



Stonewall, Texas

Lyndon B. Johnson National Historical Park

LBJ Ranch Unit

General Management Plan Amendment/Environmental Assessment



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

**Lyndon B. Johnson National Historical Park
Lyndon B. Johnson Ranch Unit
Stonewall, Texas**

**General Management Plan Amendment/Environmental Assessment
January 2010**

Proposed Action: Lyndon B. Johnson National Historical Park (Lyndon B. Johnson NHP) was established, "...to preserve in public ownership historically significant properties associated with the life of Lyndon B. Johnson" (Public Law 91-14). The park is made up of two units: one in Johnson City, Texas and one at the Lyndon B. Johnson Ranch (LBJ Ranch) near Stonewall, Texas. Prior to the 1999 general management plan/environmental impact statement (GMP/EIS), the park had been operating under its 1977 Master Plan. Although that plan provided initial guidance and direction for the park's early years, the 1999 GMP/EIS was developed to provide long-term guidance at the park. However, since the 1999 GMP/EIS, conditions at the LBJ Ranch have changed; park visitation continues to decline, use of the tour buses increasingly strains the park's budget, and subsequent analysis of the 1999 GMP/EIS caused current management to request a reevaluation of public access and private vehicle use on the LBJ Ranch. Some actions in the 1999 GMP/EIS may no longer be appropriate because of these changes, and alternative actions should be evaluated with this General Management Plan Amendment/Environmental Assessment (plan amendment/EA). This plan amendment/EA describes the actions required to make the Texas White House and other park resources more accessible to the public and the preservation requirements necessary to ensure their continued existence. It is the intent of this planning effort to provide a comprehensive direction for the LBJ Ranch for the next 10 to 15 years. Actions needed to achieve this goal include the reevaluation of the unit's transportation system, maintenance operations, and use of historic structures. Implementing the NPS Preferred Alternative (Alternative C) would result in moderate, long-term, beneficial impacts on cultural landscapes, historic structures, visual resources, site access and circulation, visitor use and experience, and operations and infrastructure; minor, short-term, adverse impacts on visual resources; minor to moderate, short-term, adverse impacts on operations and infrastructure; minor, long-term, adverse impacts to cultural landscapes; minor to moderate, long-term, adverse impacts on visitor use and experience; and moderate, long-term, adverse impacts on visual resources.

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Note to Reviewers and Respondents:

During the 30-day public review period, if you wish to comment on this Environmental Assessment you may mail comments to the name and address below or you may post them electronically at <http://parkplanning.nps.gov>. Before including your address, phone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment, including your personal identifying information, may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

Superintendent
Lyndon B. Johnson National Historical Park
P.O. Box 329
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EXECUTIVE SUMMARY

Lyndon B. Johnson National Historical Park (Lyndon B. Johnson NHP) was originally established by Public Law 91-14 on December 2, 1969, as a national historic site. Prior to the 1999 general management plan/environmental impact statement (GMP/EIS), the park had been operating under its 1977 Master Plan. Although that plan provided initial guidance and direction for the park's early years, the 1999 GMP/EIS was developed to provide long-term guidance at the park. However, since the 1999 GMP/EIS, conditions at the Lyndon B. Johnson Ranch (LBJ Ranch) Unit of the park have changed; park visitation continues to decline, use of the tour buses increasingly strains the park's budget, and subsequent analysis of the 1999 GMP/EIS caused current management to request a reevaluation of public access and private vehicle use on the LBJ Ranch. These changes require the National Park Service (NPS) to amend some of the management guidance established in the 1999 GMP/EIS with this General Management Plan Amendment/Environmental Assessment (plan amendment/EA). This plan amendment/EA describes the actions required to make the Texas White House and other park resources more accessible to the public and the preservation requirements necessary to ensure their continued existence. It is the intent of this planning effort to provide a comprehensive direction for the LBJ Ranch for the next 10 to 15 years.

This plan amendment/EA evaluates alternatives for the proposed action. The plan amendment/EA further analyzes the potential impacts these alternatives would have on the natural, cultural, and human environment. This

document has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended; regulations of the Council on Environmental Quality (CEQ) (40 CFR 1508.9); and NPS Director's Order (DO) 12: Conservation Planning, Environmental Impact Analysis, and Decision-Making.

PURPOSE, NEED, AND IMPLEMENTATION

Purpose of the Amendment

The purpose of the proposed action is to improve the visitor experience by enhancing opportunities to access the resources at the park. Included within the LBJ Ranch is President Johnson's birthplace, his grandparents' home, and his home that became the Texas White House during his presidency. These resources not only define his presidency, but also were part of the environment that influenced President Johnson's life. With the passing of Mrs. Johnson, the NPS moved forward with its mandate to share the resources at the LBJ Ranch with the public.

Need for the Amendment

One of the most notable changes at the LBJ Ranch since the 1999 GMP/EIS was the passing of Lady Bird Johnson in July 2007. Mrs. Johnson's passing caused the NPS to focus attention on aspects of the existing GMP that appeared to be less viable because of current conditions at the national park, such as changes in visitation, high interest in the Texas White House, and the expense of the existing bus system.

Prior to her passing, Mrs. Johnson regularly spent time at the ranch, specifically at the Texas White House. In order to protect her privacy and comply with the U.S. Secret Service security requirements, the NPS restricted visitor access through the national park to the NPS tour buses. Following the passing of Mrs. Johnson, the U.S. Secret Service vacated the LBJ Ranch, thereby removing the security restrictions on the ranch that had been in place, and the NPS received full access to the Texas White House.

The Texas White House is the center of the LBJ Ranch and the cornerstone of the presidential era at the ranch. The Johnson family used the house as a residence until July 2008. Now that the family has turned the house over to the NPS, restoration efforts are underway to open it to the public and share the resources and interpretive experiences it has to offer. Recent special events at the LBJ Ranch have indicated that there is a great deal of interest in exploring the Texas White House and the NPS can expect higher levels of visitation in the near future. Therefore, as the Texas White House is renovated and greater access is granted to the public, there is a need to determine the best means for allowing visitors to reach the Texas White House and other interpretive locations in the ranch.

The 1999 GMP/EIS included preliminary plans for a new bus system once the Texas White House was open to the public. However, given the rising cost and time involved in maintaining a bus fleet and the visitor interest in allowing private vehicle access onto the ranch, the NPS has reexamined the plans in the 1999 GMP/EIS. Regular access to the Texas White House and the rest of the LBJ Ranch has been provided by tour buses. The buses are in poor condition and require daily maintenance. The maintenance process is difficult due to the limited time and funding available to NPS staff, as well as the limited replacement parts that are available for the aging vehicles. If the tour buses are to be used in the future, the current buses would need to be

replaced. During late 2008 and early 2009, the NPS ran a pilot program to allow private vehicle access onto the ranch. This was done in conjunction with the opening of the President's office in the Texas White House to the public. The pilot project allowed the NPS to examine a new means of providing access to the resources within the LBJ Ranch. As the pilot project draws to a close, there is a need to determine if and to what extent buses would be used to provide access through the ranch.

While the Johnson family inhabited the Texas White House, the NPS limited interpretation of the house to views of the ranch from the tour buses. Now that the house is available for interpretation, the NPS also hopes to enhance access and interpretation at several of the buildings surrounding the Texas White House. These buildings include the hangar and the Klein Shop. While the 1999 GMP/EIS laid out initial plans for these structures, subsequent planning efforts have identified more appropriate uses for the structures surrounding the Texas White House. Therefore, there is a need to examine the current and future functions of these structures.

The Sam E. Johnson House was President Johnson's grandparents' home during his childhood. In later years, the house was expanded and eventually turned into a guest house during the presidency. While the existing structure maintains its appearance from the presidential years, it does not provide an understanding of the home that President Johnson knew and visited frequently as a child and young adult. Furthermore, the current appearance of the house does not reflect the NPS's interpretation of its place in Johnson family history. Therefore, this plan proposes further study of the Sam E. Johnson House to determine the most appropriate level of restoration and interpretation that might occur at the property to complement the rest of the story.

A decision on the most appropriate action would be made following completion of that study.

Next Steps

After the distribution of the GMP/EA, there will be a 30-day public review and comment period after which the NPS planning team will evaluate comments from other federal, state, and local agencies, organizations, businesses, and individuals regarding the plan. Appropriate changes will be incorporated into a “Finding of No Significant Impact” (FONSI), which documents the NPS selection of an alternative for implementation. In addition, the FONSI will include as an attachment any necessary errata sheets for factual changes required in the EA, as well as responses to substantive comments by agencies, organizations, or the general public. Once the FONSI is signed by the regional director, and following a 30-day waiting period, the plan can then be implemented.

Implementation of the Amendment

As described above, the purpose of a GMP is to provide an overall vision for decision-making. Implementing the approved plan for Lyndon B. Johnson NHP will depend on future funding. The approval of the plan does not guarantee that the funding and staffing needed to implement the plan will be forthcoming. Full implementation of the approved plan could be many years in the future. A GMP does not describe how particular programs or projects should be prioritized or carried out. Those decisions will be addressed during the more detailed planning associated with program plans (e.g. interpretive plans), strategic plans, and implementation plans. Carrying out the approved plan also would depend on the completion of additional feasibility studies.

ALTERNATIVES CONSIDERED

The alternatives selected for detailed analysis are summarized below. NEPA requires federal agencies to explore a range of reasonable alternatives and to analyze what impacts the alternatives could have on the human environment, which the act defines as the natural and physical environment and the relationship of people with that environment. The analysis of impacts is presented in Chapter 3: Affected Environment and Environmental Consequences of this document.

The alternatives under consideration include a no-action alternative, as prescribed by NEPA regulations at 40 CFR 1502.14. The no-action alternative (Alternative A) in this document is the continuation of the NPS’s current management of the LBJ Ranch laid, as laid out in the 1999 GMP/EIS. Visitor access and circulation through LBJ Ranch would continue to be provided by the existing NPS tour bus system. Because the current tour bus fleet has surpassed its lifespan, the NPS buses would be replaced as soon as funding became available. Although the action of acquiring new buses is not specifically prescribed in the 1999 GMP/EIS, it is necessary to maintain the existing bus operation at the park.

Action alternatives were developed by the interdisciplinary planning team, with feedback from the public during the planning process. These alternatives meet, to varying degrees, the purpose of and need for action, as expressed in Chapter 1: Purpose and Need of this document. Because these action alternatives would meet the park’s objectives and would be technically and economically feasible, they are considered “reasonable.” Alternative B would include allowing private vehicles to access the LBJ Ranch Unit, while discontinuing the existing tour bus system. This alternative also would include consolidation of the LBJ Ranch’s

maintenance operation, changing the functions of the hangar and Klein Shop, and call for a study to determine the feasibility and appropriateness of restoring the Sam E. Johnson House to the dog-trot cabin that President Johnson knew as a boy.

Alternative C would include allowing private vehicles to access the site while also providing the NPS tour bus option. The park would use adaptive management techniques, described in “Chapter 2: Alternatives”, to determine the effectiveness of the tour bus system. If the tour bus system was under utilized or proved too costly for the NPS to maintain, it could be discontinued until more favorable conditions developed. This alternative also would include consolidation of the LBJ Ranch’s maintenance operation, changing the functions of the hangar and Klein Shop, and call for a study to determine the feasibility and appropriateness of restoring the Sam E. Johnson House, as called for under Alternative B.

ENVIRONMENTAL CONSEQUENCES

The summary of environmental consequences considers the actions being proposed and the cumulative impacts from occurrences inside and outside the park. The potential environmental consequences of the actions are addressed for cultural landscapes, historic structures, visual resources, site access and circulation, visitor use and experience, and operations and infrastructure.

Alternative A: No Action

The NPS would continue to implement actions outlined in the 1999 GMP/EIS. The NPS would continue to maintain the ranch and the structures within the property as they existed during the Johnson presidency. Any physical changes to the

cultural landscape and historic structures at the ranch would be related to the actions analyzed in the 1999 GMP/EIS. No changes would be made to the existing circulation at the ranch. As the Texas White House was open to the public, staff time and funding would be diverted from other programs.

Alternative B: Private Vehicle Access

The interior of the hangar and Klein Shop would be improved. Any impact to the Sam E. Johnson House would await the proposed feasibility and advisability studies. Improvements to the Klein Shop and hangar would enhance the understanding of their historic significance and visitor contact and interpretation. The introduction of private vehicles would not require any physical development and would not notably alter the landscape. Some visitors could require some time to adjust to the sight of private vehicles on the ranch. Other visitors may view this as a permanent change to the ranch environment. Alterations to Bailey Road and Bravo Road would not notably alter the historic landscape at the ranch and would regain the former appearance of Bravo Road. The introduction of private vehicles to the ranch would result in short-term impacts to the visual resources, but would not detract from any improvements over the long-term. Access to structures within the ranch would be improved. The NPS tour bus system would be discontinued and private vehicle access would be initiated. Interpreters would not be required to drive buses and could focus on enhanced interpretation throughout the ranch.

Alternative C: Bus Tour and Private Vehicle Access (NPS Preferred Alternative)

The interior of the hangar and Klein Shop would be improved. Any impact to the Sam E. Johnson

House would await the proposed feasibility and advisability studies. Improvements to the Klein Shop and hangar would enhance the understanding of their historic significance and visitor contact and interpretation. The introduction of private vehicles would not require any physical development and would not notably alter the landscape. Alterations to Bailey Road and Bravo Road would not notably alter the historic landscape at the ranch and would regain the former appearance of Bravo Road. The introduction of private vehicles to the ranch would result in short-term impacts to the visual resources, but would not detract from any improvements over the long-term. Access to structures within the ranch would be improved. The NPS tour bus system would be discontinued and private vehicle access and a new tour bus would be initiated. Allowing private vehicle access, while maintaining a bus tour, would provide more opportunities to the visitors.

CONSULTATION AND COORDINATION

Internal Scoping

Internal scoping for the plan amendment/EA began in early 2008. At that time, representatives from the national historical park and state park met to review the 1999 GMP/EIS and select issues that needed to be revisited in the plan amendment/EA. The issues that the group selected were taken to NPS Intermountain Region Deputy Director for approval. Once the approval process was complete, representatives from the NPS and the state park along with their consultants began a thorough analysis of the different transportation concepts that were to be considered for the plan amendment/EA. Once the preliminary analysis was complete, staff from the NPS and the state park met in January 2009 to review the analysis, rate how each concept met the goals and objectives of the plan

amendment/EA, and select options that would be developed into complete alternatives for the plan amendment/EA. At this time, the NPS also selected its preferred alternative.

Public Scoping

Public scoping for the plan amendment/EA began in November 2008 when the NPS released a newsletter introducing the general concepts that were to be included in the document. Following the release of the newsletter, the NPS solicited comments from the public on the proposed concepts. Following the public review of the newsletter, the NPS hosted two public open house sessions to solicit public input on the transportation options and infrastructure improvements being considered for the plan amendment/EA. The first open house was held at the state park's dining hall from 4:00-6:00 PM on January 27, 2009, and the second open house was held on January 29, 2009 in the national historical park's Johnson City visitor center from 7:00-9:00 PM. Individuals who attended the meetings were presented with large-scale illustrations of the eight transportation options, a summary of the goals for the transportation elements, and options for other infrastructure improvements being considered under the plan amendment/EA. Representatives from the NPS and state park were on hand to explain the options and solicit comments from the public. The information obtained during the review of the newsletter and at the public meetings was used to develop the alternatives presented in this document. The public will be invited to participate in the process again, during the 30-day review of this document.

Discussions with Key Stakeholders

During the public review of the newsletter, the NPS received several comments from former employees expressing concerns over proposals

for the amendment. In order to accurately address these group's comments and obtain the informed and qualified opinions these groups could provide, appointments were scheduled during the first day of the internal alternatives development meeting (January 28, 2009). The appointments were conducted with the following individuals:

- Mr. Robert Utley - former Assistant Director, Park Historic Preservation and member of the Coalition of National Park Service Retirees.
- Ms. Melody Webb - former Superintendent, Lyndon B. Johnson NHP
- Mr. Donald Schuch - former Superintendent, Lyndon B. Johnson State Park and Historic Site
- Ms. Leslie Hart – former Superintendent, Lyndon B. Johnson NHP

Informal responses from these agencies and others indicated that they would provide official comment during the review of this document.

During each appointment, the project team provided the guests with an overview of the goals of the study and the transportation options and answered questions related to the specific elements of each option. The project team then provided the guests with the opportunity to express their comments and concerns, ask questions about the plan amendment/EA, and respond to questions posed by the project team. The discussions and information obtained during these appointments were used to inform and refine the transportation analysis that informed this document.

Agency Scoping

Agencies contacted via letter during the planning process included the Texas State Historic Preservation Officer and the Advisory Council on Historic Preservation (Appendix B).

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ACRONYMS AND ABBREVIATIONS

ACHP – Advisory Council on Historic Preservation
CEQ – Council on Environmental Quality
DO – Director’s Order
DOI – Department of the Interior
EO – Executive Order
FONSI – Finding of No Significant Impact
FY – fiscal year
GMP/EIS – General Management Plan/Environmental Impact Statement
LBJ Ranch – Lyndon B. Johnson Ranch Unit
Lyndon B. Johnson NHP – Lyndon B. Johnson National Historical Park
National Register – National Register of Historic Places
NEPA – National Environmental Policy Act of 1969, as amended
NPS – National Park Service
plan amendment/EA – General Management Plan Amendment/Environmental Assessment
SHPO – State Historic Preservation Officer
the state park – Lyndon B. Johnson State Park and Historic Site

INTRODUCTION: PURPOSE AND NEED

Lyndon B. Johnson NHP is in the “Hill Country” of south-central Texas, a landscape of forested hills, deep canyons, and secluded valleys. The park is made up of two units: one in Johnson City and one at the LBJ Ranch near Stonewall. This plan amendment/EA focuses solely on the LBJ Ranch Unit (LBJ Ranch), which lies 14 miles west of Johnson City (Figure 1). The general area is drained by the Pedernales River, a tributary of the Colorado River. The LBJ Ranch Unit focuses primarily on Lyndon Johnson the rancher and president; it includes the Junction School, reconstructed birthplace, Texas White House, show barn, ranch lands and cattle, and other structures related to Johnson’s life in the Texas Hill Country (Figure 2).

Lyndon B. Johnson National Historical Park (Lyndon B. Johnson NHP) was originally established by Public Law 91-14 on December 2, 1969, as a national historic site. This designation was later changed to national historical park on December 28, 1980 (Appendix A). Throughout the park’s development, several documents and studies were produced to guide the planning and management of park resources. These include the 1977 Master Plan, 1979 Development Concept Plan, 1995 Statement for Management, the 1997 Strategic Plan, and the recent 1999 General Management Plan/Environmental Impact Statement (GMP/EIS) (NPS 1999a). Other resource-specific documents also have been produced to guide interpretation and resource preservation.

Prior to the 1999 GMP/EIS, the park had been operating under its 1977 Master Plan. Although that plan provided initial guidance and direction

for the park’s early years, the 1999 GMP/EIS was developed to provide long-term guidance at the park. However, since the 1999 GMP/EIS, conditions at the LBJ Ranch Unit of the park (LBJ Ranch) have changed; park visitation continues to decline, use of the tour buses increasingly strains the park’s budget, and subsequent analysis of the 1999 GMP/EIS caused current management to request a reevaluation of public access and private vehicle use on the LBJ Ranch. These changes require the National Park Service (NPS) to amend some of the management guidance established in the 1999 GMP/EIS with this General Management Plan Amendment/Environmental Assessment (plan amendment/EA). This plan amendment/EA describes the actions required to make the Texas White House and other park resources more accessible to the public and the preservation requirements necessary to ensure their continued existence. It is the intent of this planning effort to provide a comprehensive direction for the LBJ Ranch for the next 10 to 15 years.

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WHY WE DO GENERAL MANAGEMENT PLANNING

The National Parks and Recreation Act of 1978 and NPS *Management Policies 2006* (NPS 2006) require each unit of the national park system to develop a GMP. The purpose of a GMP is to ensure that the park unit (in this case the LBJ Ranch) has a clearly defined direction for resource preservation and visitor use. This enables the unit to achieve the NPS's mandate to preserve resources unimpaired for the enjoyment of future generations. In addition, general management planning makes the NPS more effective, collaborative, and accountable by:

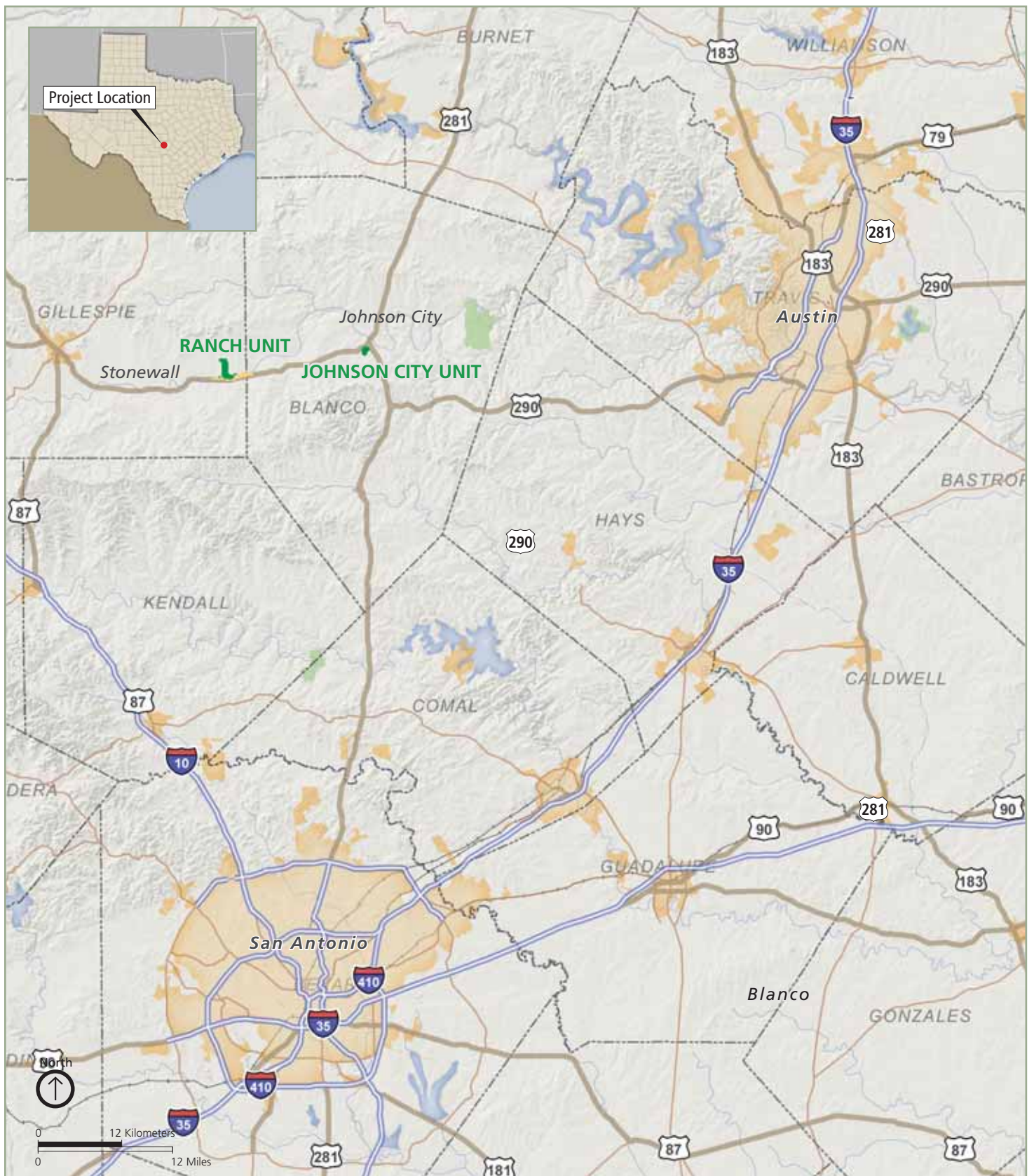
- Achieving a balance between continuity and adaptability in decision making – defining the desired conditions to be achieved and maintained at the LBJ Ranch will provide a touchstone that allows managers and staff to constantly adapt their actions to changing situations while staying focused on what is most important about the LBJ Ranch.
- Analyzing the LBJ Ranch in relation to its surrounding ecosystem, cultural setting, and community will help managers and staff understand how the LBJ Ranch can interrelate with neighbors and others in ways that are ecologically, socially, and economically sustainable. Decisions made within such a larger context are more likely to be successful over time.
- Giving everyone who has a stake in the decisions affecting the LBJ Ranch an opportunity to be involved in the planning process and to understand the decisions that are made. National parks are often the focus of intense public interest. Public involvement throughout the planning process provides focused opportunities for the managers and staff

to interact with the public and learn about public concerns, expectations, and values. Public involvement also provides opportunities for the managers and staff to share information about the park's purpose and significance, as well as opportunities and constraints for the management of its lands.

The ultimate outcome of general management planning for national parks is an agreement among the NPS, its partners, and the public about why each area is managed as part of the national park system, what the resource conditions and visitor experience should be there, and how those conditions can best be achieved and maintained over time.

The park's superintendent and staff are called upon daily to make decisions that affect how visitors view Lyndon B. Johnson NHP. Such things as how resources are interpreted, how landscape and historic structures are preserved, and how these resources are accessed by the public are critical to the future of the LBJ Ranch.

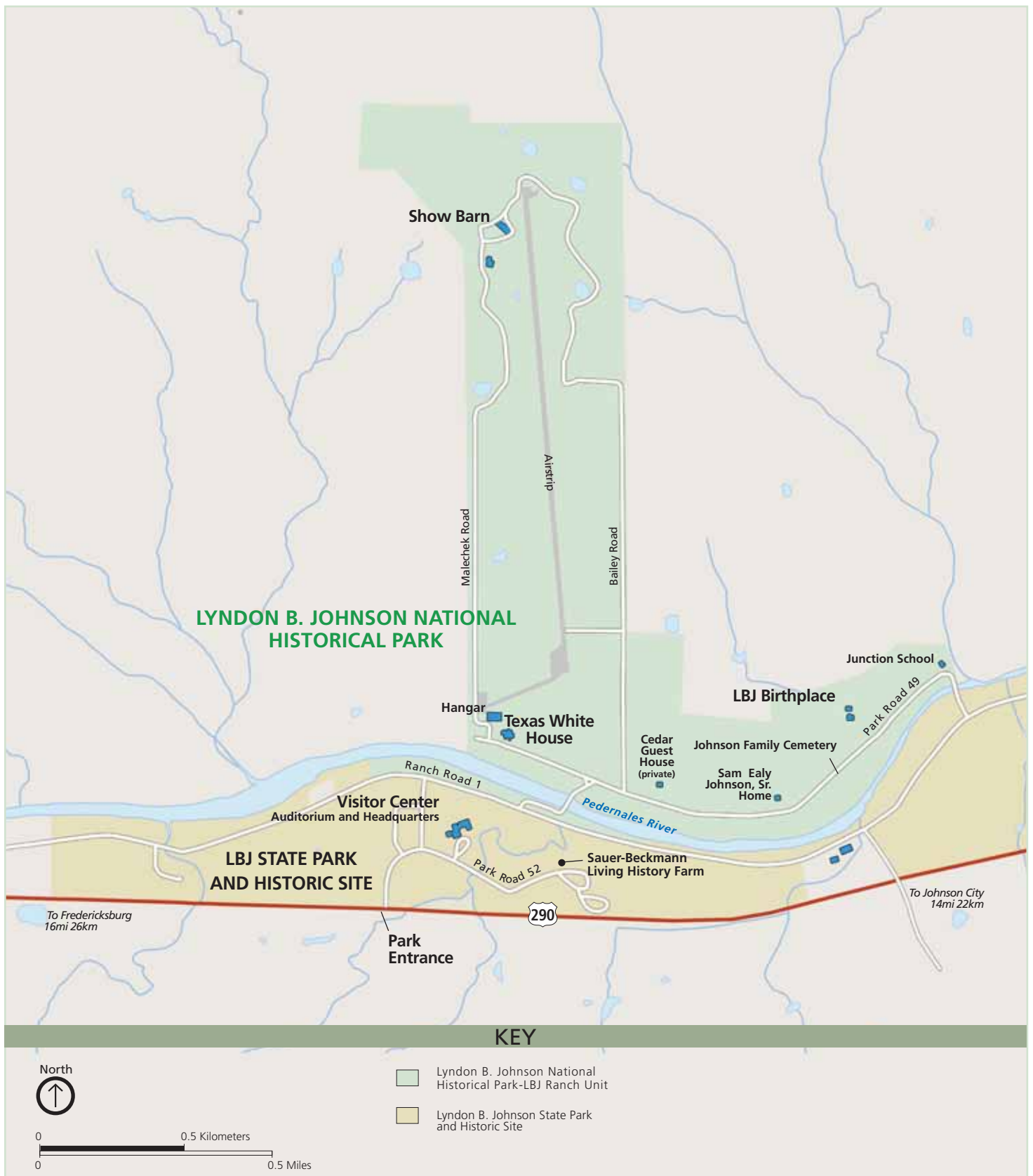
This plan amendment/EA for the LBJ Ranch builds upon the vision for preserving the ranch's resources that was laid out in the 1999 GMP/EIS. The amendment includes a plan for enhancing access and circulation and expanding the interpretive and educational opportunities presented to visitors at the ranch. The plan, following prescribed guidelines, does not provide specific or detailed answers to every question or issue facing the ranch, nor does it revisit all of the issues addressed in the 1999 GMP/EIS. However, the plan does offer a framework for proactive decision making that will guide park managers in making effective choices.



Lyndon B. Johnson NHP

Stonewall, Texas
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Figure 1
Project Location Map



Lyndon B. Johnson NHP

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Figure 2
LBJ Ranch Unit

The 1999 GMP/EIS is the most comprehensive planning document for the park. Plans to amend the GMP/EIS formally began in early 2008, when staff from Lyndon B. Johnson NHP and Lyndon B. Johnson State Park and Historic Site (the state park) met to discuss which issues in the 1999 GMP/EIS needed to be revisited. The group selected several issues which were then presented to the NPS Intermountain Region's Deputy Regional Director. The deputy director agreed that the issues selected by the park and state park should be analyzed in the plan amendment/EA. The remaining issues and management directives addressed in the 1999 GMP/EIS would remain. The plan amendment/EA will supply the guidance necessary to take the LBJ Ranch well into the next decade. Based on changes in resources and conditions at the ranch, many of the issues in the plan amendment/EA are being addressed for the first time. In other cases, changes at the ranch have resulted in the need for issues to be reexamined before the park can move into the next decade.

GMPs are intended to be long-term documents that establish and articulate a management philosophy and framework for decision making and problem solving in units of the national park system. Such plans usually provide guidance during a 15- to 20-year period. Actions directed by general management plans or by subsequent implementation plans are accomplished over time. Budget restrictions, the need for more data, or regulatory compliance, and competing national park system priorities prevent the immediate execution of many actions. Major or especially costly action could be completed 10 or more years into the future. Some actions may never be funded.

BACKGROUND AND HISTORY OF LYNDON B. JOHNSON NHP

Lyndon B. Johnson NHP is in the "Hill Country" of south-central Texas, a landscape of forested hills, deep canyons, and secluded

valleys. The park is made up of two units: one in Johnson City and one at the LBJ Ranch near Stonewall. This plan amendment/EA focuses solely on the LBJ Ranch Unit (LBJ Ranch). The LBJ Ranch Unit lies 14 miles west of Johnson City (Figure 1). The general area is drained by the Pedernales River, a tributary of the Colorado River. The LBJ Ranch Unit focuses primarily on Lyndon Johnson the rancher and president; it includes the Junction School, reconstructed birthplace, Texas White House, show barn, ranch lands and cattle, and other structures related to Johnson's life in the Texas Hill Country (Figure 2).

On December 2, 1969, Congress passed Public Law 91-134, authorizing the secretary of the interior "in order to preserve in public ownership historically significant properties associated with the life of Lyndon B. Johnson" to acquire "by donation or by purchase with donated funds" lands for the national historic site. Only the boyhood home and birthplace were specifically included in this legislation. Senate 2363-1980, Park Omnibus Bill, Title VI, Lyndon B. Johnson National Historical Park, December 28, 1980, amended P.L. 91-134 by changing "national historic site" to "national historical park." (Appendix A).

Closely associated and complimenting Lyndon B. Johnson NHP is the state park. The state park, also created by President Johnson, is operated by the Texas Parks and Wildlife Department. The mission of the state park is to honor the heritage of our nation's 36th President by interpreting the cultural lifeways of 19th and early 20th century Texas Hill Country settlers. In addition, the park protects the abundant cultural and natural resources found within the property. Sustaining the strong partnership with the NPS is fundamental to both parks' mission of providing an unparalleled opportunity for understanding Lyndon B. Johnson, the 36th president of the United States and protecting and sharing the land he cherished. The park provides exhibits,

orientation films, and an educational sales area in the state park visitor center. Other activities, including visiting the Sauer-Beckmann living history farm, viewing wild animals, swimming, and baseball, are also available. The NPS tour of the LBJ Ranch begins at the state park.

The national and state parks will continue to combine efforts providing an outstanding visitor experience of their many and varied facilities and opportunities. Together, the national and state parks provide an unparalleled opportunity for understanding Lyndon B. Johnson, the 36th president of the United States (NPS 1999a).

PURPOSE AND NEED

Purpose of the Amendment

The purpose of the proposed action is to improve the visitor experience by enhancing opportunities to access the resources at the park. Included within the LBJ ranch is President Johnson's birthplace, his grandparents' home, and his home that became the Texas White House during his presidency. These resources not only define his presidency, but also were part of the environment that influenced President Johnson's life. With the passing of Mrs. Johnson, the NPS moved forward with its mandate to share the resources at the LBJ Ranch with the public.

Need for the Amendment

One of the most notable changes at the LBJ Ranch since the 1999 GMP/EIS was the passing of Lady Bird Johnson in July 2007. Mrs. Johnson's passing caused the NPS to focus attention on aspects of the existing GMP that appeared to be less viable because of current conditions at the national park such as changes in visitation, high interest in the Texas White House, and the expense of the existing bus system. This amendment does not focus on

restoration efforts on the Texas White House but does modify the original projected uses of buildings near the Texas White House.

Prior to her passing, Mrs. Johnson regularly spent time at the ranch, specifically at the Texas White House. In order to protect her privacy and comply with the U.S. Secret Service security requirements, the NPS restricted visitor access through the national park to the NPS tour buses. Following the passing of Mrs. Johnson, the U.S. Secret Service vacated the LBJ Ranch, thereby removing the security restrictions on the ranch that had been in place, and the NPS received full access to the Texas White House.

The Texas White House is the center of the LBJ Ranch and the cornerstone of the presidential era at the ranch. The Johnson family used the house as a residence until July 2008. In February 2008, the NPS began restoration efforts on the Texas White House in cooperation with the Johnson family. At the time of the publication, four rooms of the Texas White House are open for tours. The PS anticipates the entire ground floor will be open for tours by summer 2011. Recent special events at the LBJ Ranch have indicated that there is a great deal of interest in exploring the Texas White House and the NPS can expect higher levels of visitation in the near future. Therefore, as the Texas White House is renovated and greater access is allowed to the public, there is a need to determine the best means for allowing visitors to reach the Texas White House and other interpretive locations in the ranch.

The 1999 GMP/EIS included preliminary plans for a new bus system once the Texas White House was open to the public. However, given the rising cost and time involved in maintaining a bus fleet and the visitor interest in allowing private vehicle access onto the ranch, the NPS has reexamined the plans in the 1999 GMP/EIS. Regular access to the Texas White House and the rest of the LBJ Ranch has been provided by

tour buses. The buses are in poor condition and require daily maintenance. The maintenance process is difficult due to the limited time and funding available to NPS staff, as well as the limited replacement parts that are available for the aging vehicles. If the tour buses are to be used in the future, the current buses would need to be replaced. During late 2008 and early 2009, the NPS ran a pilot program to allow private vehicle access onto the ranch. This was done in conjunction with the opening of the President's office in the Texas White House to the public. The pilot project allowed the NPS to examine a new means of providing access to the resources within the LBJ Ranch. As the pilot project draws to a close, there is a need to determine if and to what extent buses would be used to provide access through the ranch.

While the Johnson family inhabited the Texas White House, the NPS limited interpretation of the house to views of the ranch from the tour buses. Now that the house is available for interpretation, the NPS also hopes to enhance access and interpretation at several of the buildings surrounding the Texas White House. These buildings include the hangar and the Klein Shop. While the 1999 GMP/EIS laid out initial plans for these structures, subsequent planning efforts have identified more appropriate uses for the structures surrounding the Texas White House. Therefore, there is a need to examine the current and future functions of these structures.

The Sam E. Johnson House was President Johnson's grandparents' home during his childhood. In later years, the house was expanded and eventually turned into a guest house during the presidency. While the existing structure maintains its appearance from the presidential years, it does not provide an understanding of the home that President Johnson knew and visited frequently as a child and young adult. Furthermore, the current appearance of the house does not reflect the NPS's interpretation of its place in Johnson

family history. Therefore, this plan proposes further study of the Sam E. Johnson House to determine the most appropriate level of restoration and interpretation that might occur at the property to complement the rest of the story. A decision on the most appropriate action would be made following completion of that study.

PLANNING ISSUES AND CONCERNS

A planning issue is defined here as the major questions to be addressed by the plan amendment/EA for Lyndon B. Johnson NHP, LBJ Ranch Unit. Members of the general public, NPS staff, and representatives from other agencies and organizations identified a number of planning-related issues through scoping meetings, newsletter responses, and discussions with representatives of other agencies and organizations.

Until recently, access to many of the resources in the LBJ Ranch has been restricted due to security requirements and respect for the Johnson family's privacy. Therefore, these issues involved appropriate levels and methods of allowing visitor access to the Texas White House and other locations while maintaining desired resource conditions, managing the ranch landscape and associated structures, and the level and location of visitor and operational facilities. The alternatives of this plan include strategies for addressing the issues within the context of the park's purpose and significance and NPS laws and policies.

Providing Appropriate Access to the Texas White House and other Resources. Lyndon B. Johnson NHP, along with the state park, is the premier location to experience the environment that shaped the character, public policy, and continuing legacy of the 36th President of the United States (NPS 2002). Until recently, access to many of the ranch's resources was limited to views from the NPS tours. Now that the NPS

has been given unrestricted access to the majority of the LBJ Ranch, it must determine the best means for allowing visitors to explore these resources. Since the creation of Lyndon B. Johnson NHP, the tour bus system has been the only means by which visitors can move through the LBJ Ranch. There were and continue to be many reasons for the use of the buses, including resource protection, security, and the privacy of the Johnson family. Now that the security requirements have been removed, there is the opportunity to provide other means of moving through the ranch. Furthermore, the existing buses are out of date and require costly, daily maintenance. Access should be designed to allow visitors to experience as much of the ranch as possible without adversely impacting park resources or other visitors' opportunities. Any proposals made in this plan should seek to provide appropriate levels of access to resources in the ranch. Access into and through the Texas White House and other structures in the ranch is outside the scope of this study, but will be addressed in future plans.

Reassigning Functions of Structures

Surrounding the Texas White House. The enhanced access in and around the Texas White House has provided the NPS with opportunities to expand the interpretive and educational opportunities that are provided at the house and the surrounding structures. Many of these structures currently house activities demonstrating adaptive use of historic structures to accommodate public tours. Any proposals made in this plan should attempt to address the use and functions of structures surrounding the Texas White House.

Continuing to Protect the Natural and Historic Resources within the LBJ Ranch.

President Johnson gave the LBJ Ranch to the American people as a means of preserving the history captured at the site. However, the ranch was also meant to preserve the atmosphere of an active ranch. This atmosphere includes interaction with

cattle and the beauty of the Texas Hill Country. These resources are all key features of the NPS property and the state park. Any proposals made in this plan should seek to avoid adversely impacting these resources or preventing visitors from experiencing the landscape as President Johnson knew it.

Maintaining the Partnership between Lyndon B. Johnson NHP and the State Park.

By creating a national and state park at the LBJ Ranch, President Johnson established a partnership between the NPS and the state. Agreements between the NPS, TPWD, and the Johnson family have continued to be an important part of the experience at the two parks. Any proposals made in this plan are intended to maintain a partnership that identifies new opportunities for the two parks to work together.

CONSULTATION AND COORDINATION

Internal Scoping

Internal scoping for the plan amendment/EA began in early 2008. At that time, representatives from the national historical park and state park met to review the 1999 GMP/EIS and select issues that needed to be revisited in the plan amendment/EA. The issues that the group selected were taken to NPS Intermountain Region Deputy Director for approval. Once the approval process was complete, representatives from the NPS and the state park along with their consultants began a thorough analysis of the different transportation concepts that were to be considered for the plan amendment/EA. Once the preliminary analysis was complete, staff from the NPS and the state park met in January 2009 to review the analysis, rate how each concept met the goals and objectives of the plan amendment/EA, and select options that would be developed into complete alternatives for the plan

amendment/EA. At this time, the NPS also selected its preferred alternative.

Public Scoping

Public scoping for the plan amendment/EA began in November 2008 when the NPS released a newsletter introducing the general concepts that were to be included in the document. Following the release of the newsletter, the NPS solicited comments from the public on the proposed concepts. Following the public review of the newsletter, the NPS hosted two public open house sessions to solicit public input on the transportation options and infrastructure improvements being considered for the plan amendment/EA. The first open house was held at the state park's dining hall from 4:00-6:00 PM on January 27, 2009, and the second open house was held on January 29, 2009 in the national historical park's Johnson City visitor center from 7:00-9:00 PM. Individuals who attended the meetings were presented with large-scale illustrations of the eight transportation options, a summary of the goals for the transportation elements, and options for other infrastructure improvements being considered under the plan amendment/EA. Representatives from the NPS and state park were on hand to explain the options and solicit comments from the public. The information obtained during the review of the newsletter and at the public meetings was used to develop the alternatives presented in this document. The public will be invited to participate in the process again, during the 30-day review of this document.

Discussions with Key Stakeholders

During the public review of the newsletter, the NPS received several comments from former employees expressing concerns over proposals for the amendment. In order to accurately address these group's comments and obtain the informed and qualified opinions these groups could provide, appointments were scheduled

during the first day of the internal alternatives development meeting (January 28, 2009). The appointments were conducted with the following individuals:

- Mr. Robert Utley - former Assistant Director, Park Historic Preservation and member of the Coalition of National Park Service Retirees.
- Ms. Melody Webb - former Superintendent, Lyndon B. Johnson NHP
- Mr. Donald Schuch - former Superintendent, Lyndon B. Johnson State Park and Historic Site
- Ms. Leslie Hart – former Superintendent, Lyndon B. Johnson NHP

During each appointment, the project team provided the guests with an overview of the goals of the study and the transportation options and answered questions related to the specific elements of each option. The project team then provided the guests with the opportunity to express their comments and concerns, ask questions about the plan amendment/EA, and respond to questions posed by the project team. The discussions and information obtained during these appointments were used to inform and refine the transportation analysis that informed this document.

Agency Scoping

Agencies contacted via letter during the planning process included the Texas State Historic Preservation Officer and the Advisory Council on Historic Preservation (Appendix B). Informal responses from these agencies and others indicated that they would provide official comment during the review of this document.

GUIDANCE FOR THE PLANNING EFFORT

Throughout the park's development, several documents and studies were produced to guide the planning and management of park resources. These include the 1977 Master Plan, the 1979 Development Concept Plan, the 1995 Statement for Management, the 1997 Strategic Plan, and the recent 1999 GMP/EIS. The following park purpose, significance, and primary interpretive themes are taken directly from the 1999 GMP/EIS. They are restated here, as they support and provide guidance for the proposed plan amendment/EA.

Purpose

The purpose for a unit of the national park system is the reason for which it was set aside and preserved by Congress. The purpose statement, which is based on interpretation of the unit's authorizing legislation, supplies the fundamental criteria against which the appropriateness of all planning recommendations, operational decisions, and actions are evaluated. The purpose of Lyndon B. Johnson NHP is, "to preserve in public ownership historically significant properties associated with the life of Lyndon B. Johnson."

The park, through public input and analysis, has further defined the purpose as follows:

- To research, preserve, and interpret significant resources and influences associated with the life and heritage of Lyndon B. Johnson.
- To provide a variety of opportunities to experience the local and regional context that shaped the last frontier president, informed his policies and programs, and defined his legacy (NPS 1999a).

Significance

Unlike park purpose statements, which are based on the legislative mandate, park significance statements are based on the resources.

Significance statements capture what attributes make the ranch resources and values important enough to warrant national park designation. They also help define the ranch's interpretive focus. With the passage of time a park may gain significance for something that was never envisioned in the enabling legislation.

This may reflect new ways of looking at existing resources or may result from the identification of new resources. Ultimately, recognition of the significant resources further ensures their values and protection when implementing park management actions.

With public input, the NPS has defined its significance as encompassing three broad areas:

1. *The resources of Lyndon B. Johnson NHP document and communicate the life and heritage of the 36th president of the United States. Here, as in few other historical parks, one can see the lands and structures that represent the origins, ancestry, full life span, and continuing legacy of a major historical figure.*

The Lyndon B. Johnson National Historical Park and Johnson City are interwoven historically and economically. Both contain historic structures in their original locations that are in the National Register of Historic Places (National Register) and provide insight into President Johnson's early influences as well as a window into the frontier life of the Texas Hill Country.

The Johnson settlement is a comprehensive historic scene from

which the last of the frontier presidents gained identity, strength, and values.

President Johnson was born, lived, died, and was buried on the LBJ Ranch. The closeness of the reconstructed birthplace, his grandparents' home, and the family cemetery where the president is buried reflects a deep attachment for place and heritage.

The Junction School is where Lyndon Johnson began his formal education and as president signed the Elementary and Secondary Education Act of 1965.

The boyhood home is where Lyndon Johnson spent his formative years and launched his political career.

2. *President Johnson had a deep and abiding connection with the Hill Country of central Texas and with the people of Texas. He used his experience with the people, land, and resources to advocate his local, national, and international programs. It was this connection and his commitment to a government that works for people that sustained him throughout his life.*

Immediately following the assassination of President John F. Kennedy, the Johnson family home was transformed into the Texas White House. This historic ranch house served as a busy office and residential command post, as well as a quiet refuge for the Johnson family during both the good and the tumultuous times.

The operation of the LBJ Ranch is critical to understanding the image of a rancher/president. President Johnson's desire to demonstrate ranching culture and conservation practices prompted

him to stipulate that the property remain a working ranch and not a sterile relic of the past.

Johnson City, Stonewall, and surrounding areas reflect Lyndon Johnson's political legacy and its continuing economic impact on the region.

3. *President Johnson was directly involved in the restoration and preservation of the sites within the park. The Texas White House remained Mrs. Johnson's residence until July 2007. The Johnson family continues to be involved in the park's activities.*

The partnership of the Lyndon B. Johnson National and State Historical Parks began as a vision of President Johnson. He was the driving force behind the planning, acquisition, and initial development of the two parks. This cooperative effort continues today.

Mrs. Johnson's legacy of conservation, preservation, and beautification continues to focus national attention on the legacy of the Johnson administration (NPS 1999a).

Primary Interpretive Themes

Interpretation is a process of education designed to stimulate curiosity and convey ideas and information to people. It is part of the visitor experience. The NPS uses interpretive themes as a framework from which interpretive programming can be developed. Through the interpretive themes listed below, Lyndon B. Johnson NHP provides the visitor with an understanding of the life and heritage of the 36th president of the United States. Visitors have a variety of opportunities to experience the local and regional context that shaped the last

“frontier President,” informed his policies and programs, and defined his legacy. Primary interpretive themes were developed as part of the 1999 GMP/EIS and continue to guide the park today.

- Lyndon Johnson’s life reflects his deep commitment to the enrichment of all Americans through governmental support.
- The environment and communities of the Texas Hill Country shaped the character of Lyndon Johnson.
- Lyndon Johnson’s family provided unique influences that helped prepare him to become a U.S. president.
- Mrs. Johnson was an advocate and significant influence during the Johnson administration and continued to have a notable effect on the American public long after leaving the White House and years after the president’s death.
- The Vietnam War overshadowed President Johnson’s other foreign policy initiatives and much of his domestic agenda.
- The office of the presidency, the value of public service, and participation in the processes of government are fundamental messages of presidential parks.

MANDATES, LAWS, AND OTHER PLANNING EFFORTS

Special Mandates and Administrative Commitments

Special mandates and administrative commitments refer to park-specific requirements or those that affect several park units. These formal agreements often are established concurrently with the creation of a unit of the

national park system or as a result of congressional action. Lyndon B. Johnson NHP is committed to working in partnership with the state park. The ability of the state and national parks to work together is not affected by this amendment. Any other mandate or commitment entered into by the park would be unaffected by the actions proposed in this plan amendment/EA and would remain as described in the 1999 GMP/EIS.

Servicewide Laws and Policies

In this section, actions are identified that must be taken at Lyndon B. Johnson NHP to comply with federal laws and with the policies of the NPS. Many management directives are specified in laws and policies guiding the NPS and are therefore not subject to alternative approaches. For example, there are laws and policies about managing environmental quality (such as the Clean Air Act, the Endangered Species Act, and Executive Order (EO) 11990 “Protection of Wetlands”); laws governing the preservation of cultural resources (such as the National Historic Preservation Act and the Native American Graves Protection and Repatriation Act); and laws about providing public services (such as the Americans with Disabilities Act) to name a few.

Therefore, a GMP is not needed to decide if it is appropriate to protect endangered species, control exotic species, protect archeological sites, conserve artifacts, or provide access for visitors with disabilities. Laws and policies already exist to regulate those and many other issues.

Although attaining some of the conditions set forth in the laws and policies may have been temporarily deferred in the park because of funding or staffing limitations, the NPS will continue to strive to achieve these requirements with or without the plan amendment/EA.

Some laws and EOs are applicable solely or primarily to units of the national park system; for example the 1916 Organic Act which created the NPS, the General Authorities Act of 1970, the act of March 27, 1978 relating to the management of the national park system, and the National Parks Omnibus Management Act of 1998. Other laws and EOs have much broader application, such as the Endangered Species Act, the National Historic Preservation Act, and EO 11990.

The NPS Organic Act (16 USC § 1) provides the fundamental management direction for all units of the national park system, as follows:

“[P]romote and regulate the use of Federal areas known as national parks, monuments, and reservations... by such means and measures as conform to fundamental purpose of said parks, monuments and reservations, which purpose is to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.”

The National Park System General Authorities Act (16 USC § 1A-1 et seq.) affirms that while all national park system units remain “distinct in character,” they are “united through their interrelated purposes and resources into one national park system as cumulative expressions of a single national heritage.” The act makes it clear that the NPS Organic Act and other protective mandates apply equally to all units of the system. Furthermore, amendments state that NPS management of park units should not “derogate[e] ...the purposes and values for which these various areas have been established.”

The NPS also has established policies for all units under its stewardship. These are identified and explained in NPS *Management Policies 2006* (NPS 2006). The alternatives considered in this plan incorporate and comply with the provisions of these mandates and policies.

Relationships of Other Planning Efforts to this GMP

The LBJ Ranch is located in Gillespie County, Texas. Several plans prepared by or under preparation by the county, the state, or other public entities have influenced or will be influenced by this plan, as will some other NPS plans. The relationship of many of these plans to the park was considered in the 1999 GMP/EIS (NPS 1999a). This section includes brief descriptions of the plans that would be further affected by the plan amendment/EA.

The *Lyndon B. Johnson National Historical Park Final General Management Plan/Environmental Impact Statement* (NPS 1999a) laid out the mission, goals, and management directives for the park over the next 15 to 20 years. The GMP/EIS included plans for interpretation and educational programs at different locations within the LBJ Ranch, new interpretive stops along the tour route, maintaining ranchlands throughout the park, enhanced interpretation of the Texas White House, improvements to the park maintenance operation, and the potential to open more of the park to the public once security requirements were removed. As discussed earlier in this chapter, since the 1999 GMP/EIS conditions at the park have changed and some of the actions that were prescribed in the original plan need to be revisited. The general management directives, as well as the issues not amended in this plan amendment/EA, would continue to be implemented by the NPS as described in the 1999 GMP/EIS.

The park's *Long-range Interpretive Plan: Planning for the Centennial of Johnson's Birth* (NPS 2002) was developed to establish the interpretive goals for the park. The goals enhanced interpretation and understanding of many of the structures in the LBJ Ranch. The plan did not consider future interpretation after the Texas White House was turned over to the NPS. It did, however, recognize that changes would need to be made in the park's existing interpretive efforts. The proposals made in this document would allow the NPS to further its interpretive goals and advance interpretation around the Texas White House.

The *Lyndon B. Johnson National Historic Park Draft Transportation Review Report* (NPS 2003) was completed after the NPS conducted an onsite review of future transportation options at the LBJ Ranch. The memorandum outlined the existing NPS transportation system and options for future transportation. The analysis of future transportation options included a limited review of the needs of other options and the associated environmental impacts. The options and analysis presented in the 2003 memorandum have been expanded and fully analyzed in this document.

The *Lyndon B. Johnson State Park and Historic Site Interpretive Plan* is being developed to assist and guide future interpretation of the site. The document includes the site's significance and purpose statements, as well as identifying major interpretative themes. It also includes the importance of the relationship with the national historical park to the interpretative program. The interpretive plan outlines goals, objectives, and strategies for interpretive programs, products and media over the next three years. The Interpretive Plan is a document which will be reviewed each year by the site staff for progress and necessary changes. At the end of three years, a new planning cycle will begin to update and write a new plan for the next three to five years. The new plan is

currently being written and is expected to be completed by the end of the year. The plans that are being included in the interpretive plan have been reviewed to ensure that the proposals made in this document are compatible with them.

Appropriate Use of the Parks

In *Management Policies 2006* it states, "The National Park Service embraces appropriate use of the parks because these uses are key to the enjoyment of the parks and appreciation and inspiration derived from the resources. An appropriate use is a use that is suitable, proper, or fitting for a particular park, or to a particular location within a park" (NPS 2006).

The park superintendent continues to acknowledge the implied wishes of President and Mrs. Johnson that the ranch remains an active and vibrant place, "not a sterile relic of the past" balanced with the requirement not to impair the park's cultural and natural resources and values.

The NPS will always consider allowing activities that are appropriate to the parks. In considering alternatives for this plan amendment/EA, the team of state, national and local representatives, and professional planners were mindful that access to and use of the ranch should foster an understanding of and appreciation for park resources and values. The park superintendent believes enjoyment and learning is promoted through a direct association and interaction with the park's historic structures, landscapes, and operations.

Appropriate uses of the park will contribute to the personal growth and well-being of visitors by taking advantage of the inherent educational value of parks. Better understanding and use of the park also will promote support from surrounding communities as they recognize the important contributions the park makes to the area.

Given these considerations, the park finds the proposed actions in this plan amendment/EA to be appropriate uses.

IMPACT TOPICS

Impact Topics Retained for Analysis

Impact topics are resources of concern within the study area that could be affected, either beneficially or adversely, by the range of alternatives presented in this plan amendment/EA. They were identified based on the issues raised during scoping; site conditions; federal laws, regulations, Executive Orders, NPS *Management Policies 2006* (NPS 2006), and Director's Orders; and staff knowledge of the ranch's resources.

In this section and the following section on Impact Topics Dismissed from Further Analysis, the NPS examines all potential impacts by considering the direct, indirect, and cumulative impacts of the proposed action on the environment, along with connected and cumulative actions. Impacts are described in terms of context and duration. The context or extent of the impact is described as localized or widespread. The duration of impacts is described as short-term, ranging from days to three years in duration, or long-term, extending up to 20 years or longer. The intensity and type of impact is described as negligible, minor, moderate, or major, and as beneficial or adverse. The NPS equates "major" impacts as "significant" impacts. The identification of "major" impacts would trigger the need for an EIS. Where the intensity of an impact could be described quantitatively, the numerical data is presented; however, most impact analyses are qualitative and use best professional judgment in making the assessment.

The NPS defines "measurable" impacts as moderate or greater effects. It equates "no

measurable effects" as minor or less impacts. "No measurable effect" is used by the NPS in determining if a categorical exclusion applies or if impact topics may be dismissed from further evaluation in an EA or EIS. The use of "no measurable effects" in this EA pertains to whether the NPS dismisses an impact topic from further detailed evaluation in the EA. The reason the NPS uses "no measurable effects" to determine whether impact topics are dismissed from further evaluation is to concentrate on the issues that are truly significant to the action in question, rather than amassing needless detail in accordance with CEQ regulations at 1500.1(b).

Impact topics identified and analyzed in this plan amendment/EA are listed below along with a brief rationale for the selection of each impact topic. They include: cultural landscapes, historic structures, floodplains, visual resources, socioeconomic resources and adjacent lands, site access and circulation, visitor use and experience, operations and infrastructure, and public safety. Each impact topic is further discussed in detail in "Chapter 3: Affected Environment" of this document.

Cultural Landscapes

A cultural landscape is a geographic area, including both cultural and natural resources and the wildlife or domestic animals therein, associated with a historic event, activity, or person exhibiting other cultural or aesthetic values. The ranch's cultural landscape has been assessed in several NPS documents, including the 1999 GMP/EIS. The proposed actions presented in this plan amendment/EA could impact the cultural landscape of the LBJ Ranch. Therefore, the impact topic of cultural landscapes is addressed in detail.

Historic Structures

A historic structure is defined by the NPS as "a constructed work, usually immovable by nature or design, consciously created to serve some

human act” (NPS 1998). In order for a structure or building to be listed on or be eligible for listing on the National Register, it must possess historic integrity of those features necessary to convey its significance, particularly with respect to location, setting, design, feeling, association, workmanship, and materials. The National Register Bulletin #15: *How to Apply the National Register Criteria for Evaluation* (NPS 1990) provides a comprehensive discussion of these characteristics. The ranch’s historic structures have been assessed in several NPS documents, including the 1999 GMP/EIS. These studies have identified 85 resources that contribute to Lyndon B. Johnson NHP being listed on the National Register. The differing options for access and interpretation suggested in the proposed alternatives could impact the historic structures of the ranch. Therefore, the impact topic of historic structures is addressed in detail.

Visual Resources

The Organic Act states that NPS units are charged with conserving park scenery, along with all the natural and cultural resources that contribute to important views. In the evaluation of visual resources, both the visual character of the study area and the quality of the viewshed within the study area were considered. A viewshed comprises the limits of the visual environment associated with the proposed action including the viewsheds within, into, and out of the study area. The LBJ Ranch includes a mixture of historic viewsheds that are important to the NPS interpretation of the LBJ Ranch. The differing proposed actions could introduce changes to these viewsheds. Therefore, the impact topic of visual resources is addressed in detail.

Site Access and Circulation

Safe and efficient access and circulation of all visitors is important to an enjoyable visitor experience. The proposed action would

introduce new access and circulation patterns. Therefore, the impact topic of site access and circulation is addressed in detail.

Visitor Use and Experience

Enjoyment of park resources and values by the people of the United States is part of the fundamental purpose of all parks (NPS 2006). The NPS strives to provide opportunities for forms of enjoyment that are uniquely suited and appropriate to the natural and cultural resources found in parks. The proposed actions are meant to enhance the visitor experience, which encompasses interpretation, understanding, enjoyment, and safety within the study area. Because the proposed action would result in changes to the visitor experience, the impact topic of visitor use and experience is addressed in detail.

Operations and Infrastructure

The proposed action would result in changes to park operations, as well as a number of the structures located within the LBJ Ranch. Therefore, the impact topic of operations and infrastructure is addressed in detail.

Public Safety

NPS Management Policies 2006 (NPS 2006) instructs NPS staff to consider public safety in all proposed actions. Safety concerns related to the proposed actions are related to the visitor use and experience, site access and circulation, and operations and infrastructure and are discussed under those sections of this document.

Impact Topics Dismissed from Further Analysis

In this section of the plan amendment/EA, the NPS provides a limited evaluation and explanation as to why some impact topics are not evaluated in more detail. Impact topics are

dismissed from further evaluation in this plan amendment/EA if:

- they do not exist in the analysis area, or
- they would not be impacted by the proposal, or
- the likelihood of impacts are not reasonably expected, or
- through the application of mitigation measures, there would be minor or less impacts (i.e. no measurable impacts) from the proposal, and there is little controversy on the subject or reasons to otherwise include the topic.

Due to there being no impact or no measurable impacts, there would either be no contribution towards cumulative impacts or the contribution would be low. For each issue or topic presented below, if the resource is found in the analysis area or the issue is applicable to the proposal, then a limited analysis of direct and indirect, and cumulative impacts is presented. There is no impairment analysis included in the limited evaluations for the dismissed topics because the NPS's threshold for considering whether there could be an impairment is based on "major" impacts.

For these reasons, the following impact topics were initially considered but dismissed from further analysis: soils and topography, prime farmland, geologic resources, topography, vegetation, wildlife and wildlife habitat, special status species, water resources, wetlands, air quality, soundscapes, lightscapes, energy requirements and conservation potential, archeological resources, ethnographic resources, museum objects, Indian trust resources and sacred sites, and environmental justice. A brief rationale for the dismissal of these impact topics is provided below.

Soils and Topography

NPS policy is to protect the natural abundance and diversity of all naturally occurring communities. *NPS Management Policies 2006* (NPS 2006), and other NPS and the park policies provide general direction for the protection of soils. During construction, there would be a net loss of pervious surface, as existing surfaces were removed and new surfaces were paved. These short-term impacts would occur over previously disturbed soils that have limited amounts of new vegetation. The potential for soil erosion would be minimal because much of the affected park lands are developed or covered with impermeable surfaces, and appropriate soil erosion control measures would be implemented for any excavated or exposed soils. Once construction was complete, there would be no exposed soils or changes in natural soil conditions. Any short- or long-term adverse impacts to soils associated with excavation, grading, or resurfacing with concrete or asphalt would be negligible. Therefore, the impact topic of soils and topography is dismissed from further analysis.

Prime and Unique Farmlands

Prime and unique farmlands are designations made by the U.S. Department of Agriculture to identify important farmlands in the United States. They are important because they contribute to the nation's short- and long-range needs for food and fiber. In general, prime farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, fiber, forage, oilseed, and other agricultural crops with minimum inputs of fuel, fertilizer, pesticides, and labor, and without intolerable soil erosion. (7U.S.C. 4201(c)(1)(A)). Unique farmlands are land other than prime farmland that is used for the production of specific high-value food and fiber crops...such as, citrus, tree nuts, olives, cranberries, fruits, and vegetables. (7 U.S.C. 4201(c)(1)(B)).

According to the Natural Resource Conservation Service, prime farmland soils exist within the LBJ Ranch Unit (NRCS 2008). Based on the minimal proposed ground-disturbing actions, and because the proposed actions would occur in previously disturbed areas, no prime and unique farmland soils would be irreversibly converted to other uses. Therefore, the impact topic of prime farmland is dismissed from further analysis.

Geologic Resources

According to NPS *Management Policies 2006* (NPS 2006), the NPS will (1) assess the impacts of natural processes and human-related events on geologic resources; (2) maintain and restore the integrity of existing geologic resources; (3) integrate geologic resource management into Service operations and planning; and (4) interpret geologic resources for park visitors. Examples of important geologic resources in parks include rocks and minerals; geysers and hot springs in geothermal systems; cave and karst systems; canyons and arches in erosional landscapes; sand dunes, moraines, and terraces in depositional landscapes; and dramatic or unusual rock outcrops and formations. Lyndon B. Johnson NHP neither protects and preserves nor interprets important geologic resources. Therefore, the impact topic of geologic resources was dismissed from further analysis.

Vegetation

NPS policy is to protect the natural abundance and diversity of all naturally occurring communities. NPS *Management Policies 2006* (NPS 2006) and other NPS and park policies provide general direction for the protection of vegetation. Most of the vegetation found at the LBJ Ranch consists of maintained lawns and rangeland. The proposed actions would be confined to previously developed areas that are covered by maintained lawns. These areas are part of the cultural landscape and are addressed under that impact topic. Therefore, the impact

topic of vegetation is dismissed from further analysis.

Wildlife and Wildlife Habitat

NPS policy is to protect the natural abundance and diversity of all naturally occurring communities. NPS *Management Policies 2006* (NPS 2006), NPS DO 77, Natural Resources Management, and other NPS and the park policies provide general direction for the protection of wildlife and wildlife habitat. The study area is located in a developing region. The wildlife species found in the study area are common to this region. The adjacent nature preserves and surrounding region provides ample habitat for wildlife species that may be temporarily displaced during the implementation of the proposed actions (NPS 1999a). These areas, and the rest of the LBJ Ranch Unit, also would provide habitat for any wildlife permanently displaced by the proposed actions. Once the proposed actions were fully implemented, there would be negligible, long-term, adverse impacts to wildlife or wildlife habitat. Therefore, the impact topic of wildlife and wildlife habitat is dismissed from further analysis.

Special Status Species

In addition to NPS policies and management guidelines, the Endangered Species Act of 1973, as amended, provides for the protection of rare, threatened, and endangered species (floral and faunal). In a letter dated January 26, 1998, the U.S. Fish and Wildlife Service noted the presence of several federally listed or proposed threatened or endangered species under their jurisdiction within the Gillespie County. However, none of these species are known to exist within the LBJ Ranch Unit (NPS 1999a). As a result, the impact topic of special status species is dismissed from further analysis.

Water Resources

NPS *Management Policies 2006* (NPS 2006), NPS DO 77, Natural Resources Management, along with the Clean Water Act and other federal, state, and local regulations provide general direction for the protection of surface water. Along with impoundments included within the ranch boundaries, the nearest water resource is the Pedernales River which divides Lyndon B. Johnson NHP from the state park. Water quality in the vicinity of the ranch has been impacted by increased runoff from urban development and agricultural practices (NPS 1999a). The proposed action could introduce new development and vehicle patterns across the LBJ Ranch. The use of appropriate erosion and sediment controls would minimize adverse impacts of construction-related erosion and soil loss, resulting in negligible, short-term, adverse impacts to water resources. Following construction, changes in vehicle patterns would have no impact on surrounding water resources, as the vegetative buffers that protect these waterways would remain undisturbed. Therefore, the impact topic of water resources is dismissed from further analysis.

Floodplains

Executive Order 11988, “Floodplain Management,” and NPS DO 77-2, Floodplain Management require an examination of impacts on floodplains and potential risk involved in placing facilities within floodplains. This examination often includes a Statement of Findings to document potential impacts to floodplains. A Statement of Findings, however, is not required for historic sites. At the LBJ Ranch Unit, multiple historic structures already lie within both the 100- and 500-year floodplains, including the Junction School, LBJ birthplace, and the Sam E. Johnson House. In addition, the Texas White House is located within the 500-year floodplain (NPS 1999a). Because no physical changes would be made to these structures and the unit is a historic site, the

impact topic of floodplains is dismissed from further analysis.

Wetlands

Executive Order 11990, “Protection of Wetlands,” and NPS DO 77-1, Wetland Protection define the NPS goal to maintain and preserve wetland areas. There are no wetlands located in or adjacent to the study area (NPS 1999a). Therefore, the impact topic of wetlands is dismissed from further analysis.

Air Quality

The Clean Air Act and NPS *Management Policies 2006* (NPS 2006) require consideration of air quality impacts from NPS projects. Construction activities related to the proposed actions would have minimal short-term impacts on air quality. Hauling of material, operating of equipment, and other construction activities could result in temporary increases in vehicle exhaust and emissions. However, hydrocarbons, nitrates, and sulfur dioxide emissions, as well as any airborne particulates created by fugitive dust plumes would be rapidly dissipated through the use of appropriate mitigation, such as water applications. Changes in vehicle emissions would not result in any notable changes within the LBJ Ranch. The LBJ Ranch is located adjacent to a major state road and is already impacted from vehicular exhaust. Furthermore, at a minimum, all alternatives consider the replacement of the existing NPS bus fleet. Upgrading these vehicles, or allowing other modern vehicles with improved emission levels to enter the LBJ Ranch, would reduce pollutants in the area. Impact to air quality would be minor, short-term, and adverse and negligible, long-term, and beneficial. Therefore, the impact topic of air quality is dismissed from further analysis.

Soundscapes

As described in NPS *Management Policies 2006* (NPS 2006) and NPS DO #47: *Sound*

Preservation and Noise Management, preservation of natural soundscapes associated with national park units is an important part of the NPS mission. Natural soundscapes exist in the absence of human-caused sound. The natural, ambient soundscape is the aggregate of all natural sounds that occur in the ranch beyond the range of sounds that humans can perceive. This sound can be transmitted through air, water, or solid materials. The frequencies, magnitudes, and durations of human-caused sounds considered acceptable varies among NPS units, as well as potentially throughout each park unit, being generally greater in developed areas and less in undeveloped areas. At the LBJ Ranch, natural soundscapes are regularly interrupted by vehicles on the surrounding roads. On an average day, noise from the local roads is audible as far as the Texas White House. Any construction associated with implementation of the proposed action, e.g. the hauling of material or the operation of construction equipment, could result in additional, dissonant sounds, but would only result in minor, short-term, adverse impacts. Changes in vehicular patterns within the LBJ Ranch would result in long-term changes to the soundscape but would not exceed the existing vehicular noise created by the NPS buses and local roads. Due to the negligible, long-term, adverse impact, the impact topic of soundscapes is dismissed from further analysis.

Lightscaapes

In accordance with NPS *Management Policies 2006* (NPS 2006), the NPS strives to preserve natural, ambient lightscaapes, which are natural resources and values that exist in the absence of human-caused light. The main objective of the ranch is to maintain and interpret the cultural landscape as it existed during the lifetime of Lyndon B. Johnson, and as such, artificial lighting was present and would continue to be present. The proposed action would not result in any new lighting being introduced to the ranch.

Therefore, the impact topic of lightscaapes is dismissed from further analysis.

Energy Requirements and Conservation Potential

The CEQ guidelines for implementing NEPA require an examination of energy requirements and conservation potential as a possible impact topic in environmental documents. The park strives to incorporate the principles of sustainable design and development into all facilities and operations. The objectives of sustainability are to design structures to minimize adverse impacts on natural and cultural values; to reflect their environmental setting; to maintain and encourage biodiversity; to construct and retrofit facilities using energy efficient materials and building techniques; to operate and maintain facilities to promote their sustainability; and to illustrate and promote conservation principles and practices through sustainable design and ecologically sensitive use. Essentially, sustainability is living within the environment with the least impact on the environment. The action alternatives presented in this document subscribe to and support the practice of sustainable planning and design. The park would encourage suppliers and contractors to follow sustainable practices and address sustainable park and non-park practices. Consequently, any adverse impacts relating to energy use, availability, or conservation would be negligible. Furthermore, the analysis of different vehicle options assumed diesel vehicles for all alternatives. While the NPS may elect to use a hybrid vehicle that would be more energy efficient, it would not make one alternative stand out from another. By allowing private vehicles to drive through the ranch, the NPS could reduce the use of fuel for its own buses. In addition, private vehicles would only drive to the locations within the ranch where visitors were interested, resulting in more efficient use of fuels. The purchase of new, more fuel efficient buses would enhance the efficiency of fuel use at the ranch.

By improving the efficiency of vehicular use and reducing vehicular emissions at the LBJ Ranch, the proposed action also would reduce green house gas emissions that contribute to the park's carbon footprint. Therefore, the impact topic of energy requirements and conservation potential is dismissed from further analysis.

Archeological Resources

Archeological resources are the remains of past human activity and records documenting the scientific analysis of the remains (NPS 1998). Archeological investigations at the LJB Ranch have been limited to those associated with previous development projects. The proposed actions would occur on previously disturbed land and would be confined to the upper soil layers. Therefore, the impact topic of archeological resources is dismissed from further analysis

If during construction activities previously unknown archeological resources were discovered, all work in the immediate vicinity of the discovery would be halted until the resources could be identified and documented and, if the resources cannot be preserved *in situ*, an appropriate mitigation strategy would be developed in consultation with the Texas state historic preservation officer (SHPO).

Ethnographic Resources

An ethnographic resource is defined as any "site, structure, object, landscape, or natural resource feature assigned traditional legendary, religious, subsistence, or other significance in the cultural system of a group traditionally associated with it" (NPS 1998). There are no Indian tribes traditionally associated with the lands of Lyndon B. Johnson NHP and no ethnographic resources have been identified to date within the study area. Therefore, the impact topic of ethnographic resources is dismissed from further analysis.

Museum Objects

The NPS defines a museum object as "a material thing possessing functional, aesthetic, cultural, symbolic, and/or scientific value, usually movable by nature or design. Museum objects include pre-contact Native American historic and historic objects, artifacts, works of art, archival material, and natural history specimens that are part of a museum collection" (NPS 1998). None of the alternatives would affect how the park's museum objects are acquired, accessioned and cataloged, preserved, protected, or made available for access and use. Therefore the impact topic of museum objects was dismissed from further analysis.

Indian Trust Resources and Sacred Sites

Secretarial Order 3175 requires that any anticipated impacts on Indian trust resources from a proposed project or action by U.S. Department of the Interior agencies be explicitly addressed in environmental documents. The federal Indian Trust responsibility is a legally enforceable obligation on the part of the United States to protect tribal lands, assets, resources, and treaty rights, and it represents a duty to carry out the mandates of federal laws with respect to Native American tribes. There are no known Indian Trust resources in the study area, and the lands comprising the park are not held in trust by the secretary of the interior for the benefit of Indians due to their status as Indians. Therefore, the impact topic of Indian Trust resources and sacred sites is dismissed from further analysis. In the unlikely event that human remains, funerary objects, sacred objects, or objects of cultural patrimony are discovered during construction, provisions outlined in the Native American Graves Protection and Repatriation Act of 1990 (25 USC 3001) would be followed.

Socioeconomic Resources and Adjacent Lands

NPS *Management Policies 2006* (NPS 2006) requires the NPS to identify any impact to socioeconomic resources when determining the feasibility of a proposed action. The park is an important employer and tourist attraction for Gillespie County and the surrounding region. Opening the Texas White House is anticipated to increase interest in the LBJ Ranch and prompt visitors to lengthen their stay (NPS 1999a). This change in visitor patterns is outside the scope of this document. The proposed action is not expected to alter visitor patterns in a manner that would influence socioeconomic conditions in the surrounding area. The purchase of new buses and other materials would provide some short-term investment in the regional economy. The use of a concessioner to operate the new tour buses and potential increases in tourism would provide a negligible, long-term, beneficial impact on the regional economy. Therefore, the impact topic of socioeconomic resources and land use is dismissed from further analysis. The impact the proposed action may have on the state park is addressed under the “Site Access and Circulation” and “Operations and Infrastructure” sections of this document.

Environmental Justice

Executive Order 12898, “General Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,” requires all federal agencies to incorporate environmental justice into their missions by identifying and addressing the disproportionately high and/or adverse human health or environmental impacts of their programs and policies on minorities and low-income populations and communities. According to the EPA, environmental justice is the “...fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of

environmental laws, regulations and policies. Fair treatment means that no group of people, including a racial, ethnic, or socioeconomic group, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies.”

The goal of “fair treatment” is not to shift risks among populations, but to identify potentially disproportionately high and adverse impacts and identify alternatives that may mitigate these impacts. Environmental justice is dismissed as an impact topic for the following reasons:

- The park staff and planning team solicited public participation as part of the planning process and gave equal consideration to all input from persons regardless of age, race, income status, or other socioeconomic or demographic factors.
- Implementation of the proposed action would not result in any identifiable adverse human health impacts. Therefore, there would be no direct or indirect adverse impacts on any minority or low-income population.
- The impacts associated with implementation of the proposed action would not disproportionately affect any minority or low-income population or community.
- Implementation of the proposed action would not result in any identified impacts that would be specific to any minority or low-income community.

NEPA PROCESS AND NEXT STEPS

NEPA requires federal agencies to fully consider the environmental impacts of their proposed

actions before they make decisions to undertake those actions. The level of decision-making in a GMP triggers NEPA because the decisions will affect future land and resource use within the park. However, GMPs focused on desired conditions to be achieved and maintained in parks over a relatively long period of time. Therefore, they are fairly large in scope, implemented over many years, and contain minimal information on specific actions. As a result, the NEPA analysis for GMPs is typically programmatic and general in nature. For some actions, further NEPA analysis may be required prior to implementation.

The transportation-related actions proposed by this plan amendment/EA are very specific and based on a detailed analysis of the existing and proposed transportation conditions at the LBJ Ranch. Direct implementation, after approval of the appropriate decision document, may occur. On the other hand, actions such as returning the Sam E. Johnson House to its original dog-trot cabin appearance will require further study and NEPA compliance.

After this plan amendment/EA is distributed to the public, there will be a 30-day public review and comment period. Then the NPS planning team will evaluate the comments it has received from organizations, businesses, individuals, and other local, state, and federal agencies. Appropriate changes will be addressed and the selected alternative will be presented in a Finding of No Significant Impact (FONSI). The FONSI will be signed by the park superintendent and the Intermountain Region Director. With the signing of the FONSI, the plan can then be implemented.

Implementation of the Amendment

As described above, the purpose of a GMP is to provide an overall vision for decision-making. Implementing the approved plan for Lyndon B. Johnson NHP will depend on future funding. The approval of the plan does not guarantee that the funding and staffing needed to implement

the plan will be forthcoming. Full implementation of the approved plan could be many years in the future.

A GMP does not describe how particular programs or projects should be prioritized or carried out. Those decisions will be addressed during the more detailed planning associated with program plans (e.g., interpretive plans), strategic plans, and implementation plans. Carrying out the approved plan also would depend on the completion of additional feasibility studies.

ALTERNATIVES

This chapter describes various alternatives for amending the Lyndon B. Johnson NHP 1999 GMP/EIS. Alternatives for the proposed action were designed to provide different options for access and circulation, improve the interpretation and understanding of the LBJ Ranch, and continue development of the partnership between the national and state parks. This plan amendment/EA examines three alternatives: a no-action alternative (Alternative A) and two action alternatives (Alternatives B and C).

FORMULATING THE ALTERNATIVES AND IDENTIFYING THE PREFERRED ALTERNATIVE

The alternative development process for the plan amendment/EA began in early 2008. At that time, representatives from the NPS and the state park met to review the 1999 GMP/EIS and select issues that needed to be revisited in the plan amendment/EA. The issues that the group selected were taken to NPS Intermountain Region Deputy Director for approval. Once the deputy director approved the selected issues, the NPS and the state park began developing concepts to address them. This process was initiated in September 2008 when representatives from the NPS, the state park, and their consultants met to identify the goals and objectives of the project and develop performance measures for evaluating transportation concepts to be included in the plan amendment/EA. The group also identified options for non-transportation elements of the new plan. Following this meeting, the NPS published a newsletter describing options that

could be considered in the plan amendment/EA. The newsletter was open for public comment for several months, culminating in two public open houses in January 2009. Throughout the public comment period, the NPS received comments on the different options. Representatives from the NPS, the state park, and their consultants reconvened in January 2009 to review the analysis conducted on the proposed concepts. The group went through an exercise to assign a relative importance to each of the study goals and performance measures, which was used to score each transportation concept. This enabled the group to dismiss concepts that did not adequately meet the goals and objectives of the plan amendment/EA. The transportation concepts were then combined with the other proposed actions to form the alternatives described below (Alternatives B and C). The group concluded the analysis of transportation concepts by identifying Alternative C as the NPS preferred alternative. The primary component of each alternative is the means by which it provides visitor access through the ranch. Other options were dismissed from analysis and are described later in this chapter, under Alternatives Considered but Dismissed from Further Analysis.

ALTERNATIVE A: NO-ACTION

Under Alternative A (no-action), no changes would be made to the plans laid out in the 1999 GMP/EIS. Visitor access and circulation through LBJ Ranch would continue to be provided by the existing NPS tour bus system. Because the current tour bus fleet has surpassed its lifespan, the NPS buses would be replaced as soon as funding

became available. Although this action is not specifically prescribed in the 1999 GMP/EIS, it is necessary to maintain the existing management of the park.

Under Alternative A, the tour buses would pick up passengers at the state park and drive them through the LBJ Ranch. Although the buses may stop at select locations along the tour, visitors would not exit the buses unless they were accompanied by a bus driver. The bus driver would continue to escort visitors to the Show Barn, the LBJ Birthplace, and the Johnson Family Cemetery. Visitors would continue to be permitted to get off the bus for guided tours of the Texas White House and Sauer-Beckmann Farm, as well. The tour would last approximately 90 minutes (Figure 3).

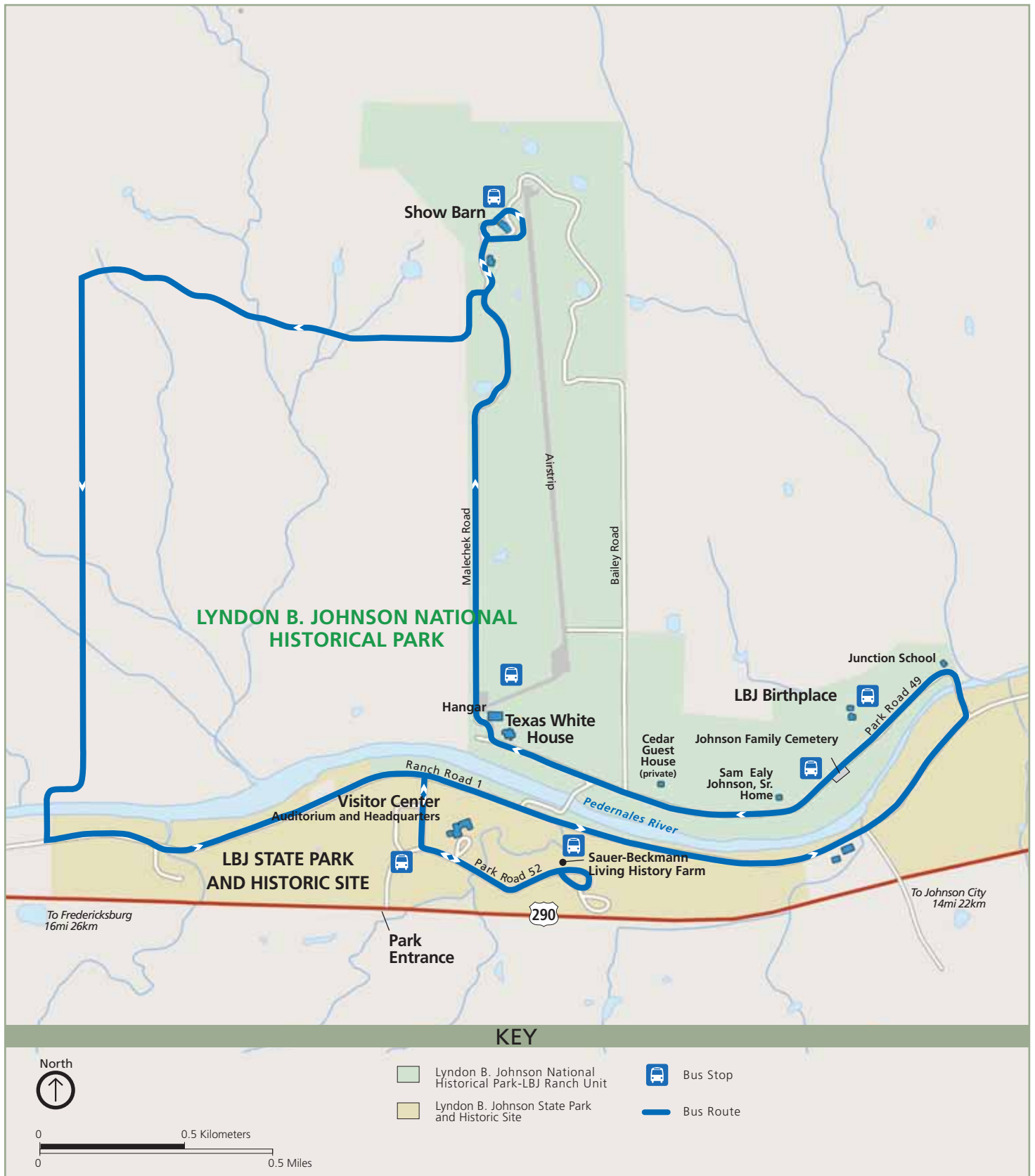
Under Alternative A, park staff would continue to make daily repairs on the buses to keep them operational until funding was made available to purchase new buses. Following the purchase, the national park would keep mechanics on staff to support the new vehicles. The bus barn would be updated, as necessary, to accommodate these new buses. These updates would occur on the existing footprint at the site.

Under Alternative A, the NPS would continue to provide “step-on” tours for guests arriving in private buses. These tours would continue to follow the same route as the current tour buses. An NPS interpreter would travel with the group to provide a similar interpretive experience to what would continue to be provided on the NPS tour buses.

Under Alternative A, no changes would be made to the existing appearance or programming included in any of the ranch structures around the Texas White House. The hangar would continue to serve as a visitor contact station, with displays related to the Johnson presidency. Alternative A also would maintain the Klein Shop as a maintenance building.

Under Alternative A, existing operations at the Sam E. Johnson House would continue. The house would continue to reflect its condition during the presidency, hiding the dog-trot cabin that President Johnson knew as a boy. The NPS would continue to interpret the role the structure played in President Johnson’s life, while displaying it as it stood during the presidency.

Overall costs for Alternative A were derived by updating the costs related to items in the 1999 GMP/EIS that have changed, as well as the cost for replacement buses. These costs are estimated to be approximately \$9,625,900 in fiscal year (FY) 2009 dollars. An estimated \$685,000 of additional spending would be required to replace and maintain the NPS tour bus fleet. (See Table 1 below for a comparison of costs between the alternatives.) Actions directed by GMPs or in subsequent implementation plans are accomplished over time. Budget restrictions, requirements for additional data or regulatory compliance, and competing national park system priorities prevent the immediate implementation of many actions. Major or especially costly actions could be implemented 10 or more years into the future, or may not be realized.



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Figure 3
Alternative A: No-Action

ALTERNATIVE B: PRIVATE VEHICLE ACCESS

Alternative B would include allowing private vehicles to access the LBJ Ranch Unit. This alternative also would include consolidation of the LBJ Ranch's maintenance operation, changing the functions of the hangar and Klein Shop, and call for a study to determine the feasibility and appropriateness of restoring the Sam E. Johnson House to the dog-trot cabin that President Johnson knew as a boy.

Under Alternative B, the existing tour bus system would be discontinued. Instead, visitors would be able to drive their private vehicles through the LBJ Ranch. Private vehicle access would be permitted during regular park hours, 9:00 AM – 5:00 PM. Step-on tours would continue to be provided to visitors arriving on commercial buses. The state park visitor center would continue to function as the point of arrival, providing visitors with orientation to the state and national parks and serving as the start of the auto tour. Visitors would obtain a permit to enter the national park and the most up-to-date tour materials (maps, CDs, etc). Visitors traveling in their private vehicles would be directed to stop at seven sites in the parks (Junction School, LBJ Birthplace, the Johnson Family Cemetery, Sam E. Johnson House, Texas White House, Show Barn, and Sauer-Beckmann Farm) (Figure 4). No new parking would be developed at any of the national park sites to support private vehicle access. Existing pull offs along the tour road would be used for parking, while visitors explored the site or took part in interpretive programs. Some additional signs or road striping could be required in some locations, like the hangar, to identify appropriate parking and vehicular circulation.

By opening the park to private vehicles, the NPS would no longer need to maintain its tour bus fleet. This would allow the NPS to move interpreters from the buses to the specific sites

that visitors would be touring. Visitors would be provided with an audio CD for their vehicles, while rangers would be stationed at interpretive sites throughout the ranch. Waysides would be installed at 18 locations to provide additional educational and interpretive materials.

Under Alternative B, the NPS reduces its automotive maintenance operation as prescribed by Core Operations analysis. The Klein Shop maintenance operations would move to the Bus Barn where ranch maintenance operations are consolidated.

As noted under Alternative A, changes made to the tour bus system also would result in changes to the bus maintenance facility. Along with accommodating the vehicle maintenance activities, Alternative B also would seek to consolidate the national park's other maintenance operations to the bus barn. The 1999 GMP/EIS prescribed a unified state and national park maintenance facility on state park lands or private lands acquired adjacent to the state park. Alternative B allows the park to maintain a unified ranch maintenance operation at the bus barn on land currently owned by the NPS. No additional land needs are anticipated to support the vehicle and maintenance operation on the ranch.

Under the Alternative B, several changes would be made to the structures surrounding the Texas White House. These changes would be made to improve park operations and interpretive and educational opportunities presented to visitors. They include improvements to the hangar, and to the Klein Shop. Other structures, like the former Secret Service structure, would be developed for interpretive displays as prescribed in the 1999 GMP/EIS.

Improvements to the hangar would be focused on developing a permanent visitor contact station to support interpretation at the Texas White House. The hangar would be the primary

exhibit area within the LBJ Ranch Unit of the park. It also would be interpreted to reflect its use during the presidency. Along with interpretation, the hangar would support a gift shop and public restrooms. The restrooms would be developed by renovating existing facilities in the building.

To facilitate access to the hangar, a new two-way road would be constructed from Bailey Road to the taxiway. Bailey Road would be widened to two lanes between the new road and Park Road 49 to provide two-way access and egress from the hangar. Bravo Road, the existing east-west road between Bailey Road and the taxiway may have its current asphalt pavement removed and would be returned to its historic gravel cover. The new road would result in approximately 0.1 miles of additional impervious surface.

The Klein Shop would be transformed into a visitor education center. The shop would provide a place for visitors to gather or wait for the Texas White House tour or continue to their experience following the tour. The shop would present educational movies on the Johnson family, President Johnson, and the events that occurred during his presidency. Additional public restrooms also would be provided at the shop, as well.

Alternative B also would consider renovating the Sam E. Johnson House to its original “dog-trot cabin.” Renovations would involve removing the outer shell of the house that was built around the cabin and restoring the façade of the cabin. The NPS interpretive programs would continue to focus on the role the house played in President Johnson’s upbringing, rather than his presidential years. The initial stories would revolve around President Johnson the child; being born, attending his first classes at the Junction School, and visiting his grandparents at the Sam E. Johnson Farm House. Prior to implementing this action, the

NPS would complete a historic structure report on the house to document the resource and fully analyze any potential impacts. The Sam E. Johnson House also would undergo architectural and historical research to determine the feasibility and advisability of returning it to its original dog-trot cabin appearance.

The overall one time cost for implementing Alternative B would range from \$1,337,900 - \$1,377,900 FY2009, depending on the cost of the Sam. E Johnson House study. Annual operating costs related to implementing Alternative B would be an estimated \$937,400 FY2009. See Table 1 below for a summary of the costs associated with the alternatives. Actions directed by GMPs or in subsequent implementation plans are accomplished over time. Budget restrictions, requirements for additional data or regulatory compliance, and competing national park system priorities prevent the immediate implementation of many actions. Major or especially costly actions could be implemented 10 or more years into the future, or may not be realized.



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Figure 4
Alternative B: Private Vehicle Access

ALTERNATIVE C: BUS TOUR AND PRIVATE VEHICLE ACCESS (NPS PREFERRED ALTERNATIVE)

Alternative C would include allowing private vehicles to access the site while also providing the NPS tour bus options. This alternative would also include consolidation of the LBJ Ranch's maintenance operation, changing the functions of the hangar and Klein Shop, and call for a study to determine the feasibility and appropriateness of restoring the Sam E. Johnson House to the dog-trot cabin that President Johnson knew as a boy, as described under Alternative B. The 1999 GMP describes the Klein Shop as continuing as a maintenance facility. Since that time, park employees and management have realized the benefits of moving a maintenance operations center away from the Texas White House and the need to increase available exhibit and interpretive space.

Under Alternative C, the NPS would allow private vehicle access described in Alternative B, while maintaining a bus tour of the ranch to maintain the existing interpretive experience. Private vehicle access would be the same as described in Alternative B. The tour bus would transport visitors throughout the ranch; however, visitors would not be permitted to exit the tour bus, except at the Sauer-Beckmann Farm and Texas White House. Bus visitors could still visit all locations by private vehicle following the tour. Visitors accessing the LBJ Ranch by private vehicle would be able to visit all sites, whereas only the Texas White House stop is provided by the NPS tour bus (Figure 5). As described in Alternative B, the state park visitor center would continue to function as the point of arrival for visitors in private vehicles and those planning on traveling on the tour bus.

The tour bus would operate between 10:00 AM and 5:00 PM. The first trip would depart the state park visitor center at 10:00 AM and the last

trip would depart at 3:00 PM. The tour bus would depart every 30 to 90 minutes, depending on demand. This would result in two to four tours per day. The roundtrip travel time would be approximately 2.5 hours and would include an hour-long tour of the Texas White House. Private vehicle access would be permitted during visitor hours. The tour bus could be owned and operated by the NPS or a concessioner. Step-on tours would continue to be provided to visitors arriving on commercial buses.

As noted in Alternative A, the NPS bus fleet has outlived its lifespan. Therefore, under this alternative, the buses would be replaced with new propane or diesel vehicles. A fleet of three vehicles would be required. Two buses would be used on a daily bases, leaving time for the third bus to be serviced by NPS or concessioner maintenance staff.

Under this alternative, an audio recording would be broadcast on the tour bus. Rangers also would provide first-hand interpretation on the tour bus and at interpretive sites throughout the ranch. Visitors who enter the LBJ Ranch by private vehicle would be provided an audio CD. To support this interpretation, waysides would be installed at 18 locations throughout the ranch.

Under this alternative, new tour buses would be purchased by the NPS or the concessioner. If the NPS operated the buses, they would be housed in the existing maintenance area. This area would be modified to efficiently service the new vehicles

As with Alternative B, Alternative C also would propose several changes to the structures surrounding the Texas White House. These changes would be made to improve park operations and interpretive and educational opportunities presented to visitors. They include improvements to the hangar, and to the Klein Shop. Other structures, like the former Secret

Service structure, would be developed for interpretive displays as prescribed in the 1999 GMP/EIS.

Improvements to the hangar would be focused on developing a permanent visitor contact station to support interpretation at the Texas White House. The hangar would be the primary exhibit area within the LBJ Ranch Unit of the park. It also would be interpreted to reflect its use during the presidency. Along with interpretation, the hangar would support a gift shop and public restrooms. The restrooms would be developed by renovating existing facilities in the building.

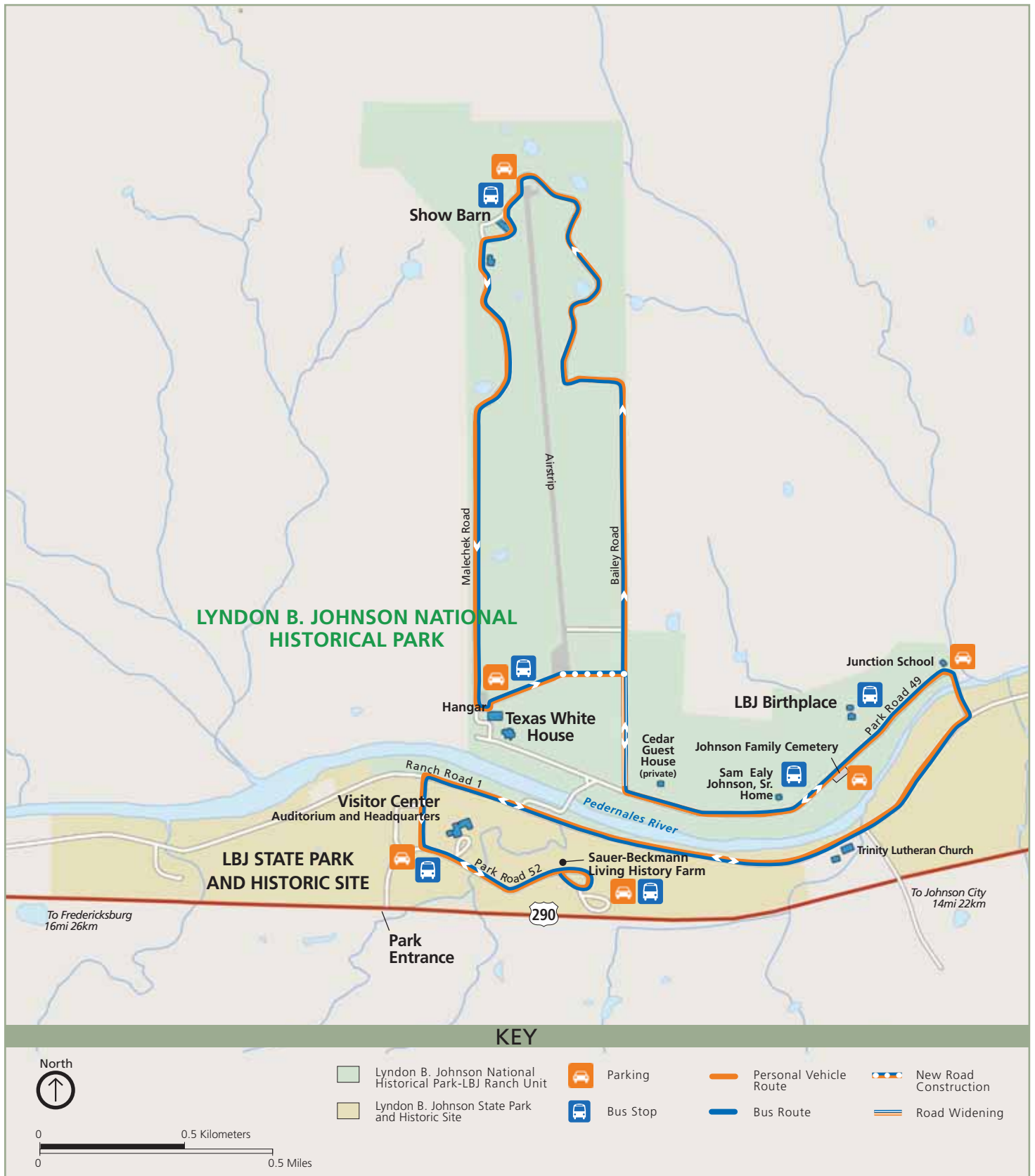
To facilitate access to the hangar, a new two-way road would be constructed from Bailey Road to the taxiway. Bailey Road would be widened to two lanes between the new road and Park Road 49 to provide two-way access and egress from the hangar. Bravo Road, the existing east-west road between Bailey Road and the taxiway may have its current asphalt pavement removed and would be returned to its historic gravel cover. The new road would result in approximately 0.1 miles of additional impervious surface.

The Klein Shop would be transformed into a visitor education center. The shop would provide a place for visitors to gather or wait for the Texas White House tour or continue to their experience following the tour. The shop would present educational movies on the Johnson family, President Johnson, and the events that occurred during his presidency. Additional public restrooms also would be provided at the shop, as well.

Alternative C also would consider renovating the Sam E. Johnson House to its original “dog-trot cabin.” Renovations would involve removing the outer shell of the house that was built around the cabin and restoring the façade of the cabin. The NPS interpretive programs

would continue to focus on the role the house played in President Johnson’s upbringing, rather than his presidential years. The initial stories would revolve around President Johnson the child; being born, attending his first classes at the Junction School, and visiting his grandparents at the Sam E. Johnson Farm House. Prior to implementing this action, the NPS would complete a historic structure report on the house to document the resource and fully analyze any potential impacts. The Sam E. Johnson House also would undergo architectural and historical research to determine the feasibility and advisability of returning it to its original dog-trot cabin appearance.

The overall one time cost for implementing Alternative C would range from \$1,337,900 - \$1,377,900 FY2009, depending on the cost of the Sam. E Johnson House study. Annual operating costs related to implementing Alternative C would range from \$1,144,900 - \$1,346,300 FY2009, depending on if the tour bus was operated by the NPS or a concessioner. See Table 1 below for a summary of the costs associated with the alternatives. Actions directed by GMPs or in subsequent implementation plans are accomplished over time. Budget restrictions, requirements for additional data or regulatory compliance, and competing national park system priorities prevent the immediate implementation of many actions. Major or especially costly actions could be implemented 10 or more years into the future, or may not be realized.



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Figure 5
Alternative C: Bus Tour and
Private Vehicle Access-
Preferred Alternative

Adaptive Management Approaches Included in the NPS Preferred Alternative

After implementing the preferred alternative it will be important to monitor the new transportation system to ensure that it improves the concerns it was intended to address. Lyndon B. Johnson NHP should use an “adaptive management approach” to determine when to increase or decrease tour bus service if the system does not meet its objectives and to provide operational flexibility.

There are two phases involved for a successful adaptive management approach: the set-up phase and the iterative phase.

Set-up Phase

Step 1: Stakeholders are identified and conferred with during the initial public scoping meeting. The park completed this step through the public review of the newsletter in late 2008 and at the initial public scoping meetings in January 2009. Interested members of the public and former NPS and state park employees attended these meetings.

Step 2: Specific, measurable, achievable, results-oriented, and time-fixed objectives are developed. These objectives were prepared and analyzed during the internal initial scoping meetings and are described in Chapter 4 and in greater detail in Appendix C.

Step 3: Alternative management actions are produced. The planning team discussed the management alternatives at their alternatives meeting in January 2009. These alternatives are also described earlier in this chapter.

Step 4: Operational models are developed to test hypotheses. Tour bus utilization and the resulting cost to the park were selected as important factors that determine the efficiency of the tour bus system.

Step 5: Monitoring plans are created to test the operational models. Bus occupancy and the operating cost per rider would be used to assess the models’ success. This is the point that Lyndon B. Johnson NHP has reached in the adaptive management process.

Iterative Phase

Step 6: After completion of the plan amendment/EA and the FONSI, the management action (preferred alternative) would be implemented.

Step 7: Occupancy and cost data is collected after implementation of the management action.

Step 8: The data is analyzed and published.

Step 9: A decision is made as to whether to modify the management action based on the data.

Adaptive Management Approaches

Under this plan amendment/EA, the following six steps would constitute the iterative phase of the adaptive management approach.

1. Monitor the baseline data — Existing conditions would be recorded and monitored to establish a set of baseline conditions for future comparison.
2. Apply the management action — Site access and circulation would be managed using the NPS Preferred Alternative (Alternative C), which would initiate private vehicle access while maintaining an NPS bus tour.
3. Monitor the effectiveness of each management action — Monitoring would determine whether the management actions were achieving the desired outcome. For example, is the bus tour being utilized by visitors? Is the

- operating cost per rider being maintained at an acceptable level?
4. Monitor for impacts of management actions on other resources — Resources in the park would be monitored during and after management actions to determine whether there were any unacceptable impacts.
 5. If monitoring indicates that utilization of the bus tour is not at an acceptable level, reconsider the management actions — Under Alternative C, this could result in temporarily suspending the use of the bus tour, establishing a seasonal schedule for the bus tour, or eliminating the bus tour. Similarly, if an action were found to have unintended impacts on other components of the environment, modifications would be considered.
 6. If the management action is effective, and the new site access and circulation patterns are effective, consider modifications to the intensity of the action — If the majority of visitors were using their personal vehicles, future adjustments to the bus tour may not be necessary.

The following measures should be evaluated one year after the Texas White House is fully opened to the public and also when the buses need to be replaced, if these two events occur at different times. These measures should be evaluated by a given time period, which may be defined by month, such that service may be increased during some months and reduced during other months.

Bus Tour Utilization

Under Alternative C, the use of the bus tour would be adjusted based on average occupancy during previous months or based on annual

occupancy for a given season or event. Average occupancy is defined as the average number of riders per tour bus run divided by the number of seats on the bus. For those periods when the average occupancy on the tour bus exceeds 70%, the service could be increased. For those periods when the average occupancy on the tour bus is less than 30%, the service could be reduced or temporarily suspended. Another factor that would be considered when assessing the use of the bus tour would be formal visitor feedback. If formal feedback from visitors about the tour bus is positive, the service would be maintained or possibly increased. If formal feedback from visitors about the tour bus is negative, or strongly in favor of private vehicle access, the service could be reduced, temporarily suspended, or eliminated.

Cost to the Park

Under Alternative C, the use of the bus tour also would be adjusted based on the operating cost, or subsidy, per rider. Operating subsidy is defined as the difference between annual revenue and the annual cost to operate and maintain the tour bus system. It does not include capital costs. For those periods when the operating subsidy per rider exceeds \$5, the tour bus service could be reduced or temporarily suspended. For those periods when the operating subsidy per rider is less than \$3, the service could be increased.

ALTERNATIVES CONSIDERED BUT DISMISSED

The following transportation options were considered during the early stages of the planning process but were dismissed based on their inability to meet the purpose of the proposed action.

Drop and Run Shuttle

The drop and run shuttle would replace the existing NPS tour bus system. The drop and run

shuttle could be owned and operated by the NPS or a concessioner. Visitors would be able to get on and off the shuttle bus at their leisure, which would continually circulate through the ranch at regular intervals. Under this option, the state park visitor center would continue to function as the point of arrival, providing visitors with orientation to the ranch and serving as the launch site for the drop and run shuttle. Although there were several routing and operating options suggested for the drop and run shuttle, the transportation analysis conducted for this study (Appendix C) found that none of these options adequately met the purpose, need, goals, and objectives of the project, as it could not enhance opportunities to access and understand the resources at the LBJ ranch. Therefore, the drop and run shuttle was dismissed from further analysis.

NPS Tour Bus

The transportation analysis conducted for this study considered options for a tour bus operated by the NPS or a concessioner. Given the similarities between the two concepts, they were combined into one alternative presented above as Alternative C: Bus Tour and Private Vehicle Access.

FUTURE STUDIES AND MITIGATING MEASURES

Future Studies

After the plan amendment/EA is completed and approved, other, more detailed studies and plans will be needed for implementing specific actions. As required, the NPS will carry out additional compliance with NEPA, the National Historic Preservation Act, and other relevant laws and policies. Consultation and public involvement will be carried out as necessary.

Mitigating Measures

Congress has charged the NPS with managing the lands under its stewardship “in such manner and by such means as will leave them unimpaired for the enjoyment of future generations” (NPS Organic Act, 16 USC 1). As a result, the NPS routinely evaluates and supplies mitigation measures whenever conditions could adversely affect the sustainability of national park system resources.

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

As described in the 1999 GMP/EIS, the NPS would use appropriate erosion and sediment controls during the construction process to mitigate impacts. Construction activities would be timed to avoid excessive interference with activities in the ranch or on neighboring properties. The NPS would maintain contact with appropriate regulatory agencies throughout the process to ensure impacts were mitigated appropriately. Following the construction process, NPS staff would monitor visitor activities and resource conditions to ensure that no further mitigation was required. These measures would apply to all alternatives. In addition, the NPS would conduct a historic structures report on the Sam E. Johnson House and continue to coordinate with the SHPO about the potential plans and impacts. The NPS also would implement appropriate invasive species monitoring and control in locations where impervious surfaces are removed.

NPS PREFERRED ALTERNATIVE

As stated in Chapter 1: Purpose of and Need for Action, all action alternatives selected for analysis must meet all objectives to a large degree. The action alternatives must also address the stated purpose of taking action and resolve the need for action; therefore, the alternatives were individually assessed in light of how well they would meet the purpose and need for this plan amendment/EA, which are stated on page 4 of this document. Alternatives that did not meet the objectives were not analyzed further (see Alternatives Considered but Dismissed).

Table 1 provides a comparison of the alternatives by summarizing the elements being considered.

To identify the NPS preferred alternative, the planning team ranked each alternative based on the ability to meet the individual plan objectives and the potential impacts on the environment (Chapter 3: Affected Environment and Environmental Consequences). The rankings were added up to determine which alternative best met the objectives. Alternatives B and C were closely ranked in their ability to meet all of the objectives. The NPS also considered which alternative would provide the visitor with the most options and NPS managers with most tools for providing visitors with a unique experience. Under Alternative C, the park could allow for private vehicle access while maintaining bus tours. By improving visitor access throughout the ranch and maintaining the bus tour, Alternative C proved to be the NPS preferred alternative.

Alternative B only partially meets the purpose and need of the plan amendment/EA, as it only provides private vehicle access. The lack of a tour bus would eliminate an important

experience at the ranch and limit the type of access provided through the ranch.

Alternative A fails to meet the purpose and need of the plan amendment/EA, since no action would be taken to improve access through the ranch or address the existing bus service.

ENVIRONMENTALLY PREFERRED ALTERNATIVE

In accordance with DO 12 and NEPA, the NPS is required to identify the environmentally preferred alternative in its NEPA documents. The CEQ defines the environmentally preferred alternative as the alternative that will promote the national environmental policy as expressed in NEPA's Section 101. In their Forty Most Asked Questions, CEQ further clarifies the identification of the environmentally preferred alternative, stating "Ordinarily, this means 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).

Alternative C: Bus Tour and Private Vehicle Access (NPS preferred alternative) provides the same level of resource protection as Alternative B, while providing an enhanced visitor experience. Improved access would allow visitors to gain a greater understanding of the history of the ranch while protecting its resources for future generations. Based on the analysis of environmental consequences of each alternative, as presented above and in Chapter 3, Alternative C is the environmentally preferred alternative.

Table 2 provides a summary of the environmental consequences related to each alternative. A more detailed explanation of the impacts is presented in "Chapter 3: Affected Environment and Environmental Consequences."

Table 1: Comparison of Alternatives			
Element	Alternative A: No-Action	Alternative B: Private Vehicle Access	Alternative C: Bus Tour and Private Vehicle Access (NPS Preferred Alternative)
Shuttle Bus / Bus Tour	Continued use of existing shuttle bus system. Buses would be replaced when funding became available.	The shuttle bus system would be discontinued.	A modified bus tour with new buses would be implemented.
Private Vehicle Access	Private vehicle access would not be allowed during normal operations.	Private vehicle access would be permitted on most paved roads within the LBJ Ranch.	Private vehicle access would be permitted on most paved roads within the LBJ Ranch.
State Park Visitor Center	The state park visitor center would continue to be the start of the NPS tour and provide orientation for the LBJ Ranch.	The state park visitor center would continue to be the start of the NPS tour and provide orientation for the LBJ Ranch.	The state park visitor center would continue to be the start of the NPS tour and provide orientation for the LBJ Ranch.
Step-on Tours	Step-on tours would continue to be provided to large groups traveling on commercial vehicles.	Step-on tours would continue to be provided to large groups traveling on commercial vehicles.	Step-on tours would continue to be provided to large groups traveling on commercial vehicles.
Maintenance Operations	Park maintenance staff would continue to maintain the tour buses. Other maintenance activities would be spread across Lyndon B. Johnson NHP, including the Klein Shop.	Park maintenance staff would no longer need to maintain buses. The bus barn could support maintenance activities throughout the ranch.	If the NPS purchased new buses, park maintenance staff would continue to maintain the new buses. If a concessioner purchased and operated the buses, park maintenance staff would no longer need to maintain buses. The bus barn could be used to support maintenance activities throughout the ranch.
Hangar	No changes would be made to the hangar or the plans prescribed for it in the 1999 GMP/EIS. The structure would continue to provide limited visitor contact services.	The hangar would be converted into the primary exhibit area in the LBJ Ranch. It would interpret the historic use of the structure while providing additional displays and education.	The hangar would be converted into the primary exhibit area in the LBJ Ranch. It would interpret the historic use of the structure while providing additional displays and education.

Table 1: Comparison of Alternatives (continued)			
Element	Alternative A: No-Action	Alternative B: Private Vehicle Access	Alternative C: Bus Tour and Private Vehicle Access (NPS Preferred Alternative)
Klein Shop	The Klein Shop would continue to serve as a maintenance facility.	The Klein Shop would be converted into a visitor contact station with educational movies and restrooms available to the public.	The Klein Shop would be converted into a visitor contact station with educational movies and restrooms available to the public.
Sam E. Johnson House	The Sam E. Johnson House would continue to represent the structure that existed during the presidency.	The Sam E. Johnson House would be studied to determine the feasibility and advisability of returning it to an earlier period appearance.	The Sam E. Johnson House would be studied to determine the feasibility and advisability of returning it to an earlier period appearance.
Interpretation	Primary interpretation would continue to be provided on the tour bus. As the Texas White House was opened to the public, additional programs would be offered.	Primary interpretation would be provided on the ground at the different locations within the LBJ Ranch. Interpreters would develop different programs for select audiences. Self-guiding devices, such as audio CDs, would be provided with park maps and guides to each visitor.	Primary interpretation would be provided on the ground at the different locations within the LBJ Ranch. Interpreters would develop different programs for select audiences. The opportunity for a guided bus tour would exist.
Staffing	22 additional FTEs	12 additional FTEs	12 additional FTEs
One Time Costs (facilities and bus)	\$685,000	\$1,337,900 - \$1,377,900	\$1,337,900 - \$1,377,900
Annual Operations (staffing and support)	\$1,415,600	\$937,400	\$1,144,900 - \$1,346,300
Total (FY2009)	\$2,100,600	\$2,275,300 - \$2,315,200	\$2,484,800 - \$2,724,200

Note: staffing and costs are related to numbers presented in the 1999 GMP/EIS, which represent costs and staffing for Lyndon B. Johnson NHP. Where possible, only those numbers related to the LBJ Ranch Unit are depicted. FTE reductions shown for Alternatives B and C reflect vacant positions and Core Operations analysis.

Table 2: Summary of Environmental Consequences

A more detailed explanation of the impacts is presented in "Chapter 3: Affected Environment and Environmental Consequences."

Resource	Alternative A: No-Action	Alternative B: Private Vehicle Access	Alternative C: Bus Tour and Private Vehicle Access (NPS Preferred Alternative)
Cultural Landscapes	<p>Any physical changes to the cultural landscape at the ranch would be related to the actions analyzed in the 1999 GMP/EIS.</p> <p>Cumulative impact: would not contribute to a minor, long-term, beneficial cumulative impact.</p> <p>Overall impact: no impact.</p>	<p>Improvements to the Klein Shop, hangar, and Sam E. Johnson House, would enhance the understanding of their historic significance. The introduction of private vehicles would not require any physical development and would not notably alter the landscape. Alterations to Bailey Road and Bravo Road would not notably alter the historic landscape at the ranch and would regain the former appearance of Bravo Road.</p> <p>Cumulative impact: would contribute an appreciable beneficial increment to a moderate, long-term, beneficial, cumulative impact.</p> <p>Overall impact: moderate, long-term, beneficial and minor, long-term, adverse.</p>	<p>Impacts would be similar to those described in Alternative B.</p>

Table 2: Summary of Environmental Consequences (continued)

A more detailed explanation of the impacts is presented in "Chapter 3: Affected Environment and Environmental Consequences."

Resource	Alternative A: No-Action	Alternative B: Private Vehicle Access	Alternative C: Bus Tour and Private Vehicle Access (NPS Preferred Alternative)
Historic Structures	<p>There would be no physical changes to historic structures beyond what was proposed and analyzed in the 1999 GMP/EIS.</p> <p>There would be no cumulative impacts on historic structures in the ranch, beyond what was analyzed in the 1999 GMP/EIS.</p> <p>Overall impact: no impact.</p>	<p>The interior of the hangar and Klein Shop would be improved. Any impact to the Sam E. Johnson House would await the proposed feasibility and advisability studies. A portion of Bailey Road would be widened and a new Bravo Road would be installed connecting to the airstrip. The introduction of private vehicles would not require any changes to or introduction of new structures.</p> <p>There would be no cumulative impacts on historic structures in the ranch, beyond what was analyzed in the 1999 GMP/EIS.</p> <p>Overall impact: moderate, long-term, and beneficial.</p>	<p>Impacts would be similar as those described under Alternative B.</p>

Table 2: Summary of Environmental Consequences (continued)

A more detailed explanation of the impacts is presented in "Chapter 3: Affected Environment and Environmental Consequences."

Resource	Alternative A: No-Action	Alternative B: Private Vehicle Access	Alternative C: Bus Tour and Private Vehicle Access (NPS Preferred Alternative)
Visual Resources	<p>The NPS would continue to maintain the ranch and the structures within the property as they existed during the Johnson presidency.</p> <p>Cumulative impact: would contribute an imperceptible adverse increment to a minor, long-term, beneficial cumulative impact.</p> <p>Overall impact: negligible, long-term, and adverse.</p>	<p>The hangar and Klein Shop would be improved to better convey their historical significance. Any impact to the Sam. E. Johnson House would await the proposed feasibility and advisability studies. The introduction of private vehicles to the ranch would result in short-term impacts to the visual resources, but would not detract from any improvements over the long-term.</p> <p>Cumulative impact: would contribute an appreciable beneficial increment to a minor, long-term, beneficial cumulative impact.</p> <p>Overall impact: minor, short-term, adverse; moderate, long-term, adverse; and moderate, long-term, beneficial.</p>	Impacts would be similar to Alternative B.

Table 2: Summary of Environmental Consequences (continued)

A more detailed explanation of the impacts is presented in "Chapter 3: Affected Environment and Environmental Consequences."

Resource	Alternative A: No-Action	Alternative B: Private Vehicle Access	Alternative C: Bus Tour and Private Vehicle Access (NPS Preferred Alternative)
Site Access and Circulation	<p>No changes would be made to the existing circulation at the ranch. As the Texas White House was opened to the public, the tour bus schedule would need to be adjusted.</p> <p>Cumulative impact: would contribute an appreciable adverse increment to a minor to moderate, long-term, adverse cumulative impact.</p> <p>Overall impact: moderate, long-term, adverse.</p>	<p>Access to structures within the ranch would be improved. The NPS tour bus system would be discontinued and private vehicle access would be initiated.</p> <p>Cumulative impact: would contribute an appreciable beneficial increment to a minor to moderate, long-term, beneficial cumulative impact.</p> <p>Overall impact: moderate, long-term, beneficial.</p>	<p>Access to structures within the ranch would be improved. The NPS tour bus system would be discontinued and private vehicle access and a new tour bus would be initiated.</p> <p>Cumulative impact: would contribute an appreciable beneficial increment to a minor to moderate, long-term, beneficial cumulative impact.</p> <p>Overall impact: moderate, long-term, beneficial.</p>
Visitor Use and Experience	<p>The NPS would continue to implement actions outlined in the 1999 GMP/EIS.</p>	<p>Improvements to the hangar and Klein Shop would enhance visitor contact and interpretation around the Texas White House. Allowing private vehicle access would provide more opportunities to the visitors.</p>	<p>Improvements to the hangar and Klein Shop would enhance visitor contact and interpretation around the Texas White House. Allowing private vehicle access, while maintaining a bus tour, would provide more opportunities to the visitors.</p>

Table 2: Summary of Environmental Consequences (continued)

A more detailed explanation of the impacts is presented in "Chapter 3: Affected Environment and Environmental Consequences."

Resource	Alternative A: No-Action	Alternative B: Private Vehicle Access	Alternative C: Bus Tour and Private Vehicle Access (NPS Preferred Alternative)
Visitor Use and Experience (continued)	<p>Cumulative impact: would contribute an appreciable adverse increment to a moderate, long-term, adverse cumulative impact.</p> <p>Overall impact: moderate, long-term, and adverse.</p>	<p>Cumulative impact: would contribute an appreciable beneficial increment to a moderate, long-term, beneficial cumulative impact.</p> <p>Overall impact: moderate, long-term, and beneficial.</p>	<p>Cumulative impact: would contribute an appreciable beneficial increment to a moderate, long-term, beneficial cumulative impact.</p> <p>Overall impact: moderate, long-term, and beneficial.</p>
Operations and Infrastructure	<p>The park would continue to implement changes and updates that were described in the 1999 GMP/EIS. As the Texas White House was open to the public, staff time and funding would be diverted from other programs.</p> <p>Cumulative impact: would contribute an appreciable adverse increment to a moderate, long-term, adverse cumulative impact.</p> <p>Overall impact: moderate, long-term, and adverse.</p>	<p>Improvements would be made to the hangar and Klein Shop. Interpreters would not be required to drive buses and could focus on enhanced interpretation throughout the ranch.</p> <p>Cumulative impact: would contribute an appreciable beneficial increment to a moderate, long-term, beneficial cumulative impact.</p> <p>Overall impact: minor to moderate, short-term, adverse and moderate, long-term, and beneficial.</p>	<p>Impacts would be similar to Alternative B. Additional staff would be required to operate the tour bus so interpreters could focus on enhanced interpretation throughout the ranch.</p> <p>Cumulative impact: would contribute an appreciable beneficial increment to a moderate, long-term, beneficial cumulative impact.</p> <p>Overall impact: minor to moderate, short-term, adverse and moderate, long-term, and beneficial.</p>

AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

Lyndon B. Johnson NHP is in the “Hill Country” of south-central Texas, a landscape of forested hills, deep canyons, and secluded valleys. The park is made up of two units: one in Johnson City and one at the LBJ Ranch near Stonewall. This plan amendment/EA focuses solely on the LBJ Ranch Unit (LBJ Ranch), which lies 14 miles west of Johnson City (see Figure 1). The general area is drained by the Pedernales River, a tributary of the Colorado River. The LBJ Ranch Unit focuses primarily on Lyndon Johnson the rancher and president; it includes the Junction School, reconstructed birthplace, Texas White House, show barn, ranch lands and cattle, and other structures related to Johnson’s life in the Texas Hill Country (see Figure 2).

This chapter describes the affected environment and environmental consequences associated with the alternatives presented in “Chapter 2: Alternatives.” It is organized by impact topic, which distills the issues and concerns into distinct subjects for discussion and analysis. Topics analyzed in this chapter include cultural landscapes, historic structures, visual resources, site access and circulation, visitor use and experience, and operations and infrastructure. Resources dismissed from further consideration were discussed in “Chapter 1: Purpose and Need.”

Each impact topic presents a discussion of the affected environment and environmental consequences of the proposed action. The environmental consequences analysis provides a

discussion of methodology, appropriate regulations and policies, and the impacts of each alternative. The impact analysis subtopic also includes a discussion of cumulative impacts and impairment and unacceptable impacts, where applicable.

GENERAL METHODOLOGY

As required by NEPA, potential impacts are described in terms of type (beneficial or adverse), effect (direct or indirect), context (site-specific, local, regional, or broader), duration (short-term and long-term), and intensity (negligible, minor, moderate, major). General definitions are defined as follows, while more specific impact thresholds are given for each resource at the beginning of each resource section.

Type describes the classification of the impact as either beneficial or adverse:

Beneficial: A positive change in the condition or appearance of the resource or a change that moves the resource toward a desired condition.

Adverse: A change that moves the resource away from a desired condition or detracts from its appearance or condition.

Effect of the action and of other actions is also considered in the analysis. An action can have a direct or an indirect effect:

Direct: An effect that is caused by an action and occurs in the same time and place.

Indirect: An effect that is caused by an action but is later in time or farther removed in distance, but is still reasonably foreseeable.

Context describes the area or location in which the impact will occur. Effects can be site-specific, local, regional, or even broader.

Duration describes the length of time an impact will occur, either short-term or long-term:

Short-term impacts lasting during construction, and up to one year afterward, allowing resources to resume their pre-construction conditions.

Long-term impacts last beyond the construction period, and could be permanent, preventing resources from resuming their pre-construction conditions.

Intensity describes the degree, level, or strength of an impact. For this analysis, intensity has been categorized into negligible, minor, moderate, and major. Because definitions of intensity vary by resource topic, intensity definitions are provided separately for each impact topic analyzed in this plan amendment/EA.

Cumulative Impacts

Methodology for Assessing Cumulative Impacts

As stated before, the “cumulative impact” is the impact on the environment which results from the incremental impact of the action when added to the impacts of other past, present, and reasonably foreseeable future actions regardless of what agency (federal or nonfederal) or person undertakes such actions.

Impacts are described in terms of type, duration, and intensity, as described above.

Action Area

The geographical area in which past, present, and foreseeable actions were identified, known as the “action area,” was defined with the understanding that certain actions, whether federal or non-federal, may occur outside of the LBJ Ranch. Nevertheless, these activities could have some direct or indirect impact on the ranch. The action area is defined as the park lands owned by the NPS and the state, as well as the private lands that border these properties.

Cumulative Actions

The CEQ regulations that implement NEPA require assessment of cumulative impacts in the decision-making process for federal projects. Cumulative impacts are defined as impacts which result when the impact of the proposed action is added to the impacts of other present and reasonably foreseeable future actions, regardless of what agency (federal or nonfederal) or person undertakes such other actions (40 CFR 1508.7).

To determine the potential cumulative impacts, existing and anticipated future projects at the ranch and in the surrounding area were identified. These included lands administered by the NPS, the state of Texas, Gillespie County, the Lower Colorado River Authority, and the city of Stonewall. Potential projects identified as cumulative actions included any planning or development activity currently being implemented or expected to be implemented in the reasonably near future. The projects identified as contributing to cumulative impacts on the resources addressed by this plan amendment/EA include previous and future development in the vicinity of the LBJ Ranch and further implementation of the park’s 1999 GMP/EIS.

Economic and Physical Development in the Region (Ongoing). Like much of Texas, the region surrounding the national and state parks

continues to experience substantial economic growth. This growth includes new businesses and jobs, as well as increasing incomes for the local community. Economic growth leads to physical development in the form of new commercial and residential developments, as well as improved roads and utilities.

Operation of the LBJ Holding Company Properties (Ongoing). The Johnson Family continues to maintain lands adjacent to the park. Among other things, these lands are used for seasonal hunting.

Other Activities on Neighboring Ranches (Ongoing): Recently, Pitts Ranch purchased land underneath half of English Park Road. The road divides the Pitts and Johnson properties and provides NPS with access/egress to the ranch. There has been some discussion between the Pitts, Johnsons, and the NPS about the timing of the tours to avoid conflicts with activity on their properties. The Hodges farm also borders the NPS property. The Hodges are included in discussions that involve activities bordering their properties.

Continued Implementation of the GMP/EIS: As the park continues to implement the 1999 GMP/EIS, park resources and values would be further protected and visitor services would be enhanced through increased interpretation and accessibility to resources. In particular, as further restoration efforts occur at the Texas White House, additional interpretive opportunities would be provided to visitors. At the time of publication, four rooms are open for tours. The NPS anticipates the entire ground floor will be open for tours by summer 2011.

In defining the contribution of each alternative to cumulative impacts, the following terminology is used:

Imperceptible: The incremental impact contributed by the alternative to the overall

cumulative impact is such a small increment that it is impossible or extremely difficult to discern.

Noticeable: The incremental impact contributed by the alternative, while evident and observable, is still relatively small in proportion to the overall cumulative impact.

Appreciable: The incremental impact contributed by the alternative constitutes a large portion of the overall cumulative impact.

Impairment

In addition to determining the environmental consequences of the NPS preferred and other alternatives, NPS *Management Policies 2006* (NPS 2006) and DO 12 require analysis of potential impacts to determine whether actions have the potential for impairment of park resources and values.

A fundamental purpose of the NPS, as provided for in its Organic Act (1916) and reaffirmed by the General Authorities Act (1970), as amended in 1978, is a mandate to conserve park resources and values. However, the laws give the NPS management discretion to allow impacts on park resources and values when necessary and appropriate to fulfill the purposes of the park, as long as the impact does not constitute impairment of the affected resources and values. Although Congress has given the NPS management discretion to allow certain impacts within parks, that discretion is limited by the statutory requirements that the NPS must leave park resources and values unimpaired, unless a particular law directly and specifically provides otherwise. The prohibited impairment is an impact that, in the professional judgment of the responsible NPS manager, would harm the integrity of park resources or values, including opportunities that would otherwise be present for the enjoyment of those resources and values. An impact would be more likely to constitute

impairment to the extent that it affects a resource or value whose conservation is:

1. Necessary to fulfill specific purposes identified in establishing legislation or proclamation of the park;
2. Key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park; or
3. Identified in the park's general management plan or other relevant NPS planning documents as being of significance.

Impairment may result from NPS activities in managing the park, as well as visitor activities or activities undertaken by concessioners, contractors, and others operating in the park. An impairment determination for all impact topics is provided at the end of each impact topic in the "Conclusion" section, with the exception of visitor use and experience; and operations and infrastructure, for which no impairment determination is required.

Unacceptable Adverse Impacts

As described in Purpose and Need, the NPS must prevent any activities that would impair park resources and values. The impact threshold at which impairment occurs is not always readily apparent. Therefore, the Service will apply a standard that offers greater assurance that impairment will not occur. The Service will do this by avoiding impacts that it determines to be unacceptable. These are impacts that fall short of impairment, but are still not acceptable within a particular park's environment. Park managers must not allow uses that would cause unacceptable impacts; they must evaluate existing or proposed uses and determine whether the associated impacts on park resources and values are acceptable.

Virtually every form of human activity that takes place within a park has some degree of impact

on park resources or values, but that does not mean the impact is unacceptable or that a particular use must be disallowed. To determine if unacceptable impact could occur to the resources and values of the parks, the impacts of proposed actions in this environmental assessment were evaluated based on monitoring information, published research, and professional expertise, and compared to the guidance on unacceptable impacts provided in *NPS Management Policies 2006* (NPS 2006).

By preventing unacceptable impacts, park managers also ensure that the proposed use of park resources will not conflict with the conservation of those resources. In this manner, the park managers ensure compliance with the Organic Act's separate mandate to conserve park resources and values.

CULTURAL LANDSCAPES

Affected Environment

The LBJ Ranch is a 1,558-acre parcel (authorized boundary) which incorporates three cultural landscapes defined in 1999 as the Texas White House, Agricultural Complex, and Historic Area landscapes. The 1999 Cultural Landscape Inventory (NPS 1999b) focused on the Agricultural Complex, which was documented and categorized through an analysis and definition of character-defining elements. The Texas White House and Historic Area landscapes were reviewed to some degree, but not to the same level of detail.

The north section of the ranch, the highest point, is devoted to agricultural and former communications functions, with separately defined clusters for each. The central portion of the ranch is a mix of open space and ornamental shrubs and trees. The open space provides room for cattle to actively graze in the park. The park roads wind through these open areas and connect

to county and state maintained roadways providing access to the LBJ state park and beyond. The southern part of the ranch contains the highest number of buildings and structures: this area includes the Texas White House and its many attendant buildings and the Historic Area to the east which contains the birthplace, Sam E. Johnson house, cemetery, and school. The edge of the park is lined with wire fences. Beyond the fences are vast meadows that reflect the undeveloped history of the region.

As described in more detail below in the Historic Structures section, the cultural landscape features some late 19th and early 20th century buildings. The buildings and structures in the ranch, however, predominantly date to the 1960s when Lyndon B. Johnson made most of the improvements for his political, ranching, and commemorative activities. The arrangement of clusters are mainly associated with the various functions carried on here, including the Texas White House cluster; the communications cluster at the highest point in the northwest corner; the agricultural cluster that includes the barns, pens, grazing fields and other natural and functional elements; and the commemorative cluster with the Sam E. Johnson House, reconstructed birthplace, Junction School, and the family cemetery.

Circulation in the ranch dates to the 1960s, although some roads, such as Park 49, evolved from earlier roads paralleling the river. Bailey Road and Malachek Road provide north-south vehicular movement between the Historic Texas White House Area and the Show Barn/Bus Barn complex. The physical road system and the airport strip and taxiway that are in place are considered contributing elements to the cultural landscape.

Views and vistas include open views of the countryside and the river, the view north which displays the gradual rise in elevation, views of the agricultural setting, and the views within and

through the pecan orchard. Numerous small scale features in the landscape include fencing, cattle guards, and water tanks at low elevations that provide water and control run-off.

Environmental Consequences

Methodology

Negligible: Impact(s) is at the lowest level of detection with neither adverse nor beneficial consequences.

Minor: Adverse impact – Alteration of a pattern(s) or feature(s) of the landscape would not diminish the overall integrity of the landscape.

Beneficial impact – Preservation of landscape pattern(s) or feature(s) in accordance with the Secretary of the Interior Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes.

Moderate: Adverse impact – Alteration of a pattern(s) or feature(s) of the landscape would diminish the overall integrity of the landscape.

Beneficial impact – Rehabilitation of a landscape or its pattern(s) or feature(s) in accordance with the Secretary of the Interior Standards for the Treatment of Historic Properties with Guidelines for Treatment of Cultural Landscapes.

Major: Adverse impact – Loss of a pattern(s) or feature(s) of the landscape would diminish the overall integrity of the landscape.

Beneficial impact – Restoration of a landscape or its pattern(s) or feature(s) in accordance with the Secretary of the Interior Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes.

Regulations and Policies

Regulations and policies related to cultural landscapes in the LBJ Ranch include:

- National Historic Preservation Act of 1966, as amended
- Advisory Council on Historic Preservation's (ACHP) regulations implementing Section 106 of the National Historic Preservation Act (36 CFR 800)
- DO 28: Cultural Resource Management Guideline
- NPS *Management Policies 2006*

Impacts of Alternative A (No-Action)

Impact Analysis. Under Alternative A, there would be no change to the cultural landscape at the LBJ Ranch. The NPS and the state park would continue their current management of the natural and built features of the landscapes.

Overall, Alternative A would result in no impacts on cultural landscapes.

Cumulative Impacts. Past, present, and reasonably foreseeable future actions have and continue to contribute to the cumulative impact on cultural landscapes in and around the cemetery. These projects include the economic and physical development in the region, the operation of the LBJ Holding Company properties, the Hodges farm, and the Pitts Ranch. Any new economic or physical development could introduce additional structures into the regional landscape. In some cases, these structures would enhance the existing landscapes that reflect the historic presence of ranches and small towns around the LBJ Ranch. The operations of the LBJ Holding Company properties, the Hodges farm, and Pitts Ranch have and would continue to protect the park from intrusions on its landscape. These entities have maintained much of their property as undeveloped ranch land. Some activities on the two sites are not consistent with that of the park; however, these activities do not regularly intrude upon the landscape at the ranch. These

projects, along with Alternative A, would have a minor, long-term, beneficial cumulative impact on cultural landscapes. Alternative A would not contribute to this cumulative impact.

Conclusion. Overall, Alternative A would result in no impact on the cultural landscape. Alternative A would not contribute to a minor, long-term, beneficial cumulative impact. Because there would be no major adverse impacts on a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the park's establishing legislation, (2) key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park, or (3) identified in the park's general management plan or other relevant NPS planning documents as being of significance, there would be no impairment of park resources or values or unacceptable adverse impacts related to cultural landscapes.

Impacts of Alternative B (Private Vehicle Access)

Impact Analysis. Under Alternative B, the hangar and Klein Shop would be reconfigured on the interior to accommodate improved interpretive and visitor facilities. Opening these structures to visitors would reintroduce pedestrians into and out of these structures, a common sight on the historic landscape.

Visitors would be allowed to access the park with private vehicles. Existing turn-offs and parking areas would be used to support private vehicle access at these locations and others within the ranch. Therefore, there would be no need to introduce new structures to the historic landscape. Private vehicles were common on the ranch landscape during the presidency; however, they became less prevalent after President Johnson left office. The level of visitation at the park would result in irregular pattern of vehicular movement, with steady traffic only occurring during special events. During these

events, the landscape would not reflect its historic appearance. During regular operation, however, the ranch landscape would reflect the varying levels of traffic that existed throughout President Johnson's life.

Alterations to Bailey Road, the north-south route that leads from the Texas White House complex on the east to the Show Barn complex, would alter the appearance of the historic road system. These improvements would introduce new structures to the historic road system but would not notably alter the historic circulation patterns. The changes to the road system also would return portions of Bravo Road to its historic gravel surface, presenting it as it once appeared on the historic landscape.

Alternative B also calls for a study of feasibility and advisability of reconstructing the Sam E. Johnson House to return it to its original appearance as the 1880s dog-trot cabin occupied by Lyndon B. Johnson's-grandparents. The rehabilitation would only be done after careful research and analysis, would strengthen the historic appearance of this area of the Ranch Unit. Rehabilitation of the Sam E. Johnson House would be undertaken in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties* (1997). Any materials removed during rehabilitation efforts would be evaluated to determine their value to the park's museum collections and/or for their comparative use in future preservation work at the site.

Overall, Alternative B would result in both a moderate, long-term, beneficial impact and long-term, minor, adverse impact on cultural landscapes at the ranch.

Cumulative Impacts. Past, present, and reasonably foreseeable future actions have and continue to contribute to the cumulative impact on cultural landscapes in and around the cemetery. These projects include the economic

and physical development in the region, the operation of the LBJ Holding Company properties, the Hodges farm, and the Pitts Ranch. These projects, along with Alternative B, would have a moderate, long-term, beneficial cumulative impact on cultural landscapes. Alternative B would contribute an appreciable beneficial increment to this cumulative impact.

Conclusion. Overall, Alternative B would result in a moderate, long-term, beneficial impact on the cultural landscape. Alternative B would contribute an appreciable beneficial increment to a moderate, long-term, beneficial cumulative impact. Because there would be no major adverse impacts on a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the park's establishing legislation, (2) key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park, or (3) identified in the park's general management plan or other relevant NPS planning documents as being of significance, there would be no impairment of park resources or values or unacceptable adverse impacts related to cultural landscapes.

Impacts of Alternative C (Bus Tour and Private Vehicle Access) (NPS Preferred Alternative)

Impact Analysis. Impacts to cultural landscapes under Alternative C would be the same as those described under Alternative B. The inclusion of both private vehicles and NPS tour buses would not notably alter the landscape. The buses have been a part of the landscape for some time, and their limited use would not create a regular intrusion on the historic landscape. Through the use of adaptive management, the use of buses could be limited or eventually eliminated. In this case, the impacts would be the same as those described under Alternative B.

Overall, Alternative C would result in a moderate, long-term, beneficial impact and a

minor, long-term, adverse impact on cultural landscapes at the ranch.

Cumulative Impacts. Past, present, and reasonably foreseeable future actions have and continue to contribute to the cumulative impact on cultural landscapes in and around the cemetery. These projects include the economic and physical development in the region, the operation of the LBJ Holding Company properties, the Hodges farm, and the Pitts Ranch. These projects, along with Alternative C would have a moderate, long-term, beneficial cumulative impact on cultural landscapes. Alternative C would contribute an appreciable beneficial increment to this cumulative impact.

Conclusion. Overall, Alternative C would result in a moderate, long-term, beneficial impact and minor, long-term, adverse impact on the cultural landscape. Alternative C would contribute an appreciable beneficial increment to a moderate, long-term, beneficial cumulative impact. Because there would be no major adverse impacts on a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the park's establishing legislation, (2) key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park, or (3) identified in the park's general management plan or other relevant NPS planning documents as being of significance, there would be no impairment of park resources or values or unacceptable adverse impacts related to cultural landscapes.

HISTORIC STRUCTURES

Affected Environment

Buildings, structures, and sites in the Ranch unit are associated with one or more of three clusters that define the cultural landscapes identified in the 1999 Cultural Landscapes Inventory of the agricultural complex (NPS 1999b). The major

structures within the ranch are the Texas White House, reconstructed LBJ birthplace, the Show Barn, the Johnson Family Cemetery wall, Sam E. Johnson House, Junction School, and the hangar, along with a host of smaller ancillary buildings which largely date to the 1960s within the Agricultural Complex and the Texas White House cultural landscapes.

Lyndon B. Johnson NHP was administratively listed on the National Register in 1969, which at the time only included the boyhood home and birthplace. In 1990, a National Register nomination, which provided additional documentation on both the Ranch Unit and the Johnson City Unit, was approved. Additionally, the nomination provided more specific information about the property to confirm with National Register documentation requirements, including a period of significance (1869-1973), areas of significance (Politics/Government) and pertinent eligibility criteria (Criteria A and B, Criteria Considerations C, D, E, and G), and list of contributing and non-contributing buildings. Most of the buildings and structures are contributing elements to the district; the non-contributing buildings are those that post-date 1973 and that were built by the National Park Service as ancillary structures.

The nomination ordered and presented the building and structure descriptions within a series of complexes that do not correspond with the defined cultural landscapes. These more discrete complexes include the Ranch Headquarters Complex (1896-1973); Birthplace Complex 1964; Secret Service Complex; Cemetery/Junction School Complex; Sam E. Johnson Sr./H.A. Jordan Complex; Show Barn Complex; Ranch Field Complex; and the Bus Barn Complex.

The central building within the Ranch Unit is the Texas White House. The small 1890s front gable limestone house had been substantially expanded and altered by the time Lyndon B.

Johnson purchased the property in 1951. Except for the original two-story limestone section that now serves as the living room, the rest of this large two-story house is of wood frame construction with shiplap siding. The façade features the original front gable section with a second story addition which is connected to a larger front gable section and other outlying one-story sections by a recessed two-story veranda.

In the vicinity of the Texas White House stands a cluster of buildings and structures that mostly date to the 1960s, including the Klein shop and the hangar. The Klein Shop, immediately west of the house, dates from 1967. The gable-roofed building is of steel truss construction and sided and roofed with corrugated metal painted in "LBJ" Green. The hangar nearby to the north also is of steel truss construction, with corrugated metal covering on its wide gable roof and siding with a carport on the south end. Other buildings and structures in this cluster include the 1930 Old Martin Barn, a gable-roofed structure of post-and-beam construction that is similarly sheathed in corrugated metal; two carports with flat corrugated metal roofs supported by steel posts; two prefabricated guest houses with board-and-batten siding and stone foundations that date to the 1960s, and a series of sheds from the 1950s-1960s.

East of the Texas White House are several buildings which relate to President Johnson's childhood and his family. The 1964 replica of the original birthplace built by President Johnson is the only presidential birthplace that was constructed, furnished and interpreted by an incumbent chief executive (Tiff 1999). The one-story, five-room Texas dog-trot house has a stone foundation, board-and-batten siding, and a wood-shingle side gable roof. A full-width porch across the front has simple horizontal railings between the wood porch roof supports. Close to the birthplace is the Johnson Family Cemetery, a small ¼-acre plot dominated by numerous mature live oaks and surrounded by low stone

walls with wrought iron entry gates. The cemetery contains the grave of Lyndon B. Johnson, as well as those of his wife, his parents, grandparents and other family members. Also in the vicinity is the 1910 Junction School, a single-story, one-room wood frame schoolhouse with a front gable roof. The building is sheathed in embossed metal siding, while its roof is covered with wood shingles.

The Sam E Johnson House was built circa 1889 in two construction episodes by President Johnson's grandfather, but was substantially modified between 1965 and 1972 to serve as a ranch guest house. The 1-1/2-story house, originally a dog-trot cabin of board-and-batten construction, has had the open central passageway and rear porch enclosed, several rooms added, and mid-20th century low-pitched gable roofs added.

The Show Barn in the north part of the unit is a 1966 metal-frame structure with a low-pitched gable roof. The building's long rectangular footprint features an open middle section where stalls are visible. The 1960s buildings and structures surrounding the Show Barn include the pens and corrals; loading chute - an open structure with a metal roof supported by metal poles; the Malechek House, which is a one-story wood frame house with a gable roof; and several round corrugated metal grain bins.

The Bus Barn, formerly used for Ranch maintenance, feed mixing and storage, is a one-story gable-roofed structure sided and roofed with corrugated metal. Roads within the ranch, including Bailey Road and Bravo Road, form a circulation system that primarily dates to the 1960s, which reflects the variety of functions and security measures at the ranch during that time. The circulation system is composed of older 19th century roads, major and service roads from the 1960s, and the airport tarmac and runway. Most of these surfaces are paved.

Environmental Consequences

Methodology

For purposes of analyzing potential impacts on historic structures/buildings, the thresholds of change for the intensity of an impact are defined as follows:

Negligible: Impact(s) is at the lowest level of detection, with neither adverse nor beneficial consequences.

Minor: Adverse impact – Alteration of a feature(s) would not diminish the overall integrity of the resources.

Beneficial impact – Stabilization/preservation of character-defining features in accordance with the *Secretary of the Interior Standards for the Treatment of Historic Properties*.

Moderate: Adverse impact – Alteration of a feature(s) would diminish the overall integrity of the resource.

Beneficial impact – Rehabilitation of a structure or building in accordance with the *Secretary of the Interior Standards for the Treatment of Historic Properties*.

Major: Adverse impact - Loss of a feature(s) would diminish the overall integrity of the resource.

Beneficial impact – Restoration of a structure or building in accordance with the *Secretary of the Interior Standards for the Treatment of Historic Properties*.

Regulations and Policies

Regulations and policies related to historic structures in the LBJ Ranch include:

- National Historic Preservation Act of 1966, as amended
- ACHP's regulations implementing Section 106 of the National Historic Preservation Act (36 CFR 800))

- Historic Sites, Buildings, and Antiquities Act of 1935, as amended
- Secretary of the Interior Standards for Treatment of Historic Properties (1966)
- DO 28: Cultural Resource Management Guideline
- NPS *Management Policies 2006*

Impacts of Alternative A (No-Action)

Impact Analysis. Under Alternative A, there would be no physical changes to historic structures at the LBJ Ranch. The NPS would continue to maintain the buildings, structures, and sites that contribute to the historic nature of the ranch.

Overall, Alternative A would result in no impact on historic structures.

Cumulative Impacts. None of the cumulative actions would impact historic structures. Therefore, there are no cumulative impacts related to historic structures.

Conclusion. Overall, Alternative A would result in no impact on the historic structures. Because none of the cumulative actions would impact historic structures, there would be no cumulative impact. Because there would be no major adverse impacts on a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the park's establishing legislation, (2) key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park, or (3) identified in the park's general management plan or other relevant NPS planning documents as being of significance, there would be no impairment of park resources or values or unacceptable adverse impacts related to historic structures.

Impacts of Alternative B (Private Vehicle Access)

Impact Analysis. Under Alternative B, the hangar and Klein Shop would be reconfigured on the interior to accommodate improved interpretive and visitor facilities. This would improve the interpretation of these historic structures and reintroduce regular pedestrian activity without altering their physical integrity.

Under Alternative B, visitors would be allowed to access the ranch with private vehicles. Existing turn-offs and parking areas would be used to support private vehicle access at these locations and others within the ranch. Therefore, there would be no new development to detract from the integrity of the historic structures in the ranch.

Alterations to Bailey Road, the north-south route that leads from the Texas White House complex on the east to the Show Barn complex, would alter the appearance of the historic road system. These improvements would introduce new structures to the historic road system but would not notably alter the historic circulation patterns. The changes to the road system also would return portions of Bravo Road to its historic gravel surface, returning the road to its historic condition.

Alternative B also calls for a study of feasibility and advisability of reconstructing the Sam E. Johnson House to its original appearance as the 1880s dog-trot cabin occupied by Lyndon B. Johnson's-grandparents. The rehabilitation would only be done after careful research and analysis, would strengthen the historic appearance of this area of the Ranch Unit.

Overall, Alternative B would result in a moderate, long-term, beneficial impact to historic structures.

Cumulative Impacts. None of the cumulative actions would impact historic structures. Therefore, there are no cumulative impacts related to historic structures.

Conclusion. Overall, Alternative B would result in a moderate, long-term, beneficial impact on the historic structures. Because none of the cumulative actions would impact historic structures, there would be no cumulative impact. Because there would be no major adverse impacts on a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the park's establishing legislation, (2) key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park, or (3) identified in the park's general management plan or other relevant NPS planning documents as being of significance, there would be no impairment of park resources or values or unacceptable adverse impacts related to historic structures.

Impacts of Alternative C (Bus Tour and Private Vehicle Access) (NPS Preferred Alternative)

Impact Analysis. Under Alternative C, impacts to historic structures would be similar to those described under Alternative B. Overall, Alternative C would result in a moderate, long-term, beneficial impact to historic structures.

Cumulative Impacts. None of the cumulative actions would impact historic structures. Therefore, there are no cumulative impacts related to historic structures.

Conclusion. Overall, Alternative C would result in a moderate, long-term, beneficial impact on the historic structures. Because none of the cumulative actions would impact historic structures, there would be no cumulative impact. Because there would be no major adverse impacts on a resource or value whose conservation is (1) necessary to fulfill specific

purposes identified in the park's establishing legislation, (2) key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park, or (3) identified in the park's general management plan or other relevant NPS planning documents as being of significance, there would be no impairment of park resources or values or unacceptable adverse impacts related to historic structures.

VISUAL RESOURCES

Affected Environment

The LBJ Ranch has been preserved to reflect its appearance during the Johnson presidency. The buildings, roads, and associated structures all appear as they did between 1963 and 1969. Since the presidency, the primary changes to the visual landscape have been the development of the state park and some of the NPS signs placed throughout the ranch. Although these additions resulted in changes from the historic view of the ranch, they are as President Johnson had planned for the future of the ranch.

The central portion of the ranch is a mix of open space and ornamental shrubs and trees. The open space provides room for cattle to actively graze in the park. The park roads wind through these open areas and connect to county and state maintained roadways providing access to the LBJ state park and beyond. The edge of the park is lined with wire fences. Beyond the fences are vast meadows that reflect the undeveloped history of the region.

While President Johnson was at the Texas White House, vehicles regularly traveled the ranch roads to transport guests and staff. After his presidency, the roads were less traveled. Today, the roads are used exclusively by NPS vehicles and the tour bus system. The current tour buses must be replaced as they are worn and unserviceable. This condition is very limiting to

visitor access, and the NPS believes that the introduction of private vehicles onto the ranch may restore vehicle traffic similar to those of the 1960s. This condition does not reflect the appearance the NPS strives to maintain at Lyndon B. Johnson NHP and its other units of the national park system.

The structures within the ranch have all maintained their general appearance since the presidency. Some structures have undergone some modification or are being used for activities that are not historically significant. The Sam E. Johnson House, a structure that has been maintained since the presidency, does not reflect its appearance as President Johnson would have known it as a child.

Environmental Consequences

Methodology

The existing visual environment is defined as what is seen by the visitor during the approach to the study area, as well as what is seen within the area itself. The visual environment impacts both the anticipation and experience at the site.

All available information on viewsheds potentially impacted in the study area was compiled for this document. Where possible, map locations of important areas were compared with locations of proposed developments and modifications of existing facilities. Predictions about short- and long-term site impacts were based on previous projects with similar results. The thresholds of change for the intensity of an impact are defined as follows:

Negligible: Impacts on the visual quality of the landscape would be at or below the level of detection, and the changes would be so slight that they would not be of any measurable or perceptible consequence to the visual experience.

Minor: Impacts on the visual quality of the landscape would be detectable, although the impacts would be localized and would be small and of little consequence to the visual experience. Mitigation measures, if needed to offset adverse impacts, would be simple and likely successful.

Moderate: Impacts on the visual quality of the landscape would be readily detectable and localized, with consequences to the visual experience. Mitigation measures, if needed to offset adverse impacts, would be extensive and likely successful.

Major: Impacts on the visual quality of the landscape would be obvious and would have substantial consequences to the visual experience in the region. Extensive mitigation measures would be needed to offset any adverse impacts, and their success would not be guaranteed.

Regulations and Policies

Regulations and policies related to visual resources in the LBJ Ranch are related to those regulations guiding the management of cultural landscapes, as the cultural landscape defines many of the ranch's important viewsheds. These regulations include:

- National Historic Preservation Act of 1966, as amended
- ACHP's regulations implementing Section 106 of the National Historic Preservation Act (36 CFR 800)
- DO 28: Cultural Resource Management Guideline
- NPS *Management Policies 2006*

Impacts of Alternative A (No-Action)

Impact Analysis. Under Alternative A, the NPS would continue to maintain the ranch and the structures within the property as they existed during the Johnson presidency.

When funding became available, the park would purchase new tour buses. This would remove the aged vehicles from the park and replace them with vehicles more appropriate to the visual setting of a national park. In the meantime, the NPS would continue to operate dated and deteriorating buses at the LBJ Ranch.

Overall, Alternative A would result in a negligible, long-term, adverse impact to visual resources.

Cumulative Impacts. Past, present, and reasonably foreseeable future actions have and continue to contribute cumulative impacts on visual resources in and around Lyndon B. Johnson NHP. These projects include the economic and physical development in the region, the operation of the LBJ Holding Company properties, the Hodges farm, and the Pitts Ranch. Any new physical development in the region could introduce additional structures into the regional viewshed. In some cases, these structures would enhance the existing viewsheds that reflect the historic presence of ranches and small towns around the LBJ Ranch. The operation of the LBJ Holding Company properties, the Hodges farm, and Pitts Ranch have and would continue to protect the park from intrusions on its viewsheds. These sites have maintained much of their property as undeveloped ranch land. Some activities on private lands are not consistent with that of the park; however, these activities do not regularly intrude upon the viewshed of the site. These projects, along with Alternative A, would result in a minor, long-term, beneficial cumulative impact. Alternative A would contribute an imperceptible adverse increment to this cumulative impact.

Conclusion. Overall, Alternative A would result in a negligible, long-term, adverse impact on the visual resources. Alternative A would contribute an imperceptible adverse increment to a minor, long-term, beneficial cumulative impact.

Impacts of Alternative B (Private Vehicle Access)

Impact Analysis. Under Alternative B, impacts to visual resources would include the removal of maintenance activities from the Klein Shop. This would improve the historic appearance of the area surrounding the Texas White House, a beneficial impact.

Changes to the access roads near the hangar would not alter the park's viewshed, as vehicles would continue to pass through the same general location. Returning portions of Bravo Road to its historic gravel cover would provide an improved visual understanding of what some of the ranch roads were like.

In addition, the introduction of private vehicles to the LBJ Ranch would alter the pattern of the vehicles on the landscape, but not to a degree that would impact the park's visual resources. Private vehicles were common on the landscape during the presidency, and based on current and projected visitation, there would not be enough vehicles on the landscape at one time to detract from the resources at the LBJ Ranch. There would be short-term impacts as the sight of private vehicles became common to the ranch. As private vehicles are a part of everyday life, once some time has passed, private vehicles within the LBJ Ranch would become common; however, this sight may never become an accepted part of the ranch for some people.

Overall, Alternative B would have minor, short-term, adverse, moderate, long-term, adverse, and moderate, long-term, beneficial impacts on visual resources.

Cumulative Impacts. Past, present, and reasonably foreseeable future actions have and continue to contribute cumulative impacts on visual resources in and around Lyndon B. Johnson NHP. These projects include the economic and physical development in the

region, the operation of the LBJ Holding Company properties, the Hodges farm, and the Pitts Ranch. These projects, along with Alternative B, would result in a minor, long-term, beneficial cumulative impact. Alternative B would contribute an appreciable beneficial increment to this cumulative impact.

Conclusion. Overall, Alternative B would result in minor, short-term, adverse; moderate, long-term, adverse; and moderate, long-term, beneficial impacts on the visual resources. Alternative B would contribute an appreciable beneficial increment to a minor, long-term, beneficial cumulative impact.

Impacts of Alternative C (Bus Tour and Private Vehicle Access) (NPS Preferred Alternative)

Impact Analysis. Under Alternative C, impacts related to visual resources would be similar to those described above for Alternative B. The primary difference would be the inclusion of an NPS bus tour. The site of private vehicles and a new bus tour would be similar to the impacts described under Alternative B. Through the use of adaptive management, the use of buses could be limited or eventually eliminated. In this case, the impacts would be the same as those described under Alternative B.

Overall, Alternative C would have minor, short-term, adverse, moderate, long-term, adverse, and moderate, long-term, beneficial impacts on visual resources.

Cumulative Impacts. Past, present, and reasonably foreseeable future actions have and continue to contribute cumulative impacts on visual resources in and around Lyndon B. Johnson NHP. These projects include the economic and physical development in the region, the operation of the LBJ Holding Company properties, the Hodges farm, and the Pitts Ranch. These projects, along with

Alternative C, would result in a minor, long-term, beneficial cumulative impact. Alternative C would contribute an appreciable beneficial increment to this cumulative impact.

Conclusion. Overall, Alternative C would result in minor, short-term, adverse; moderate, long-term, adverse; and moderate, long-term, beneficial impacts on the visual resources. Alternative B would contribute an appreciable beneficial increment to a minor, long-term, beneficial cumulative impact.

SITE ACCESS AND CIRCULATION

Affected Environment

Regional access to the LBJ Ranch is provided by Route 290, which extends east to Austin and connects to San Antonio in the south via Route 281. The town of Fredericksburg is just over 15 miles to the west. The state park entrance connects directly to Route 290. The entrance road leads to the state park parking lot which sits in front of the visitor center. The parking lot has ample space and is only filled to capacity during special events. From the parking lot, visitors leave their vehicles and enter the state park visitor center. From this point, visitors board the NPS tour bus. Visitors were charged \$6.00 for adults and \$3.00 for seniors to ride the tour bus through the LBJ Ranch. Tours last approximately 90 minutes. Therefore, depending on when visitors arrive at the state park, they may need to wait some time before boarding a tour bus. The tour schedule remained the same year-round; however, during the slow season, a bus capable of carrying over 60 visitors may take only 10. This reduces the need for visitors to wait for tours.

After boarding the NPS tour bus at the state park visitor center, NPS rangers conducted a driving tour of the LBJ Ranch and state park. Although

the bus stops at select locations along the tour, visitors are only permitted to exit the bus at the LBJ Birthplace, the Johnson Family Cemetery, and the Show Barn. At these locations, visitors are accompanied by the NPS ranger. Visitors are also permitted to get off the bus at the Sauer-Beckmann Farm at the conclusion of the tour.

On August 27, 2008, the Texas White House was opened to the public for the first time. At the time of publication, four rooms are currently open to the public. But the national park expects to gradually open additional rooms. At this time the national historical park also initiated a pilot program permitting visitors to access the LBJ Ranch by private vehicle. For the time being, the NPS tour bus service has been suspended.

In recent years the NPS has initiated step-on tours for visitors arriving in commercial buses. These tours follow the same route and provide the same information as the park's tour buses; however, visitors do not use the NPS tour bus. Instead, a park ranger travels with the group in their bus to provide a similar interpretive experience to what is provided on the park's tour buses. Each adult visitor is charged \$3.00. Step-on tours, resumed in May 2009, continue to be available during the private vehicle pilot program.

Environmental Consequences

Methodology

The purpose of park roads is to enhance visitor experience while providing safe and efficient circulation and access to park resources. Circulation is also dependent on site access via entry roads and regional roadways. The thresholds of change for the intensity of an impact are as follows:

Negligible: The impact would be at the lowest levels of detection and would not have an appreciable impact on pedestrian and vehicular

traffic flow. There would be no changes in the site accessibility.

Minor: The impact would be detectable but would be of a magnitude that would not have an appreciable impact on pedestrian and vehicular traffic flow. There would be no noticeable changes in the site access or circulation. If mitigation was needed to offset adverse impacts, it would be simple and likely successful.

Moderate: The impacts would be readily apparent and would result in a substantial change in circulation patterns, congestion, and/or site accessibility in a manner noticeable to the public. Mitigation would be necessary to offset adverse impacts and would likely be successful.

Major: The impacts would be readily apparent and would result in a substantial change in circulation in a manner noticeable to the public and be markedly different from the present site accessibility and circulation. Mitigation measures to offset adverse impacts would be needed, would be extensive, and their success would not be guaranteed.

Impacts of Alternative A (No-Action)

Impact Analysis. Under Alternative A, as the Texas White House was opened to the public, the tour bus schedule would need to be modified. This modification could involve extending the length of the tour to provide visitors with enough time at the Texas White House or reducing the number of stops on the tour to maintain the same tour schedule. Both of these options would further reduce the ability of visitors to move freely through the LBJ Ranch.

Overall, Alternative A would have a moderate, long-term, adverse impact on site access and circulation.

Cumulative Impacts. Past, present, and reasonably foreseeable future actions have and continue to contribute cumulative impacts on site access and circulation in and around Lyndon B. Johnson NHP. These projects include the economic and physical development in the region, the operation of the LBJ Holding Company properties, the Hodges farm, and the Pitts Ranch. Continued growth and development in the region has and would continue to result in increasing levels of vehicular traffic on Route 290. In some cases, this traffic could hamper access to the LBJ Ranch. The NPS and the state park would work together with its neighbors to coordinate events so they would not conflict with one another. These projects, along with Alternative A, would result in a minor to moderate, long-term, adverse cumulative impact on site access and circulation. Alternative A would contribute an appreciable adverse increment to this cumulative impact.

Conclusion. Overall, Alternative A would result in a moderate, long-term, adverse impact on site access and circulation. Alternative A would contribute an appreciable adverse increment to a minor to moderate, long-term, adverse cumulative impact.

Impacts of Alternative B (Private Vehicle Access)

Impact Analysis. Under Alternative B, visitors would still initiate their visit to the LBJ Ranch at the state park. They would have an opportunity to stop at the visitor center, shop in the gift shop, visit the Sauer-Beckmann Farm, or access the other resources in the state park.

Within the ranch, a new two-way road would be constructed from Bailey Road to the taxiway, to facilitate access to the hangar. Bailey Road would then be widened to two lanes between the new road and Park Road 49 to provide two-way access and egress from the hangar. Given the relative low level of daily visitation at the LBJ

Ranch, the change in access would not result in any traffic problems within the ranch. During special events, park staff could assist in directing traffic and parking to avoid traffic congestion.

The Texas White House buildings complex would become a pedestrian use only area when surrounding roads were realigned. The new road would direct vehicles away from this area, making it a safe and efficient pedestrian location.

In addition, visitors would be provided access to the Klein Shop, as well as new circulation patterns within the hangar. These improvements would not result in changes to circulation patterns within the LBJ Ranch.

Under Alternative B, the existing tour bus system would be discontinued. Instead, visitors would be able to drive their private vehicles through the ranch. Private vehicle access would be permitted during regular park hours, 9:00 AM – 5:00 PM (hours may be extended during summer months). Step-on tours would continue to be provided to visitors arriving on commercial buses. Visitors traveling in their private vehicles would be directed to stop at seven sites through the ranch (Junction School, LBJ Birthplace, the Johnson Family Cemetery, Sam E. Johnson House, Texas White House, Show Barn, and at the state park's Sauer-Beckmann Farm). No new parking would be developed at any of the ranch sites to support private vehicle access. Existing pull offs along the tour road would be used for parking, while visitors exited their vehicles to explore the site or take part in interpretive programs. Some additional signs or road striping could be required in some locations, like the hangar, to identify parking and vehicular circulation.

Given the level of visitation the ranch experiences, the introduction of private vehicles to the ranch roads would not result in adverse traffic conditions or create and safety concerns

on the roads. Some minor to moderate, short-term, adverse impacts would occur as new traffic patterns developed on park roads. By greatly improving the ability for visitors to move through the LBJ Ranch, Alternative B would result in a moderate, long-term, beneficial impact to site access and circulation.

Cumulative Impacts. Past, present, and reasonably foreseeable future actions have and continue to contribute cumulative impacts on site access and circulation in and around Lyndon B. Johnson NHP. These projects include the economic and physical development in the region, the operation of the LBJ Holding Company properties, the Hodges farm, and the Pitts Ranch. These projects, along with Alternative B, would result in a minor to moderate, long-term, beneficial cumulative impact on site access and circulation. Alternative B would contribute an appreciable beneficial increment to this cumulative impact.

Conclusion. Overall, Alternative B would result in a moderate, long-term, beneficial impact on site access and circulation. Alternative B would contribute an appreciable beneficial increment to a minor to moderate, long-term, beneficial cumulative impact.

Impacts of Alternative C (Bus Tour and Private Vehicle Access) (NPS Preferred Alternative)

Impact Analysis. Under Alternative C, impacts to site access and circulation would be similar to Alternative B. Visitors would continue to initiate their visit at the state park and have full access to its resources. In addition to improvements at the Klein Shop and hangar, the NPS would allow private vehicle access described, while maintaining a bus tour. Private vehicle access would be the same as described in Alternative B. The tour bus would transport visitors throughout the ranch; however, visitors would not be permitted to exit the tour bus, except at select

locations. Visitors accessing the LBJ Ranch by private vehicle would be able to visit all of the sites served by the NPS tour bus. Private vehicle visitors would have the option to stop at the Junction School, Cemetery/Birthplace, and Show Barn not normally afforded NPS tour visitors due to tour length limits. As described in Alternative B, the state park visitor center would continue to function as the point of arrival for visitors in private vehicles and those planning on traveling on the tour bus.

The tour bus would operate between 10:00 AM and 5:00 PM. The first trip would depart the state park visitor center at 10:00 AM and the last trip would depart at 3:00 PM. The tour bus would depart every 30 to 90 minutes, depending on demand. This would result in two to four tours per day. The roundtrip travel time would be approximately 2.5 hours. Private vehicle access would be permitted during regular park hours, 9:00 AM – 5:00 PM.

Given the relatively low level of daily visitation at the LBJ Ranch (current vehicle permits range from 50-150 per day), the introduction of private vehicles and tour buses to the ranch roads would not create any traffic congestion problems. During special events, park staff could assist in directing traffic and parking to avoid traffic congestion.

As noted in Alternative B, these changes would result in some minor to moderate, short-term, adverse impacts as visitors and bus drivers adjusted to new traffic patterns on park roads. By greatly improving the ability and options for visitors to move through the LBJ Ranch, Alternative C would result in a moderate, long-term, beneficial impact to site access and circulation. Through the use of adaptive management, the use of buses could be limited or eventually eliminated. In this case, the impacts would be the same as those described under Alternative B.

Cumulative Impacts. Past, present, and reasonably foreseeable future actions have and continue to contribute cumulative impacts on site access and circulation in and around Lyndon B. Johnson NHP. These projects include the economic and physical development in the region, the operation of the LBJ Holding Company properties, the Hodges farm, and the Pitts Ranch. These projects, along with Alternative C, would result in a minor to moderate, long-term, beneficial cumulative impact on site access and circulation. Alternative C would contribute an appreciable beneficial increment to this cumulative impact.

Conclusion. Overall, Alternative C would result in a moderate, long-term, beneficial impact on site access and circulation. Alternative C would contribute an appreciable beneficial increment to a minor to moderate, long-term, beneficial cumulative impact.

VISITOR USE AND EXPERIENCE

Affected Environment

In 2008, approximately 93,204 people visited Lyndon B. Johnson NHP, with approximately 67,414 people visiting the LBJ Ranch.

Within the LBJ state and national parks, there are several resources that provide visitors with a direct link to President Johnson's life. They include Junction School, LBJ Birthplace, the Johnson Family Cemetery, Sam E. Johnson House, Texas White House, Show Barn, and Sauer-Beckmann Farm. Visitors to the LBJ Ranch begin their visit at the state park's visitor center where, through a partnership established by the president, they receive orientation and purchase a ticket for the bus tour of the ranch. The visitor center also has a gift shop sales area, orientation film, and ranger talks.

The NPS tour bus tour is the focal point of the visitor experience at the LBJ Ranch. It is the only opportunity for visitors to see the majority of the ranch. An NPS ranger drives the bus and narrates a tour of the ranch. Each ranger develops the theme for their tour and includes discussions of all important resources on the ranch. The first resource on the tour is the Junction School, the first school Johnson attended. The next stop includes a half-hour stop at the birthplace, allowing the visitor to see Johnson's reconstruction of the original home. At the birthplace stop visitors can also visit the Johnson family cemetery where the president and many other family members are buried. The tour continues past the Texas White House without allowing visitors to exit the bus, as the site has not been officially opened to the public. The tour proceeds through ranch lands and stops at the Show Barn, the place where the president showed off his prize-winning Hereford cattle. The 90 minute tour then returns to the state park visitor center. From this point, visitors can extend their visit to the Sauer-Beckmann Farm where visitors are introduced to the facilities and provided an opportunity to exit the bus for a tour provided by state park costumed interpreters.

During the year there are several special programs and events for visitors. These events include a Christmas tree lighting ceremony that opens holiday activities, a commemoration of President Johnson's birthday in August, and night sky programs and lectures that are held throughout the year. In August 2008, the NPS opened the office in the Texas White House to the public. At this time and continuing to the present, the NPS allowed visitors to drive their own vehicles into the park to reach the Texas White House. On average, approximately 50-150 private vehicle permits are issued per day, depending on the season.

Environmental Consequences

Methodology

NPS *Management Policies 2006* (NPS 2006) states that enjoyment of park resources and values by the people of the United States is part of the fundamental purpose of all parks and that the NPS is committed to providing appropriate, high-quality opportunities for visitors to enjoy parks. Past interpretive and administrative planning documents provided background on changes to visitor use and experience over time. Anticipated impacts on visitor use and experience were analyzed using information from previous studies. Based on these findings, the following intensity levels were developed:

Negligible: Changes in visitor use and/or experience would be below or at the level of detection. The visitor would not likely be aware of the impacts associated with the alternative.

Minor: Changes in visitor use and/or experience would be detectable, although the changes would be slight. The visitor would be slightly aware of the impacts associated with the alternative.

Moderate: Changes in visitor use and/or experience would be readily apparent. The visitor would be aware of the impacts associated with the alternative and would likely be able to express an opinion about the changes.

Major: Changes in visitor use and/or experience would be readily apparent and would be severely adverse or exceptionally beneficial. The visitor would be aware of the impacts associated with the alternative and would likely express a strong opinion about the changes.

Impacts of Alternative A (No-Action)

Impact Analysis. Under Alternative A, the NPS would continue to provide tours of the ranch, but visitor opportunities to view the resources would

continue to be limited by the schedule of the bus tours. When funding became available, the NPS would upgrade the vehicles in the bus fleet. In the meantime, visitors would continue to utilize the outdated vehicles. When the NPS opened the Texas White House to the public, changes would need to be made in the bus tour to allow more time at the site. This would take away from opportunities for visitors at the other sites.

Under Alternative A, the park would maintain the existing uses of the structures surrounding the Texas White House. The hangar would remain open as a visitor contact station, but would not provide any additional opportunities. The Klein Shop would continue to be closed to visitors and support maintenance activities that were not conducive to the visitor experience.

Visitors would continue to pay a fee for the NPS bus tour. NPS could initiate a fee for the Texas White House tour as the structure is opened to the public. At present, the state park does not charge a fee for any of its activities. Overall, Alternative A would continue to result in a moderate, long-term, adverse impact to visitor use and experience.

Cumulative Impacts. Past, present, and reasonably foreseeable future actions have and continue to contribute cumulative impacts on visitor use and experience in and around Lyndon B. Johnson NHP. These projects include the economic and physical development in the region, operation of the LBJ Holding Company properties, the Hodges farm, and the Pitts Ranch. Any new development could introduce new hotels, restaurants, and other tourist attractions. These resources could improve visitors' experiences while visiting the park by providing more opportunities to extend or supplement their stay. These developments also could result in increased levels of traffic on local roads. In some cases, these developments may not be characteristic with the rural, ranching atmosphere that the NPS preserves. However,

the presence of the state park, and surrounding ranchlands would provide a suitable buffer between increased development and the LBJ Ranch. Activities on these adjacent properties have and would continue to have an impact on the visitor use and experience at the park. Hunting and other activities on these properties would occur, and although not consistent with typical NPS operations and opportunities they do represent typical activities of private Texas ranches. Continued coordination with these landowners would allow the park to schedule tours and other events at times and locations that would not be greatly impacted by these private landowner activities. These projects, along with Alternative A, would result in a minor to moderate, long-term, beneficial cumulative impact on visitor use and experience. Alternative A would contribute an appreciable adverse increment to this cumulative impact.

Conclusion. Overall, Alternative A would result in a moderate, long-term, adverse impact on visitor use and experience. Alternative A would contribute an appreciable adverse increment to a minor to moderate, long-term, beneficial cumulative impact.

Impacts of Alternative B (Private Vehicle Access)

Impact Analysis. Under Alternative B, several improvements would be made to the visitor experience. The hangar would be developed into a permanent visitor contact station to support interpretation at the Texas White House. The hangar would be the primary exhibit area within the LBJ Ranch Unit. It also would be interpreted to reflect its use during the presidency, a beneficial impact. Along with interpretation, the hangar would support a gift shop and public restrooms. This would improve visitors understanding of the entire Texas White House complex, as well as the presidency.

In addition, the Klein Shop would be developed to support visitor contact activities. The shop would provide a place for visitors to wait to tour the Texas White House or to continue to their experience following the tour. The shop would present educational movies on the Johnson family, President Johnson, and the events that occurred during his presidency. Additional public restrooms also would be provided. This would have a beneficial impact by improving the quality of the time visitors spend at the Texas White House complex.

Under Alternative B, the Sam E. Johnson House would be studied to determine the feasibility and advisability of returning it to its original dog-trot cabin appearance. Should that action occur, new interpretive programs would focus on the role the house played in Johnson's upbringing, rather than his presidential years. This would provide the visitor with a better understanding of the sights known to Lyndon Johnson in his youth.

Private vehicle access would provide additional freedom to park visitors. After obtaining maps and other orientation material at the state park visitor center, visitors could plan their own tour through the park. Visitors could spend as much time as they wanted at any site and travel to them in any order they chose. Some visitors may be disappointed that regular tours were not provided as in the past, but the new system would allow the NPS to enhance educational and interpretive programs that would provide greater understanding and experiences within the LBJ Ranch.

Visitors would no longer pay a fee to enter the ranch, as they would be traveling in their own vehicle. The NPS could initiate a fee for the Texas White House tour as the structure is opened to the public. At present, the state park does not charge a fee for any of its activities.

There would be a minor to moderate, short-term, adverse impact as visitors became accustomed to

the sight and sound of private vehicles on the park roads and viewsheds; however, some visitors may never become accustomed to these changes. Overall, Alternative B would result in minor to moderate, long-term, adverse and moderate long-term, beneficial impacts on visitor use and experience as a result of improved visitor access and expanded visitor contact and interpretive facilities.

Cumulative Impacts. Past, present, and reasonably foreseeable future actions have and continue to contribute cumulative impacts on visitor use and experience in and around Lyndon B. Johnson NHP. These projects include the economic and physical development in the region, operation of the LBJ Holding Company properties, the Hodges farm, and the Pitts Ranch. These projects, along with Alternative B, would result in a minor to moderate, long-term, beneficial cumulative impact on visitor use and experience. Alternative B would contribute noticeable to appreciable adverse and appreciable beneficial increments to this cumulative impact.

Conclusion. Overall, Alternative B would result in minor to moderate, long-term, adverse and moderate long-term, beneficial impact to visitor use and experience. Alternative B would contribute noticeable to appreciable adverse and appreciable beneficial increments to a minor to moderate, long-term, beneficial cumulative impact.

Impacts of Alternative C (Bus Tour and Private Vehicle Access) (NPS Preferred Alternative)

Impact Analysis. The impacts to visitor use and experience under Alternative C would be similar to those described in Alternative B. However, under this alternative, the NPS would continue to provide an interpretive tour through the LBJ Ranch. This would allow some visitors to

explore the ranch on their own, while others could take a guided tour.

Visitors would no longer pay a fee to enter the ranch if they were traveling in their own vehicle. A fee would continue to be charged for the NPS bus tour. The NPS could initiate a fee for the Texas White House tour as the structure is opened to the public. At present, the state park does not charge a fee for any of its activities.

As was the case in Alternative B, there would be a minor to moderate, short-term, adverse impact as visitors became accustomed to the sight and sound of private vehicles and new tour buses on the park roads and viewsheds. Overall, Alternative C would result in minor to moderate, long-term, adverse and moderate, long-term, beneficial impacts on visitor use and experience as a result of improved visitor access and expanded visitor contact and interpretive facilities. Through the use of adaptive management, the use of buses could be limited or eventually eliminated. In this case, the impacts would be the same as those described under Alternative B.

Cumulative Impacts. Past, present, and reasonably foreseeable future actions have and continue to contribute cumulative impacts on visitor use and experience in and around Lyndon B. Johnson NHP. These projects include the economic and physical development in the region, operation of the LBJ Holding Company properties, the Hodges farm, and the Pitts Ranch. These projects, along with Alternative B, would result in a minor to moderate, long-term, beneficial cumulative impact on visitor use and experience. Alternative C would contribute noticeable to appreciable adverse and appreciable beneficial increments to this cumulative impact.

Conclusion. Overall, Alternative C would result in minor to moderate, long-term, adverse and moderate long-term, beneficial impact to visitor

use and experience. Alternative C would contribute noticeable to appreciable adverse and appreciable beneficial increments to a minor to moderate, long-term, beneficial cumulative impact.

OPERATIONS AND INFRASTRUCTURE

Affected Environment

Operations at Lyndon B. Johnson NHP Ranch Unit are focused on interpreting the ranch through a bus tour. NPS interpretive staff conduct tours on the tour bus system of the ranch. Each tour lasts approximately 90 minutes. Additionally, an interpretive assistant schedules the NPS step-on tours for the ranch. Along with providing orientation and tours, interpretive staff work to develop overall interpretive themes for the parks and plan special events.

The maintenance staff at Lyndon B. Johnson NHP provides general upkeep of all of the historic and support structures. This work is based out of the Klein Shop and includes carpentry, painting, and general cleaning and grounds keeping. Maintenance staff also spend a large portion of their time maintaining the tour buses at the bus barn. The bus fleet consists of several buses (power unit and trailer), each with a 60-passenger capacity, which were purchased in 1995, and one bus with a 27-passenger capacity. All buses are propane-powered, air-conditioned, and accessible. The buses are out of date and require daily maintenance to keep them running. Replacement parts are difficult to find and the number of mechanics necessary to maintain the fleet far exceeds typical vehicle to mechanic ratios.

Structures at the ranch include the Texas White House, the hangar, Klein Shop, and the other buildings that surround the house. These structures have been maintained by the Johnson

family and the NPS for a number of years and are still in good condition. The exterior of the Klein Shop, USSS Command Post, and the hangar, along with the airstrip taxiway and runway, still reflect their appearance during the presidency. Recently, the NPS has opened the hangar for special events and tours. During special events, the park has used portions of the tarmac for parking private vehicles or NPS tour buses reflecting historic uses by the President and Mrs. Johnson.

The Sam E. Johnson House is another important structure at the park. The house was Johnson's grandparents' home and later became a guest house during the presidency. Between Johnson's childhood and his presidency, the house changed hands a number of times and was remodeled. The remodeling included building a larger shell around the original house. These changes do not reflect the property that President Johnson remembered from his childhood, but are consistent with the appearance that existed during the presidency. The house is closed to visitors, but is regularly maintained. There is no formalized parking at the house; however, there are some displays along the park road that provide background on the property.

Along with the historic structures at the park, there are several support structures. These structures include the bus barn which has been used as the tour bus maintenance facility. The space was not designed for this operation but provides enough space for maintenance staff to work on buses and store their equipment. It does not provide enough space, in its current configuration, to support all of the park's maintenance equipment and activities.

Park roads are another important piece of the LBJ Ranch infrastructure and are regularly maintained. The road network has remained relatively unchanged since the presidency. In an effort to respect the historic nature of the site and comply with Secret Service security

requirements, no additional access and circulation systems have been constructed in the park.

Environmental Consequences

Methodology

Operations and infrastructure includes park staffing levels, availability and location of staff, park budget, and partnerships with the state park and other partners. The topic also refers to the quality and effectiveness of the infrastructure in order to adequately protect and preserve vital resources and provide for an effective visitor experience. This includes an analysis of the condition and usefulness of the facilities and developed features used to support the operations of the park. Impact analyses are based on the current description of operations and infrastructure presented in the Affected Environment section above. The thresholds of change for the intensity of this impact are defined as follows:

Negligible: Operations and infrastructure would not be affected, or the impacts would be at low levels of detection and would not have an appreciable impact on operations and infrastructure.

Minor: The impact would be detectable but would be of a magnitude that would not have an appreciable impact on operations and infrastructure. If mitigation was needed to offset adverse impacts, it would be simple and likely successful.

Moderate: The impacts would be readily apparent and would result in a substantial change in operations and infrastructure in a manner noticeable to staff and the public. Mitigation measures would be necessary to offset adverse impacts and would likely be successful.

Major: The impacts would be readily apparent, would result in a substantial change in park operations in a manner noticeable to staff and the public, and be markedly different from existing operations and infrastructure. Mitigation measures to offset adverse impacts would be needed, would be extensive, and their success could not be guaranteed.

Impacts of Alternative A (No-Action)

Impact Analysis. Under Alternative A, no changes would be made to the operations at the state park visitor center. The NPS and the state park would continue to work together to provide orientation and collect fees for the NPS bus tour.

NPS interpretive staff would continue to provide tours and site orientation, while working to develop new interpretive and educational programs for the park. When the Texas White House was open to the public, interpretive staff would conduct tours of this site as well. This would involve changing the existing tour schedule and focusing more time on the Texas White House than some of the other structures in the park. This would prevent interpretive staff from fully explaining the history and stories of the president, his home, and culture.

Under Alternative A, no changes would be made to the tour bus system. This would require the maintenance staff to continue to use the bus barn as the bus maintenance facility. When funding became available, the park would purchase new buses. In the meantime, staff would continue daily activities to keep the buses running. When new buses were purchased, the layout and equipment included at the bus barn would be changed to best support the new vehicles. The bus barn operation would be relocated to the state park or adjacent private lands when available for purchase.

Under this alternative, no changes would be made to the structures in the park. Since the

1999 GMP/EIS was completed, park staff have identified better uses for several of these structures as plans for the opening of the Texas White House develop. Under Alternative A, these new plans would not be able to be developed. The Texas White House would still open as planned, but without the appropriate use of the surrounding buildings to support park staff.

Overall, Alternative A would have a moderate, long-term, adverse impact on operations and infrastructure.

Cumulative Impacts. Past, present, and reasonably foreseeable future actions have and continue to contribute cumulative impacts on operations and infrastructure at Lyndon B. Johnson NHP. These projects include the operation of the LBJ Holding Company properties, the Hodges farm, and the Pitts Ranch. Hunting and other activities on these properties continue. Continued coordination with these landowners would allow the park to schedule tours and other events at times and locations that would not be greatly impacted by these activities. These projects, along with Alternative A, would result in a negligible, long-term, adverse cumulative impact on operations and infrastructure. Alternative A would contribute an appreciable adverse increment to this cumulative impact.

Conclusion. Overall, Alternative A would result in a moderate, long-term, adverse impact on operations and infrastructure. Alternative A would contribute an appreciable adverse increment to a negligible, long-term, adverse cumulative impact.

Impacts of Alternative B (Private Vehicle Access)

Impact Analysis. Under Alternative B, the NPS and the state park would continue to work together to operate the visitor center. Staff

would provide orientation and distribute permits to drive on to the ranch. There would be no fee charged for this permit, but the NPS would continue to assist the state park in identifying means of recovering any revenues lost through this new operation.

Several changes would be made to the structures at the LBJ Ranch. The hangar at the Texas White House would be further developed to serve as a visitor contact station with enhanced interpretation of its use in the Johnson presidency. These improvements would not result in any physical changes to the hangar, as improvements would be focused on the presentation of and interpretation within the hangar.

The Klein Shop would be developed into an unstaffed educational center that displayed movies related to Johnson and his presidency. The Klein Shop also would have additional restrooms installed, as well. These improvements would require some upgrades to the interior of the structure, but would not detract from its historic, exterior appearance. Maintaining the structure would require additional staff time, but its proximity to other structures would allow this maintenance work to be incorporated to existing activities.

To improve vehicular access to the hangar, and surrounding structures, a new two-way road would be constructed from Bailey Road to the taxiway. Bailey Road would then be widened to two lanes between the new road and Park Road 49 to provide two-way access and egress from the hangar. The remainder of Bailey Road north of the new access road would be demolished. There would be some short-term impacts to the road system as the road demolition and improvements were completed. Once construction was complete, the changes would not notably alter the way the roads were used or maintained.

Along with these changes, new signs and markers would be installed along the taxiway to identify appropriate places for visitors to park their vehicles. This would represent new infrastructure; however, maintaining these elements could easily be incorporated into daily maintenance activities.

By discontinuing the tour bus system, changes could be made in the maintenance operation. Vehicle maintenance activities would be limited to NPS vehicles. Therefore, the NPS could consolidate more of its maintenance operation at the bus barn. This also would allow NPS staff to focus on other tasks.

Overall, Alternative B would have a minor to moderate, short-term, adverse and moderate, long-term, beneficial impact on operations and infrastructure.

Cumulative Impacts. Past, present, and reasonably foreseeable future actions have and continue to contribute cumulative impacts on operations and infrastructure at Lyndon B. Johnson NHP. These projects, along with Alternative B, would result in a negligible, long-term, adverse cumulative impact on operations and infrastructure. Alternative B would contribute an appreciable beneficial increment to this cumulative impact.

Conclusion. Overall, Alternative B would result in a minor to moderate, short-term, adverse and moderate, long-term, beneficial impact on operations and infrastructure. Alternative B would contribute an appreciable beneficial increment to a negligible, long-term, adverse cumulative impact.

***Impacts of Alternative C (Bus Tour and Private Vehicle Access)
(NPS Preferred Alternative)***

Impact Analysis. Under Alternative C, the impacts related to operations and infrastructure

would be similar to those described above under Alternative B. The NPS and the state park would continue to work together to operate the visitor center. Staff would provide orientation, distribute permits to drive on to the ranch, and charge fees for those who opted to take the NPS tour. There would be no fee charged for this permit, but the park would continue to charge a fee for the NPS tour. The NPS would continue to assist the state park in identifying means of recovering any revenues lost through this new operation.

The continuation of an NPS bus tour would result in the same beneficial impacts to the interpretive staff, as described in Alternative B. This benefit would be achieved by separating the responsibilities of a bus driver and an interpreter. Interpreters would be stationed throughout the park, as described under Alternative B, with additional staff taking on the responsibility of driving the NPS tour buses. If the NPS tour bus was to be operated by a concessioner, much of the maintenance equipment at the bus barn could be removed. If the NPS tour buses were not to be run by a concessioner, the NPS would maintain its maintenance operation at the bus barn and purchase new buses. The bus barn would be equipped with the appropriate equipment to service the new vehicles. These vehicles would require less maintenance time, allowing maintenance staff to focus on other tasks.

Overall, Alternative C would result in a minor to moderate, short-term, adverse and moderate, long-term, beneficial impact to operations and infrastructure. However, the beneficial effects likely would not be as great as under Alternative B due to the continuing use of NPS tour buses and the associated maintenance and staffing needs. Through the use of adaptive management, the use of buses could be limited or eventually eliminated. In this case, the impacts would be the same as those described under Alternative B.

Cumulative Impacts. Past, present, and reasonably foreseeable future actions have and continue to contribute cumulative impacts on operations and infrastructure at Lyndon B. Johnson NHP. These projects, along with Alternative C, would result in a negligible, long-term, adverse cumulative impact on operations and infrastructure. Alternative C would contribute an appreciable beneficial increment to this cumulative impact.

Conclusion. Overall, Alternative C would result in a minor to moderate, short-term, adverse and moderate, long-term, beneficial impact on operations and infrastructure. Alternative C would contribute an appreciable beneficial increment to a negligible, long-term, adverse cumulative impact.

SUMMARY OF ENVIRONMENTAL CONSEQUENCES

Alternative A: No Action

The NPS would continue to implement actions outlined in the 1999 GMP/EIS. The NPS would continue to maintain the ranch and the structures within the property as they existed during the Johnson presidency. Any physical changes to the cultural landscape and historic structures at the ranch would be related to the actions analyzed in the 1999 GMP/EIS. No changes would be made to the existing circulation at the ranch. As the Texas White House was open to the public, staff time and funding would be diverted from other programs.

Alternative B: Private Vehicle Access

The interior of the hangar and Klein Shop would be improved. Any impact to the Sam E. Johnson House would await the proposed feasibility and advisability studies. Improvements to the Klein Shop and hangar would enhance the

understanding of their historic significance and visitor contact and interpretation. The introduction of private vehicles would not require any physical development and would not notably alter the landscape. Alterations to Bailey Road and Bravo Road would not notably alter the historic landscape at the ranch and would regain the former appearance of Bravo Road. The introduction of private vehicles to the ranch would result in short-term impacts to the visual resources, but would not detract from any improvements over the long-term. Access to structures within the ranch would be improved. The NPS tour bus system would be discontinued and private vehicle access would be initiated. Interpreters would not be required to drive buses and could focus on enhanced interpretation throughout the ranch.

Alternative C: Bus Tour and Private Vehicle Access (NPS Preferred Alternative)

The interior of the hangar and Klein Shop would be improved. Any impact to the Sam E. Johnson House would await the proposed feasibility and advisability studies. Improvements to the Klein Shop and hangar would enhance the understanding of their historic significance and visitor contact and interpretation. The introduction of private vehicles would not require any physical development and would not notably alter the landscape. Alterations to Bailey Road and Bravo Road would not notably alter the historic landscape at the ranch and would regain the former appearance of Bravo Road. The introduction of private vehicles to the ranch would result in short-term impacts to the visual resources, but would not detract from any improvements over the long-term. Access to structures within the ranch would be improved. The NPS tour bus system would be discontinued and private vehicle access and a new tour bus would be initiated. Allowing private vehicle access, while maintaining a bus tour, would provide more opportunities to the visitors.

CONSULTATION AND COORDINATION

NPS DO #12 requires the NPS to make “diligent” efforts to involve the interested and affected public in the NEPA process. This process, known as scoping, helps to determine the important issues and eliminate those that are not; allocate assignments among the interdisciplinary team members and/or other participating agencies; identify related projects and associated documents; identify other permits, surveys, consultations, etc. required by other agencies; and create a schedule that allows adequate time to prepare and distribute the environmental document for public review and comment before a final decision is made. This chapter documents the scoping process for the proposed action and includes the official list of recipients for the document.

PUBLIC AND AGENCY INVOLVEMENT

Internal Scoping

Internal scoping for the plan amendment/EA began in early 2008. At that time, representatives from the national historical park and state park met to review the 1999 GMP/EIS and select issues that needed to be revisited in the plan amendment/EA. The issues that the group selected were taken to NPS Intermountain Region Deputy Director for approval. Once the approval process was complete, representatives from the NPS and the state park along with their consultants began a thorough analysis of the different transportation concepts that were to be considered for the plan amendment/EA. Once the preliminary analysis was complete, staff

from the NPS and the state park met in January 2009 to review the analysis, rate how each concept met the goals and objectives of the plan amendment/EA, and select options that would be developed into complete alternatives for the plan amendment/EA. At this time, the NPS also selected its preferred alternative.

Public Scoping

Public scoping for the plan amendment/EA began in November 2008 when the NPS released a newsletter introducing the general concepts that were to be included in the document. Following the release of the newsletter, the NPS solicited comments from the public on the proposed concepts. Following the public review of the newsletter, the NPS hosted two public open house sessions to solicit public input on the transportation options and infrastructure improvements being considered for the plan amendment/EA. The first open house was held at the state park’s dining hall from 4:00-6:00 PM on January 27, 2009, and the second open house was held on January 29, 2009 in the national historical park’s Johnson City visitor center from 7:00-9:00 PM. Individuals who attended the meetings were presented with large-scale illustrations of the eight transportation options, a summary of the goals for the transportation elements, and options for other infrastructure improvements being considered under the plan amendment/EA. Representatives from the NPS and state park were on hand to explain the options and solicit comments from the public. The information obtained during the review of the newsletter and at the public meetings was used to develop the alternatives presented in this

document. The public will be invited to participate in the process again, during the 30-day review of this document.

Discussions with Key Stakeholders

During the public review of the newsletter, the NPS received several comments from former employees expressing concerns over proposals for the amendment. In order to accurately address these group's comments and obtain the informed and qualified opinions these groups could provide, appointments were scheduled during the first day of the internal alternatives development meeting (January 28, 2009). The appointments were conducted with the following individuals:

- Mr. Robert Utley - former Assistant Director, Park Historic Preservation and member of the Coalition of National Park Service Retirees.
- Ms. Melody Webb - former Superintendent, Lyndon B. Johnson NHP
- Mr. Donald Schuch - former Superintendent, Lyndon B. Johnson State Park and Historic Site
- Ms. Leslie Hart – former Superintendent, Lyndon B. Johnson NHP

During each appointment, the project team provided the guests with an overview of the goals of the study and the transportation options and answered questions related to the specific elements of each option. The project team then provided the guests with the opportunity to express their comments and concerns, ask questions about the plan amendment/EA, and respond to questions posed by the project team. The discussions and information obtained during these appointments were used to inform and

refine the transportation analysis that informed this document.

Agency Scoping

Agencies contacted via letter during the planning process included the Texas State Historic Preservation Officer and the Advisory Council on Historic Preservation (Appendix B). Informal responses from these agencies and others indicated that they would provide official comment during the review of this document.

DOCUMENT REVIEW PROCESS

The EA will be released for public. To inform the public of the availability of the EA, the NPS will publish and distribute a letter or press release to various agencies and members of the public on the national historical park's and state park's mailing lists, as well as place an ad in the local newspaper. Copies of the EA will be provided to interested individuals, upon request. Copies of the document will also be available for review at the state park's visitor center, the national historical park's hangar visitor contact station on the LBJ Ranch, the Johnson City visitor center, and on the Internet at <http://parkplanning@nps.gov/lyjo>.

The EA is subject to a 30-day public comment period. During this time, the public is encouraged to submit their written comments to the NPS address provided at the beginning of this document. Following the close of the comment period, all public comments will be reviewed and analyzed, prior to the release of a decision document. The NPS will issue responses to substantive comments received during the public comment period, and will make appropriate changes to the EA, as needed.

LIST OF PREPARERS AND CONTRIBUTORS

This document was prepared by Vanasse Hangen Brustlin, Inc. with input from staff at Lyndon B. Johnson NHP, Lyndon B. Johnson State Park and Historic Site, Texas Parks and Wildlife Department, the NPS Intermountain Region Office, and the NPS Denver Service Center.

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APPENDIX A: RELEVANT LEGISLATION

Authorizing Legislation

An Act to establish the Lyndon B. Johnson National Historic Site (83 Stat. 279)

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That in order to preserve in public ownership historically significant properties associated with the life of Lyndon B. Johnson, the Secretary of the Interior is authorized to acquire by donation or by purchase with donated funds, such lands and interests in lands, together with the buildings and improvements thereon, at or in the vicinity of Johnson City, Texas, as are depicted on the drawing entitled "Lyndon B. Johnson National Historic Site Boundary Map", numbered NHS-LBJ-20,000 and dated September 1969, together with such lands as from time to time may be donated for addition to the site and such lands as he shall deem necessary to provide adequate public parking for visitors at a suitable location. The drawing shall be on file and available for public inspection in the offices of the National Park Service, Department of the Interior. When acquired such a site shall be known as the Lyndon B. Johnson National Historic Site.

Sec. 2. The Secretary shall administer the Lyndon B. Johnson National Historic Site in accordance with the Act approved August 25, 1916 (39 Stat. 535; 16 U.S.C. 1 et seq.), as amended and supplemented, and the Act approved August 21, 1935 (49 Stat. 666; 16 U.S.C. 461 et seq.), as amended.

Sec. 3. There are hereby authorized to be appropriated not more than \$180,000 to provide for the development of the Lyndon B. Johnson National Historic Site.
Approved December 2, 1969.

Legislative History

House Report No. 91-636 (Committee on Interior and Insular Affairs).

Senate Report No. 91-364 (Committee on Interior and Insular Affairs).

Congressional Record. Vol. 115 (1969):

Aug 12: Considered and passed Senate.

Nov. 17: Considered and passed House, amended.

Nov. 19: Senate concurred in House amendment.

Authorizing Legislation
Amendatory Legislation
Public Law 96-607 – Dec. 28, 1980
Title VI

Lyndon B. Johnson National Historical Park

Sec 601. The Act entitled “An Act to establish the Lyndon B. Johnson National Historic Site”, approved December 2, 1969 (83 Stat. 274) IS AMENDED –

- (1) In the first section, by changing “by donation or by purchase with donated funds” to “by donation or by purchase with donated or appropriated funds” and by changing “drawing entitled ‘Lyndon B. Johnson National Historic Site Boundary Map’, numbered NHS-LBJ-20,000 and dated September 1969” to “drawings entitled ‘Boundary Map Lyndon B. Johnson National Historical Park’, numbers 447-40,008B and 447-40,000A, and dated January 1980”;
- (2) in section 3, by changing “not more than \$680,000 to provide for the development of” to “such sums as may be necessary to carry out the provisions of this Act, but not more than \$4,100,000 for development and not more than \$1,400,000 for the acquisition of lands and interests therein for”; and
- (3) by changing “National Historic Site” whenever it appears to “National Historical Park”.

APPENDIX B: RELEVANT CORRESPONDENCE



June 16, 2009

Mr. Russ Whitlock
Superintendent
National Park Service
Lyndon B. Johnson National Historical Park
P.O. Box 329
Johnson City, Texas 78636

Dear Mr. Whitlock:

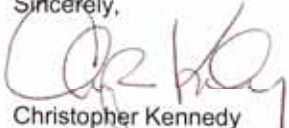
Chair Klein asked that I follow up on your request for information regarding the Lyndon B. Johnson National Historical Park. First let me say that the LBJ Ranch is an important asset to Central Texas, and LCRA owes a great deal of thanks to what the Johnson family has brought to this region.

You inquired about two items. First, you asked if LCRA had any future plans that may affect public access to the LBJ Ranch. The answer is no. LCRA does not know of any projects in our future that would impact any of the public access points to the ranch.

Second, you asked about any archival records related to the construction of dams on the Pedernales River. We do have a few items in our archives that might be of interest:

- a 1951 map of the proposed site of the Lyndon B. Johnson Dam;
- a 1955 Pedernales River Study by Holton Cook that includes a cross section of possible dam sites and cost estimates for a dam at Deadman Hole Creek; and
- a "Statement of LCRA Pertaining to Possible Flood Control Dam on Pedernales River - Hearing at Johnson City, Texas, March 18, 1958" and other materials, which include the general plan for structures and cost estimates.

We work closely with the LBJ Library and would be happy to share any of these records. You can contact Jean Flahive at 1-800-776-5272, ext. 6824, or e-mail her at corporate.archives@lcra.org.

Sincerely,

Christopher Kennedy
Chief Administrative Officer

**APPENDIX C:
LYNDON B. JOHNSON
NATIONAL HISTORICAL PARK
TRANSPORTATION STUDY –
EXECUTIVE SUMMARY**

PURPOSE

In 2008, the National Park Service (NPS) initiated plans for a General Management Plan Amendment/Environmental Assessment (plan amendment/EA) for the Lyndon B. Johnson National Historical Park (NHP) (Figure 1), to build upon the vision for preserving and sharing the park's resources that was laid out in the 1999 General Management Plan/Environmental Impact Statement (GMP/EIS), including a plan to enhance access and circulation options.



Figure 1: LBJ State and National Parks (Ranch Unit)

The plan amendment/EA was initiated to address the following concerns at the LBJ Ranch Unit of Lyndon B. Johnson NHP.

- Visitation has declined substantially over the past 30 years. The NPS believes that it could attract greater visitation, particularly visitors on day trips or weekend trips to the Texas Hill Country, if visitors were permitted to enter the LBJ Ranch in their personal vehicles.

- The existing tour buses at the LBJ Ranch Unit have exceeded their useful lifespan and require daily maintenance.
- An annual subsidy of approximately \$140,000 is required to operate the NPS tour bus. This does not include funding to replace the buses. This subsidy could otherwise be used to enhance interpretation at the LBJ Ranch Unit.
- With the opening of the Texas White House, the NPS will need to reevaluate the use of staff and resources throughout the LBJ Ranch Unit.

This report discusses the process that was used to develop and evaluate nine transportation options that were considered as part of the access and circulation component of the plan amendment/EA (VHB 2009).

TRANSPORTATION OPTIONS

During an internal scoping meeting in September 2008, the planning group identified four basic transportation options for providing access to the LBJ Ranch: a no-action option and three action options (Option 1, Option 2, and Option 3). Several of these options have variations related to the route structure and whether the service is operated by the NPS or a concessioner. These nine options are described below.

- **No Action – NPS Tour Bus:** Under the No Action option, visitor access and circulation through the LBJ Ranch would continue to be provided by the NPS tour bus. Visitors would remain with the tour for the entire trip, with bus drivers interpreting park resources. Tours would continue to start at the Lyndon B. Johnson State Park and Historical Site (the state park) visitor center, where visitors purchase bus tickets and receive orientation. The bus driver would continue to escort visitors to the Show Barn and LBJ Birthplace/Johnson Family Cemetery. Visitors would be permitted to get off the bus for tours of the Texas White House and Sauer-Beckmann Farm.
- **Option 1 – Drop and Run Tour Bus:** This would replace the existing tour bus system with a drop and run tour bus system that allows visitors to get on and off the bus at designated locations, much like an urban bus route. The new bus system would continually circulate through the park at regular intervals. Under this option, the state park visitor center would continue to function as the point of arrival, providing visitors with orientation to the LBJ state and national parks and serving as the launch site for the bus system. Option 1 has three route variations.
 - **Option 1A and Option 1B – Long Route:** For Option 1A and Option 1B, a drop and run tour bus would continually circulate between the state park visitor center, LBJ Birthplace/Johnson Family Cemetery, Texas White House, Show Barn, and Sauer-Beckmann Farm, at regular intervals. Visitors would be permitted to get on and off the bus at these five designated bus stops at their leisure. The drop and run tour bus would be operated by the NPS in Option 1A and by a concessioner in Option 1B.
 - **Option 1C and Option 1D – Short Route:** For Option 1C and Option 1D, a drop and run tour bus would continually circulate on an abbreviated route, between the state park visitor center, Texas White House, and the Sauer-

Beckmann Farm, at regular intervals. Visitors would be permitted to get on and off the bus at these three designated bus stops at their leisure. In addition, visitors would be permitted to enter the LBJ Ranch in their personal vehicles. Visitors in personal vehicles would also be permitted to stop at the LBJ Birthplace, Johnson Family Cemetery, and the Junction School. The drop and run tour bus would be operated by the NPS in Option 1C and by a concessioner in Option 1D.

- **Option E – 1999 GMP Route:** For Option 1E, a drop and run tour bus would continually circulate between the state park visitor center, LBJ Birthplace/Johnson Family Cemetery, Texas White House, Show Barn, and Sauer-Beckmann Farm, at regular intervals. Visitors would be permitted to get on and off the bus at these five designated bus stops at their leisure. In addition, visitors would be permitted to get off the bus at the intersection of Ranch Road 49 and Bailey Road and walk to the Texas White House, approaching it from the front, just as visitors did during the president’s life. Option 1E would be operated by a concessioner.
- **Option 2 – Personal Vehicles Only:** This option would allow visitors to tour the LBJ Ranch by personal vehicle and would discontinue the NPS tour bus. The state park visitor center would continue to function as the point of arrival, providing visitors with orientation to the LBJ state and national parks and serving as the start of the auto tour. Visitors would be permitted to visit seven sites by personal vehicle (Texas White House, Sauer-Beckmann Farm, Junction School, LBJ Birthplace/Johnson Family Cemetery, Sam E. Johnson, Sr. House, and Show Barn) after receiving a permit at the state park visitor center.
- **Option 3 – NPS Tour Bus & Drop and Run Tour Bus:** Under Option 3, the NPS would implement a combination of the No Action and Option 2. While a tour bus would provide service to several locations on the ranch, visitors would be permitted to enter the park by personal vehicle as well. Visitors accessing the LBJ Ranch by tour bus would remain with the tour for the entire trip, with bus drivers interpreting park resources. Tours would continue to start at the state park visitor center. Visitors would be permitted to get off the bus for tours of the Texas White House and Sauer-Beckmann Farm. The NPS tour bus would be operated by the NPS in Option 3A and by a concessioner in Option 3B. Visitors accessing the LBJ Ranch by personal vehicle would also be permitted to stop at the locations mentioned above, as well as the Junction School, Show Barn, LBJ Birthplace, and Johnson Family Cemetery.

EVALUATION OF TRANSPORTATION OPTIONS

During a 2009 internal scoping meeting, the planning team conducted an evaluation of the nine transportation options. This meeting was attended by representatives from the NPS Denver Service Center (DSC), the Lyndon B. Johnson NHP, the state park, and the NPS’s consultant team. The score for each transportation option was plotted against the lifecycle cost of each option (lifecycle costs includes operating costs, maintenance costs, and annualized capital costs) (Figure 2). Those options that provided a lower score at a higher lifecycle cost were considered to be fatally flawed and were removed from consideration. For example, Option 1C and Option 1D received a lower score than Option 2, but had a higher lifecycle cost. In addition, Option 1A, Option 1B, and Option 1E were removed from consideration.

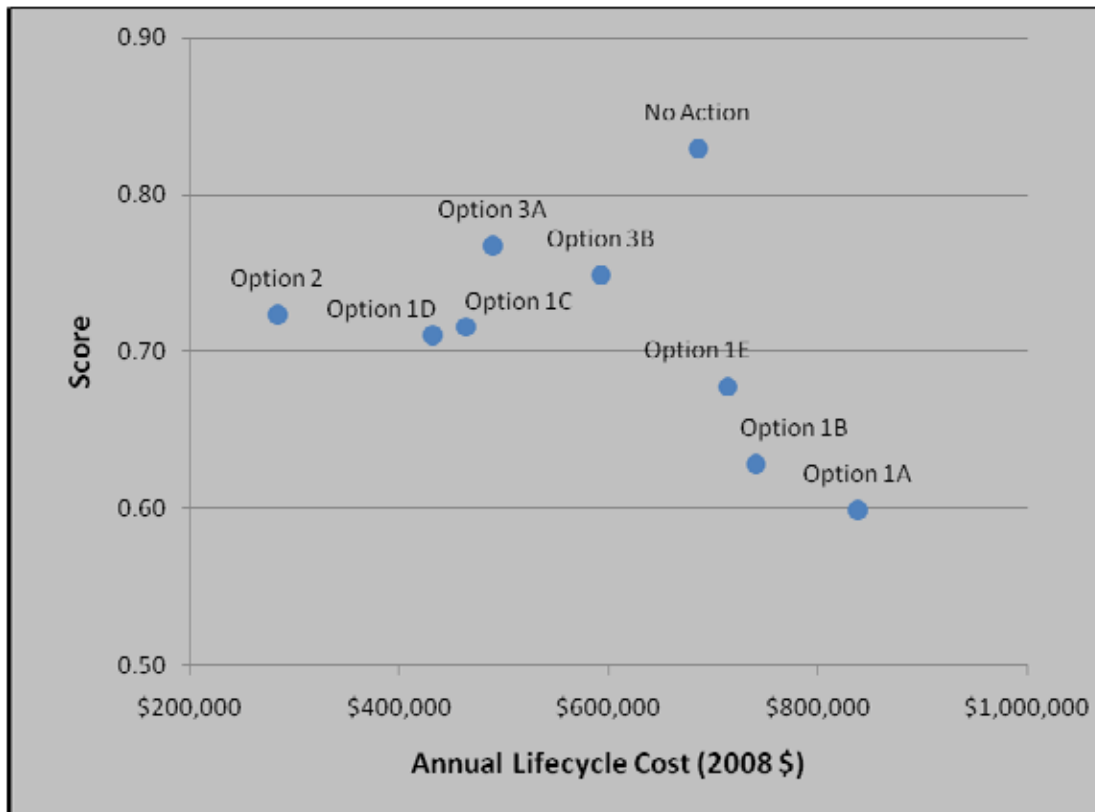


Figure 2: Comparison of Annual Life Cycle Costs and Score, for Each Transportation Option

On January 27 and January 29, 2009, the NPS hosted two public meetings, three stakeholder appointments, and a two-day internal scoping session. Based on comments received from those meetings, as well as internal discussions between the project team, the four remaining transportation options were reevaluated based on revised assumptions. These assumptions include a fee structure that charges \$6.00 for adults and \$3.00 for seniors to ride the tour bus, and institutes a \$5.00 interpretive fee to enter the Texas White House. It also included revisions to the number of tours operated each day, such that during the busiest four months of the year three bus tours would be operated per day and during the eight least busy months of the year only two bus tours would be operated per day.

Table 1 shows the total cost of each transportation system, the cost to the park after fees are collected, and the score. The total cost of the transportation options ranges from a low of \$283,000 per year (Option 2) to a high of \$692,000 per year (Option 3B). The cost to the park after fees are collected ranges from a \$81,000 surplus (Option 2) to a \$260,000 deficit (Option 3B). Overall, on a scale of 0 to 1, the No Action and Option 2 receive the highest score while Option 3B receives the lowest score.

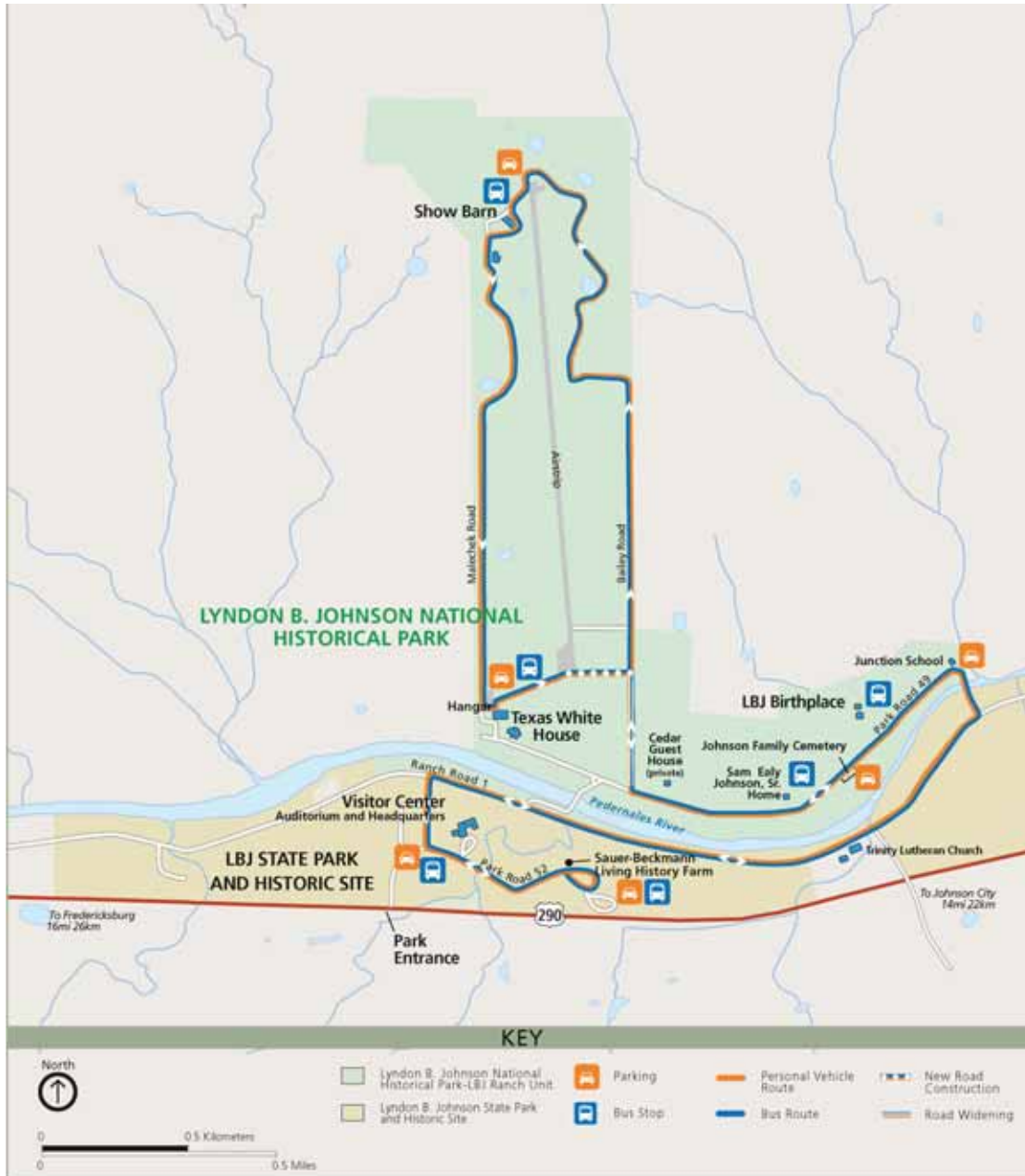
Table 1: Evaluation of Transportation Options

Option	Total Cost	Cost to Park after Fees	Score (0 to 1)
No Action	\$685,114	\$64,739 deficit	0.81
Option 2: Personal Vehicle Access	\$283,413	\$80,525 surplus	0.81
Option 3A: NPS-Operated Tour Bus & Personal Vehicles	\$490,884	\$58,714 deficit	0.73
Option 3B: Concessioner-Operated Tour Bus & Personal Vehicles	\$692,317	\$260,147 deficit	0.64

RECOMMENDATION

The project planning team members decided that Option 3A should be selected as the NPS Preferred Alternative. This option allows for the most personal choice by the visitor; provides a high score in meeting the goals and objectives established by the planning team, yet has a low annual life cycle cost; and provides flexibility in park operations for meeting future visitation needs (increases or decreases). A map of Option 3A is provided below.

Figure 3: Recommended Option



Additional characteristics of the recommended option include:

- **Hours of Operation:** The NPS tour bus would operate between 10:00 am and 5:00 pm. The first trip would depart at 10:00 am and the last trip would depart at 3:00 pm. The tour bus would depart every 30 to 90 minutes, depending on demand. This would result in two to four tours per day. The roundtrip travel time is approximately 2.5 hours. Personal vehicles would be permitted to enter the LBJ Ranch at 9:00 am.
- **Fleet:** As most of the bus fleet has outlived its lifespan, most of the buses would be replaced with new propane or diesel vehicles. A fleet of three vehicles is required, which includes one spare vehicle. The tour buses would be owned by the national park and maintained by a contractor.
- **Interpretation:** Several types of interpretation would be provided. An audio recording would be broadcast on the tour bus and rangers would provide interpretation on the tour buses and at six locations in the LBJ state and national parks. Visitors who enter the LBJ Ranch by personal vehicle would be provided an audio CD or other interpretive media as technology advances. Waysides would be installed at 18 locations.
- **Access Restrictions:** Visitors would be able to enter the LBJ Ranch in their personal vehicle after obtaining a permit at the state park visitor center. Step-on tours would continue.
- **Road Modifications:** A new two-way road would be constructed from Bailey Road to the taxiway and Bailey Road would be widened to two-lanes between the new road and Park Road 49 (VHB 2009).

ADAPTIVE MANAGEMENT APPROACH

After implementing the preferred alternative it will be important to monitor the new transportation system to ensure that it improves the concerns it was intended to address. Lyndon B. Johnson NHP should use an adaptive management approach to determine when to increase or decrease tour bus service if the system does not meet its objectives and to provide operational flexibility. The following measures should be evaluated one year after the Texas White House is fully opened to the public and also when the buses need to be replaced, if these two events occur at different times. These measures should be evaluated by a given time period, which may be defined by month, such that service may be increased during some months and reduced during other months.

- Tour Bus Utilization
 - For those periods when the average occupancy on the tour bus exceeds 70%, consider increasing service. Additional factors to consider may include informal feedback from visitors.
 - For those periods when the average occupancy on the tour bus is less than 30%, consider reducing service. Additional factors to consider may include informal feedback from visitors.
 - Average occupancy is the average number of riders per tour bus run divided by the number of seats on the bus.

- Cost to the Park
 - For those periods when the operating subsidy per rider exceeds \$5, consider reducing tour bus service. Additional factors to consider may include informal feedback from visitors.
 - For those periods when the operating subsidy per rider is less than \$3, consider increasing tour bus service. Additional factors to consider may include informal feedback from visitors.
 - Operating subsidy is defined as the difference between annual revenue and the annual cost to operate and maintain the tour bus system. It does not include capital costs.



As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historical places; and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.