

# Fort Scott National Historic Site Accessibility Assessment

## Summary Report Findings and Recommendations

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National Park Service  
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**Fort Scott National Historic Site  
Accessibility Assessment  
Summary Report of Findings and Recommendations  
Assessment Date: September 20, 2010**

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## **II. Final Identified Locations in FMSS**

18547 – Officers’ Quarters #1 (HS-1)  
18551 – Wilson/Goodlander Home (HS-2)  
18555 – Sutlers Store (HS-4)  
18558 – Dragoon Barracks (HS-5)  
18562 – Grand Hall (HS-6)  
18569 – Infantry Barracks/Museum (HS-7)  
18572 – Visitor Center (HS-8)  
18576 – Guard House (HS-9)  
18580 – Quarter Master Storehouse (HS-12)  
18587 – Post Bakery (HS-14)  
18593 – Powder Magazine (HS-17)  
18602 – Dragoon Stables (HS-10)  
18603 – Post Headquarters (HS-11)  
18609 – Parade Ground Walkways  
30352 – Grounds  
30362 – Tallgrass Prairie Loop Trail  
30366 – RV Parking Lot

### **III. Park Purpose, History and Themes**

The mission of the National Park Service at Fort Scott National Historic Site is to preserve, protect and interpret nationally significant historic resources related to the opening of the West, the Permanent Indian Frontier, the Mexican-American War, Bleeding Kansas, the Civil War and the expansion of railroads.

Fort Scott was established in 1842 as a military base at the edge of the nation's settlement area. For more than a quarter century, it was used as a supply base and to provide security in turbulent areas as the country expanded westward. The soldiers stationed at Fort Scott were involved in events that would lead to tremendous growth and expansion as the west opened to settlement. Fort Scott played a significant role in battling increased tensions over slavery, the turmoil of "Bleeding Kansas" and the American Civil War. Later, the military returned to Fort Scott to protect railroad workers from squatters who forcefully opposed the railroad building on land they felt was theirs. Fort Scott National Historic Site takes the visitor through these watershed years and beyond to the time when the United States emerged as a united, transcontinental nation.

In 1978 Fort Scott was designated a National Historic Site. Today, Fort Scott consists of 20 historic structures, a parade ground and five acres of restored tall grass prairie. The Park offers a glimpse back in history into the lives of the soldiers during that era and the hardship of battle, through interpretive exhibits, media, guided tours, and education programs.

### **IV. The National Center on Accessibility Assessment Approach**

The National Center on Accessibility assessment process is designed to identify barriers to participation for people with disabilities, make recommendations for barrier removal and improved access, and develop associated work orders and cost estimates to assist park personnel in long-term planning. The NCA assessment team utilizes the federal standard for program access, Section 504 of the 1973 Rehabilitation Act, as a guiding principle for viewing the programs, activities and services of the National Park or Historic Site, in its entirety, for consideration of barrier removal. The assessment team looks critically at the programs that make up the visitor experience from the point of view of persons who have impairments to vision, hearing, mobility, or cognitive processes. This approach focuses the assessment process and outcomes on the visitor experience and beyond the realm of solely the physical environment. The NCA assessment team views the physical environment as a catalyst for program access and thus forms recommendations for barrier removal with program access at the forefront of the investigative and reporting processes.

At Fort Scott National Historic Site, the assessment team from the National Center on Accessibility conducted an accessibility assessment of the physical aspects of the site and its existing programmatic elements. The team also interviewed key park personnel, collecting information to provide a broad range of recommendations for improving access for visitors with disabilities.

### **V. Referenced Standards and Guidelines**

The National Park Service is legislatively mandated to provide accessible facilities and programs for their visitors with disabilities. Based on these mandates, the National Center on Accessibility utilizes the following accessibility standards and guidelines for their assessment:

**Architectural Barriers Act of 1968 as amended (U.S. Access Board, 2004; General Services Administration, effective date May 8, 2006)**

This document contains scoping and technical requirements for accessibility to sites, facilities, buildings, and elements by individuals with disabilities. The requirements are to be applied during the design, construction, addition to, alteration, and lease of sites, facilities, buildings, and elements to the extent required by regulations issued by Federal agencies under the Architectural Barriers Act of 1968 (ABA).

**Rehabilitation Act of 1973, as amended in 1978, Section 504**

Section 504 of the Rehabilitation Act (1973) reads, "No otherwise qualified individual with a disability in the United States shall solely by reason of his disability, be excluded from the participation in, be denied benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance, or under any program or activity conducted by an Executive Agency."

**Rehabilitation Act of 1973, Section 508**

This section, amended in 2000, requires access to electronic and information technology provided by the Federal government. The law applies to all Federal agencies when they develop, procure, maintain, or use electronic and information technology. Federal agencies must ensure that this technology is accessible to employees and members of the public with disabilities to the extent it does not pose an "undue burden."

**NPS Director's Order #42: Accessibility for Visitors with Disabilities in National Park Service Programs and Services**

This NPS Director's Order reiterates the NPS goal to ensure that all people, including the estimated 54 million citizens with disabilities, have the highest level of accessibility that is reasonable to their programs, facilities and services in conformance with applicable regulations and standards. Five objectives are outlined including: incorporation of the highest level of accessibility as a long range goal; implementation through daily operation, policies, organizational relationships and strategies; provision of guidance and direction regarding the NPS interpretation of laws and policies; establishment of a framework for effective implementation; and ensuring the implementation of "universal design" principles within the National Park system.

**Programmatic Accessibility Guidelines for National Park Service Interpretive Media (February 2012)**

These NPS Guidelines combine laws, policies, and best practices for interpretive media. The guidelines acknowledge that no interpretive media product works alone. Media products are interdependent and each has inherent strengths and weaknesses. Park visitors sample and benefit from an array of interpretive media. These guidelines describe design and presentation solutions that are acceptable in most interpretive media situations. It should be noted however that these guidelines present highlights only and are not comprehensive.

**Draft Final Accessibility Guidelines for Outdoor Developed Areas (U.S. Access Board, October 19, 2009)**

Achieving accessibility in outdoor environments has long been a source of inquiry due to challenges and constraints posed by terrain, the degree of development, construction practices and materials, and other factors. These guidelines are proposed by the U.S. Access Board as new scoping and technical requirements for outdoor developed areas covered by the Architectural Barriers Act. The guidelines will cover new and altered trails, beaches, picnic and camping facilities and viewing areas. While these guidelines are not yet enforceable as requirements for Federal entities, they should be integrated into

the planning, construction, and renovation of outdoor recreation areas and facilities and in the provision of programs and services provided to the public as best practice guidelines.

In addition to legislative mandates and proposed rulemaking, the NCA assessment team has made recommendations based on best practices in the field in order to create greater opportunities for participation and benefit among visitors with disabilities.

### **Principles of Universal Design**

Universal Design is the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design. The intent of Universal Design is to simplify life for everyone by making products, communications, and the built environment more usable by as many people as possible at little or no extra cost. Universal Design benefits people of all ages and abilities.

There are times when NCA may use the concept of Universal Design for recommendations that are not requirements but are seen as “best practices”. An example would be providing recommendations for benches in the outdoor environment, installing power assisted exterior doors, marking parking spaces uniformly at 11 feet wide, and/or utilizing the advisories in ABAAS when appropriate due to accessibility issues that contribute to safety risks.

### **Smithsonian Guidelines for Accessible Exhibition Design**

The Smithsonian Guidelines is one of the very first and most formidable resources addressing exhibit design considerations for museum patrons with disabilities. The Smithsonian Guidelines are referenced as best practice for designing to various learning styles and functional abilities in the interpretive environment and especially in situations where the accessibility standards do not fully transfer to unique exhibition designs.

### **NPS Audio-Visual Accessibility Initiative for Visitors with Disabilities D24 (2420) (October 20, 2006)**

A series of official disability rights complaints and testimony received at a Congressional oversight hearing on disability access revealed that the NPS has many audiovisual programs that are not captioned or audio-described; assembly areas that are not equipped with assistive listening systems; and in some cases, captioning systems that are broken and have not been repaired. This initiative established the fundamental goal that the films and audio-visual programs presented in parks provide three basic services: open captions, audio-description, and assistive listening devices for those with hearing loss.

### **Architectural and Transportation Barriers Compliance Board Revised Draft Guidelines for Accessible Public Rights-of-Way (November 23, 2005)**

Sidewalks, street crossings, and other elements of the public rights-of-ways present unique challenges to accessibility for which specific guidance is considered essential. These proposed guidelines for public rights-of-way address various issues, including access for blind pedestrians at street crossings, wheelchair access to on-street parking, and various constraints posed by space limitations, roadway design practices, slope, and terrain. The new guidelines will cover pedestrian access to sidewalks and streets, including crosswalks, curb ramps, street furnishings, pedestrian signals, parking, and other components of public rights-of-way.

## VI. Key Findings and Recommendations

This section provides an overview of the NCA assessment team's key findings and recommendations. More complete details of findings, recommendations for corrective actions and cost estimates are available through the Facility Management Software System (FMSS) database, and the Cost Estimating Software System (CESS).

The deficiencies are given a priority rating by the assessors. The three accessibility deficiency priorities, as established by the National Park Service within FMSS, are:

**Critical** - A critical priority would be given to those deficiencies that occur in an asset or facility that is utilized by a significantly high number of people (visitors or employees); or "prohibits" or seriously inhibits people with disabilities from utilizing the facility.

**Serious** - A serious priority would be given to those deficiencies that occur in an asset or facility but only modestly inhibit an individual with a disability from utilizing the facility.

**Minor** - A minor priority would be given to those deficiencies that occur in any asset or facility but only slightly inhibit an individual with a disability from utilizing the facility. Minor classifications can also signify that the deficiency can be easily corrected with maintenance and/or minor adjustments or that correction might take more time and money but only needs to be corrected when renovations/replacements are scheduled.

### 1. Policy Considerations and Best Practices

During the review of assessment data, the NCA assessment team identified several barriers to accessibility, unique to Fort Scott, that are not explicitly addressed in the above referenced standards. As a result of discussion with Park management, and in collaboration with recommendations from the U.S. Access Board, the Park has decided to adopt the following best practices to maximize accessibility for visitors with disabilities.

#### Exterior Doors

While there is no identified accessibility standard for the operating force of exterior doors, it is recommended as best practice for the Park to adjust exterior door closers to reduce the operating force to as close to 5 pounds (maximum force requirement for interior doors) as possible. If this is not possible, the Park should investigate the installation of a power assisted or automatic door opener to minimize the potential barrier for an individual with a disability. Exterior doors that currently exceed 5 pounds of opening force are the ground floor doors at Grand Hall, the exterior door to the exhibit space in the Officers' Quarters, and the southwest door of the Visitor Center.

#### Waysides and Interpretive Panels

As new waysides and interpretive panels are installed, or maintenance is conducted to existing routes where waysides and interpretive panels are furnished, clear ground space complying with ABAAS 305 should be provided, positioned for either a forward or parallel approach, centered on the frame.

#### Benches

All new accessible benches should be installed with clear floor or ground space provided near the bench for wheelchair seating that does not overlap the accessible route. As benches are repaired or replaced,

accessible benches should be provided until a minimum of 20 percent are accessible in each location. Accessible benches should have back support, at least one armrest, a seat height between 17 inches minimum and 19 inches maximum, and should be installed along an accessible path of travel (i.e. accessible route, outdoor recreation access route, or trail).

## **2. Visitor Information**

The Park website is often the first point of contact for people planning their visit to the Fort Scott National Historic Site. Currently, information is provided in the accessibility section of the website for visitors with mobility impairments, apprising them of what is physically available to them on site and what barriers exist. Some information is also provided for visitors with a visual, hearing or cognitive impairment regarding the availability of captioning, audio description and an assistive listening system for the orientation film. No information regarding the procedure to request a sign language interpreter is provided. Information concerning service animals is provided in a separate section of the website under “pets”. The term “seeing eye dogs” is used to state what animals are permitted in the Park. This terminology is no longer utilized within the disability community.

The recommendation is to update the accessibility section of the Park’s website to include more information in regards to accommodations for visitors with disabilities. Provide specific, objective information about accessible routes, accessible features at Fort Scott, and auxiliary aids and services, to enable prospective visitors to plan accordingly. Offering information about all of the accessibility accommodations that the Park provides on a single page of the website simplifies the process for potential visitors. Be sure to include detailed information, not only for people with physical disabilities, but also accessibility information for people with sensory and cognitive disabilities. As additional accessibility features are updated or become available, such as a portable assistive listening system or significant tactile opportunities, provide this information on the website. Include the procedure to request a sign language interpreter or to make other accommodation requests. This is important not just for every day visitors, but for those attending special events on site. It is also recommended that the Park reference the latest regulations published by the Department of Justice regarding service animals, and review and update the Park’s policies on the issue. Provide the Park’s policy, not only in the “Pets” section of the website, but also in the “Accessibility” section. Finally, include the name and phone number of the staff member who serves as the accessibility coordinator for the Park.

## **3. Visitor Orientation and Way-finding**

The layout of the facilities and features of Fort Scott National Historic Site is communicated through signage, maps, and publications intended to welcome and orient the visitor to the Park. Maps of the Fort are not provided in electronic, large print, or tactile formats for people with low vision or who are blind.

While accessibility standards do not address visitor orientation and way-finding, in order to meet program access requirements the Park should design and develop a tactile, topographical map of Fort Scott that effectively communicates the orientation of the buildings, the size of the Fort, and the surrounding environment. Locate the tactile map within the Visitor Center or outside of it so that visitors with low vision or who are blind can get a general orientation as they enter the site. The map material should be able to withstand high visitor use, be comfortable to the touch (i.e., be able to withstand temperature extremes if located outside), and be finished with a coating that allows for routine cleaning. A variety of textures should be used to distinguish between landscape features of varying topographies.



## **4. Publications**

The standard Park unigrid brochure, which was new in 2009, includes basic visitor information and the Fort map. This brochure, along with other secondary publications (such as the Wilson/Goodlander Home publication), is not available in alternate formats such as audio, large print, Braille, or electronic format. All written information shared with visitors should be available in formats that are accessible to people with disabilities and communicated as effectively for people with disabilities as they are for people without disabilities.

The Fort Scott unigrid brochure and all other readily available publications should be converted to Braille, designed for large print, and formatted for audio and electronic distribution. Utilize the Harpers Ferry Center large print brochure template to adapt all primary standard Park brochures to large print. In addition, translate the content for the primary standard Park brochures to Braille, electronic text file (.txt, .rtf, .doc), and audio (CD, mp3). Develop a procedure for translating content of secondary brochures, and insert a statement in those publications indicating “alternate formats of this publication are available upon request.” Maintain the alternate formats in stock for visitor requests, and provide signage at the Visitor Center stating that the information is available.

Add a section to the primary Park brochure explaining the availability of services for visitors with disabilities including information to request a sign language interpreter, availability of an assistive listening system, alternate formats for publications, accessibility improvements to the Park, and the contact information for the Park’s accessibility coordinator. Ensure that the same information is added to the existing accessibility section of the Park’s website.

## **5. Exhibits**

There are many exhibit areas throughout the facilities of Fort Scott. Interpreting the rich history of the site includes the display of original artifacts and furnishings, maps and exhibit panels. Barriers to program access were often repeated at each exhibition site within the Fort. Access for people with sensory or cognitive impairments is critical to providing an equal opportunity to participate in and benefit from the program.

- Dragoon Barracks – The exhibits interpret the day-to-day life of soldiers and the history, weapons and uniforms of the dragoons. Period-furnished rooms are viewable by visitors from behind a barrier, and individual exhibit pieces are displayed in closed cases or behind glass. While some tactile exhibits exist, including tables and benches in the Mess Hall and beds in the Bunk Room, little is available for visitors who have low vision or are blind.
- The Officers’ Quarters present similar displays of furnished rooms such as a typical parlor, kitchen, dining room and bedrooms as they would have appeared when the Fort was in use. No tactile exhibits are provided.
- The Stables offer empty horse stalls that visitors can enter. Relevant exhibit items such as grooming tools and saddles are displayed behind a gate or mounted on a wall out of reach range. These exhibit items exceed recommended viewing heights and distances. Interpretive panels explaining these exhibit items and other topics relevant to equestrian needs of the Fort utilize text that is too small to read from the current viewing height and distance.
- The Museum exhibits interpret the timeline of the city of Fort Scott, the military presence and the role the Fort played as America expanded and the population grew. Second floor displays cover the construction and reconstruction of Fort Scott, the Civil War, the role of black soldiers,

and the emotional topic of slavery. The topics are primarily interpreted through text and graphics, with many exhibit pieces displayed in cases or behind glass. Only one tactile exhibit is provided – stone and brick walls showcased on the second floor.

- The Wilson/Goodlander Home offers significant information on a reconstruction theme, showing the bones of the building, including inside the interior walls, beneath the floors and through the ceilings. Sixty-four different building elements are pointed out using a printed pamphlet that helps to interpret the elements. No interpretation is provided for visitors with visual impairments.

Interpretive panels are used in all exhibition areas, and all include text and graphics. Often serif fonts are used, the font is too small relative to reading distance, and limited contrast between the text and background reduces readability. There is little to no opportunity for visitors who have low vision or are blind, or those with cognitive disabilities to participate in or benefit from much of the interpretive exhibition.

Work with design services to create a comprehensive exhibit design and replacement plan. Incorporate more interactive and tactile exhibits so that all visitors are provided an equivalent experience. Objects made available for tactile exploration should be relevant to the story being told and should teach something new to the visitors who need them. A large stone or a candlestick cannot always provide significant information, where less common items such as soldiers' uniforms and weapons, horse grooming tools and saddles, or period furnishings can offer new details that are difficult to convey through verbal and written communication. Consider options for interpretive exhibits of the Wilson/Goodlander home to engage visitors with disabilities who either cannot see the display or cannot physically get through the building to benefit from this important part of Fort Scott's narrative.

Additionally, audio description of exhibits can provide visitors who are blind with specific details of displays or unique artifacts that are visually accessible for other visitors. This affords visitors with visual impairments, and in some cases cognitive impairments, an equal opportunity to benefit from the interpretive program. Audio description tours are addressed more specifically in the "Talks and Tours" section of this report.

The importance of Fort Scott involves land beyond the actual NPS site. Maps are used in exhibits throughout the Fort to explain this, to show the movement of troops, the expansion of the railroad system, and the territory affected by Civil War battles. Include three-dimensional, tactile maps to effectively communicate this information.

When interpretive exhibit panels are replaced, ensure that the information is presented in a way that is accessible to the widest range of visitors. Things to consider in interpretive design include the use of sans serif or simple serif fonts (as opposed to serif fonts), minimal use of italics, size of font based on reading distance, and contrast between text and background of 70-95 percent. Text should be readable against any background image and should not appear backlit or in shadow, as the stylistic presentation of information can interfere with readability. All exhibit components including text labels should be installed in consideration of viewing height for the widest range of visitors including those who are seated or of shorter stature, including children.

Waysides: There are approximately 17 waysides provided around the grounds of Fort Scott. None include audio or tactile components for individuals who are blind or cognitively impaired. The

presentation of the interpretive information incorporates the use of serif fonts, italics, insufficient contrast and text over images. These all create barriers to effective communication for visitors with low vision.

**Text Panels:** There are small, free-standing informational panels used in four buildings at the Fort to provide textual information about a specific exhibit area. Some of these panels are placed inside the exhibit rooms beyond the exhibit barrier, placing them out of view for visitors who are seated or of short stature. The text on the panels is a serif font with varying line widths, printed in all capital letters and italicized. All of these features make readability difficult for visitors with low vision.

Similar to the recommendation to redesign the interpretive exhibits throughout Fort Scott, work with design services to create a comprehensive wayside and interpretive panel design and replacement schedule for Fort Scott. Design panels for the widest range of visitors. Size and type of fonts, contrast, and interactive elements should be considered in the design. Type set in all capital letters should be limited to items such as titles and decorative headings due to reduced readability. Place the interior and exterior waysides in locations where all visitors can access the information. As panels are replaced, the new information should be integrated into the audio described tour of Fort Scott (addressed later in this report).

## **6. Audio/Visual Programs**

All new media productions shall be open captioned and audio described per Section 508 and the NPS Audio-Visual Accessibility Initiative. All existing media shall be captioned, audio described and available for use with an assistive listening system. The accessible features of the audio/visual programs such as assistive listening, audio description and open captioning shall be maintained through periodic testing and staff training. Display signage at reception areas indicating that the assistive listening system and audio description are available and market their availability through brochures, program announcements and the Park web site.

### Assistive Listening System

An assistive listening system is available with the Fort Scott orientation film for visitors with hearing loss. This information is provided on the Park's website. Display signage that includes the International Symbol of Access for Hearing Loss at the information desk of the Visitor Center indicating that the assistive listening system is available. While the Park had enough receivers based on the seating capacity of the small auditorium (10), ensure that the required number continues to be provided for any new theatre space, as addressed in ABAAS F219.

### Audio Description

Audio description is available with the Fort Scott orientation film for visitors with visual impairments. Display signage at the information desk of the Visitor Center indicating that audio description for the film is available.

### Open Captioning

According to the Park's website, the orientation film shown in the Infantry Barracks Museum is closed captioned. It is the policy of the National Park Service that all audiovisual programs will be shown in the open captioned mode at all times. This eliminates the need for visitors to self-disclose that they have hearing loss. All new media developed or purchased for use in the Park shall be captioned and shown in the open caption mode.

## **7. Talks and Tours**

### Portable Assistive Listening System

There is no portable assistive listening system for use during talks and tours that take place throughout the Fort. People with hearing loss must be provided an equal opportunity to participate in the various ranger programs offered for all visitors.

A portable assistive listening system is required for use during ranger talks and tours throughout the Fort. Purchase a minimum of one portable transmitter and a minimum of two receivers for use during ranger-led talks and tours; 25 percent minimum of receivers provided, but no fewer than two should be hearing-aid compatible. Display a sign that includes the International Symbol of Access for Hearing Loss at the reception area of the Visitor Center indicating that the portable assistive listening system is available. The Park should determine if additional receivers should be purchased based on visitation numbers.

### Audio Description

Visitors who are blind or have low vision are not able to get visual information about the appearance of the Fort and its facilities. They also cannot benefit from exhibits that are displayed with only visual elements such as graphics and text. No audio components are available that describe in detail the visitor's specific surroundings.

It is recommended that the Park work with a consultant to develop and record a script that will incorporate the visual elements of Fort Scott into an audio described tour. Included in the script should be a general orientation to the Fort, description of the architectural styles, the waysides, photos, graphics and text on interpretive panels, rooms and spaces that are historically furnished, exhibit items and tactile components throughout the Fort's exhibit areas, and locations that are inaccessible for people with mobility disabilities. Include notifications where cell phone tour stations are located. If audio description for specific exhibits is provided, provide individual signage at the exhibit alerting to its availability. The consultant should also assist in determining what equipment will be most appropriate for the Fort's specific audio description needs. Ensure that the equipment is hands-free or has a hands-free option (so that visitors can explore their surroundings by means of tactile exhibits), is able to be independently operated, and is hearing-aid compatible.

### Cell Phone Tour

Fort Scott offers a cell phone tour with 12 stops throughout the site. The information provided through the tour is not accessible for people who are deaf. This interpretive program should meet the minimum requirements of Section 508 for electronic and information technology, and the program access standard mandated by Section 504 of the Rehabilitation Act. Wherever communication is made with visitors, whether through audio or visual means, the communication should be as effective for people with disabilities as it is for people without disabilities. Use of technology, such as cell phones, smart phones, MP3 players, and portable GPS should include purposeful planning to accommodate the range of needs of people with hearing loss, people with visual impairments, people with mobility impairments, and people with cognitive impairments. Consideration should also be given to the diversity of the Park visitor population including those traveling with children, older adults, large groups, and individuals who may not own or have access to such devices. The Park should consider purchasing a number of accessible MP3 players to be made available at the Visitor Center. The MP3 players could contain preloaded media content including the cell phone tour audio program and an audio described version of the cell phone tour for visitors with visual impairments who request this accommodation. This method

of communication shall be investigated as a means of providing the interpretive information without requiring the visitor to have/carry a personal cell phone, and possibly to deplete their available minutes and/or battery life.

Provide text versions of the tour script used at each stop along the tour. Transcripts should be available in both standard and large-print formats and readily available in the Visitor Center. An additional recommendation is to place the transcripts on the Park website for download.

#### Virtual Tours

Several of the buildings at Fort Scott have no physical access to the second floors where additional exhibits and experiences are offered for the visitor. Neither the interior nor exterior stairs can be modified for accessibility, nor can any vertical conveyance system be installed. Other buildings have changes in level at the exterior entrances impeding access for visitors with mobility disabilities. Books of photographs of these inaccessible areas are available in the Visitor Center; however, there are no other programmatic alternatives for visitors who are unable to access these areas.

Any programmatic presentation must be equal to the quantity and quality of the original on which it is based so as to provide an equitable experience for the user. It is recommended that the Park work with a consultant to design and develop virtual tours of at least eight buildings. Consider the latest technologies available to provide an equivalent programmatic experience when physical access is not technically feasible. All new media productions shall be open captioned, audio described and available for use with an assistive listening system per Section 508 of the Rehabilitation Act and the NPS Audio-Visual Accessibility Initiative for Visitors with Disabilities.

### **8. Physical Building Elements**

Below is a summary of the major physical accessibility deficiencies, by area, found at Fort Scott. The identified barriers and recommended solutions have been entered into FMSS, and work orders have been generated and cost estimated for the removal of the specific barrier. For a detailed explanation of a specific deficiency and solution, please refer to the FMSS data and generated work orders.

#### Parking

The parking lot nearest the Visitor Center is owned and maintained by the City of Fort Scott. Most visitors to the historic site utilize this lot. It is recommended that the Park collaborate with the City of Fort Scott to assess the small lot and ensure compliance with the 2010 ADA Standards for Accessible Design (the standards to which the City must comply). A significant deficiency that should concern the Park is the location of the vertical signage designating the accessible parking space for the city lot. The metal post is installed into the concrete sidewalk, approximately 18 inches back from the curb. It reduces the required clear width of the sidewalk, and the signage could be a safety hazard as a protruding object for someone that is blind.

The Park-owned RV and bus parking lot south of the Fort does not have delineated parking spaces or a designated accessible parking space. The surface of this parking lot exceeds maximum slope requirements.

Where parking spaces are provided, accessible spaces must be included. Grade and resurface at least a portion of the parking lot to correct for slope. Stripe the lot for a minimum of one accessible parking space and designate it with vertical signage. Because this parking lot serves vehicles that may be wider than a standard car or van, it is recommended that the accessible parking space be

striped at 20 feet wide minimum as recommended in the Draft Final Accessibility Guidelines for Outdoor Developed Areas, which addresses parking for recreational vehicles. This width will accommodate a wider vehicle and the lowering of a wheelchair lift, if necessary. Ensure the new adjacent access aisle directly adjoins the newly recommended accessible route, addressed in the next section.

### Accessible Routes

#### *Exterior Routes*

The red brick surface on the southwest side of the Fort is not an accessible surface material. The heaving and deterioration of the bricks create changes in level and openings that exceed maximum requirements.

Conduct a design study to determine what material to use to replace the red brick ground surface. The existing brick is not historic. The Park is considering stamped concrete as one option among several possible alternatives. When choosing and installing the new ground surface, ensure that it meets flush with the Visitor Center porch. The surface shall be firm, stable and slip resistant, and comply with standards for running slope, cross slope, changes in level and openings.

There is no accessible route from the RV parking lot to the Fort's parade ground. There is no curb cut or curb ramp from the RV parking lot to the route leading to the parade ground. A portion of the pathway from the RV parking lot to the parade ground exceeds maximum running slope for a ramp. The rest of the route meets requirements for an accessible route.

Conduct a landscape design study to determine the feasibility of providing an accessible route from the RV parking lot to the parade ground. The existing path would need to be rerouted to reduce running slope, which could affect the area of tall grass prairie adjacent to the path. If the study determines that an accessible route and/or ramp to the parade ground are feasible, ensure that requirements for an accessible route (ABAAS 403) and/or a ramp (ABAAS 405) are followed, including running and cross slope, clear width and surfacing.

Many buildings and elements at Fort Scott have limestone porch surfacing and wood ramp structures at the entrance doors that serve as part of the accessible route for visitor tours. The limestone has an uneven surface creating many changes in level that pose as obstacles for wheelchairs, other assistive devices, and visitors with unsteady gaits. This occurs at the porches of the Visitor Center, Infantry Barracks, Dragoon Barracks, Officer's Quarters, Wilson-Goodlander Home, Sutlers Store, Guard House, Grand Hall, Post Bakery, and around the Well Canopy. The wood ramp structures used at the Visitor Center, Infantry Barracks, Dragoon Barracks, Grand Hall, and Guard House include either one or two ramps attached to a landing at the entrance doors. All of the ramps have excessive running slope and changes in level. The handrails exceed the required gripping diameter, and none meet the minimum height requirement. Other entrances, such as at the Dragoon Barracks, Post Headquarters, Officer's Quarters, Wilson-Goodlander Home, Sutlers Store, and Post Bakery, have a significant change in level at the door, with no accessible means of entry available, denying visitors with mobility disabilities the opportunity to enter these exhibit spaces. Also, the running slope of the route leading up to the limestone landing at the Post Bakery exceeds maximum requirements.

A comprehensive design study should be conducted to determine possibilities for creating a continuous accessible route throughout Fort Scott that will comply with all standards, including

those for running and cross slopes, clear width and changes in level, while maintaining the site's historical integrity.

Visitors with mobility disabilities are unable to access Officers' Row because there are steps at both ends. The only accessible route to the opposite side of the Parade Ground is the route on the southwest side that runs in front of the Visitor Center. This requires visitors who are unable to access the steps to backtrack the full length of the Parade Ground in order to continue their tour.

As recommended in the Cultural Landscape Report for the Park, create a center walkway that cuts through the center of the Parade Ground to connect the two sides. Ensure that running slope and cross slope do not exceed maximum requirements.

At the southeast corner of the Parade Ground, a portion of the route from the end of Officer's Row leading to the Quartermaster Storehouse has running slope that exceeds maximum requirements for an accessible route and for a ramp.

Create a new accessible route closer to Grand Hall, running parallel with the existing route and extending to the south fire road. Provide a connecting route from this new path to the south side of the Quartermaster Storehouse. Ensure running and cross slope, clear width, surfacing, and turning space are provided according to the accessibility standards.

### *Entrances*

The thresholds at the southwest exterior door of the Visitor Center, the northeast exterior door of the Infantry Barracks leading to the exhibits, and the exterior door to the Mess Hall in the Dragoon Barracks exceed maximum height requirements for thresholds and can present a barrier for some visitors with mobility disabilities. The vertical change in level at the interior of the entrance door to the Bake House exceeds maximum requirements for thresholds.

Replace the wood thresholds at the four entrances to comply with the maximum allowed change in level. At the request of the Park, replace the exterior doors at these entrances to accommodate the resulting gap. Ensure the change in level from the exterior landing and the new threshold does not exceed  $\frac{1}{4}$  inch.

There is a strip of limestone at the entrance threshold to the Stables laid between the concrete sidewalk and the wood Stable floor. The limestone is uneven resulting in changes in level at both ground surface transitions. There are large openings between some of the stones presenting barriers for visitors using assistive devices.

Remove and replace the strip of limestone with smooth sandstone. Ensure the vertical change in level at the transitions between surface materials, and openings in the surface do not exceed maximum requirements. The double doors to the Stables have bolts at the bottom of the doors' interior that secure into a latch located in the existing limestone ground surface. This latch will need to be reinstalled into the new sandstone. Replacing the limestone may result in a gap between the new threshold and the bottom of the two doors. As per Park request, replace the two stable doors to accommodate the resulting gap.

### *Interior Routes*

The limited use/limited application (LULA) elevator that provides access between the first and second floor of Grand Hall has multiple deficiencies. The process to use the elevator does not facilitate independent operation. The door leading to the LULA is locked, and the visitor must obtain the key from Park staff. Once in the elevator another key is required for operation. Use of the keys requires tight pinching and twisting of the wrist. The up and down arrow control buttons inside the elevator are not identified by tactile characters. The control button for the emergency stop is not identified with the appropriate tactile symbol. The doorbell, used to notify a Park ranger that there is someone on the ground floor and that they should send the elevator down from the second floor, was not operational at the time of the assessment.

Contact the product representative to come to the site to conduct an evaluation and determine the feasibility of altering the existing limited use/limited application elevator to ensure all of the requirements are met, or to determine whether the LULA shall be replaced to meet all requirements with a compliant elevator.

At the time of the assessment, there was no access to the second floor of the Museum for people with mobility disabilities. There is a significant exhibit display on the second floor that covers the bricks and mortar of Fort Scott, as well as the emotional history of its role during the Civil War and the divisive subject of slavery. Plans for the installation of an elevator within the building had already begun. A new elevator must comply with ABAAS 407, including requirements for the elevator landings, controls, signals and indicators, signage, doors, car dimensions and emergency communication. Ensure that operation of the elevator is maintained and inspected regularly.

#### Picnic Facilities

The Fort Scott picnic facility does not meet minimum recommendations for accessibility. It is not served by a firm and stable outdoor recreation access route leading from the adjacent Park-owned RV parking lot or from the Fort grounds. Four picnic units are dispersed throughout the picnic area beneath the trees. The natural ground surface is not firm and stable, and the single accessible picnic table does not have the required clear ground space around it.

Conduct a landscape design study to determine the feasibility of modifying the existing picnic facility or relocating it to another area of the Park. It is recommended that at least two of the picnic tables be wheelchair accessible, located on an outdoor recreation access route, and be placed on a firm and stable surface with clear ground space around each table. The feasibility study should take into consideration a minimum of the following: providing a firm and stable outdoor recreation access route to the designated accessible picnic units within the picnic facility, providing a level, firm and stable ground surface around the accessible outdoor constructed features (picnic tables), and providing the minimum recommended number of accessible outdoor constructed features (picnic tables). The adjacent RV parking lot does not meet minimum requirements for accessibility and is addressed earlier in this report.

#### Restrooms

##### *Visitor Center*

The Visitor Center offers a men's and a women's restroom for public use. Neither restroom is fully accessible due to numerous deficiencies. Restroom signage, the opening force of entrance doors, knee clearance beneath lavatories, the installation of urinals, the size of the men's accessible stall; grab bar placement, the height of toilet seats, mirrors and paper towel dispensers all present barriers for visitors with disabilities.



If restrooms are provided for public use, they must be accessible for people with disabilities. Conduct a design study for a total renovation of both the men's and women's restroom in the Visitor Center. In order to provide the required clearances for toilet stalls and clear floor space, walls will need to be moved. There is a possibility of utilizing the space in the small foyer outside of the restroom doors as well as the large closet/safe room adjacent to the women's restroom. Consider providing unisex toilet rooms rather than single-sex rooms. This could allow that just one unisex restroom be made accessible, although universal design recommends making all accessible if possible.

### *Grand Hall*

The restrooms in Grand Hall are not compliant with accessibility standards. Both restrooms have deficient signage, and both entrance doors exceed maximum opening force.

Replace the restroom signage to include Braille, raised characters, pictograms and the International Symbol for Accessibility. Restroom signage should be placed on the wall to the latch side of the door; however, because there is no room on the door frame or adjoining wall, there is an exception where the signage can be placed on the push side of the door with a closer without hold-open devices.

Adjust the closers on the two doors to reduce opening force. If adjusting the door closer to 5 pounds of force is not possible, investigate the installation of a power assisted or automatic door opener to minimize the potential barrier for an individual with a disability.

The women's restroom does not provide minimum maneuvering clearance at the door inside the restroom; mirrors exceed maximum height requirements; and a beveled mirror and elongated lavatory meet requirements but are not necessary to provide accessibility. They may need to be removed in order to provide a fully accessible toilet stall.

The designated wheelchair accessible stall in the women's restroom has multiple deficiencies: the stall does not meet minimum size requirements for a wheelchair accessible stall containing a floor mounted water closet; the grab bars are not positioned correctly, and the space between the wall and the inside of the grab bar exceeds requirements; and the coat hook exceeds maximum requirements for reach range.

Conduct a design study for a total renovation of the women's restroom in Grand Hall to comply with minimum accessibility standards. If restrooms are provided for public use, they must be accessible for people with disabilities. Where toilet compartments are provided, at least one compartment shall comply with the requirements for a wheelchair accessible compartment, including size, clearance, and grab bars. Because the current configuration of the four toilet stalls does not allow a compliant accessible stall, consider plumbing codes in the redesign to determine the possibility of reducing the number of stalls. Consider eliminating the elongated lavatory; the existing lavatory counter unit meets accessibility standards.

The men's restroom in Grand Hall also has multiple deficiencies: the minimum required maneuvering clearance is not provided at the entrance door inside the restroom due to the location of the privacy wall; the designated accessible urinal exceeds maximum height requirements; the two mirrors exceed

maximum height requirements; the beveled mirror above the elongated lavatory meets requirements; however, these elements are being recommended for removal in order to provide a fully accessible toilet stall.

The two toilet stalls in the men's restroom in Grand Hall do not meet the minimum size requirements for a wheelchair accessible toilet compartment. Where toilet compartments are provided, at least one compartment shall comply with the requirements for a wheelchair accessible compartment. The grab bars on either side of the water closet (meant for an ambulatory stall) exceed maximum requirements for the space between the wall/partition and the inside of each bar. There is no rear grab bar.

Repair the accessibility deficiencies in the men's restroom by reversing the swing of the entrance door so that it continues to swing into the restroom but in the opposite direction. This will provide the minimum maneuvering clearance required at the door. Remove and dispose of the elongated and beveled mirror. The existing lavatory counter unit meets accessibility standards. Lower at least one of the existing mirrors. Lower the designated accessible urinal to meet rim height requirements.

Replace the existing toilet stall on the left side of the men's restroom with one that meets minimum measurement requirements for a wheelchair accessible toilet compartment for a floor mounted water closet. The door to the stall should be located so that it faces the restroom entrance door to allow for the required maneuvering clearance at the stall door. Replace the existing grab bars and install on the side and rear wall at the water closet. Ensure the positioning of the bars and the space between the wall and the inside of each bar is compliant.

#### Drinking Fountains

There is a single-unit, wall-mounted drinking fountain located in the foyer outside of the restrooms in the Visitor Center. The knee clearance below the fountain does not meet minimum requirements. There is no high unit provided for standing persons who have difficulty bending or stooping.

No fewer than two drinking fountains shall be provided. One shall be wheelchair accessible and one shall be accessible for standing persons. Include the drinking fountain in the comprehensive redesign recommended for the Visitor Center restrooms, as the redesign may include the small foyer where the fountain is currently located.

There is both a high and low wall-mounted drinking fountain located between the two restroom doors inside Grand Hall. The low drinking fountain unit does not meet minimum height requirements for knee clearance, and the high drinking fountain unit does not meet minimum spout height requirements for standing persons.

Raise the low drinking fountain unit to meet the minimum knee clearance requirement. Ensure that when reinstalling the low unit that it complies with knee and toe clearances, clear ground space and spout height. Raise the high drinking fountain unit to meet the minimum spout height requirement for standing persons.

## **9. Trails & Scenic Viewing Opportunities**

### Tallgrass Prairie Trail

The Tallgrass Prairie Trail located northeast of the parade ground has a natural grass and dirt surface which is not firm and stable and therefore not accessible for some individuals with disabilities. The location of the single interpretive wayside at the trailhead has the same natural ground surface. This surface can deny visitors with disabilities an opportunity to participate.

Grade and resurface the 1300 linear feet of trail, including the trailhead, with a compacted aggregate to ensure that the trail meets accessibility guidelines for a firm and stable surface. Ensure that running and cross slopes comply with the recommendations in the Draft Final – Outdoor Guidelines to the maximum extent feasible. Ensure a minimum clear width of 5 feet wide to eliminate the need to provide passing spaces. When resurfacing and compacting the trailhead, ensure clear ground space, located for a parallel approach at the interpretive wayside. If trailhead signage will be provided, it should include at minimum the following information: length of the trail or trail segment, surface type, typical and minimum tread width, typical and maximum running slope and typical and maximum cross slope.

The Draft Final Accessibility Guidelines for Outdoor Developed Areas (Draft Final – Outdoor) apply to Federal land management agencies, including the National Park Service. The guidelines also apply to non-federal entities that construct or alter facilities on Federal lands on behalf of the Federal government. According to the Draft Final – Outdoor, a trail is defined as, “A pedestrian route developed primarily for outdoor recreational purposes. A pedestrian route developed primarily to connect elements, spaces, or facilities within a site is not a trail.”

Where the Park determines that a specific portion of a trail does not permit full compliance due to one or more conditions for exceptions set forth in these trail guidelines, the Park should ensure that the trail complies with the guidelines to the maximum extent feasible. The Park should then document the basis for the determination, and should maintain the documentation with the records for the construction or alteration project.

### Program Access on Trails

A common misconception among park and recreation practitioners is that the “program access” standard under Section 504 of the Rehabilitation Act only applies to staffed, structured, traditional programs, such as specially scheduled interpretive tours. The program access standard applies to every good, service or activity provided by the Park to the public, including trails. In addition to assessing the trails for physical access, the programmatic elements offered on each individual trail should also be assessed. Program access on trails encompasses more than just information provided on waysides along the trail; it includes the entire experience that the trail offers to a visitor. The experience could include prominent features found along a trail, facilities and/or amenities along the trail, or a type of environment provided on a trail that may not be found elsewhere within the Park. Therefore, it will be necessary to first look at Fort Scott’s *entire* trail program, and then the individual trail(s), to adequately determine if visitors with disabilities are being offered equal programmatic trail experiences at Fort Scott.

## **10. Concessions**

Western National Parks Association manages the gift shop located in the Visitor Center. The aisles between the merchandise shelves and areas for turning space did not meet minimum clear width

requirements. It is recommended that the shelving be rearranged to provide accessible routes throughout the area. Western National has plans to reduce the shelving and incorporate new fixtures for better display of merchandise.

Provision of accessible goods, activities and services by the concessionaire should be reviewed as part of the annual NPS evaluation. At a minimum, the concessionaire should strive to achieve the same level of program access as is expected of the programs or services offered by the National Park Service. As such, taking action on the recommendations to improve program access as outlined in this report would also be prescribed for the concessionaire. For example, when new inventory is selected, buyers are encouraged to seek videos/DVD programs with captions and audio description and make those titles known to customers. If videos or DVDs are shown in retail spaces, versions with open-captions and audio descriptions are recommended for viewing.

### **11. Planning and Maintenance**

Park personnel identified the possible acquisition of two buildings adjacent to the site, one potentially becoming the new visitor center and the other being used to store maintenance equipment. If these two buildings are procured by the National Park Service and added to the Fort Scott site, modifications to the RV parking lot and the rerouting of the existing walkway from the lot will become a higher priority, as it will serve as the primary accessible route from the new visitor center to the parade ground and surrounding buildings.

## **VII. Action Planning**

Upon receipt of the assessment data, it will be critical for Park personnel to review and embark on a series of actions to continue planning for improved access to the programs and facilities at the Fort Scott National Historic Site.

Park senior management is encouraged to establish a core accessibility management team with representation from various divisions including interpretation, maintenance, administration, concessions and senior management. Representation should include individuals with decision-making authority in order to appropriately prioritize funds while assuming responsibilities for compliance oversight in those key areas.

A process to review and prioritize corrective actions to improve Park access for visitors with disabilities should be developed. In addition, a strategy and timeline should be outlined to conduct accessibility assessments of facilities and programs as they are altered or updated so that any deficiencies may be entered into FMSS, and proposed corrective actions can be cost estimated to serve future planning and budget requests.

A process to review all new construction and renovation plans or designs should be implemented to ensure the minimum accessibility standards and guidelines are appropriately applied and opportunities for the application of universal design are seized. In addition, a process to inspect all construction projects for compliance with the minimum accessibility standards and guidelines should be established.

Provide staff training for full-time staff, seasonal staff and volunteers on select topics including the application of the accessibility standards and guidelines for Park maintenance; the principles of universal design; program access; methods for developing accessible interpretive programs; the accommodation

process; techniques for interacting with people with disabilities and the use of people first language. Interpretive staff should receive more specific training on the provision of audio description for people with visual impairments and tailoring talks for people with cognitive impairments. Frontline customer service staff should also receive a seasonal update on accessibility improvements in order to field and/or refer questions on accessibility from the public.

An ongoing evaluation of programs, services and activities should be instituted to ensure the Park is meeting the needs of visitors with disabilities.