to the St. Louis area. Under this alternative, visitation to and operation of the Memorial would continue to have a long-term minor to moderate beneficial economic impact to the region.	Under Alternative 3, the Memorial would continue to be a major attraction for visitors coming to the St. Louis area, and its appeal to local residents and visitors is expected to increase with the additional programming and design elements of this alternative. Visitation to the Memorial would have a long-term beneficial economic impact due to visitor spending and expenditures associated with operations at the Memorial, though the magnitude is indeterminate at this time. Cumulative impacts from other projects and planning activities have the potential to increase visitation to the Memorial and downtown St. Louis, which would have a minor beneficial impact on downtown retailers and businesses.	Under this alternative, the Memorial would have a long-term minor positive economic impact due to visitor spending and expenditures associated with operations at the Memorial, though the impacts would be focused within the local geographic area. Cumulative impacts from other projects may increase visitation to the Memorial and downtown St. Louis, which would have a minor beneficial impact on downtown retailers and businesses.	Visitation to the Memorial would have a long-term minor to moderate positive economic impact due to visitor spending and expenditures associated with operations at the Memorial. Impacts would be largely focused within a small geographic area near the Memorial, but may be expanded if a visitor transportation system travels near other important downtown sites and businesses. Cumulative impacts from other projects and planning activities have the potential to increase visitation to the Memorial and downtown, which would have a minor beneficial impact on downtown retailers and businesses.

Impact Topic	Alternative 1: No Action	Alternative 3: Program Expansion	Alternative 4: Portals	Alternative 5: Park into the City
Impacts on Transportation and Access				
Transportation and Access	The no action alternative would result in short and long-term minor adverse transportation conditions at the Memorial.	The Program Expansion alternative would result in moderate to major long-term adverse to beneficial impacts on transportation. This determination derives from the unknown, yet potentially substantial changes to the existing transportation conditions, depending upon the outcome of the design competition.	The Portals alternative would result in minor to moderate long-term beneficial impacts on transportation. This determination is due to improvements to pedestrian circulation and parking resources, as well as the implementation of a visitor transportation system.	The Park into the City alternative would result in moderate to major long-term beneficial impacts on transportation. This determination is due to the extensive improvements to pedestrian circulation and transit enhancements, particularly the implementation of a visitor transportation system. This finding assumes that the loss of on-site parking is considered a benefit to the overall visitor experience of the Memorial, rather than a hindrance.
Impacts on NPS Operations				
Impacts on NPS Operations	Ongoing long-term minor to moderate adverse impacts would continue to NPS operations in the no action alternative.	The long-term impacts of the Program Expansion alternative would range from moderate/major beneficial to adverse. Much depends on the outcome of the design competition, and whether the new programs and elements that emerge from the competition come with additional financial resources for operations.	The long-term impacts of the Portal management alternative would be moderate to major and adverse. The expanded facilities would require a commensurate increase in NPS operational resources.	The long-term impacts of the Park into the City alternative would be moderate and adverse. Without additional resources, the proposed changes to the Memorial would have substantial effects on existing operational resources.