

## Chapter 5. Affected Environment and Environmental Consequences

### Introduction

This chapter provides a description of the resources potentially impacted by the alternatives and the likely environmental consequences. It is organized by impact topics that were derived from internal park and external public scoping. The impacts are evaluated based on context, duration, intensity, and whether they are direct, indirect, or cumulative. NPS policy also requires an evaluation of potential impairment of park resources and the potential for generating unacceptable levels of impact. More detailed information on resources in the park may be found in the GMP (NPS 2004) and in the CLR (NPS 2003).

### General Methods

This section contains the environmental impacts, including direct and indirect effects, and their significance for each alternative. The analysis is based on the assumption that the mitigation measures and BMPs identified in the “Mitigation” section of this EA would be implemented for the action alternatives (Table 3, pg 95). Overall, NPS based these impact analyses and conclusions on the review of existing literature and park studies, information provided by experts within the park, other agencies, professional judgment and park staff insights, and public input.

The following terms are used in the discussion of environmental consequences to assess the impact intensity threshold and the nature of impacts associated with each alternative:

*Context:* Context is the setting within which an impact would occur, such as local (site alternative); parkwide (in Nicodemus National Historic Site); or regional (in Graham County, Kansas).

*Duration:* Duration of impact is analyzed independently for each resource because impact duration is dependent on the resource being analyzed. Depending on the resource, impacts may last for the construction period, a single year or growing season, or longer. For purposes of this analysis, impact duration is described as short-term or long-term. Impact duration is defined in a table for each resource topic.

*Impact Intensity:* Impact intensity is defined individually for each impact topic. There may be no impact or impacts may be negligible, minor, moderate, or major.

*Type:* Effects can be beneficial or adverse. Beneficial effects are a positive change in the condition or appearance of the resource or a change that moves the resource toward a desired condition. Adverse effects are a negative change in the condition or appearance of the resource or a change that moves the resource away from a desired condition.

*Direct and Indirect Impacts:* Effects can be direct, indirect, or cumulative. Direct effects are caused by an action and occur at the same time and place as the action. Indirect effects are caused by the action and occur later or farther away, but are still reasonably foreseeable. Direct and indirect impacts are considered in this analysis, but are not specified in the narratives. Cumulative effects are discussed in the next section.

*Threshold for Impact Analysis:* The duration and intensity of effects vary by resource. Therefore, the definitions for each impact topic are described separately. These definitions were formulated through the review of existing laws, policies, and guidelines; and with assistance from park staff and regional NPS staff. Impact intensity thresholds for negligible, minor, moderate, and major adverse effects are defined in a table for each resource topic.

## **Cumulative Effects**

Cumulative impacts are defined as “the impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (federal or nonfederal) or person undertakes such other actions” (40 CFR 1508.7). Cumulative effects can result from individually minor, but collectively significant, actions taking place over a period of time. The CEQ regulations that implement NEPA require assessment of cumulative impacts in the decision-making process for federal projects.

### **Methods for Assessing Cumulative Effects**

Cumulative impacts were determined by combining the impacts of each action alternative and the no action alternative with other past, present, and reasonably foreseeable future actions. Past actions include activities that influenced and affected the current conditions of the environment near the project area. Ongoing or reasonably foreseeable future projects near the park or the surrounding region might contribute to cumulative impacts. The geographic scope of the analysis includes actions in the project area as well as other actions in the park or surrounding lands, where overlapping resource impacts are possible. The temporal scope includes actions within a range of approximately 10 years.

Once identified, past, present, and reasonably foreseeable actions were then assessed in conjunction with the impacts of the alternatives to determine if they would have any added adverse or beneficial effects on a particular resource, park operation, or visitor use. The impacts of past, present, and reasonably foreseeable actions vary for each resource. Cumulative effects are considered for each alternative and are presented in the environmental consequences discussion for each impact topic.

The following past, present, and reasonably foreseeable actions are relevant to the analysis of the effects on resources and values that would result from the alternatives, and are based on actions described in the park's Historic Structures Report (NPS 2002).

Past, present, and reasonably foreseeable management of the NHL buildings by NPS includes various preservation and stabilization measures applied to the buildings. Stabilization measures have been previously conducted on all of the NHL buildings except for Township Hall. Funding issues have hampered park efforts to address all repair needs in the past, which has contributed to the deterioration of the historic structures. Additional stabilization and rehabilitation measures are planned for all of the NHL buildings but will be based on the amount of funding provided to the park. Increased interpretation is also planned for all of the NHL buildings as described in the LRIP (NPS 2009). Additional staff needs have been identified for the park. No other reasonably foreseeable actions were identified in the vicinity of the project area that would potentially contribute to cumulative effects.

### **Impacts to Cultural Resources and Sections 106 and 110 of the National Historic Preservation Act**

For purposes of the NEPA process, cultural resources are considered under sections 106 and 110 of the National Historic Preservation Act, and specifically its implementing regulations under 36 CFR Part 800. Section 106 requires federal agencies to consider the effects of an undertaking on historic properties and provides a process under which to implement section 106. Section 110 requires federal agencies to assume responsibility for the preservation of any historic properties owned or controlled by the agency. Before approving an undertaking that may directly and adversely affect a NHL property, the responsible federal agency must take steps to minimize harm to the property and must provide the Advisory Council on Historic Preservation an opportunity to comment on the undertaking.

In this EA, impacts to cultural resources are described in terms of context, duration, intensity, and type (as described above), which is consistent with the regulations of the CEQ, which implements NEPA. CEQ regulations and the NPS *Conservation Planning, Environmental Impact Analysis and Decision-making* (DO – 12) also call for a discussion of the appropriateness of mitigation, as well as an analysis of how effective the mitigation would be in reducing the intensity of a potential impact (e.g., reducing the intensity of an impact from major to moderate or minor). Any resultant reduction in intensity of impact due to mitigation, however, is an estimate of the effectiveness of mitigation under NEPA only. It does not suggest that the level of effect, as defined by section 106, is similarly reduced. Although adverse effects under section 106 may be mitigated, the effect remains adverse. The park would coordinate with the SHPO to address mitigation measures for the preferred alternative.

## **Archeological Resources**

### Affected Environment

One known historic archeological site is in the Township (NPS 2003). The historic archeological site was identified in a 1992 Phase II archeological study along U.S. Highway 24 in the old Henry Williams place, which is currently owned by Mr. Veryl Switzer (Williams 1992). The site includes remains of a dugout and stone house ruin dating from the early Nicodemus Townsite development period (NPS 2003). The CLR documented several sites and properties that have potential for archeological resources and where surveys should be conducted within the Township. This includes a property that was listed as a potential resource because it has ruins on the property and was occupied as early as 1880-1900 by C. Reynolds. Another property in the Township was listed as a potential resource because it was occupied as early as 1880–1900 by J. Vaughn. Alternative 1 Townsite also contains properties listed as potential areas for future testing and as potential areas for miscellaneous outbuildings.

### Impact Intensity Threshold

Sections 106 and 110 of the National Historic Preservation Act, and its implementing regulations under 36 CFR 800, require all federal agencies to consider effects of federal actions on cultural properties eligible for or listed in the national register and on national historic landmarks. For an archeological site to be listed in the national register, it must be associated with an important historic event, person(s), or embodies distinctive characteristics or qualities of workmanship. The thresholds of change for the intensity of an impact on archeological sites are defined in Table 4.

**Table 5. Archeological Sites Impact and Intensity**

Impact Intensity	Intensity Description
Negligible	Impacts would be at the lowest level of detection with neither adverse nor beneficial consequences. The determination of impact for sections 106 and 110 would be no adverse effect.
Minor	Alteration of an archeological site would not diminish the overall integrity of the resource. The determination of impact for sections 106 and 110 would be no adverse effect. Monitoring may be required if a proposed activity occurs near an archeological site.
Moderate	Alteration of an archeological site would diminish the overall integrity of the resource. The determination of impact for sections 106 and 110 would be adverse effect. A programmatic agreement is executed among NPS and applicable state or tribal historic preservation officer and, if necessary, the advisory council, in accordance with 36 CFR 800.6(b). Measures identified in the memorandum of agreement to minimize or mitigate adverse impacts reduce the intensity of the impact under NEPA from moderate to minor.
Major	Alteration of an archeological site would diminish the overall integrity of the resource. The determination of impact for sections 106 and 110 would be adverse effect. Measures to minimize or mitigate adverse impacts cannot be agreed on, and NPS and applicable state or tribal historic preservation officer and/or advisory council are unable to negotiate and execute a memorandum of agreement in accordance with 36 CFR 800.6(b).

Short-term impact-following project completion, effects would remain less than one year

Long-term impact-following project completion, effects would remain more than one year

## Environmental Consequences

### **No Action Alternative**

Direct and Indirect Effects of the Alternative. Under the no action alternative, there would be no new ground-disturbing activities that would potentially affect archeological resources. Current levels of maintenance and repairs to historic structures and landscapes would continue. These activities do not typically include excavation. Because current management practices would continue, there would be no new impacts to archeological sites and artifacts in the NHL.

Cumulative Impacts. Management of the park has had, and will continue to have, local negligible to minor adverse impacts on archeological resources as a result of ground- and vegetation-disturbing activities. Past, present, and reasonably foreseeable future actions would have local minor adverse impacts on archeological resources. Because the no action alternative would not add any impacts to the impacts of past, present, or reasonably foreseeable projects, the alternative would not have a cumulative effect on archeological resources.

Conclusion. There would be no new impacts on archeological resources under the no action alternative and the alternative would not contribute to cumulative impacts.

## **Alternative 1 – Townsite**

Direct and Indirect Impacts of the Alternative. In addition to ongoing activities described under the no action alternative, Alternative 1 would include excavation for construction of the visitor contact station, administrative building, and maintenance yard, which may expose previously unknown archeological resources (most likely artifacts associated with the NHL). No known archeological sites would be disturbed by the alternative. To minimize potential adverse impacts, surveys for visible archeological resources would be conducted prior to ground-disturbing activities and research and interviews would be conducted regarding the former presence of buildings/structures on those sites. Monitoring for subsurface artifacts would be conducted during ground-disturbing activities in the properties. In the event archeological resources are encountered, work would be stopped immediately and the park cultural resource specialist would be contacted. If necessary, the SHPO would be consulted on potential adverse impacts and additional mitigation measures.

Alternative 1 includes ground-disturbing activities with the potential to encounter and adversely affect previously unknown archeological resources. Potential adverse impacts would be minimized by preconstruction surveys and monitoring in areas with high potential for artifacts. With the mitigation measures, Alternative 1 would have local long-term minor adverse impacts on archeological resources.

Cumulative Impacts. As described under the no action alternative, past, present, and reasonably foreseeable actions would have local minor adverse impacts on archeological resources. Those impacts, in combination with the local long-term minor adverse impacts of Alternative 1, would result in local minor adverse cumulative impacts.

Conclusion. Because activities under Alternative 1 have the potential to encounter archeological resources, with mitigation, the impacts would be local, long-term, minor, and adverse. Cumulative impacts would be local, minor, and adverse.

## **Alternative 2 – Township**

Direct and Indirect Impacts of the Alternative. The activities and their impacts on archeological resources under Alternative 2 would be similar to those under Alternative 1. The area of total disturbance would be greater under Alternative 2 compared to Alternative 1, increasing the likelihood of encountering archeological resources; however the density and intensity of settlement in the Township is less than that in the Townsite. No known archeological sites would be affected by the alternative. Mitigation measures described for Alternative 1 are also included under Alternative 2.

Alternative 2 includes ground-disturbing activities with the potential to encounter and adversely affect previously unknown archeological resources. Potential adverse impacts would be minimized by preconstruction surveys and monitoring in areas with high potential for

artifacts. With mitigation measures, Alternative 2 would have local long-term minor adverse impacts on archeological resources.

Cumulative Impacts. As described under the no action alternative, past, present, and reasonably foreseeable actions would have local minor adverse impacts on archeological resources. Those impacts, in combination with the local long-term minor adverse impacts of Alternative 2, would result in local minor adverse cumulative impacts.

Conclusion. Because activities under Alternative 2 have the potential to encounter archeological resources, with mitigation, the impacts would be local, long-term, minor, and adverse. Cumulative impacts would be local, minor, and adverse.

### **Alternative 3 – NHS Buildings**

Direct and Indirect Impacts of the Alternative. Alternative 3 could impact archeological resources from the excavation and construction of the visitor contact station, parking areas, and maintenance facility; however, the footprint of disturbance would be smaller than Alternatives 1 and 2. No known archeological sites would be affected by the alternative. Mitigation measures described for Alternative 1 are also included under Alternative 3.

Alternative 3 includes ground-disturbing activities with the potential to encounter and adversely affect previously unknown archeological resources. Potential adverse impacts would be minimized by preconstruction surveys and monitoring in areas with high potential for artifacts. With mitigation measures, Alternative 3 would have local long-term minor adverse impacts on archeological resources.

Cumulative Impacts. As described under the no action alternative, past, present, and reasonably foreseeable actions would have local minor adverse impacts on archeological resources. Those impacts, in combination with the local long-term minor adverse impacts of Alternative 3, would result in local minor adverse cumulative impacts.

Conclusion. Because activities under Alternative 3 have the potential to encounter archeological resources, with mitigation, the impacts would be local, long-term, minor, and adverse. Cumulative impacts would be local, minor, and adverse.



## Historic Structures / Cultural Landscapes

### Affected Environment

Detailed information on historic sites, structures, and cultural landscape features associated with the park is provided in Chapters 1 and 3. The proposed alternatives would potentially affect the historic structures of Township Hall and First Baptist Church.

### Impact Intensity Threshold

Sections 106 and 110 of the NHPA of 1966, as amended (16 USC 470, et seq.) and its implementing regulations under 36 CFR 800 require all federal agencies to consider effects of federal actions on historic and cultural properties eligible for or listed in the national register and to minimize those effects. In order for a structure or building to be listed in the national register, it must be associated with an important historic event, person(s), or that embodies distinctive characteristics or qualities of workmanship. Cultural landscapes are the result of the long interaction between people and the land, and the influence of human beliefs and actions over time on the natural landscape. The thresholds of change for the intensity of an impact on historic structures and the cultural landscape are defined in Table 5.

**Table 6. Historic Structures and Cultural Landscape Impact and Intensity**

Impact Intensity	Intensity Description
Negligible	Impacts would be at the lowest level of detection with neither adverse nor beneficial consequences. The determination of effect for Sections 106 and 110 would be no adverse effect.
Minor	Alteration of a historic structure or a pattern(s) or feature(s) of the landscape would not diminish the overall integrity of the resource. The determination of effect for Sections 106 and 110 would be no adverse effect.
Moderate	Alteration of a historic structure or a pattern(s) or feature(s) of the landscape would diminish the overall integrity of the resource. The determination of effect for Sections 106 and 110 would be adverse effect. A programmatic agreement is executed among NPS and applicable state or tribal historic preservation officer and, if necessary, the advisory council, in accordance with 36 CFR 800.6(b). Measures identified in the programmatic agreement to minimize or mitigate adverse effects reduce the intensity of the impact under NEPA from moderate to minor.
Major	Alteration of a historic structure or a pattern(s) or feature(s) of the landscape would diminish the overall integrity of the resource. The determination of effect for Sections 106 and 110 would be adverse effect. Measures to minimize or mitigate adverse impacts cannot be agreed on, and NPS and applicable state or tribal historic preservation officer and/or advisory council are unable to negotiate and execute a memorandum of agreement in accordance with 36 CFR 800.6(b).

Short-term impact-following project completion, effects would remain less than one year

Long-term impact-following project completion, effects would remain more than one year



## Environmental Consequences

### **No Action Alternative**

Direct and Indirect Impacts of the Alternative. The no action alternative would result in the continuation of existing park building and landscape management approaches. Township Hall would continue to be used for the visitor center and a permanent use strategy for Township Hall would be developed. The historic structure of Township Hall would not be altered. Maintenance materials and equipment would continue to be stored on the site and in the garage of the historic AME Church. The no action alternative would have no new effects on the historic structures and cultural landscape of the park.

Cumulative Impacts. Past, present, and ongoing NPS management of the historic structures has stabilized, but not greatly improved, the conditions of the historic structures. The continued use of Township Hall as the visitor center has resulted in incremental changes to this historic structure and a major change in its intended function. Additional stabilization and preservation measures would result in a long term beneficial effect. Overall, past, present, and reasonably foreseeable actions would result in parkwide minor beneficial effects on historic structures. Because the no action alternative would not add any new effects to the effects of past, present, or reasonably foreseeable projects, the alternative would not have a cumulative effect on historic structures or cultural landscapes.

Conclusions. Because current management practices and maintenance capabilities would continue under the no action alternative, the alternative would have no new impact on historic structures or cultural landscapes and the alternative would not contribute to cumulative impacts.

### **Alternative 1 – Townsite**

Direct and Indirect Impacts of the Alternative. Alternative 1 would include relocating the visitor center to a new building constructing new administration and maintenance facilities. The cultural landscape of the NHL would be altered by Alternative 1 because of the presence of the new facilities. These alterations to the landscape would impact the historic integrity of the NHL by their presence. Relocating the visitor center out of Township Hall would improve the integrity of the structure by returning it to its traditional use. Overall, Alternative 1 would have a parkwide long-term minor to moderate adverse effect on the cultural landscape of the NHL and long-term beneficial effects on historic structures.

Cumulative Impacts. As described under the no action alternative, past, present, and reasonably foreseeable actions would result in parkwide minor beneficial effects on historic structures and negligible adverse effects on cultural landscapes. With minor to moderate adverse effects on cultural landscapes and beneficial effects on historic structures, Alternative 1

would have local minor to moderate adverse cumulative effects on the cultural landscape and beneficial cumulative effects on historic structures.

Conclusions. Alternative 1 would have a parkwide long-term minor to moderate adverse impact on cultural landscapes and beneficial effects on historic structures. The cumulative effects of Alternative 1 would be local, minor to moderate, and adverse for cultural landscapes and beneficial for historic structures.

### **Alternative 2 – Township**

Direct and Indirect Impacts of the Alternative. Under Alternative 2, the visitor center, administration, and maintenance facilities would be relocated to a property outside of the Townsite but within the Township. Moving the visitor center out of Township Hall and maintenance materials out of the AME Church site would have a long-term beneficial effect on historic structures by allowing for the buildings to be rehabilitated and, in the case of Township Hall, returned to its traditional use as a meeting place for the town. The cultural landscape of the Township would be altered by the construction of the new facilities within an area that was previously open/agricultural land; however, the alteration would not diminish the overall integrity of the cultural landscape. Alternative 2 would have a long-term beneficial effect on historic structures and a long-term minor adverse effect on the cultural landscape.

Cumulative Impacts. As described under the no action alternative, overall, past, present, and reasonably foreseeable actions would result in parkwide minor beneficial effects on historic structures and negligible adverse effects on cultural landscapes. With minor adverse effects on cultural landscapes and beneficial effects on historic structures, Alternative 2 would have local minor adverse cumulative effects on the cultural landscape and beneficial cumulative effects on historic structures.

Conclusions. Alternative 2 would have a long-term beneficial effect on historic structures by allowing the NHL buildings to be rehabilitated, and would have a long-term minor adverse effect on the cultural landscape with the alteration of a portion of the Township from open/agricultural land to housing a new visitor center, administrative, and maintenance facilities. Alternative 2 would have local minor adverse cumulative effects on the cultural landscape and beneficial cumulative effects on historic structures.

### **Alternative 3 – NHS Buildings**

Direct and Indirect Impacts of the Alternative. Under Alternative 3, a new visitor center contact station would be constructed on a site within the Townsite and administration offices would be moved into the First Baptist Church. The historic use of Township Hall would be restored. The use of the First Baptist Church would help stabilize the integrity of the structure, but would also alter the structure for use as an administration office building.

This alteration to the inside of the structure would have an impact to the cultural resource. Removing the visitor center from Township Hall would help the integrity of the structure. Construction of the visitor center contact station in the Townsite would also impact the cultural landscape of the town. Alternative 3 would have a local long-term moderate adverse impact on the First Baptist Church and cultural landscape of the town.

Cumulative Impacts. As described under the no action alternative, overall, past, present, and reasonably foreseeable actions would result in parkwide minor beneficial effects on historic structures and negligible adverse effects on cultural landscapes. With moderate adverse effects on cultural landscapes and historic structures, Alternative 3 would have local moderate adverse cumulative effects on the cultural landscape and historic structures.

Conclusions. Alternative 3 would have a local long-term moderate direct adverse impact on the First Baptist Church and cultural landscape of the town by converting the First Baptist Church to administration buildings and constructing a new visitor contact station. Cumulative effects would be local, moderate, and adverse.

## **Visual Resources**

### Affected Environment

The sights along U.S. Highway 24 are primarily open and provide long views of the countryside because of the open agricultural lands with little tree cover or other obstructions in the area. Geographical landforms such as knolls and plateaus are readily visible as well. The town is visible from U.S. Highway 24, approximately 0.25 mile from the edge of the town as travelers descend upon it from both the east and west. The water tower is the largest visible feature and can easily be seen because the town's surrounding landscape is primarily agricultural land. Currently, no structures, fences, or large vegetation block the views between the five buildings in the NHS. The overall views of the Townsite and Township include residential buildings and agricultural land.

### Impact Intensity Threshold

Visual resources are the features that define the visual character of an area, which could include natural features, vistas, viewsheds, and architecture. The thresholds of change for the intensity of impacts to visual resources are described in Table 6.

**Table 7. Visual Resources Impact and Intensity**

Impact Intensity	Intensity Description
Negligible	Effects would result in barely perceptible changes to existing views.
Minor	Effects would result in slightly detectable changes to views in a small area or would introduce a compatible human-made feature to an existing developed area.
Moderate	Effects would be readily apparent and would change the character of visual resources in the area. The visitor would be aware of the effects associated with the alternative and would likely express a neutral to negative opinion about the changes.
Major	Effects would be highly noticeable and visible from a considerable distance or over a large area. The character of visual resources would change substantially. The visitor would be aware of the effects associated with the alternative and would likely express a strong negative opinion about the changes.

Short-term-following project completion, recovery would take less than 3 years

Long-term-following project completion, recovery would take more than 3 years

### Environmental Consequences

#### **No Action Alternative**

Direct and Indirect Effects of the Alternative. The no action alternative would have no new effect on visual resources. No changes to views or facilities would occur at the park.

Cumulative Impacts. There have not been many changes to the Townsite or Township in the past or present, and no future actions are planned. Past, present, and reasonably foreseeable actions would result in no impacts on visual resources and the no action alternative would not contribute to cumulative effects.

Conclusion. The no action alternative would have no effect on visual resources and there would be no cumulative effects.

#### **Alternative 1 – Townsite**

Direct and Indirect Impacts of the Alternative. The visual quality of the town would be temporarily impacted during construction from earthwork, vegetation removal, equipment, dust, and facility construction under Alternative 1. The visitor center contact station and administration and maintenance buildings would be designed to be compatible with the existing landscape with minimal visual intrusion. Vegetative screening would be used where appropriate to aid in blending facilities into the landscape. The new buildings would be oriented to provide the best compromise between fitting the existing topography and optimizing views of the town, including the view of the NHL buildings. The presence of the new buildings would change the views in town and could change the view of the town from U.S. Highway 24 depending on building locations. Alternative 1 would have a parkwide long-term moderate effect on visual resources.

Cumulative Impacts. There have not been many changes to the Townsite or Township in the past or present, and no future actions are planned. Past, present, and reasonably foreseeable actions would result in no impacts on visual resources. The long-term moderate adverse effect from Alternative 1 would contribute to the overall cumulative effects.

Conclusion. Construction of new facilities would result in a local long-term moderate adverse impact to visual resources from the visual intrusion of a new building complex to the landscape. Cumulative effects would be parkwide, long-term, minor, and adverse. There would be no unacceptable impacts to visual resources.

### **Alternative 2 – Township**

Direct and Indirect Impacts of the Alternative. Alternative 2 would have the same effects on visual resources as Alternative 1 from construction and placement of new buildings within the Township. The same design methods described under Alternative 1 would be used to site the buildings. The visitor center would be visible from U.S. Highway 24. The existing bluffs could be impacted by construction of the new facilities. Alternative 2 would have a parkwide long-term moderate adverse effect on visual resources from the changes in views of the Township.

Cumulative Impacts. There have not been many changes to the Townsite or Township in the past and no future actions are planned that would affect visual resources. Past, present, and reasonably foreseeable actions would result in no impacts on visual resources. The long-term moderate adverse effect from Alternative 2 would contribute to the overall cumulative effects.

Conclusion. Construction of a new visitor center, administration building, maintenance yard, and parking areas would result in a local long-term moderate adverse impact to visual resources from the visual intrusion of a new building complex to the Township landscape. Cumulative effects would be parkwide, long-term, moderate, and adverse.

### **Alternative 3 – NHS Buildings**

Direct and Indirect Impacts of the Alternative. Alternative 3 would have the same temporary impacts from construction as Alternatives 1 and 2. The same design methods would be used as described in Alternatives 1 and 2. The new visitor contact station and parking area would change the views in the Townsite. None of the views of the NHL buildings would be impacted by Alternative 3. The conversion of the First Baptist Church into administration space would not affect visual resources. Alternative 3 would have a parkwide long-term minor effect on visual resources.

Cumulative Impacts. There have not been many changes to the Townsite or Township in the past and no future actions are planned. Past, present, and reasonably foreseeable actions would result in no impacts on visual resources. The long-term minor adverse effect from Alternative 3 would contribute to the overall cumulative effects.

Conclusion. Construction of a new visitor contact station would result in a parkwide long-term minor adverse impact to visual resources from the visual intrusion of a new visitor contact station to the landscape. Cumulative effects would be parkwide, long-term, minor, and adverse. There would be no unacceptable impacts to visual resources.

## **Visitor Experience**

### Affected Environment

The park hosts nearly 3,000 visitors annually. Daily visitation is low. The last weekend in July of each year is Nicodemus Homecoming with 300 to 400 descendants celebrating their shared history at the site. A visitor survey was conducted in 2005 at Nicodemus. The survey results showed that 81 percent of park visitors were satisfied overall with the facilities, services, and recreational opportunities.

The existing visitor center is in Township Hall, which is leased from the Nicodemus Township Board. Township Hall is a large open interior space with a vestibule, an open auditorium space, an elevated stage with bathrooms installed on the stage level, and a basement space under the stage. Township Hall does not meet Occupational Safety and Health Administration (OSHA) codes or ADA Accessibility Guidelines. The heating/air conditioning system is inefficient. The space is concurrently used as a bookstore, theater, staff work space, and exhibit area. All activities share the same space, which makes it difficult to hear. There is currently on-street parking. ADA-compliant porta-potties are behind Township Hall with a gravel drive access.

The visitor center is open seven days a week from 9:00 a.m. to 4:30 p.m. except on certain holidays. An orientation talk on the history of the town is offered to everyone at the visitor center. Interpretive programs are offered on an as-requested basis with special programs and guided tours offered to groups by reservation only (NPS 2009). Ten exhibit panels and two display cabinets are in the visitor center. A park film is shown to all visitors.

Currently, of the five NHS buildings, Township Hall is the only one open to the public. The Roadside Park is north of Township Hall and is leased by NPS. The Roadside Park has picnic and porta-potties, and includes a Kansas State Historical Marker and a Solomon Valley Highway 24 Heritage Alliance bulletin board with some inaccurate and outdated information about Nicodemus and its historic and geographic context. Currently there are no standard NPS wayside exhibits in the park (NPS 2009). There are signs in front of four of the historic sites that include a brief history of each building, dates of construction, and known building use.



### Impact Intensity Threshold

NPS Management Policies 2006 state that the enjoyment of park resources and values by the people of the United States is part of the fundamental purpose of all parks, and that NPS is committed to providing appropriate high quality opportunities for visitors to enjoy the parks. Part of the purpose of the park is to offer opportunities for recreation, education, inspiration, and enjoyment. Consequently, one of the park's management goals is to ensure that visitors safely enjoy and are satisfied with the availability, accessibility, diversity, and quality of park facilities, services, and appropriate recreational opportunities.

Scoping input and observation of visitation patterns, combined with assessment of amenities available to visitors under current park management, were used to estimate the effects of the alternatives. Impacts on the ability of visitors to experience a full range of park resources were analyzed by examining resources and objectives presented in the park significance statements, as derived from its enabling legislation. The potential for change in visitor experience proposed by the alternatives was evaluated by identifying projected increases or decreases in access and other visitor uses, and determining whether or how these projected changes would affect the desired visitor experience, to what degree, and for how long. The thresholds of change for the intensity of an impact to visitor experience are described in Table 7.

**Table 8. Visitor Experience Impact and Intensity**

Impact Intensity	Intensity Description
Negligible	Changes in visitor experience would be below or at an imperceptible level of detection. The visitor would not likely be aware of the effects associated with the action.
Minor	Changes in visitor experience would be detectable, although the changes would be slight. Most visitors would be aware of the effects associated with the action, but would be unlikely to express an opinion about the changes.
Moderate	Changes in visitor experience would be readily apparent. The visitor would be aware of the effects associated with the action and would likely express an opinion about the changes.
Major	Changes in visitor experience would be readily apparent and severely adverse or exceptionally beneficial. The visitor would be aware of the effects associated with the action and would likely express a strong opinion about the changes.

Short-term impact¾occurs only during project construction

Long-term impact¾continues after project construction

### Environmental Consequences

#### **No Action Alternative**

Direct and Indirect Impacts of the Alternative. The fundamental nature and quality of the visitor experience would not change under the no action alternative. Township Hall would continue to operate as the visitor center and would provide information and orientation to



park visitors. One of the five national historic structures would remain open to the public. Interpretive exhibits, films, bookstore, and restrooms at the visitor center would remain available for visitors. Because Township Hall was not designed as a visitor center, it lacks the space and design layout necessary to effectively meet visitor needs. The continued use of Township Hall as the visitor center would perpetuate the diminished quality of the visitor experience and the limited ability of the park to adequately provide information to visitors. Without a centrally located and easily accessible visitor center, park staff would lack the ability to educate the public on the significance of the park and the Nicodemus community. Interpretative capabilities would remain inadequate because of the limited space available. The no action alternative would continue the current, less-than-desirable level of visitor experience, but would have no new effect on visitor experience.

Cumulative Impacts. Past, present, and reasonably foreseeable actions that would have an effect on visitor experience include increases in interpretation of the NHL buildings as described in the LRIP (NPS 2009). Increased interpretation would have a parkwide beneficial effect on the visitor experience. Because the no action alternative would have no new effects, it would not contribute to cumulative effects on visitor experience.

Conclusion. Under the no action alternative, current visitor services and facilities would remain unchanged and there would be no new effects on visitor experience. Cumulative effects would be parkwide and beneficial, with no contribution from the no action alternative.

### **Alternative 1 – Townsite**

Direct and Indirect Impacts of the Alternative. Under Alternative 1, the quality of the visitor experience would increase substantially. A new visitor contact station would be constructed in the Townsite. The new visitor contact station would expand the capacity for visitor services by providing educational, interpretive, and informational opportunities and materials needed by all visitors to better enjoy the park. The new visitor contact station would allow the park to show films and make presentations. Easily accessible restrooms would be added. The new visitor contact station would serve as the primary point to educate visitors on the park's valuable cultural resources, history, and significance. The new location would provide an identity for the park and more opportunities for visitor contact. The new parking area would allow easy entry and exit. The visitor center would attract additional visitors and change and improve the way visitors experience the park. The effects on visitor experience under Alternative 1 would be parkwide, long-term, and beneficial.

Cumulative Impacts. As described under the no action alternative, increased interpretation at the NHL buildings would have a parkwide beneficial effect on visitor experience. The parkwide long-term beneficial impacts from Alternative 1 would contribute to the overall parkwide cumulative beneficial impacts to visitor experience.

Conclusion. Under Alternative 1, there would be parkwide long-term beneficial effects on visitor use and the quality of the visitor experience. Cumulative impacts would be parkwide and beneficial.

## **Alternative 2 – Township**

Direct and Indirect Impacts of the Alternative. Activities under Alternative 2 would be similar to those under Alternative 1, but a new visitor center would be located outside of the Townsite and the visitor center program would include more exhibit and interpretive space than Alternative 1. Alternative 2 would allow visitors to have access to parts of the Township as well as the Townsite. Alternative 2 would also provide trails and overlooks for visitors, expanding the visitor experience. Alternative 2 would have a parkwide long-term beneficial effect on visitor experience.

Cumulative Impacts. As described under Alternative 1, future plans include increased interpretation at the NHL buildings. The parkwide long-term beneficial impacts from Alternative 2 would contribute to the overall beneficial cumulative effects on visitor experience.

Conclusion. Under Alternative 2, there would be a parkwide long-term beneficial effect on visitor experience. Cumulative impacts would be parkwide and beneficial.

## **Alternative 3 – NHS Buildings**

Direct and Indirect Impacts of the Alternative. Under Alternative 3, a new visitor center contact station would be constructed in the Townsite and the First Baptist Church would be used for administration offices. The new visitor center contact station would have the same beneficial impacts as the other action alternatives. The use of the First Baptist Church for administration buildings would adversely affect the interpretive value of the structure and reduce the ability of visitors to value the building as a cultural resource. Alternative 3 would have a local long-term minor adverse effect on visitor experience from the change in use of the First Baptist Church, but would also have a parkwide long-term beneficial effect from construction of a new visitor center contact station.

Cumulative Impacts. Future increased interpretation at the NHL buildings would have an additional beneficial impact on visitor experience. The parkwide long-term beneficial and local long-term minor adverse impacts from Alternative 3 would contribute to the overall parkwide beneficial cumulative impacts on visitor experience.

Conclusion. Alternative 3 would have a local long-term minor adverse effect on visitor experience from the change in use of the First Baptist Church, but would also have a parkwide long-term beneficial effect from construction of a new visitor center contact station. Cumulative effects would be parkwide and beneficial.

## Transportation

### Affected Environment

The Townsite is laid out on a grid system. The formal Townsite boundaries include seven blocks east to west and six and a half blocks north to south. U.S. Highway 24 is along the northern boundary of the park. Township Hall is on the corner of Washington Avenue and Second Street and is one block south of U.S. Highway 24, which is the main road in and out of town. There are no traffic signals or stop signs on U.S. Highway 24. There is currently no designated parking for oversized vehicles and parking for the visitor center is off street. Sidewalks or dirt paths are along all of the streets in the park to access the historic sites or visitors can drive around town to access all of the historic sites. Outlying Township sites may only be accessible by unpaved dirt roads. Many of the local roads are generally in poor condition.

### Impact Intensity Threshold

NPS Management Policies 2006 recognizes that the location, type, and design of transportation systems and their components all strongly influence the quality of the visitor experience. These systems also affect, to a great degree, how and where park resources would be impacted. The thresholds of change for the intensity of an impact on transportation are defined in Table 8

**Table 9. Transportation Impact and Intensity Thresholds**

Impact Intensity	Intensity Description
	Traffic, transportation patterns, and visitor circulation would not be affected, or the effects would be at low levels of detection and would not have an appreciable effect on existing transportation.
	The effect to traffic, transportation patterns, and visitor circulation would be noticeable, but would not have an appreciable effect on existing transportation.
Moderate	The effects to traffic, transportation patterns, and visitor circulation would be readily apparent and would result in substantial noticeable effects on existing transportation.
Major	The effects to traffic, transportation patterns, and visitor circulation would be readily apparent and would result in substantial noticeable effects to transportation and safety.
Beneficial	The effects would improve traffic, transportation patterns, and visitor circulation or would reduce features that impede transportation and safety. The intensity of the beneficial effect can be negligible, minor, moderate, or major.

Short-term impact-occurs only during project construction  
Long-term impact-continues after project construction

## Environmental Consequences

### **No Action Alternative**

Direct and Indirect Impacts. There would be no change in roads, parking, or traffic circulation in the park under the no action alternative. The number of visitors to Township Hall is expected to remain similar to existing conditions. The no action alternative would have no new effect on existing transportation or visitor circulation in the park.

Cumulative Impacts. Past and present access to the park by visitors and on-street parking of oversized vehicles has had a minor parkwide adverse effect on circulation in the park. The no action alternative would have no new effect on existing transportation or circulation and would not contribute to cumulative effects.

Conclusion. The no action alternative would have no impact on transportation and no new contribution to minor parkwide adverse cumulative effects.

### **Alternative 1 – Townsite**

Direct and Indirect Impacts. Under Alternative 1, a new parking lot would be constructed adjacent to the new visitor contact station. The proposed visitor contact station would expand opportunities to access the park and organize parking at the visitor center. The parking, drop-off area, and paved walkways would provide accessible access for park visitors to explore both the new visitor contact station and surrounding landscape features. While it is not clear if the new visitor contact station would increase traffic along the streets in the town, an increase in the number of travelers who stop at the visitor center may be higher than the current number of visitors to the area. There would be a short-term local minor adverse affect on transportation during construction. Overall, Alternative 1 would have a local long-term beneficial effect on transportation from the construction of a new parking lot for visitors.

Cumulative Impacts. Past and present access to the park by visitors and on-street parking of oversized vehicles has had a parkwide minor adverse effect on circulation in the park. Alternative 1 would contribute local long-term beneficial effects on transportation. Overall, cumulative effects under Alternative 1 would be parkwide and beneficial.

Conclusions. Alternative 1 would have a parkwide long-term beneficial effect on transportation from construction of additional parking for visitors, with a short-term local minor adverse effect from construction. Cumulative effects would be parkwide and beneficial.

## **Alternative 2 – Township**

Direct and Indirect Impacts. Alternative 2 would be similar to Alternative 1 with the construction a new parking lot adjacent to the visitor center, except the parking lot in Alternative 2 would be accessed from U.S. Highway 24. In addition, a pedestrian path would be constructed from the visitor center to the Townsite. Alternative 2 would affect traffic along U.S. Highway 24 with a new entry/exit point constructed to access the visitor center and adjacent parking lot.

Alternative 2 would have a short-term local minor adverse effect on transportation from construction. Alternative 2 would also have a local long-term minor adverse effect on transportation because of the new entry/exit point off of U.S. Highway 24. The new parking lot and pedestrian path for visitors would have a parkwide long-term beneficial effect on transportation by removing traffic and on-street parking from the park. Overall, Alternative 2 would have parkwide long-term beneficial effects on transportation.

Cumulative Impacts. Past and present access to the park by visitors and on-street parking of oversized vehicles has had a minor parkwide adverse effect on circulation in the park. With the parkwide long-term beneficial effects of Alternative 2, cumulative effects would be parkwide and beneficial.

Conclusions. Alternative 2 would have a local long-term minor adverse effect on transportation from construction of an entry/exit point off of U.S. Highway 24. The new parking lot for visitors would have a parkwide long-term beneficial effect on transportation by reducing traffic and on-street parking in the park. There would be a short-term local minor adverse effect from construction. Overall, Alternative 2 would have parkwide long-term beneficial effects on transportation. Cumulative effects would be parkwide and beneficial.

## **Alternative 3 – NHS Buildings**

Direct and Indirect Impacts. Alternative 3 would be similar to Alternative 1 with the construction of a new parking lot adjacent to the visitor contact station. As described in Alternative 1, the addition of new parking areas for visitors would have a parkwide long-term beneficial effect on transportation.

Cumulative Impacts. Past and present access to the park by visitors and on-street parking of oversized vehicles has had a parkwide minor adverse effect on circulation in the park. With the contribution of parkwide beneficial effects, cumulative effects under Alternative 3 would be parkwide and beneficial.

Conclusions. The new parking lot proposed in Alternative 3 would have parkwide long-term beneficial effects on transportation. Cumulative effects would be parkwide and beneficial.

## Public Health and Safety

### Affected Environment

Ongoing park operations have strived to provide a healthy and safe environment for visitors and park staff; maintenance of park physical, natural, and cultural resources; and recreational opportunities for park visitors. The current visitor center does not meet ADA or OSHA standards. One visitor has had an accident due to the non-ADA compliance. The building is also difficult to heat and lacks energy efficiency. The community vacated Township Hall to allow NPS to use it as a visitor center. Township activities have no permanent location at present, impacting the welfare of the community.

### Impact Intensity Threshold

Public health and safety refers to the ability of NPS to provide a healthy and safe environment for visitors and park staff, to protect human life, and to provide for injury-free visits and appropriate responses when accidents and injuries occur. The thresholds of change for the intensity of an impact to public health and safety are described in Table 9.

**Table 10. Public Health and Safety Impact and Intensity**

Impact Intensity	Intensity Description
Negligible	The effects would be at low levels of detection and would not have appreciable effects on public health and safety.
Minor	The effects would be detectable, and would be of a magnitude that would not have appreciable effects on public health and safety. If mitigation is needed to offset adverse effects, it would be simple and likely successful.
Moderate	The effects would be readily apparent and would result in a change in public health and safety that would be noticeable to park staff and the public. Mitigation measures would be necessary to offset adverse effects and would likely be successful.
Major	The effects would be readily apparent; would result in a substantial change in public health and safety in a manner noticeable to staff and the public; and would be markedly different from existing operations. Mitigation measures to offset adverse effects would be necessary and extensive, and success could not be guaranteed.

Short-term impact-occurs only during project construction

Long-term impact-continues after project construction

### Environmental Consequences

#### **No Action Alternative**

Direct and Indirect Impacts of the Alternative. Under the no action alternative, Township Hall would continue to be used as the visitor center and would continue to not meet ADA or OSHA standards. The visitor center would continue to pose a safety concern for visitors by being in non-ADA compliance. The no action alternative would not address visitor and

employee safety issues associated with current facilities and there would be no new effects on public health and safety.

Cumulative Impacts. Past and present actions have created conditions in park facilities that have had a local long-term minor adverse effect on public health and safety. The no action alternative would not contribute new cumulative effects, but would perpetuate adverse effects.

Conclusion. The no action alternative would have no new effect on public health and safety, but would continue to contribute to local minor adverse cumulative effects.

### **Alternative 1 – Townsite**

Direct and Indirect Impacts of the Alternative. The new visitor contact station would improve public health and safety by meeting current fire and electrical safety and building codes and compliance with OSHA workplace safety standards. The new visitor contact station would be built to ADA standards for universal accessibility. The new visitor contact station, administration, and maintenance facilities also would provide an improved work environment for park staff and is expected to have a positive effect on employee morale. Overall, Alternative 1 would have local long-term beneficial effects on public health and safety.

Cumulative Impacts. Past and present actions have created conditions in park facilities that have had a local minor adverse effect on public health and safety. The adverse effects of past and present projects, in combination with the beneficial effects of Alternative 1, would result in local beneficial cumulative effects on public health and safety.

Conclusion. Alternative 1 would result in local long-term beneficial effects on public health and safety by meeting current building codes and providing a safe environment for visitors and park staff. The cumulative effects would be local and beneficial.

### **Alternative 2 – Township**

Direct and Indirect Impacts of the Alternative. As described in Alternative 1, the new visitor center would have a local long-term beneficial effect on public health and safety. Additionally, however, Alternative 2 includes a pedestrian trail along U.S. Highway 24 to the Township. Increasing pedestrian use along U.S. Highway 24 would increase the chance of pedestrians being injured or killed by vehicles. Although injury or death would be unlikely, the potential severity of consequences would result in a local long-term moderate adverse effect on public health and safety.

Although Alternative 2 would result in OSHA and ADA-compliant facilities, which would have a beneficial effect, the benefits would be outweighed by the increase in risk of serious injury or death from pedestrian activity along U.S. Highway 24. Therefore, overall, Alterna-



tive 2 would have local long-term moderate adverse effects on public health and safety.

Cumulative Impacts. Past and present actions have created conditions in park facilities that have had a local minor adverse effect on public health and safety. Those effects, in combination with the local long-term moderate adverse effects of Alternative 2, would result in local moderate adverse cumulative effects on public health and safety.

Conclusion. Alternative 2 would have a local long-term moderate adverse effect on public health and safety from the increase in pedestrian activity along U.S. Highway 24. Cumulative effects would be local, minor, and adverse.

### **Alternative 3 – NHS Buildings**

Direct and Indirect Impacts of the Alternative. Alternative 3 would have similar effects as Alternative 1 from the construction of a new visitor contact station that would be ADA- and OSHA-compliant. The administration building would be located in the First Baptist Church, which currently does not meet ADA and OSHA standards and rehabilitation would include these upgrades. Construction of a new visitor contact station would have a parkwide long-term beneficial effect on public health and safety.

Cumulative Impacts. Past and present actions have created conditions in park facilities that have had a local minor adverse effect on public health and safety. The adverse effects of past and present projects, in combination with the beneficial effects of Alternative 3, would result in local beneficial cumulative effects on public health and safety.

Conclusion. Alternative 3 would result in long-term beneficial effects on public health and safety by meeting current building codes and providing a safe environment for visitors and park staff. Cumulative effects would be local and beneficial.

## **Park Operations**

### Affected Environment

Ongoing park operations have strived to maintain park physical, natural, and cultural resources, while providing recreational opportunities for park visitors. Park operations include interpretation and education, protection, planning and resource management, business services, and facility management. Deficiencies in the condition and location of existing park operation facilities have made efficient park operations challenging. The park is currently operating below an effective staffing level. Facility manager and administrative officer services are obtained via another park and there is no chief of interpretation.

Currently, the park leases Township Hall for the visitor center and leases offices from nearby

residential units. The separation of the visitor center from the park offices has isolated the interpretative staff. The administration offices are accessed via residential common space shared with seven other units, providing for an ambiguous entry presence for NPS visitors. The offices have limited research or operational curatorial space, eliminating related activities by staff, consultants, or visitors. Storage space is very limited. Maintenance materials and equipment are stored in the historic AME Church and the garage. The problematic space limitations in the visitor center have made basic visitor services (e.g., interpretation, exhibits, and orientation presentations) challenging. Noise and circulation conflicts occur between bookstore, staff workspace, exhibit, and film viewing operations. The current visitor center also uses excessive amounts of energy to heat and cool. There is no work space for volunteers, a Western National Parks Association bookstore coordinator, or additional staff.

In the visitor center, 10 modular interpretive panels line the east wall of Township Hall. These panels have been designed to be disassembled and moved when Township Hall is used by the community (NPS 2009). The disassembly and removal of the panels is time consuming and labor intensive. Because Township Hall is a national historic site, the park cannot create permanent exhibit panels that would change the historic character of the space.

#### Impact Intensity Threshold

Park operations, for the purposes of this EA, refers to the quality and effectiveness of the infrastructure, and the ability of park staff to maintain the infrastructure used in the operation of the park to protect and preserve vital resources, and provide for a high-quality visitor experience. Facilities in the park include the visitor center, administration facilities, and historic structures. The thresholds of change for the intensity of an impact to park operations are described in Table 10.

**Table 11. Park Operations Impact and Intensity**

Impact Intensity	Intensity Description
Negligible	The effects would be at low levels of detection and would not have appreciable effects on park operations.
Minor	The effects would be detectable, and would be of a magnitude that would not have appreciable effects on park operations. If mitigation is needed to offset adverse effects, it would be simple and likely successful.
Moderate	The effects would be readily apparent and would result in a change in park operations that would be noticeable to park staff and the public. Mitigation measures would be necessary to offset adverse effects and would likely be successful.
Major	The effects would be readily apparent, would result in a substantial change in park operations in a manner noticeable to staff and the public, and would be markedly different from existing operations. Mitigation measures to offset adverse effects would be necessary and extensive, and success could not be guaranteed.

Short-term impact-occurs only during project construction

Long-term impact-continues after project construction

## Environmental Consequences

### **No Action Alternative**

Direct and Indirect Impacts of the Alternative. Under the no action alternative, there would be no change in current park operations or infrastructure. The park would continue to use Township Hall as a visitor center. This facility would continue to maintain an information desk, bookstore, and film viewing area. The interpretive staff would continue to be separated from the visitor center staff. Maintenance requirements would continue at current levels. The long-term presence of NPS in Township Hall would require consideration of relocating office and/or storage space that is currently in Township Hall to allow for increased interpretation of the park in general and Township Hall in particular. In addition, the no action alternative would still require NPS to construct a new administration building in the future. Under the no action alternative, there would be no new effect on park operations.

Cumulative Impacts. The park has maintained park resources and provided informative material on the historic site for park visitors. Because the visitor center is separated from the park offices, the interpretive staff have been isolated and effective operations have been hampered. The park has determined that additional staff would be needed in the future, including interpretive staff. This future need would increase space demands. The overall cumulative impacts to park operations from the no action alternative, in combination with past, present, and reasonably foreseeable future actions, would be parkwide, moderate, and adverse.

Conclusion. The no action alternative would have no new effects on park operations. Cumulative effects would be parkwide, moderate, and adverse.

### **Alternative 1 – Townsite**

Direct and Indirect Impacts of the Alternative. Under Alternative 1, a new visitor contact station, administrative facility, and maintenance facility would be constructed in the Townsite. The new visitor contact station would have more space for interpretive media and office space. Construction of a new visitor contact station and associated parking and landscape improvements would add to park maintenance and operating requirements. The visitor contact station would have additional mechanical systems that would require ongoing maintenance. Park operations would become more efficient by having park interpretative staff available to contact more visitors and provide direction and information to improve their visit, protect park resources, and reduce demands on park staff. Alternative 1 would have a parkwide long-term beneficial effect on park operations.

Cumulative Impacts. As described under the no action alternative, additional staff would be needed in the future, which would increase space demands. The parkwide moderate adverse impacts from past, present, and future actions, in combination with the beneficial effects of

Alternative 1, would result in long-term beneficial cumulative effects on park operations.

Conclusion. Constructing new facilities would have parkwide short- and long-term minor adverse impacts on park operations from additional maintenance requirements for a new facility and landscaping. These minor adverse effects would be offset by parkwide long-term beneficial effects on the quality of park operations. Cumulative effects would be parkwide and beneficial.

### **Alternative 2 – Township**

Direct and Indirect Impacts of the Alternative. Alternative 2 would relocate the visitor center, administrative, and maintenance staff to new buildings. This alternative would be similar to Alternative 1 with improvements to staff space and resources from construction of a new visitor center. Construction of trails and pedestrian paths would add to the maintenance requirements. The visitor center and administrative staff would be further from the park resources by being located outside of the Townsite. As under Alternative 1, the increase in maintenance would have parkwide long-term minor adverse effects on park operations, but these effects would be offset by construction of new facilities. Overall, Alternative 2 would have parkwide long-term beneficial effects on park operations.

Cumulative Impacts. As described under the no action alternative, additional staff would be needed in the future, which would increase space demands. The parkwide moderate adverse impacts from past, present, and future actions, in combination with the beneficial effects of Alternative 2, would result in long-term beneficial cumulative effects on park operations.

Conclusion. Overall, Alternative 2 would have parkwide long-term beneficial effects on park operations. Cumulative effects would be parkwide and beneficial.

### **Alternative 3 – NHS Buildings**

Direct and Indirect Impacts of the Alternative. Alternative 3 would be similar to Alternative 1 with the construction of a new visitor contact station; however, the administrative staff would be relocated into the First Baptist Church. The maintenance of the visitor contact station and the First Baptist Church would have a long-term minor adverse effect, but would be offset by the overall parkwide long-term beneficial effect, on park operations from the new facilities.

Cumulative Impacts. As described under the no action alternative, additional staff would be needed in the future, which would increase space demands. The parkwide moderate adverse impacts from past, present, and future actions, in combination with the beneficial effects of Alternative 3, would result in long-term beneficial cumulative effects to park operations.

Conclusion. Overall, Alternative 3 would have parkwide long-term beneficial effects on park operations. Cumulative effects would be parkwide and beneficial.

## Socioeconomics

### Affected Environment

The visitor center plays an important role in the town economy and in the economy of Graham County. Historically, the county's economy has been based on regional oil, farming, and ranching (Graham County 2011). The population of the town has been dwindling in recent years, with a total population of 25 residents in 2010 (NPS 2010). The lease of Township Hall by NPS is the only income the Township receives, other than from Graham County.

Most of the population of Graham County lives in Hill City, which is 13 miles west of Nicodemus. Hill City and Stockton has several restaurants and lodging options available for Nicodemus visitors. Although no specific economic numbers are available on the park's contribution to the local economy, visitors to the park patronize restaurants, lodging, gas stations, and other local businesses in Hill City and Stockton.

### Impact Intensity Threshold

Socioeconomic issues were identified through the scoping process. Concerns covered by this section include effects on the economic contribution of the park to the local economy and the potential effects associated with building or not building a visitor center. The thresholds of change for the intensity of impacts to socioeconomics are described in Table 11.

**Table 12. Socioeconomics Impact and Intensity Thresholds**

Impact Intensity	Intensity Description
Negligible	No effects would occur or the effects on socioeconomic conditions would be below the level of detection.
Minor	The effects on socioeconomic conditions would be detectable. Any effects would be small and if mitigation were needed to offset potential adverse effects, it would be simple and successful.
Moderate	The effects on socioeconomic conditions would be readily apparent. Any effects would result in changes to socioeconomic conditions on a local scale. If mitigation is needed to offset potential adverse effects, it could be extensive, but would likely be successful.
Major	The effects on socioeconomic conditions would be readily apparent and would cause substantial changes to socioeconomic conditions in the region. Mitigation measures to offset potential adverse effects would be extensive and success could not be guaranteed.
Beneficial	The effects would improve socioeconomic conditions of local businesses and the community. The intensity of the beneficial effect can be negligible, minor, moderate, or major.

Short-term impact-occurs only during project construction

Long-term impact-continues after project construction

## Environmental Consequences

### **No Action Alternative**

Direct and Indirect Effects of the Alternative. No change in park operation costs or impacts to the local economy are anticipated with the continued use of Township Hall as a visitor center. There would be no effect on socioeconomics under the no action alternative.

Cumulative Impacts. Although other past, present, and reasonably foreseeable future actions may affect regional socioeconomics, the no action alternative would have no impact on the regional economy and, therefore, would not contribute to the effects of other actions. Consequently, there would be no cumulative impact to socioeconomics under the no action alternative.

Conclusion. The no action alternative would have no adverse impact on socioeconomics and no cumulative effects.

### **Alternative 1 – Townsite**

Direct and Indirect Impacts of the Alternative. Construction of the visitor contact station, administration, and maintenance facilities would result in construction-related spending and employment. Construction expenditures would be used for labor, supplies, equipment, and other services. Labor would likely come from regional communities in Graham County and beyond. Because only a small portion of the park would be affected by construction activities, no change in the number of visitors is anticipated while the visitor contact station is being constructed. Additional annual funding for staffing and operating and maintenance costs for the new facilities would be required, which would have a long-term regional beneficial effect on socioeconomics.

A new visitor contact station would provide a focal point for visitors to come and learn about the town. Over the long term, the new visitor contact station would support local businesses and tourism-related spending, providing minor beneficial economic effects from a facility that attracts visitors and improves the quality of the visitor experience. A positive visitor experience in the park would contribute to the number of repeat visitors to the region and tourist-related spending.

The relocation of the visitor center out of Township Hall would reduce the income for the town. This would have a local long-term minor adverse effect on socioeconomics.

The decrease in income from NPS not leasing Township Hall would have a local long-term minor adverse impact on the socioeconomics of Nicodemus, but improved visitor facilities would have a regional long-term beneficial effect.

Cumulative Impacts. There are no past, present, or future actions that would cumulatively contribute to the effects on socioeconomics from Alternative 1, so there would be no cumulative effects.

Conclusion. Alternative 1 would have a local long-term minor adverse effect on the socioeconomics of the town and a long-term beneficial effect on regional socioeconomics. There would be no cumulative effects.

### **Alternative 2 – Township**

Direct and Indirect Impacts of the Alternative. Alternative 2 would have similar effects as Alternative 1 with the addition of a new visitor center and administration buildings and the relocation of the visitor center out of Township Hall. The relocation of the visitor center out of Township Hall would have a long-term minor adverse effect on the socioeconomics of the town. The new visitor contact station would have a long-term beneficial effect on the socioeconomics of the region.

Cumulative Impacts. There are no past, present, or future actions that would cumulatively contribute to the effects on socioeconomics from Alternative 2, so there would be no cumulative effects.

Conclusion. The relocation of the visitor center out of Township Hall would have a long-term minor adverse effect on the socioeconomics of the town. The new visitor contact station would have a long-term beneficial effect on the socioeconomics of the region.

### **Alternative 3 – NHS Buildings**

Direct and Indirect Impacts of the Alternative. Alternative 3 would have similar effects as Alternative 1 with the addition of a new visitor contact station and the relocation of the visitor center out of Township Hall. Construction of the visitor center contact station and the rehabilitation of the First Baptist Church would result in construction-related spending and employment. The relocation of the visitor center out of Township Hall would have a long-term minor adverse effect on the socioeconomics of the town. The new visitor contact station and other improvements would have a long-term beneficial effect on the socioeconomics of the region.

Cumulative Impacts. There are no past, present, or future actions that would cumulatively contribute to the effects on socioeconomics from Alternative 3, so there would be no cumulative effects.

Conclusion. Alternative 3 would have long-term local minor adverse effects and regional long-term beneficial effects on socioeconomics. There would be no cumulative effects.



## Museum Collections

### Affected Environment

Currently, artifacts are kept in two non/climate-controlled metal storage containers behind the AME Church. The drastic changes in temperatures impact the artifacts. Other artifacts are in a closet in the administration offices, stored with clothing and supplies, and are being impacted by frequent staff access. Regional collections management staff have inspected the storage facilities, and the artifacts and recommend immediate corrective action. The park is currently responding to those recommendations.

### Impact Intensity Threshold

Museum collection issues were identified through the scoping process. Concerns covered by this section include effects on the artifacts that are part of the park, the current conditions of the artifacts and collections, and how they would be impacted by project activities. The thresholds of change for the intensity of impacts to museum collections are described in Table 12.

**Table 13. Museum Collections Impact and Intensity Thresholds**

Impact Intensity	Intensity Description
Negligible	Impact is at the lowest level of detection – barely measurable, with no perceptible consequences to museum collections.
Minor	Would affect the integrity of a few items in the collection but would not degrade the usefulness of the collection for future research and interpretation.
Moderate	Would affect the integrity of many items in the museum collection and would diminish the usefulness of the collection for future research and interpretation.
Major	Would affect the integrity of most items in the museum collection and would destroy the usefulness of the collection for future research and interpretation.
Beneficial	The effects would improve museum collections. The intensity of the beneficial effect can be negligible, minor, moderate, or major.

Short-term impact¾following project completion, effects would remain less than one year

Long-term impact¾following project completion, effects would remain more than one year

### Environmental Consequences

#### **No Action Alternative**

Direct and Indirect Effects of the Alternative. Under the no action alternative, the park would continue to store artifacts in the metal storage containers, and within a room that is not climate-controlled and in other locations that are not suitable for curatorial purposes. The artifacts would continue to degrade from the lack of storage facilities. Under the no action alternative, there would be no new effects on museum collections, but long-term minor

adverse effects would continue.

Cumulative Impacts. Past, present, and future management of the park's artifacts has led to parkwide minor adverse effects on museum collections. Under the no action alternative, artifact degradation and parkwide minor adverse effects would continue.

Conclusion. The no action alternative would have no new effect on museum collections, but cumulative effects would be parkwide, minor, and adverse.

### **Alternative 1 – Townsite**

Direct and Indirect Impacts of the Alternative. Under Alternative 1, the artifacts would be moved to the new administrative buildings or visitor contact station depending on the building layouts. The new buildings would have storage space available that would improve conditions of the artifacts by allowing for storage in a climate-controlled room, which would have a parkwide long-term beneficial effect on museum collections.

Cumulative Impacts. Past, present, and future management of the park's artifacts has led to parkwide minor adverse effects on museum collections. Alternative 1 would contribute a parkwide long-term beneficial effect, resulting in parkwide beneficial cumulative effects.

Conclusion. Alternative 1 would have parkwide and local long-term beneficial effects on museum collections with the construction of new storage space in the new facilities. Alternative 1 would have a parkwide beneficial effect on museum collections.

### **Alternative 2 – Township**

Direct and Indirect Impacts of the Alternative. Alternative 2 includes the construction of a visitor center building that would include administration offices and a separate maintenance facility on-site. New storage space would be included in the facilities, which would improve conditions of the artifacts. The new storage space would have a parkwide long-term beneficial effect on museum collections.

Cumulative Impacts. Past and present management of the park's artifacts has led to parkwide minor adverse effects on museum collections. With the contribution of parkwide beneficial effects from Alternative 2, cumulative effects on museum collections would be parkwide and beneficial.

Conclusion. Alternative 2 would have a parkwide long-term beneficial effect on museum collections and parkwide beneficial cumulative effects.

### **Alternative 3 – NHS Buildings**

Direct and Indirect Impacts of the Alternative. Under Alternative 3, the administration facilities would be moved to the First Baptist Church and the maintenance facilities would

be located at the existing Nicodemus Housing Authority complex or within a new maintenance yard. The museum artifacts would be relocated either to the rehabilitated First Baptist Church or to the new maintenance yard or would be kept within the Nicodemus Housing Authority complex. The storage conditions of the artifacts would not change substantially and their condition would continue to degrade. Under Alternative 3, there would be parkwide long-term minor adverse effects on museum collections.

Cumulative Impacts. Past, present, and future management of the park's artifacts has led to parkwide minor adverse effects on museum collections. With the contribution of parkwide long-term minor adverse effects from Alternative 3, cumulative effects on museum collections would be parkwide, minor, and adverse.

Conclusion. Alternative 3 would have parkwide long-term minor adverse effects on museum collections and parkwide minor and adverse cumulative effects.

## **Chapter 6. Consultation and Coordination**

### **Scoping/Consultation**

A press release describing the Preferred Alternative and inviting public comment on this EA was issued on February 11, 2012. The park also sent letters describing the preferred alternative and asking for comments to interested individuals; organizations; state, county, and local governments; and federal agencies.

#### Section 106 Consultation

Agencies that have direct or indirect jurisdiction over historic properties are required by section 106 of the National Historic Preservation Act of 1966, as amended (16 USC 470, et seq.), to take into account the effect of any undertaking on properties listed in or eligible for listing in the national register. To meet the requirements of 36 CFR 800, on June 10, 2011, NPS talked with the SHPO to discuss the proposed project and solicit comment on the alternatives. The SHPO will also receive a copy of the final EA for review and comment. The park will coordinate with the SHPO in the development of mitigation measures for historic and archeological resources.

#### Other Federal and State Agencies, Regional and Local Governments, and Interested Parties

Agencies and organizations provided an opportunity to review or comment on this EA include, but are not limited to, the following.

#### Federal Agencies

## Compliance with Federal and State Regulations

NPS would comply with all applicable federal and state regulations when implementing the preferred alternative. Permitting and regulatory requirements for the preferred alternative are listed in Table 14.

**Table 14. Environmental Compliance Requirements**

Agency	Statute, Regulation, or Order	Purpose	Project Application
<b>Federal</b>			
<b>National Park Service</b>	National Environmental Policy Act	Applies to federal actions that may significantly affect the quality of the environment.	Environmental review of the preferred alternative and decision to prepare a FONSI or EIS.
	National Historic Preservation Act, Section 106	Protection of historic and cultural resources.	The park is consulting with the SHPO to address anticipated effects and mitigation for cultural resources.
	EO 11990, "Protection of Wetlands"	Requires avoidance of adverse wetland impacts where practicable and mitigation, if necessary.	The preferred alternative would not impact wetlands.
	EO 11988, "Floodplain Management"	Requires avoidance of adverse floodplain impacts where practicable and mitigation, if necessary.	The preferred alternative would have no effect on floodplains.
	NPS 77-2: Floodplain Management	Protection of natural resources and floodplains.	The preferred alternative would have no effect on floodplains.
<b>U.S. Army Corps of Engineers (Corps)</b>	Clean Water Act – Section 404 Permit to discharge dredge and fill material	Authorizes placement of fill or dredge material in waters of the U.S. including wetlands.	The preferred alternative would have no impacts on waters of the U.S. including wetlands.
<b>U.S. Fish and Wildlife Service</b>	Endangered Species Act	Protection of federally listed threatened or endangered species.	The park is consulting with the Fish and Wildlife Service as part of the NEPA process.
<b>State of Kansas</b>			
<b>Kansas Department of Health and Environment</b>	Kansas Department of Health and Environment Stormwater Runoff General Permit for Construction Activities	Erosion control and water quality protection.	The preferred alternative would disturb more than 1 acre of ground at a site and a stormwater runoff permit would be obtained.

## References

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