



Lincoln Home National Historic Site

Accessibility Assessment



FINAL REPORT

Findings and Recommendations

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Lincoln Home National Historic Site

Accessibility Assessment Summary of Findings and Recommendations

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Assessment Scope and FMSS Locations

The Eppley Institute for Parks and Public Land's National Center on Accessibility entered into an agreement with the National Park Service to conduct an accessibility assessment of high use areas at Lincoln Home National Historic Site. Other park areas were not within the scope of this project, including Cook House, DuBois House, James Jenkins Lot, Miller House, and Robinson House. Within the scope, the assessment team identified accessibility barriers in the following locations, which are referenced throughout this report:

- Arnold House
- Beedle House (staff offices)
- Corneau House (staff offices)
- Dean House
- Lincoln Home
- Morse House (staff offices)
- Rosenwald House (staff offices)
- Sprigg House (staff offices)
- Visitor Center
- Visitor Circulation Routes



Purpose, History, and Themes

Lincoln Home National Historic Site (LIHO) was established in 1972 to protect and interpret the home where Abraham Lincoln lived with his family from 1844 to 1861. From the foundation document, the purpose statement reads:

The purpose of Lincoln Home National Historic Site is to protect and preserve the Springfield home of Abraham Lincoln and the surrounding Lincoln era neighborhood as a meaningful setting for visitor understanding and appreciation; and to interpret Abraham Lincoln and the significant impact his 17-year residency in Springfield had on his emergence as a transcendent national and international figure, for the benefit of present and future generations.

This home located in Springfield, IL is the only home that Abraham Lincoln ever owned. He lived in this home with his family for the 17 years leading up to his election to President of the United States in 1861. While living in this home, Lincoln's legal career prospered as he developed his own law practice, served in the U.S. House of Representatives, and ran for U.S. Senate. Many historically significant events also took place inside the home such as Lincoln's preparation for the infamous Lincoln-Douglas debates, his receiving of the Republican nomination for president, and his writing of the final portion of his first inaugural address.

The park's resources and values shape park planning and management and are essential to achieving the purpose of the park and maintaining its significance. Fundamental resources and values for LIHO include:

- The Lincoln Home and Lot

- The View of the Neighborhood from the Lincoln Home
- The Historic Landscape of the Lincoln Neighborhood
- Views of the Lincoln Home
- Collection Items with Documented Lincoln Home Provenance, 1844–1861

Based on the resources and values at Lincoln Home National Historic Site, interpretive themes clarify the meaning, concepts, and contexts of LIHO's resources. Themes go beyond mere description of events or processes in order to foster multiple opportunities to experience and consider the park and its resources. These themes help explain why a park story is relevant to people who may otherwise be unaware of connections they have to an event, time, or place associated with the park. The interpretive themes at LIHO, as identified in the foundation document, include:

- Abraham Lincoln believed in the ideal that everyone in America should have the opportunity to improve his/ her economic and social condition. Lincoln's life was the embodiment of that ideal.
- Abraham Lincoln was a spouse, parent, and neighbor who experienced the same hopes, dreams, and challenges of life that are still experienced by many people.
- Many of Abraham Lincoln's social and political beliefs concerning equality, freedom, and opportunity came into focus while he lived in Springfield. We as a nation strive to fulfill Lincoln's legacy of national and individual ideals.
- People today—as they have since the time of Abraham Lincoln's death—visit his home as a place to memorialize his life, seek meaning from his struggles and achievements, and find inspiration for their own lives.

The resources, values and themes at any park are the foundation of the park's programming. They drive the visitor experience, and the meanings and significance visitors draw from the park. Providing equitable access to these resources, values, and

themes for people with and without disabilities is paramount to achieving the National Park Service mission.

Accessibility Assessment Approach

Eppley's National Center on Accessibility (NCA) assessment process has been designed to identify barriers to participation for people with disabilities, make recommendations for barrier removal and access improvement, and assist facility personnel in long-term planning. The NCA 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 at LIHO in their entirety for consideration of barrier removal. The assessment team looks critically at programs for effective communication and equitable opportunities for participation for people who have disabilities related to vision, hearing, mobility, and 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 LIHO, Eppley's NCA assessment team conducted an accessibility assessment of the physical and programmatic elements of the historic site. This included three days on-site for primary data collection and follow-up in October 2021. The team also interviewed key personnel and reviewed key park documents to collect information needed to provide a broad range of recommendations for improving access for visitors with disabilities.



Referenced Standards and Guidelines

The National Park Service (NPS) is legislatively mandated to provide accessible facilities, programs, services, and activities for their visitors with disabilities. Based on these mandates, NCA utilizes the following accessibility legislation, standards, and guidelines for their assessment:

2015 Architectural Barriers Act Accessibility Standards (General Services Administration, effective date May 8, 2006)

These standards, issued under the Architectural Barriers Act (ABA) of 1968, contain scoping and technical requirements for accessibility that apply to

sites and facilities designed, constructed, altered, or leased with certain federal funds. The most recent provisions for outdoor areas developed by the federal government, which address access to trails, picnic and camping areas, viewing areas, and beach access routes, are included in this edition of the ABA Accessibility Standards.

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

Section 508 requires access to information and communication 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.” Section 508 standards were updated and published in 2017.

Architectural and Transportation Barriers Compliance Board Proposed Guidelines for Pedestrian Facilities in the Public Right-of-Way; Shared Use Paths (July 26, 2011; February 12, 2013)

Sidewalks, street crossings, and other elements of the public right-of-way present unique challenges to accessibility, for which specific guidance is essential. These guidelines ensure that sidewalks, pedestrian street crossings, pedestrian signals, and other facilities for pedestrian circulation and use constructed or altered in the public right-of-way by state and local governments are readily accessible to and usable by pedestrians with disabilities. The guidelines were supplemented in 2013 to include provisions for shared-use paths, multi-use paths designed for transportation and recreation that may or may not be within the public right-of-way.

NPS Director’s Order #42: Accessibility for Visitors with Disabilities in National Park Service Programs and Services (November 3, 2000)

This NPS Director’s Order reiterates the NPS goal of ensuring that all people, including American citizens with disabilities (now estimated at more than 60 million people), 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.

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.

NPS Policy Memorandum 18-02: Use of Service Animals by Visitors with Disabilities—Interim Policy (October 18, 2018)

This Policy Memorandum updates information about the use of service animals by visitors with disabilities in units of the national park system. It provides guidance on what NPS employees must do to comply with section 504 of the Rehabilitation Act of 1973 and align with Department of Justice regulations implementing titles II and III of the Americans with Disabilities Act of 1990.

Programmatic Accessibility Guidelines for National Park Service Interpretive Media (May 2017)

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 are currently under revision.

Wayside Exhibits: A Guide to Developing Outdoor Interpretive Exhibits(October 2009)

The Wayside Guide is an overview of the NPS wayside exhibit standards and work process. Its purpose is to provide information and tools for preparation, participation, and management of a wayside project. The guide addresses accessibility issues related to Section 504 requirements, design, and installation, as well as accessible wayside features including audio components, braille, and tactile elements.

Smithsonian Guidelines for Accessible Exhibition Design, 1996

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

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. Universal design benefits people of all ages and abilities.

The NCA recommends application of universal design principles to all components of projects that impact visitor use. Examples include providing

recommendations for benches in the outdoor environment, using plain language in publications, installing power-assisted exterior doors, marking van-accessible parking spaces uniformly 11 feet wide, and utilizing the advisories in the Architectural Barriers Act Accessibility Standards (ABAAS) when appropriate, due to accessibility issues that contribute to safety risks.

During the accessibility assessment, the NCA assessment team identified some barriers to accessibility that are best addressed utilizing the principles of universal design and best practices. It is the policy of the National Park Service (NPS Director's Order 42) that the principles of universal design will be applied wherever it is practical to do so. Barriers and solutions that fall into these categories are included in the recommendations and cited as such in the action tables.



Historic Structures and Landscapes

The National Register of Historic Places automatically includes all historic areas administered by the National Park Service, including Lincoln Home National Historic Site. The historic buildings included in this assessment are Lincoln Home, Beedle House, Dean House, Corneau House, Sprigg House, Morse House, and Arnold House.

The fact that a landscape, district, or building is listed on the National Register does not exclude it from complying with accessibility standards. Many federal facilities around the country have been able to make changes to historic structures and landscapes to bring them into compliance with accessibility standards. Through NCA's assessment

of LIHO, deficiencies were noted regardless of whether they were part of a contributing factor to the park's National Register listing. It is the park's responsibility to remedy those deficiencies to the greatest extent possible. However, the park should always strive for both improved accessibility and historical compatibility regarding things like finishes while considering the balance of historical integrity with present-day public use. According to the ABA Accessibility Standards, the Advisory Council on Historic Preservation has established procedures for federal agencies to meet this responsibility, including consultation with the State Historic Preservation Officer and involvement, in certain cases, by the Advisory Council. LIHO should work with its own or National Park Service regional historic preservation specialists to determine what possible changes can be made. If it is determined that a feature, element, or area cannot be made

accessible, there is still an obligation to provide program access to the feature, element, or area. In many cases, this is achieved through a combination of approaches including increasing accessibility to the feature, element, or area as much as is feasible, providing the experience in an alternative accessible location, and providing accessible interpretive program alternatives.

At LIHO there are many unique and historic elements, such as Lincoln Home, where the implementation of the ideal solution of adding an elevator to provide access to the second floor may be limited due the historic nature of the building and significant site constraints. In these cases, proposed solutions may focus on the creation of new interpretive materials (e.g., displays or video experiences) or creating the experience in a different, more accessible location as ways of creating programmatic access where physical access is limited. However, as technology, construction methods, and management strategies evolve, the park should always be reevaluating whether the ultimate goal of providing experiences in as integrated a setting as possible can be attained in these locations.

ABA Accessibility Standards allow for exceptions from specific provisions in the technical requirements when certain circumstances apply. It should be noted that documentation is required whenever a condition for exception prohibits full compliance with the standards. The documentation must include the reasoning for not meeting compliance, the date of the decision, and information regarding who made the decision. Compliance in an alteration is not required where it is technically infeasible. "Technically infeasible" is defined as "something that has little likelihood of being accomplished because existing structural conditions would require removing or altering a load-bearing member that is an essential part of the structural frame; or because other existing physical or site constraints prohibit modification or addition of elements, spaces, or features that are in full and strict compliance with the minimum requirements." Where technical infeasibility is encountered, compliance is still required to the maximum extent technically feasible.

This study takes a comprehensive view of all the experiences and programs offered at the park to evaluate accessibility-related opportunities, and to correct deficiencies at the site. Acknowledging that parks have many additional considerations when making any modifications to their infrastructure and programs, this study strives to offer attainable solutions and alternatives while also providing long-term goals. The action tables, list of deficiencies by criticality, and list of easy improvements are the best tools with which the park can plan projects. This narrative section of the report tells the story of access at the park, and how the corrective actions taken together will provide more equitable access to the important resources, values, and themes of the park for people with disabilities.

The AccessAbility Office at the National Endowment for the Arts (NEA) provides a variety of resources for museum operators and historic properties including the Design for AccessibilityGuide and the Disability Symbols (www.arts.gov).

Key Findings and Recommendations

Park-wide Considerations

Accessibility Webpage

The park website is often the first point of contact for people planning a visit to a National Park Service site. The accessibility web page on the LIHO website provides visitors with some information about facilities, programs, and services that are available for people with disabilities, including contact information for further questions regarding accessibility concerns and short summaries of accessible features and available accommodations. It is important to remember not to assume what an individual would consider accessible or not, depending on their individual circumstances. As a best practice, provide objective information about what visitors will encounter in

various areas of the park so that they can make their own determinations regarding accessibility.

It is recommended that the web page be updated to provide more detailed information about park features so that visitors can determine what features of the park are accessible to them based on their own abilities. Providing accurate and specific accessibility information on the park's website, with easy links to relevant material, can simplify the process of planning a visit for prospective guests. Avoid listing what is accessible or not accessible, and simply provide details of current conditions. (e.g., "There are nine steps from the boardwalk to the front door entrance of Lincoln Home and there is a handrail on the right side of the steps.") As additional accessibility features are updated or become available, ensure revisions are made to the website.

Individuals, or their representatives, have a right to file a disability rights complaint no later than 180 days from the date of alleged discrimination if they believe they have been discriminated against or denied access to any program, service, or activity conducted by the NPS. The complaint must be in writing, signed, and dated. Furthermore, the complaint should include contact information, the name of the alleged discriminatory official or entity, nature of the complaint, and date of alleged discrimination. All accessibility complaints should be sent to the NPS Office of Equal Opportunity Programs. It is also recommended that the park's accessibility webpage include information on how visitors can file an accessibility-related complaint.

The following National Park Service accessibility web pages can be referenced as good examples regarding what information to provide, how much information to provide, and formatting options to consider when revising the LIHO accessibility page.

ALEUTIAN WORLD WAR II NATIONAL HISTORIC AREA

<https://www.nps.gov/aleu/planyourvisit/accessibility.htm>

All information about the accessible features of the park is on a single page of the website, which can simplify the planning process for potential visitors. A welcome statement at the top of the page provides general information including a description of the park landscape, weather conditions, safety warnings, and information about the Access Pass. Several available services for people with disabilities are listed, and the reader is encouraged to contact the park if a needed service is not listed. Links leading to more specific information are provided, taking you farther down the same page. This eliminates the need for scrolling or switching between different pages for information. Links are then provided to information categorized by disability: physical/mobility, deaf/hearing loss, blind/low vision, and service animals. Each section is thorough in its descriptions of physical elements and services that are offered to the public.

YELLOWSTONE NATIONAL PARK

<https://www.nps.gov/yell/planyourvisit/accessibility.htm>

While Yellowstone National Park is significantly larger than LIHO, their accessibility web page can offer some suggestions for format and content. General statements about access to the park and its programs welcome and orient the reader. Reference to the park cell phone app is made, with mention of its accessibility features, including audio description and alternative text for images. The Access Pass, and where to acquire one, is explained. Information is then categorized by a visitor's needs—mobility and wheelchairs, audio assistance, and visual assistance. Details are given about the physical conditions of all areas of the park, the availability of auxiliary aids and services, and where to obtain maps and park guides in alternate formats. Additional links to further information about several topics, including service animals, are provided. A link within the visual assistance section takes the reader to the mp3 tracks of the audio description for the park map and

guide. The tracks can be listened to or downloaded for the visitor's convenience.

GOLDEN GATE NATIONAL RECREATION AREA

<https://www.nps.gov/goga/planyourvisit/accessibility.htm>

The Golden Gate accessibility web page, similar to Yellowstone's, covers a significant amount of property, programs, and services. They do, however, offer information that may be beneficial to visitors of any park. A link is provided to a page that explains which accessibility laws apply to the National Park Service, the goals of the NPS's five-year strategic plan "All In! Accessibility in the National Park Service, 2015–2020," and the procedure for filing a disability rights complaint. Direct links are also available to learn more about accessibility terms and definitions, to request a sign language interpreter or beach wheelchair, and to receive assistance with any issue regarding the accessibility of the park's website or electronic documents.

Accessibility Guide

LIHO currently does not have an accessibility guide; however, gathering the information on accommodations and the accessibility of programs and facilities at the park is an important step in providing accessible experience and should be easily achievable. Several parks have also created, or are in the process of creating, accessibility guides for their visitors. These stand-alone documents provide useful resources for both trip planning and on-site navigation and information specifically relevant to visitors with disabilities. They acknowledge a park's present conditions while also demonstrating its commitment to full inclusion. LIHO's accessibility guide should be posted on the website as a downloadable document and be made available to visitors at the Visitor Center. The accessibility guide must also comply with Section 508 of the Rehabilitation Act of 1973, which requires access to information and communication technology.

Several park service sites such as Yellowstone, Yosemite, San Francisco Maritime, and Sequoia

and Kings Canyon National Park, have already created guides. While the need for a guide is typically greater at large parks due to the volume of information needed, they should still be considered at smaller parks. As accessibility improvements are implemented and more accessible features and programs are available for people with disabilities at LIHO, a guide could be easily updated for use by individuals with disabilities who are preparing to visit the park.

Accommodations

LIHO lists the available accommodations on the accessibility page of the park website. The accommodations include wheelchair rental, assistive listening devices, sensory kit, tactile Lincoln Home tour book, foreign language and Braille tour booklets, open captioned and audio described park films, foreign language subtitled Lincoln Home tour videos, audio described waysides, and a process to request a sign language interpreter.

The park offers ASL interpretation with two-weeks advance notice. While two weeks may be the ideal time frame, staff should be prepared to exhaust all possible options for meeting accommodation requests inside of the two-week window. In addition to individually accommodating those who request a sign language interpreter, the park should consider providing qualified sign language interpreters for all large special events and programs. The park also has personal assistive listening devices available. As a best practice, assistive listening devices should be offered at the start of all programs. This will encourage potential users who may be hesitant to use the devices. The park currently does not offer real-time captioning services for visitors who are deaf or hard of hearing, but the park films do include open captions.

Ensure information about the accommodations and resources are available to the necessary staff members. Policies and procedures for the request, acquisition, and scheduling of interpreter services, real-time captioning, and live audio description should be developed, if not already, and provided to staff. Information on procedures for a visitor

to request auxiliary aids and services should be posted on the accessibility page of the park website and should include the amount of advance notice necessary to make such requests, as the park is already doing for sign language interpretation. Continue to include contact information for the appropriate park staff on the website as well.

It is important to remember when providing accommodations, that the intent is to meet the individual visitor “where they are” with respect to their disability. For example, adapting the physical setting of a program or facility to accommodate wheelchair use is appropriate; however, it is never appropriate to expect that the visitor will transfer from their chair to one that more easily fits the facility (i.e., is narrower than the standard). In cases where an accommodation or alteration is not technically feasible, it is the park’s responsibility to provide adequate information to the visitor so that they can make their own determination about access.

Service Animal Regulations

Service animals are used by people with a variety of physical, sensory, and cognitive disabilities. The ADA defines “service animal” as:

“...dogs that are individually trained to do work or perform tasks for people with disabilities. Examples of such work or tasks include guiding people who are blind, alerting people who are deaf, pulling a wheelchair, alerting and protecting a person who is having a seizure, reminding a person with mental illness to take prescribed medications, calming a person with Post-Traumatic Stress Disorder (PTSD) during an anxiety attack, or performing other duties. Service animals are working animals, not pets. The work or task a dog has been trained to provide must be directly related to the person’s disability. Dogs whose sole function is to provide comfort or emotional support do not qualify as service animals under the ADA.”

The National Park Service policy guidance on service animals and additional information regarding this topic can be found in Policy Memorandum 18-02 and

the associated FAQ document. The policy regarding service animals is available on the accessibility page of the LIHO website. The policy indicates that service animals must be able to go up and down stairs if they are to accompany an individual on a tour of Lincoln Home. This section of the park website also provides information on potable water, weather and site conditions, animal waste, and wildlife.

Audio Description

A tremendous portion of the visitor experience at a National Park Service unit is derived visually. Visitors who are blind or have low vision are unable to obtain the same information as other visitors through these predominately visual programs. Audio description is a narration that describes visual content to communicate essential details and elements of experiences such as live performances, presentations and events, exhibits, films and videos, and the surrounding environment. Audio description delivery can be provided through a variety of hardware options, software formats, and methods of distribution.

Throughout this report are recommendations for incorporating or adding audio description to park programs. It is recommended to provide live audio description for Lincoln Home, which can only be accessed via a ranger-led tour. Guides should receive skills training on providing live audio description to make the visual elements of tours more accessible to people with low or no vision. Areas that are accessed independently (without park staff), such as the exhibits at the Visitor Center, Dean House, and Arnold House should have stand-alone audio description. Waysides located throughout the park already have audio description and narration available via the NPS app through screen reader functionality. Additionally, the Sensible Innovations Aware app provides wayfinding and turn-by-turn descriptive information for visitors. The app utilizes beacon technology that is located throughout the park to sense the user’s location. It should be noted that this is not a NPS managed app.

Additional audio description for printed materials such as the park unigrid should be made available to aid visitors in planning, orientation, and wayfinding. A single system could provide audio description for all aspects of the park or they could be separate systems. It should be noted that audio description is only one aspect of providing access to visitors who are blind or have low vision and attempts should be made to ensure all waysides and exhibits are designed to be accessible in addition to being audio described.

LIHO administration should work with a consultant to determine what equipment would be most appropriate for the park's specific audio description needs. Upon selection of the equipment, ensure that units are hands-free or have a hands-free option (so that visitors can explore their surroundings tactilely), are able to be independently operated, and hearing-aid compatible. Display signage at the Visitor Center, Dean House, Arnold House, and near or directly on, waysides indicating that audio description is available and include a notice on the park website when the system is established.

When evaluating equipment for assistive listening systems and audio description services, the currently used multi-channel receivers that combine both services into one system may be determined to be the most appropriate. Ensure all staff are trained on the procedure for storage and distribution of equipment, regular testing, and maintenance of cleanliness and function. Inform visitors of the available services through signage, publications, and the park website.

While cell phones are often used as audio tour delivery systems, not all visitors may have a cell phone, or they may prefer not to use it because it depletes the battery. Some people with disabilities rely on cell phones to maintain their independence and must avoid nonessential use. On the other hand, some people prefer the familiarity of their own phone. If wayside audio description continues to be delivered to cell phones via the NPS app, an alternative delivery system should be made available, such as a wand, mp3 player, or a cell phone that can be checked out from the visitor

center. In addition, offering a charging system for visitors' phones should be considered. Develop a policy for lending this fee-free equipment, as well as procedures for distribution, maintenance, storage, and cleaning of the devices.

The planning or conducting of any interpretive or educational programming must also meet the minimum requirements of Section 508 of the Rehabilitation Act, as well as the program access standard mandated by Section 504. Therefore, use of new technology, such as cell phones, smartphones, mp3 players, and portable GPS should include purposeful planning to accommodate the range of needs of people with hearing loss, visual impairments, mobility impairments, or cognitive impairments. Consideration should also be given to the diversity of the park visitor population, including those traveling with children, older adults, and large groups.

Publications

Park publications offer a wide range of information for visitors; therefore, it is critical that people with disabilities receive the same information—of the same quality—as other visitors. As per the Harpers Ferry Center's guidelines, publications that are considered "readily available," such as the official park brochure, newspapers, and site bulletins must be provided in alternate formats including braille, large print, audio and electronic versions. At LIHO, the only alternate format publication currently available is a braille copy of the site unigrid dated 2014 and a braille copy of the Lincoln Home tour script.

The Harpers Ferry Center's Programmatic Accessibility Guidelines for National Park Service Interpretive Media were developed from the requirement for effective communication in Section 504 of the Rehabilitation Act; this means that anything designed for public distribution must be available for people with disabilities as well (in formats such as braille or large print). Any audio and electronic files should be available on the park website. Other publications that are not primary, or that change frequently, should include a statement

that the publication is available in alternate formats upon request and include a minimum length of time for advance notice. When individuals request a document, the park can work with them to determine the format that best suits their needs.

Waysides

As new waysides are added, or current waysides are updated, LIHO should work with local accessibility experts and people with disabilities to design them for the best visitor experience. Ensure compliance with height and location recommendations put forward by Harpers Ferry Center. Accessible waysides should have basic elements, including large, easily readable text; high contrast graphics; audio and tactile components; and dimensions that comply with basic accessibility standards. Waysides should always be installed on an accessible route, as close to the associated route as possible.

Level, clear ground space should be provided at the front of each wayside exhibit, centered on the interpretive information, and positioned for a forward approach whenever feasible. Park management should develop and incorporate meaningful tactile elements, such as dimensional maps or scale models, for waysides. Where possible, maps, including floorplans, should be available in a tactile format. Tactile models that are integral to the interpretive story give visitors with visual impairments access to ideas and provide critical information such as shape and scale. They also increase the range of an exhibit's appeal, engage people with different learning styles, and add emphasis to the story. Tactile elements can be mounted to an interpretive panel, or they can be stand-alone or separate structures.

All waysides should be designed with universal access in mind so that they are as accessible as possible. Audio description of all waysides should continue to be available; however, providing audio description in and of itself does not make a wayside accessible. Park staff can post wayside content on the park website, but not in place of incorporating it into the on-site audio description offerings.

Parking

The primary visitor parking area for LIHO is located south of the Visitor Center on S 7th Street between E Jackson Street and E Edwards Street. The visitor lot has a total of 71 parking spaces and three of them are designated accessible parking spaces. There is an additional parking lot located directly north of the Visitor Center which is designated for bus parking. It is important to ensure that accessible parking options are clearly described, both online and onsite, and marked with directional signage. While there is currently no designated accessible parking specifically for staff use, any staff requiring accessible parking would be able to utilize the spaces in the visitor parking lot. Although the park has the minimum number of accessible spaces required by the standards, it should consider increasing the number due to the lack of accessible parking designated specifically for staff use. See Figure 1 for parking lot scoping requirements.

According to the ABA standards, accessible parking spaces must have identification signs that measure 60 inches minimum and include the International Symbol of Accessibility and signs that identify van parking must have signage with the designation "van accessible." Car parking spaces must be at least 96 inches wide and van parking spaces must be at least 132 inches wide. Additionally, access aisles must be 60 inches wide and angled van parking is required to have the access aisle located on the passenger side, but as a best practice it is recommended to include a passenger side access aisle for regular accessible angled parking as well. Accessible parking spaces must be located on the shortest accessible route to an accessible entrance. Marked crossings should be implemented where access routes cross vehicular traffic lanes to aid pedestrian safety. LIHO should make necessary upgrades and adjustments to accessible parking during any future restriping projects for parking lots.

FIGURE 1

Minimum Number of Accessible Parking Spaces Table
 * at least 1 of every 6 accessible spaces or fraction of 6
 ** 501 - 1000: 2% of total

*** 1001 and over: 20 + 1 for each 100 or fraction thereof over 1000

Parking Facility Total	Minimum Number of Accessible Spaces		
	Standard	Van*	Total (Standard + Van)
1 - 25	0	1	1
26 - 50	1	1	2
51 - 75	2	1	3
76 - 100	3	1	4
101 - 150	4	1	5
151 - 200	5	1	6
201 - 300	5	2	7
301 - 400	6	2	8
401 - 500	7	2	9

Pedestrian Circulation

Accessible routes are required to connect visitors to the park’s amenities and sites of interest. Surfacing, slope, and width impact a circulation path’s accessibility, as do directional signage, shade, and seating. Once at a point of interest, such as a wayside, building entrance, or outdoor feature, the transition from the outdoor route into the site must also meet accessibility standards. Accessible pedestrian circulation is a critical component of overall visitor experience, in that it impacts the amount of effort needed to simply move through the park. Altering historically significant features can be challenging, and it is tempting to be creative in finding access solutions. However, any solution must allow the visitor to independently access the site. Currently, the main pedestrian circulation route leading visitors around the grounds of the park consists of wooden boardwalk planks that act as a sidewalk. The four-block area of the LIHO grounds, consisting of the intersection of E Jackson Street and S Eighth Street, is closed to vehicular traffic other than a few exceptions including authorized emergency vehicles. Thus, visitors can travel in the roadway instead of the boardwalk if they choose. In fact, utilizing the roadway instead of the boardwalk

is the preferred route for wheelchair users interested in visiting Lincoln Home due to the lack of curb cuts at the intersection where the home is located.

Throughout LIHO, commonly identified deficiencies for pedestrian circulation include surface materials that are not firm, stable, and slip resistant; clear width that does not meet the minimum requirements; changes in level and openings larger than the maximum allowances; and running and/or cross slope exceeding maximum allowances. Ramps and doorways located on accessible routes should also be considered when examining pedestrian circulation. Specific visitor circulation recommendations can be found in the individual Visitor Circulation report.

It should be noted that documentation is required whenever a condition for exception prohibits full compliance with the standards. The documentation must include the reasoning for not meeting compliance, the date of the decision, and information regarding who made the decision. Compliance in an alteration is not required where it is technically infeasible. “Technically infeasible” is defined as “something that has little likelihood of being accomplished because existing structural conditions would require removing or altering a load-bearing member that is an essential part of the structural frame; or because other existing physical or site constraints prohibit modification or addition of elements, spaces, or features that are in full and strict compliance with the minimum requirements.” Where technical infeasibility is encountered, compliance is still required to the maximum extent technically feasible.

Signs

Routes throughout LIHO should be easy to navigate and labeled with signs, maps, or models to make orientation easy for all visitors, including those with disabilities. Indicating the shortest route or the path with the easiest terrain is important to facilitating accessible use of the area. The visitor should be able to easily determine the best route to a desired location and know what to expect along the way. Signs and maps located at each main

visitor use area as well as along the routes will make navigation quicker and easier. Signage does not need to be intrusive – the international accessibility symbol and a directional arrow can assist a person with a disability in finding a usable path to their destination. Several areas of the park provide accessible routes to features but lack appropriate signage. The accessible route that leads from the parking lot to the Visitor Center is one example of such an area. Several signs should be added at various points in the area to direct visitors to the accessible route, which may not be clearly seen otherwise. The specific locations of these signs are discussed in the individual location report for Visitor Circulation. Accessible signs should have basic elements including large, easily readable text; high contrast graphics; audio and tactile components; and dimensions that comply with basic accessibility standards. All signs should be a sans or simple serif font to enhance readability by individuals with low vision. Signs that are too high or blocked by objects should be relocated to the edge of tour paths to enhance readability by individuals with disabilities. Other things to consider include text size and contrast, complexity and reading level, and tactile or other sensory experiences, as applicable to the setting and content. Consulting the Harpers Ferry Guidelines for specific guidance is recommended

Mobility Device Policy

There are many different types of mobility devices that people use to help them with movement. Some of these devices include walkers, rollators, canes, crutches, braces, wheelchairs, scooters, and even less traditional devices like Segways or golf carts, which are known as Other Power-Driven Mobility Devices.

The Department of Justice defines wheelchairs as:

a manually-operated or power-driven device designed primarily for use by an individual with a mobility disability for the main purpose of indoor or of both indoor and outdoor locomotion.

The Department of Justice defines Other Power-Driven Mobility Devices (OPDMDs) as:

any mobility device powered by batteries, fuel, or other engines... that is used by individuals with mobility disabilities for the purpose of locomotion, including golf carts, electronic personal assistance mobility devices [...] such as the Segway® PT, or any mobility device designed to operate in areas without defined pedestrian routes, but that is not a wheelchair.

The Department of Justice (DOJ) regulations for OPDMDs are directly applicable to entities covered by the ADA, however; federal entities also have a legal responsibility under Section 504 of the Rehabilitation Act of 1973 to permit the use of OPDMDs within their facilities.

While LIHO's website does not have a policy specifically referencing the term "OPDMD", there are several statements available regarding the use of mobility devices. The webpage addressing physical/mobility accessibility indicates:

Motorized wheelchairs, scooters, and Segway devices are not permitted in the Lincoln Home. Walkers and self-provided wheelchairs are permitted, provided they are able to safely clear the doorways and corners of the Lincoln Home.

In addition, the following statements regarding mobility devices can be found in the [Superintendent's Compendium](#):

The park has two standard wheelchairs that are available for loan to visitors to tour the park and exhibit areas. We will suggest that visitors with disabilities using a motorized device use one of them while touring the Lincoln Home and 4 blocks of the park if desired.

The areas closed to use by persons with disabilities who use motorized devices are to protect the cultural resources from damage or destruction. It is also to provide a safe environment for other visitors and to protect them from potential injury due to the use of the

device in small areas and when visitors are very close to each other. The park will loan a standard wheelchair free of charge for use to tour the closed areas.

Lincoln Home Tour Program: ...Only one wheelchair will be admitted into the Lincoln Home at a time. Admittance will be limited to the first floor... Segway devices are not permitted in the Lincoln Home.

Exhibit Areas: The following are prohibited in the Visitor Center, Dean House, and Arnold House public use areas except by Special Use Permit: ... Segway devices (or similar) used by people with disabilities or transportation.

The Segway (or similar type) device used by people with disabilities will not be allowed to operate in the Lincoln Home due to:

The Lincoln Home has original door frames and interior doors which if bumped or run into could result in significant damage. Other areas subject to damage include the plaster walls, wallpaper and the reproduction carpet in the dining room. Door frame and the railing system gates are narrower than today's access standards and widths vary in size from 30 to 32 inches. There are artifacts in the historic houses including the Lincoln home which if bumped or run into could result in significant damage to the furniture or artifacts.

Visitor Safety:

Concern for the operator of the device due to small rooms, low and varying height of door frames. Concern also for the safety of visitors touring with the operator of the device and their ability to stop and start without interfering with others on the same tour in very tight spaces. The park has two standard wheelchairs that are available for loan to visitors to tour the park and exhibit areas. We will suggest that visitors with disabilities using a Segway device use one of them while touring the Lincoln Home and 4 blocks of the park if desired.

Why less restrictive measures will not suffice:

The Segway device is a vehicle except when used by persons with disabilities. The areas closed to their use by persons with disabilities are to protect the cultural resources from damage or destruction. It is also to provide a safe environment for other visitors and to protect them from potential injury due to the use of the device in small areas and when visitors are very close to each other. The park will loan a standard wheelchair free of charge for use to tour the closed areas.

The DOJ rules allow an entity to ban the use of an OPDMD by individuals with mobility disabilities if the entity has assessed and documented the assessment of the facility, trail, route, or area before the person requesting use arrived on site, and the entity found that the OPDMD cannot be used due to one or more of the following assessment factors:

- The type, size, weight, dimensions, and speed of the device
- The volume of pedestrian traffic (which may vary at different times of the day, week, month, or year)
- The design and operational characteristics (e.g., whether its service, program, or activity is conducted indoors, its square footage, the density and placement of stationary devices, and the availability of storage for the device, if requested by the user)
- Whether legitimate safety requirements can be established to permit the safe operation of the other power-driven mobility device in the specific facility
- Whether the use of the other power-driven mobility device creates a substantial risk of serious harm to the immediate environment or natural or cultural resources, or poses a conflict with Federal land management laws and regulations.

The park's policies focus on the type of device being used and are specific enough for visitors with disabilities to know whether their OPDMD will likely be allowed or not. However, the restriction of certain

types of devices at Lincoln Home is discriminatory and must be reevaluated. Instead of banning certain types of devices entirely, the park should determine a maximum weight or dimension/size limit for mobility devices. It is recommended that the park include its policy on OPDMD use and links to relevant legislature on the accessibility page of the website and in the accessibility guide. Staff should also be made aware of the OPDMD policy and how to address visitors requesting to use OPDMD's on park grounds.

Individual Location Reports

This section, arranged by site locations, provides descriptions of identified barriers and the assessment team's recommendations for barrier removal. The corresponding action tables for these locations go into further detail, outlining the criticality and timeframe.

One intention of the format of this report is for park management and the accessibility team to use the report, specifically the location-specific sections to inform five-year work plans, influence addendums to existing projects, and inform future project work. Accessibility work is most successfully executed when it is an integral component of the project planning, writing, and scoping process.

The location-specific sections of this report include a summary of the area's experiences and benefits that are afforded to visitors in a section titled "Purpose, Experience & Use." The next section highlights the recommended long-term and interim solutions for improved accessibility and equitable use of the area based on conversations and data collected during the on-site visits. The long-term and interim solutions section are intended to inform management decisions about future work planning and managed use(s) of an area. The next section of the report includes the observations and recommendations based on common themes: parking and arrival; orientation, wayfinding, and signage; amenities and site features; interpretation

and education. These portions of the report conclude with action items that can be achieved with minimal effort or resources, but that will improve the experiences of people with disabilities and their companions. Repairs and upgrades such as adjusting the height of fixtures to fall within acceptable reach range requirements or replacing handrails on stairways and/or ramps to better meet the needs of individuals who have a variety of mobility-related needs can improve the visitor experience and perception of Lincoln Home National Historic Site as a welcoming place for people with disabilities and their companions.

Criticality

Each identified deficiency is rated proportionate with how much it inhibits or prohibits access for someone with a physical, sensory, or cognitive disability. A compiled list of deficiencies grouped by criticality is in Appendix A. The National Park Service Facility Management Software System establishes three levels of criticality: critical, serious, and minor. A similar rating system is presented in consideration of accessibility deficiencies:

Critical: A critical priority is given to those physical or programmatic deficiencies that impact a significantly high number of visitors or prohibit people with physical, sensory, or cognitive disabilities from utilizing a facility or accessing a program.

Serious: A serious priority is given to those physical or programmatic deficiencies that substantially inhibit an individual with a physical, sensory, or cognitive disability from utilizing a facility or accessing a program.

Minor: A minor priority is given to those deficiencies that only slightly inhibit an individual with a physical, sensory, or cognitive disability from utilizing a facility or accessing a program.

Timeframe

An implementation timeframe is provided for each solution. These timeframes are intended to help the

park transition from an evaluation of deficiencies to an action plan for removing barriers. The timeframes were reviewed by the park during the data review process. As funding, staffing, or other factors will likely change these timeframes, the park should evaluate and update these on a regular basis.

Definitions for the timeframes:

Immediate: less than 1 year

Short-term: 1-2 years

Mid-term: 3-7 years

Long-term: more than 7 years

Deficiency Solutions Versus Best Practice Recommendations

Many of the deficiencies noted in the action tables are deficiencies because they do not meet an accessibility standard or program access. These deficiencies need to be addressed because they do not meet a legal requirement. Other deficiencies are identified as best practices. These indicate deficiencies where the proposed solution is recommended because it achieves good universal design and best contributes to providing complete program access, but the barrier is not specifically addressed by or applicable to an accessibility standard. All of these barriers are presented in this report for the park's consideration.

The accessibility standards and laws often specify what an element, program, or feature of a park should be doing in terms of accessibility, but not how to achieve that function. An NCA accessibility assessment has two parts: (1) identify the barriers that must be corrected, then (2) provide, in consultation with the park, a corrective action or actions that work best for the park. A barrier, once identified, can be addressed in any way that will remove it, which provides flexibility for the park in carrying out these actions

Action Planning

The summaries in this report and the corresponding action tables represent NCA's recommendations

for barrier removal. Where specific solutions are not stipulated, it is the park's responsibility to consider all possible solutions and determine the most feasible option that will provide the required access. Some solutions, such as providing vertical access to historic structures or modifying exhibit displays, may require significant time and funding. These longer-term projects should not be deferred; rather, the timeline is meant to acknowledge that the process for developing the scope and securing funding can take multiple years. The park, while offering interim solutions and building long-term solutions, is still considered deficient with respect to accessibility. A variety of factors - including a complaint brought against the park or agency - may change the recommended or planned implementation timeline.

Providing access cannot be deferred until a larger project is undertaken. In order to ensure equal access to programs, short-term solutions or programmatic alternatives must be provided. For example, the Lincoln Home tour is not accessible to visitors who are blind. Although the ideal permanent solution requires an investigation of many alternatives, alternative program access will need to be provided until that larger project is funded and underway. The interim solution could be to continue providing the existing tactile objects and develop a prerecorded audio-described version of the tour that is available on a portable device and can also be downloaded from the park website.

Upon receipt of the assessment data and report, 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 LIHO. Immediate work on PMIS requests and integration of accessibility-related recommendations into other NPS planning processes for long-term projects is strongly recommended and may be required to complete work within the established timelines. For example, a multi-step, long-term project can take seven-plus years from initiation. That clock starts when the project is submitted to PMIS, and this step should not be delayed.

Park senior management is encouraged to formalize a core accessibility management team with representation from various divisions including interpretation, facility operations, maintenance, administration, and other relevant departments affecting the experience for visitors with disabilities. Representation should include individuals with decision-making authority in order to appropriately prioritize funds while assuming responsibility for compliance oversight in those key areas. The core accessibility management team should be convened to prioritize accessibility improvements, review procedures, and ensure policies are consistent with federal accessibility legislation.

The park staff member designated as the accessibility coordinator (Volunteer Coordinator at the time of the assessment) should be significantly involved in the planning process for accessibility improvements and work as a conduit for information between program services and facility operations. The accessibility coordinator also should serve as the park management staff member to receive public requests for accommodations such as sign language interpreters.

A process to review and prioritize corrective actions to improve 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 changed or updated. Any deficiencies should be documented and proposed corrective actions can be cost estimated for 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.

Continue to provide and invest in training for fulltime 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, including those working for concessioners, also should receive a seasonal update on accessibility improvements to field or refer questions on accessibility from the public. Staff should be trained on the use of the available auxiliary aids, such as the assistive listening system, and a routine maintenance program for auxiliary aids and other accessibility equipment should be instituted.

To ensure LIHO continues to meet the needs of visitors with disabilities, a system of ongoing evaluation of the park's programs, services, and activities should be developed and instituted. The National Park Service is prohibited from discriminating against people with disabilities in their programs and services per Section 504 of the Rehabilitation Act. All visitors must have equal access to participate in and benefit from all programs and services, regardless of ability. Park staff is encouraged to contact Epley's National Center on Accessibility to discuss possible solutions to any accessibility issue to ensure compliance is met and program access is guaranteed.



Arnold House

Date: October 12, 2021

Project: Lincoln Home National Historic Site

Purpose, Experience & Use

Arnold House is located at 810 East Jackson Street, across the street from Lincoln Home. The house is named after Charles Arnold who resided in the house from 1850-1879. Beginning in the late 19th and early 20th centuries, various families lived on the property and additions were made to the original structure, resulting in it having been encased in brick and siding. Restoration work began on the structure in the 1990s and it was found that the original structure remained. As part of the restoration process, the house was moved back to its original location at the front of the lot and returned to its 1860s appearance.

Arnold House is currently open to the public and houses the exhibit *If These Walls Could Talk*, which is focused on the preservation and restoration efforts at the park. The building is a story-and-a-half A-Frame, but only the first floor is open to the public. The displays are dispersed throughout the three rooms of the first floor, and they consist primarily of

large wall-mounted text panels (some with attached display cases) and stand-alone display cases. There is also one interactive display available to visitors.

The objectives for evaluation of Dean House were:

- Suggest accessible alternatives to exhibit components.
- Review the current facilities and exhibits for compliance with applicable accessibility standards, guidelines, and best practices.

Providing access to the experiences currently provided to visitors at Arnold House cannot be deferred until a larger project is undertaken. To ensure equal access to opportunities and programs, interim solutions and/or programmatic alternatives must be provided. Although the ideal permanent solution(s) for accessibility, recommended in the table below, require substantial investigation and planning, alternative program access will need to be provided until those larger projects are funded and underway.

Specific interim and long-term accessibility goals for Arnold House include:

Goal	Timeline	Implementation Detail
Provide objective information about the park's current and planned accessibility features to visitors.	Interim*	Display current and planned accessibility-related information about Arnold House on the park website, app, and accessibility guide. All methods of communication shall comply with Section 504 requirements for effective communication and/or Section 508 requirements for digital media, as appropriate. Ensure staff and volunteers are aware of accessibility-related policies and procedures.
Provide a fully accessible interpretive experience throughout the Arnold House exhibits.	Long-term*	Replacement or redesign of current exhibits with fully accessible exhibits; design and installation specifications based on Universal Design principles and Harpers Ferry Center guidance for interpretive media. Exhibits that are designed to consider the needs of individuals with disabilities are likely to include the following features: integration of audio and/or audio description; three-dimensional graphics, bas relief, or tactile maps/models; high contrast text and images; minimal complexity of written descriptions; font selection that is sans or simple serif and of a size that is appropriate for the viewing distance.

Asterisk (*) indicates priority goals

Observations & Recommendations

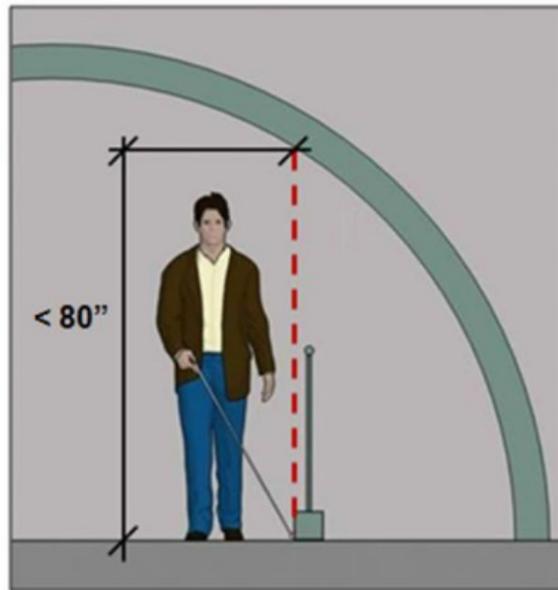
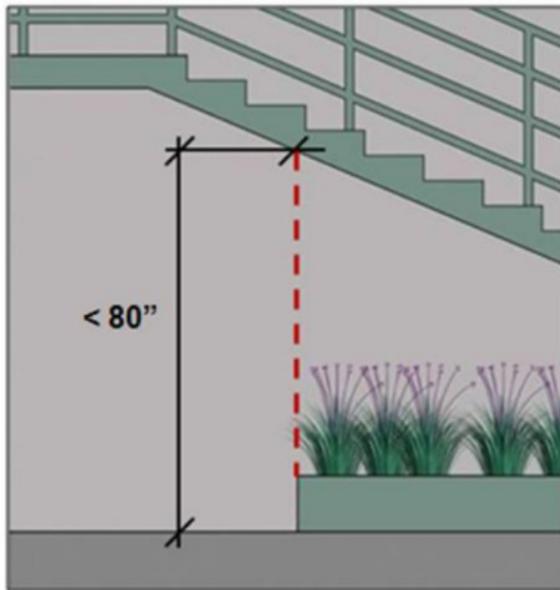
Based on observations of the accessibility evaluation team from the Eppley Institute, as well as information and feedback provided by Lincoln Home National Historic Site personnel, the following recommendations are suggested for improved access to Arnold House for visitors with disabilities:

Parking & Arrival

After parking their vehicles or exiting their tour bus, visitors typically visit the Visitor Center. However, regardless of where their visit begins on park grounds, visitors are likely to make their way down the boardwalk or street to Arnold House to view the exhibit. The house is located in the southeast corner of the intersection at S Eighth Street and E Jackson Street. There are two entrances to the house that can both be accessed by traveling east on E. Jackson Street. The first entrance that visitors would encounter has approximately five steps with handrails on both sides. The second is an accessible entrance that is located at the back of the house. To reach the accessible entrance, visitors able to

step up and down off the curb can travel along the boardwalk until they reach the fence gate with the international symbol of accessibility. Visitor who use wheelchairs, or who cannot step up or down off the curb, must travel down E Jackson St. until they reach the alleyway behind the Arnold property where they can transition up onto the boardwalk and backtrack to the fence gate. Once visitors have arrived at the back of Arnold House, they have the option to use a ramp or stairs to reach the exhibit entrance. Several of the boardwalk planks in this area require maintenance or replacement. To the right of the ramp and stairs the roof slopes down to provide cover over a porch area. The sloped roof is only 2" away from the boardwalk that leads to the entrance stairs and is a potential hazard.

Recommendation #1: Through maintenance inspection process, park staff should continue to inspect for locations where boardwalk planks have holes, cracks or openings between the boards greater than ½ inch which could be a safety concern for people using canes, crutches, or walkers. Inspect for abrupt transitions and/or any transition between the boards greater than a ¼ inch change in level that could result in a tripping hazard. Replace boards as needed.



Recommendations #2: The sloped roof that hangs over the porch area is 63" above the ground floor. The lack of 80" of vertical clearance qualifies the roof as a protruding object. Place a fixed barrier such as planters or benches where the vertical clearance is less than 80". Ensure the barriers have a leading edge no more than 27" high so that they are cane detectable.

Recommendation #3: Consider adding a tactile map in addition to or in place of the park map. Including a tactile map of the area and its features will convey the sense of space and distance in a way that is understandable by both those with disabilities and others who process visual information differently.

Orientation, Wayfinding & Signage

There is very little orientation, wayfinding, and signage at Arnold House. The gate leading to the accessible route entrance at the back of the house has the international symbol of accessibility. Inside the house, next to the accessible entrance door there is a Lincoln Home National Historic Site neighborhood map. The interior side of this entrance door and the interior side of the main entrance door both have "exit" signs. There is also a simple floor plan located on the wall near the main entrance door.

Recommendation #1: Add signage to the exterior main entrance that indicates where the accessible entrance is located. A simple sign with the international symbol of accessibility and an arrow would suffice.

Recommendation #2: Add signage to the interior of the main entrance indicating where the accessible exit is located.

Amenities & Site Features

The primary site features are the exhibit displays. See "Interpretation & Education," below.

Interpretation & Education

All the interpretive exhibits at this site are located inside Arnold House. The text panels and displays all describe restoration and preservation efforts at the park as well as the archaeological record and archaeological excavation of houses in the neighborhood, particularly highlighting Arnold House.

The text panels feature images of historical photos and documents and some have attached display cases that protect artifacts. There are also a couple different styles of stand-alone display cases. Lastly, one corner of the house is being used as an interactive display. In this corner, the lath and frame of the house is exposed and covered with clear

glass for protection. In front of the glass are seven descriptions of building elements that visitors can see in the display. The descriptions each have a button that triggers a small laser pointer to highlight the element. There are currently no tactile displays or audio description available at Arnold House.

Recommendation #1: Interpretive exhibits that are designed to consider the needs of individuals with disabilities are likely to include the following features: installation in a location that is along an accessible route; integration of audio and/or audio description; three-dimensional graphics, bas relief, or tactile maps/models; high contrast text and images; minimal complexity of written descriptions; font selection that is sans or simple serif and of a size that is appropriate for the viewing distance. All future exhibits for Lincoln Home National Historic Site should be designed and installed in consideration of these minimum best practices for effective communication.

Recommendation #2: Review the key artifacts on display to identify which are most suitable for use as a tactile exhibit. Some items inside of the display cases cannot be handled by visitors; however, replicas can be displayed for touching. Ideally, objects that are shared for tactile displays are ones that visitors might not otherwise be familiar with. Having these items available for handling allows people with vision, cognitive, or other disabilities to better understand the nature of the items on display.

Recommendation #3: The interactive display currently has no instructions, and the laser pointer light is very small and difficult to notice when the buttons are pushed. Improve the interactive display by providing instructions for use and making the identified elements within the frame of the house more obvious. Consider the feasibility of adding an audio component to describe what elements are being highlighted.

Recommendation #4: Ensure that all display cases and text panels fall within appropriate protrusion limits. Objects that are 27-80" above

the finish floor can protrude 4" maximum. Permanent objects should be placed beneath any displays or panels that cannot be relocated or modified to eliminate the hazard.

Resources

- [Harpers Ferry Center Resources for Interpretive Media Accessibility](#)
- [U.S. Access Board Technical Guide – Accessible Routes](#)
- [U.S. Access Board Technical Guide – Ramps and Curb Ramps](#)
- [U.S. Access Board Technical Guide – Stairs](#)
- [U.S. Access Board Technical Guide – Protruding Objects](#)
- [U.S. Access Board Technical Guide – Operable Parts](#)

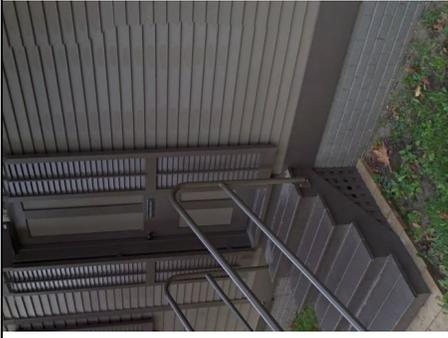
Action Tables

Upon receipt of the assessment data and report, 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 Lincoln Home National Historic Site. The corresponding action table(s) represent the Eppley Institute's recommendations for barrier removal for Arnold House.

Action tables begin on the next page (landscape orientation).

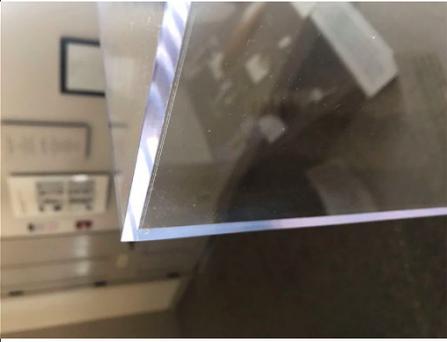
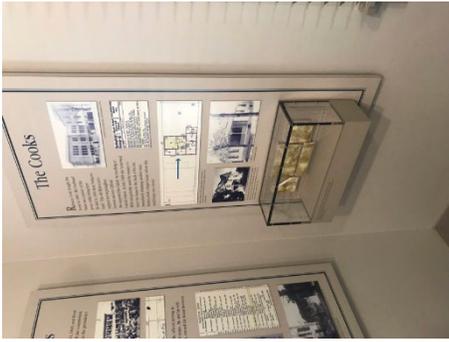
<p>Location: Accessible ramp Corrective Action: Replace handrail</p>			
<p><u>Deficiency</u> The handrails on the ramp do not extend far enough.</p>	<p><u>Solution</u> Replace the handrails on the ramp so that they extend 12" minimum beyond the top and bottom of ramp run.</p>	<p><u>Criticality</u> Serious</p> <p><u>Timeframe</u> Short-term</p>	 <p>LIHO_Arnold House_LMK_002</p>
<p>Reference Standards and Guidelines: ABAAS 505.10.1</p>			
<p>Location: Accessible entrance stairs Corrective Action: Replace handrails</p>			
<p><u>Deficiency</u> The handrails for the stairs do not extend far enough.</p>	<p><u>Solution</u> Replace the handrails for the stairs so that they extend 12" minimum at the top and extend the length of one tread beyond the last riser nosing.</p>	<p><u>Criticality</u> Serious</p> <p><u>Timeframe</u> Short-term</p>	 <p>LIHO_Arnold House_LMK_006</p>
<p>Reference Standards and Guidelines: ABAAS 505.10.2, 505.10.3</p>			

ARNOLD HOUSE

<p>Location: Accessible entrance stairs Corrective Action: Rebuild stairs</p>			
<p><u>Deficiency</u> Current stairs do not have curved or beveled nosings.</p>	<p><u>Solution</u> Rebuild the stairs so that the nosings are curved or beveled and project no more than 1.5" over the tread below.</p>	<p><u>Criticality</u> Minor</p> <p><u>Timeframe</u> Short-term</p>	 <p>LIHO_Arnold House_LMK_006</p>
<p>Reference Standards and Guidelines: ABAAS 504.5</p>			
<p>Location: Main entrance stairs Corrective Action: Replace handrails</p>			
<p><u>Deficiency</u> The handrails do not extend far enough.</p>	<p><u>Solution</u> Replace the handrails for the stairs at the front entrance so they extend 12" at the top.</p>	<p><u>Criticality</u> Serious</p> <p><u>Timeframe</u> Short-term</p>	 <p>LIHO_Arnold House_LMK_022</p>
<p>Reference Standards and Guidelines: ABAAS 405.2</p>			

ARNOLD HOUSE

<p>Location: Main entrance stairs Corrective Action: Rebuild stairs</p>			
<p><u>Deficiency</u> Current stairs do not have curved or beveled nosings.</p>	<p><u>Solution</u> Rebuild the stairs so that the nosings are curved or beveled and project no more than 1.5" over the tread below.</p>	<p><u>Criticality</u> Minor</p> <p><u>Timeframe</u> Short-term</p>	 <p>LIHO_Arnold House_LMK_002</p>
<p>Reference Standards and Guidelines: ABBAS 504.5</p>			
<p>Location: Arnold House main entrance Corrective Action: Replace doorknobs</p>			
<p><u>Deficiency</u> The doorknobs do not meet accessibility standards as they require tight grasping and twisting of the wrist.</p>	<p><u>Solution</u> Replace the doorknobs with lever-shaped handles that do not require tight grasping, pinching, or twisting of the wrist.</p>	<p><u>Criticality</u> Minor</p> <p><u>Timeframe</u> Short-term</p>	 <p>LIHO_Arnold House_LMK_023</p>
<p>References Standards and Guidelines: ABAAS 309.4</p>			

<p>Location: Arnold House exhibits Corrective Action: Smooth sharp edges</p>			
<p><u>Deficiency</u> Clear plexiglass displays with sharp edges are particularly hazardous for people with low vision.</p>	<p><u>Solution</u> Bevel and smooth edges of the plexiglass display cases. Marking the edges with colored tape can also improve their visibility and prevent injury.</p>	<p><u>Criticality</u> Serious</p> <p><u>Timeframe</u> Short-term</p>	 <p>LIHO_Arnold House_LMK_013</p>  <p>LIHO_Arnold House_LMK_011</p>
<p>Reference Standards and Guidelines: Section 504 of the Rehabilitation Act of 1973, as Amended; Harpers Ferry Center Resources for Interpretive Media Accessibility</p>			



Dean House

Date: October 12, 2021

Project: Lincoln Home National Historic Site

Purpose, Experience & Use

Dean House was deeded to the National Park Service in 1978 and is located at 421 South 8th Street, across the street and a short distance northwest of the Lincoln Home. The historic structure is named after Harriet Dean who held the title to the property from 1849-1860 and it is a wonderful example of Italianate architecture.

Currently, the house has exhibits that are open to the public on the first floor and staff offices are located on the second floor (see individual report on Staff Offices). The first-floor exhibit is titled What a Pleasant Home Abe Lincoln Has and it focuses on the life of the Lincoln family and their home in Springfield. The first floor is composed of several different rooms with various display cases and wall-mounted text panels. The public entrance is on the left side of the house where a platform lift is located. This entrance can be accessed from 8th Street or

the alleyway behind the house. Behind the house there are also several wayside exhibits as well as a living history heirloom garden modeled after a mid-19th century kitchen garden.

The objectives for evaluation of Dean House were:

- Suggest accessible alternatives to exhibit components.
- Review the current facilities and exhibits for compliance with applicable accessibility standards, guidelines, and best practices.

Providing access to the experiences currently provided to visitors at Dean House cannot be deferred until a larger project is undertaken. To ensure equal access to opportunities and programs, interim solutions and/or programmatic alternatives must be provided. Although the ideal permanent solution(s) for accessibility, recommended in the table below, require substantial investigation and planning, alternative program access will need to be provided until those larger projects are funded and underway.

Specific interim and long-term accessibility goals for Dean House include:

Goal	Timeline	Implementation Detail
Provide objective information about the park's current and planned accessibility features to visitors.	Interim	Display current and planned accessibility-related information about Dean House on the park website, app, and accessibility guide. All methods of communication shall comply with Section 504 requirements for effective communication and/or Section 508 requirements for digital media, as appropriate. Ensure staff and volunteers are aware of accessibility-related policies and procedures.
Provide a fully accessible interpretive experience throughout the Dean House exhibits.	Long-term*	Replacement or redesign of current exhibits with fully accessible exhibits; design and installation specifications based on Universal Design principles and Harpers Ferry Center guidance for interpretive media. Exhibits that are designed to consider the needs of individuals with disabilities are likely to include the following features: integration of audio and/or audio description; three-dimensional graphics, bas relief, or tactile maps/models; high contrast text and images; minimal complexity of written descriptions; font selection that is sans or simple serif and of a size that is appropriate for the viewing distance.

Asterisk (*) indicates priority goals

Observations & Recommendations

Based on observations of the accessibility evaluation team from the Eppley Institute, as well as information and feedback provided by Lincoln Home National Historic Site personnel, the following recommendations are suggested for improved access to Dean House for visitors with disabilities:

Parking & Arrival

After parking their vehicles or exiting their tour bus, visitors typically visit the Visitor Center. However, regardless of where their visit begins on park grounds, visitors must make their way to the side of Dean House where the entrance is located if they wish to explore the exhibit. The entrance can be accessed by traveling north on the boardwalk on the west side of Eighth Street. Once in front of the house, there is an extension of the boardwalk that leads to the left side of the house. This portion of the boardwalk is technically a ramp with a slope that varies between 7-9.2%. Alternatively, the accessible route to this entrance is located at the back of the house. At the time of this assessment the alleyway

surface material was loose gravel but it has since been removed to reveal chip seal asphalt. The route leads visitors through the alleyway that is located between the visitor center/bus parking lot and the backyards of the houses on Eighth Street. There is a white fence between the alleyway and the backyard of Dean House; however, the entry way is open and does not have any type of gate or door. The surface material transitions here to boardwalk planks. Visitors then travel along the boardwalk, past the heirloom garden and accompanying waysides to the exhibit entrance. The entrance to Dean House has a staircase as well as a disappearing wheelchair lift (see Amenities & Site features for more information on the lift). The stairs have handrails on both sides, risers between 4.75-5.25" high, and treads that are 13" deep.

Recommendation #1: Regrade the ramped boardwalk planks in front of Dean House so that the slope is consistently 8% or less.

Recommendation #2: After re-grading the ramped boardwalk, add handrails on both sides that comply with ABA Accessibility Standards.

Recommendation #3: When determining a new surface material to cover or replace the chip seal asphalt, ensure the material is stable, firm, and slip resistant in compliance with ABA Accessibility Standards.

Orientation, Wayfinding & Signage

There is very little orientation, wayfinding, or signage at Dean House. There is a small sign near the entrance that indicates when the exhibit is open, that no food or drinks are allowed, and that there are no public restrooms. The entrance to the building also has a sign above the stairs indicating the location of the exhibit entrance. Once up on the porch, there is a small sign indicating that the lift is for wheelchair use only. There is no sign at the bottom of the lift nor are there any signs offering instructions for operating the lift.

Inside Dean House there are two orientation and wayfinding maps located on a wall. One is a simple floorplan of the first floor of the Dean House. The second map is a Lincoln Home National Historic Site neighborhood map with some additional information about the Visitor Center. To the left of these maps is a doorway that is purposely left ajar. There is a sign on the door with an arrow pointing visitors towards the exit, which is located at the front of the house.

Recommendation #1: Add signage indicating where the accessible route to Dean House is located. A sign should be added near the Visitor Center, at the back fence, and at the front of Dean House.

Recommendation #2: Add signage at the lift indicating that the lift is intended for wheelchairs and informing visitors how to operate the lift.

Recommendation #3: Add signage near the front exit indicating where the accessible exit is located (accessible entrance is also the accessible exit).

Recommendation #4: Consider adding a tactile map in addition to or in place of the park map. Including a tactile map of the area and

its features will convey the sense of space and distance in a way that is understandable by both those with disabilities and others who process visual information differently.

Amenities & Site Features

The primary site features are the disappearing lift, waysides, and exhibits. (Waysides and exhibits are discussed in the Interpretation & Education” section, below.) There are no public restrooms available at Dean House. When not in use, the disappearing lift is flush to the boardwalk except for a small safety lip that fully emerges once the lift is in operation. There are also two safety rails that are attached to either side. There is a stanchion positioned next to the lift which has three buttons used to operate it. There are also three buttons on the lift itself and on another stanchion located on the porch. The lift is simple to operate as an individual only needs to press the up or down button to activate it. Once the lift has been raised, wheelchair users must push open a swinging gate to be able to access the porch. As described by staff, the lift is approximately five years old and does not require much maintenance. Maintenance is typically electrical in nature; however, the lift company is very responsive when mechanical issues arise, and new parts are needed.

Recommendation #1: Add a latch and D-ring pull to the lift gate on the porch to increase safety measures. Ensure the latch can be operated with one hand, does not require tight grasping, pinching, or twisting of the wrist.

Interpretation & Education

Dean House has three outdoor wayside exhibits related to gardening and life in the 19th century. These waysides are located along the boardwalk. The two waysides nearest to the garden are positioned on tables and are slightly angled. Inside Dean House the first displays that visitors encounter are about the Lincoln Home and the various alterations and additions made to structure throughout the years that the Lincolns lived there. These displays feature models of the home underneath plexiglass display cases. The rest of the

exhibit features text panels with images of historical photos and documents as well as artifacts that are protected in display cases. There are currently no tactile displays or audio descriptions available.

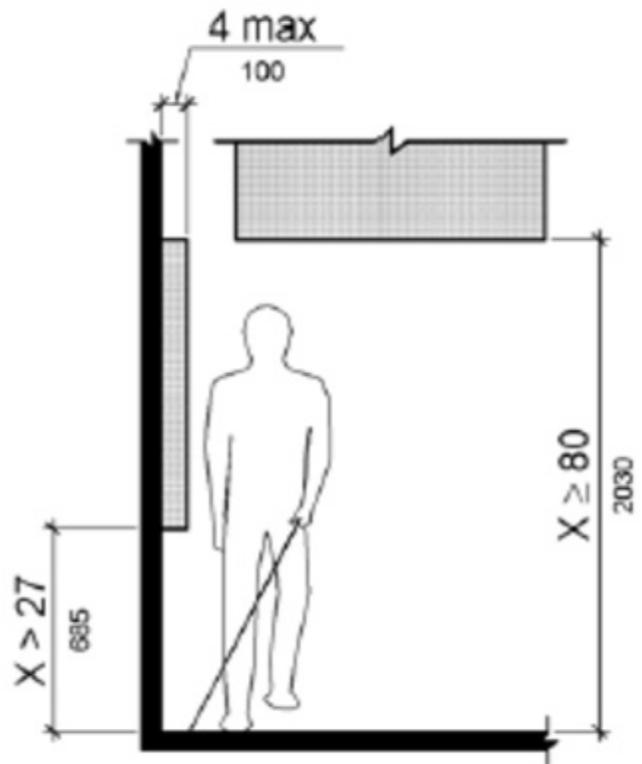
Recommendation #1: Waysides and interpretive exhibits that are designed to consider the needs of individuals with disabilities are likely to include the following features: installation in a location that is along an accessible route; integration of audio and/or audio description; three-dimensional graphics, bas relief, or tactile maps/models; high contrast text and images; minimal complexity of written descriptions; font selection that is sans or simple serif and of a size that is appropriate for the viewing distance. All future waysides and exhibits for Lincoln Home National Historic Site should be designed and installed in consideration of these minimum best practices for effective communication.

Recommendation #2: Review the key artifacts on display to identify which are most suitable for use as a tactile exhibit. Some items inside of the display cases cannot be handled by visitors; however, replicas can be displayed for touching. Ideally, objects that are shared for tactile displays are ones that visitors might not otherwise be familiar with. Having these items available for handling allows people with vision, cognitive, or other disabilities to better understand the nature of the items on display.

Recommendation #3: Provide visitors with touchable models of the Lincoln Home. Models demonstrating the different stages of alteration to the exterior of the house and models of the interior rooms should be provided.

Recommendation #4: Ensure that all display cases and text panels fall within appropriate protrusion limits. Permanent objects should be placed beneath any displays or panels that cannot be relocated or modified to eliminate the hazard.

Figure 307.2 Limits of Protruding Objects



Resources

- [Harpers Ferry Center Resources for Interpretive Media Accessibility](#)
- [U.S. Access Board Technical Guide – Operable Parts](#)
- [U.S. Access Board Technical Guide – Stairs](#)

Action Tables

Upon receipt of the assessment data and report, 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 Lincoln Home National Historic Site. The corresponding action table(s) represent the Eppley Institute's recommendations for barrier removal for Dean House.

Action tables begin on the next page (landscape orientation).

DEAN HOUSE

<p>Location: Exhibit display cases Corrective Action: Remove sharp edges</p>			
<p><u>Deficiency</u> Clear plexiglass displays with sharp edges are particularly hazardous for people with low-vision.</p>	<p><u>Solution</u> Replace display cases with cases that have rounded edges or bevel and smooth the edges to avoid potential injury to visitors who have limited vision and may lean forward to get a closer look at exhibits. Marking the corners with colored tape could also improve their visibility and prevent injury.</p>	<p><u>Criticality</u> Serious</p> <p><u>Timeframe</u> Short-term</p>	 <p>LIHO_Dean House_LMK_055</p>
<p>Reference Standards and Guidelines: Section 504 of the Rehabilitation Act of 1973, as Amended; Harpers Ferry Center Resources for Interpretive Media Accessibility</p>			
<p>Location: Interior doors Corrective Action: Replace doorknobs</p>			
<p><u>Deficiency</u> The doorknobs do not meet accessibility standards as they require tight grasping and twisting of the wrist.</p>	<p><u>Solution</u> Replace the doorknobs with lever-shaped handles that do not require tight grasping, pinching or twisting of the wrist.</p>	<p><u>Criticality</u> Minor</p> <p><u>Timeframe</u> Short -term</p>	 <p>LIHO_Dean House_LMK_068</p>
<p>Reference Standards and Guidelines: ABAAS 309.4</p>			

DEAN HOUSE

**Location: "Daily Life in 1860" wayside
Corrective Action: Adjust wayside angle**

<p><u>Deficiency</u> The wayside is currently angled approximately 10 degrees and is not easily viewable by individuals using wheelchairs.</p>	<p><u>Solution</u> Increase the degree of the angle so the wayside is easy viewable by individuals using wheelchair or redesign the base of the wayside to be a standard low-profile NPS wayside with an angle of 30-45 degrees.</p>	<p><u>Criticality</u> Serious</p> <p><u>Timeframe</u> Short-term</p>	 <p style="text-align: right;">LIHO_Dean House_LMK_045</p>
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Reference Standards and Guidelines: Harpers Ferry Center Resources for Interpretive Media Accessibility

**Location: Entry stairs
Corrective Action: Rebuild stairs**

<p><u>Deficiency</u> The current stairs do not have uniform riser height or curved or beveled nosings.</p>	<p><u>Solution</u> Rebuild the stairs with uniform risers that are 4" minimum and 7" maximum high. Ensure that any nosings are either curved or beveled and project no more than 1.5" over the tread below.</p>	<p><u>Criticality</u> Serious</p> <p><u>Timeframe</u> Mid-term</p>	 <p style="text-align: right;">LIHO_Dean House_LMK_052</p>
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Reference Standards and Guidelines: ABAAS 504.2, 504.5

Location: Entry stairs

Corrective Action: Replace handrails

<p><u>Deficiency</u> The handrails are too low at 30.5" and do not extend far enough at the top of bottom.</p>	<p><u>Solution</u> Replace handrails so the top of the gripping surface is 34-38" above the stair nosing. Handrails should extend 12" at the top and 13" (the tread depth) at the bottom.</p>	<p><u>Criticality</u> Serious</p> <p><u>Timeframe</u> Short-term</p>	 <p>LIHO_Dean House_LMK_054</p>
<p>Reference Standards and Guidelines: ABBAS 505.4, 505.10</p>			



Lincoln Home

Date: October 12, 2021

Project: Lincoln Home National Historic Site

Purpose, Experience & Use

Lincoln Home is located at 413 South Eighth Street at the corner of Jackson Street in Springfield, IL. The Greek Revival style house was originally built as a one-and-a-half story cottage in 1839. Abraham Lincoln purchased the cottage for himself and his wife, Mary, in 1844 and it is the only home that he ever owned. Over the years, Lincoln's home was remodeled several times and eventually became a two-story home. Lincoln's family resided in their Springfield home until 1861, when he left to become the President of the United States. In the years leading up to the election, many significant historic events took place at this site. It was in this home in which Lincoln prepared for the Lincoln-Douglas debates and where he received the Republican nomination for President. Thus, Lincoln Home is quite a popular tourist destination.

The house has been restored to represent what it would have looked like after 1856 when the Lincolns completed their remodeling. The house is currently only open to the public for free, ranger-led tours, which occur daily from 9a.m.-4:30p.m. Visitors must sign-up for the tour by obtaining a ticket from the front desk of the Visitor Center. Inside the home, there is a specific, designated tour path, which prevents visitors from directly entering most of the rooms or interacting with any of the furnishings in order to protect the home's historical integrity. Visitors who are able to climb stairs can enter the home through the front door with the tour group; however, wheelchair users must use a separate

entrance through the backyard where a disappearing lift has been installed.

Lincoln Home and its contributing structures are listed on the National Register of Historic Places. It should be noted that the fact that a landscape, district, or building is listed on the National Register does not exclude it from complying with accessibility standards. It is the park's responsibility to remedy those deficiencies to the greatest extent possible. According to the ABA Accessibility Standards, the Advisory Council on Historic Preservation has established procedures for federal agencies to meet this responsibility. LIHO should work with its own or National Park Service regional historic preservation specialists to determine what changes can be made. If it is determined that a feature, element, or area cannot be made accessible, there is still an obligation to provide program access to the feature, element, or area. In many cases, this is achieved through a combination of approaches including increasing accessibility to the feature, element, or area as much as is feasible; providing the experience in an alternative accessible location; and providing accessible interpretive program alternatives.

The objectives for evaluation of Lincoln Home were:

- Discuss opportunities for expanded accessibility to Lincoln Home.
- Review the current facilities and visitor engagement for compliance with applicable accessibility standards, guidelines, and best practices.



Providing access to the experiences currently provided to visitors at Lincoln Home cannot be deferred until a large project is undertaken. To ensure equal access to opportunities and programs, interim solutions and/or programmatic alternatives must be provided.

Specific interim and long-term accessibility goals for Lincoln Home include:

Goal	Timeline	Implementation Detail
Offer a more equitable experience for wheelchair users visiting Lincoln Home.	Long-term*	Wheelchair users must enter Lincoln Home through the alleyway and backyard then utilize a wheelchair lift located in the backyard. Investigate the feasibility of creating a universally accessible front entrance to the home that would not require visitors to climb stairs. Alternatively, in order to provide a more equitable experience, the tour route should be changed so that the entire tour group can enter through the same entrance at the back of the house. Construction of a ramp that begins in the adjoining lot and brings visitors up onto the back porch should be considered in place of the lift. The ramp should comply with ABA Accessibility Standards for clear width, running and cross slope, handrails, surface material, edge protection, landings, and rise. Consideration should also be given to reinstalling the kitchen stove closer to the wall to provide more appropriate clearance for wheelchairs that must pass through the space. There is currently only approximately 27.5" of clearance between the stove and table.
Provide all visitors with access to the second floor of Lincoln Home.	Long-term	Investigate the feasibility of constructing an addition to the exterior of the home to allow for installation of an exterior elevator.
Create an accessible program experience for visitors with a variety of disabilities.	Interim*	The current tour of Lincoln Home does not provide sufficient equitable experiences for visitors who cannot climb stairs, are blind, have cognitive/intellectual disabilities, or who are Deaf or hard of hearing. (See recommendations, below, in the observations and recommendations for Interpretation and Education)

Asterisk (*) indicates priority goals

Observations & Recommendations

Based on observations of the accessibility evaluation team from the Epley Institute, as well as information and feedback provided by Lincoln Home National Historic Site personnel, the following recommendations are suggested for improved access to Lincoln Home for visitors with disabilities:

Parking & Arrival

After parking their vehicles or exiting their tour bus, visitors make their way to the Visitor Center where they can sign up for a Lincoln Home tour at the front desk and pick up a copy of the park brochure. After joining their tour guide in Theater 2 for a pre-tour orientation, visitors exit the Visitor Center through a side entrance and follow their guide down the boardwalk towards the front entrance of Lincoln Home. The tour group then uses the front steps and

front door to enter the home. Currently, wheelchair users are not able to enter Lincoln Home through the front entrance of the house where the rest of the tour group enters. Wheelchair users must travel to the alleyway behind the home to enter the backyard where they can meet a staff member who can operate the disappearing lift so the visitor can gain access to the home via the back porch entrance. Once on the porch, wheelchair users are brought inside the home through a door to the kitchen and are then directed towards the front of the home where the tour begins.

Recommendation #1: Implement a process for staff to prepare the wheelchair lift in advance of a tour.

Recommendation #2: Train all staff on how to appropriately communicate with and assist visitors with disabilities including how to offer and operate available accommodations such as assistive listening devices.

Recommendation #3: Provide large print versions of the park brochure and ensure that the braille version created in 2014 is still up to date.

Orientation, Wayfinding & Signage

Informational signage related to the Lincoln Home tour is available in various locations of the site. There is a bulletin board located between the parking lot and the stairs leading up to the Visitor Center. The bulletin board structure has an LED sign indicating when the next available tour of Lincoln Home takes place, but the sign was not in operation at the time of this assessment. Once visitors make their way from the parking lot to the front of the Visitor Center, they encounter an orientation kiosk with a directional arrow pointing in the direction of Lincoln Home and a small map of the site. To the right of the kiosk is a wayside panel, which includes basic information about Lincoln Home tours in addition to other park information. The wayside panel also includes a map of the entire site. At the time of this assessment there was an a-frame chalkboard sign set up on the street corner opposite Lincoln Home advertising that visitors could obtain a free tour

ticket in the Visitor Center. Lincoln Home itself only has a small name plate on the front door with the name “A. Lincoln.” There is no signage indicating where the accessible route or entrance to Lincoln Home is located.

Recommendation #1: Add signage with International Symbol of Accessibility near Lincoln Home front entrance and near the back alleyway to indicate the direction of and location of the accessible entrance.

Recommendation #2: Provide tactile models or tactile maps depicting the layout and location of various site features where visual maps are presented.

Amenities & Site Features

The primary site features are a cluster of benches positioned for visitors to view the front of Lincoln Home, interior home tour path, backyard boardwalk, disappearing lift, several exterior staircases and one wayside. The interior home tour currently does not allow any motorized devices, including power wheelchairs. The tour path itself and the majority of doorways inside the home are quite narrow but in general meet standards at 32”. On the first floor of the home, the tour path is restricted by railings, which block visitors from directly entering rooms. These railings have gates that staff members can open when access to the space is needed. Tour groups use the steep and narrow staircase located directly across from the front door to access the second floor. The tour path of the second floor has the same railings installed at the doorways to several of the rooms. However, the tour path leads visitors through Mr. and Mrs. Lincoln’s bedrooms. In these two rooms, visitors are advised not to stray from the blue carpet, lest an alarm is triggered. After viewing the second floor, the tour proceeds down the narrow back steps to the kitchen at the back of the first floor. After viewing the kitchen, the tour group exits through a side door and are led out to the backyard of the home.

The backyard of Lincoln Home features a Y-shaped boardwalk, disappearing lift, two small sets of

stairs and one wayside. The disappearing lift has two safety rails that must be set in place by a staff member before it can be operated. As described by park staff, the lift is approximately six years old, covered with a tarp in the winter, and the pit is typically cleaned out about two times per year. A local company services the lift when it needs electrical repairs and is very responsive in providing replacement parts. It was also noted that the lift likely needs to be replaced every 8-10 years. The lift can be released if it were to get stuck in the “up” position and may be operable with the use of a hydraulic jack if necessary. The lift cannot be independently operated as a staff member is needed to retrieve the controls from a locked storage room within Lincoln Home, which is not in accordance with ABAAS 410.1. The requirement is that platform lifts not be attendant-operated.

There are two small sets of stairs with open risers leading from the boardwalk up onto the back and side porches of Lincoln Home. At the back of the yard, there is one wayside positioned near a set of stairs that guide visitors back out onto the boardwalk.

Recommendation #1: Through maintenance inspection process, park staff should continue to inspect for locations where movement of the boardwalk planks has created opening between the boards greater than ½ “, which could be a safety concern for people using canes, crutches, or walkers. Inspect for abrupt transitions and/or any transition between the boards greater than a ¼ “ change in level that could result in a tripping hazard. Replace boards as needed.

Recommendation #2: The current latch mechanism for the railing gates inside Lincoln Home should be replaced as needed for any staff members who have a disability that affects their ability to open and close it.

Recommendation #3: Revise the policy on motorized wheelchairs so that it is not discriminatory. The policy should indicate either a weight or size limit for motorized devices instead of banning them entirely.

Recommendation #4: When raised, the lift is not flush with the porch. The service company should adjust the height that the lift can achieve or the planks on the lift should be replaced to ensure the change in level between the lift platform and porch is not greater than ¼”.

Recommendation #5: Consider replacing the wooden planks on the lift with a different surface material that requires less maintenance and is more stable, firm, and slip-resistant.

Recommendation #6: Investigate the feasibility of reconfiguring the operating mechanisms for the lift so that it can be independently operated as required by the standards.

Recommendation #7: Consider removing the lift and installing a ramp that is constructed on the side of the house, in the adjoining lot. This would allow all visitors to enter through the same entrance at the back of the house, thus creating a more equitable experience.

Recommendation #8: Create a procedure for providing programmatic access to Lincoln Home for wheelchair users in the event that the lift is not operational.

Interpretation & Education

During the 25-minute ranger-led tour, visitors hear all about the life of the Lincolns while they lived in the home. The ranger leads visitors through the home and stops at nearly every room to provide narrative information about how the room was used by the family. As a supplement to the tour, a sensory tile is available for visitors to explore in the Visitor Center. The sensory tile features different textures and materials found in the home. Visitors who are Deaf or hard of hearing can request a sign language interpreter with two weeks advance notice, borrow assistive listening devices, or watch a pre-recorded ASL presentation of the tour content. At the time of this assessment the assistive listening device was not working during the tour. It is unclear if the device was malfunctioning or if staff was unfamiliar with how to use the device.

In the backyard of Lincoln Home is a single wayside that describes what “a day with the Lincolns” was like and provides a comparison image of the back of the home that dates back to 1865.

Recommendation #1: To effectively communicate the historical role and meaning of Lincoln Home National Historic Site to people with disabilities, accessible interpretation must be integrated into the onsite experience. Interpretive panels throughout the site should include accessible features, including tactile components, descriptive audio, high contrast and large print design, and clear ground and unobstructed viewing space.

Recommendation #2: Train staff in audio description to improve the visitor experience for individuals who are blind or have low vision while touring Lincoln Home.

Recommendation #3: Train all staff on how to operate, distribute, and troubleshoot assistive listening devices for Lincoln Home tour.

Recommendation #4: Individuals who cannot climb the stairs to the second floor should be provided with an experience that mimics the second floor tour. It is recommended that the current photo slideshow should be redesigned as a video tour to provide visitors with a more detailed sense of the space.

Visitors who are blind or who benefit from more sensory/tactile experiences are currently able to request use of a sensory tile that is available in the Visitor Center. This tile should be made available to all tour participants inside the home so that individuals do not need to seek it out before or after the tour. Tactile models of the exterior and interior of Lincoln Home should also be made available to visitors to aid in their understanding of the style and layout of the building. An audio-described tour should also be made available by either training staff who provide tours or by creating pre-recorded audio description that visitors can utilize at their discretion.

ASL users can request an ASL interpreter with two-weeks advance notice. While two weeks may be ideal, park staff should be prepared to exhaust all possible options for meeting accommodation requests inside of the two-week window. ASL users are also able to watch a YouTube video that provides an ASL version of the tour content. However, the ASL tour does not actually provide the same visual experience of the in-home tour. For ASL users to get the full experience, they would need to participate in the home tour with an ASL interpreter or watch the YouTube video before/after taking the typical tour. If visitors did not request an ASL interpreter in advance, a more equitable experience should be provided by making the YouTube video downloadable and available on an iPad inside the home for each tour so that ASL users can enjoy the tour content in ASL while physically touring the home with the rest of the group.

Resources

- [Harpers Ferry Center Resources for Interpretive Media Accessibility](#)
- [U.S. Access Board Technical Guide – Accessible Routes](#)
- [U.S. Access Board Technical Guide -- Stairways](#)
- [U.S. Access Board Technical Guide -- Ramps and Curb Ramps](#)

Action Tables

Upon receipt of the assessment data and report, 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 Lincoln Home National Historic Site. The corresponding action table(s) represent the Eppley Institute’s recommendations for barrier removal for Lincoln Home.

Action tables begin on the next page (landscape orientation).

<p>Location: Lincoln Home exterior Corrective Action: Replace handrails</p>		
<p><u>Deficiency</u> The front steps only have a handrail on one side. The handrail does not return and does not extend far enough.</p>	<p><u>Solution</u> Replace the handrail with one that extends horizontally above the landing for 12" and returns to a wall, guard, or landing surface. The bottom of the handrail should extend at the slope of the stair flight for a horizontal distance equal to at least one tread depth beyond the last rider nosing.</p>	<p><u>Criticality</u> Serious</p> <p><u>Timeframe</u> Short-term</p>  <p>LIHO_Lincoln Home_LMK_099</p>
<p>Reference Standards and Guidelines: ABAAS 505.2, 505.10</p>		
<p>Location: Lincoln Home kitchen Corrective Action: Install new gate with 32" clear width</p>		
<p><u>Deficiency</u> The gate allowing wheelchair users to access the home via the kitchen is only 30" wide.</p>	<p><u>Solution</u> Investigate whether the gate can be replaced with one that allows a minimum clear width of 32".</p>	<p><u>Criticality</u> Serious</p> <p><u>Timeframe</u> Short-term</p> <p>No photo</p>
<p>Reference Standards and Guidelines: ABAAS 403.5.1</p>		

Location: Lincoln Home kitchen

Corrective Action: Reinstall stove

Deficiency

The space between the base of the stove and table only provides approximately 27.5" of clear width.

Solution

Investigate the possibility of reinstalling the stove closer to the rear wall to increase the clear width to 32".

Criticality

Serious

Timeframe

Short-term



LIHO_Lincoln Home_LMK_078



LIHO_Lincoln Home_LMK_092

Reference Standards and Guidelines: ABA AS 403.5.1

Location: Lincoln Home backyard
Corrective Action: Replace stairs

Deficiency

Two small sets of stairs both have open risers and inadequate or no handrails.

Solution

Investigate the possibility of replacing the stairs with historically accurate stairs that meet the minimum requirements of uniform riser height and tread depth, riser height 4-7" maximum, tread depth of 11" minimum, no open risers, and handrails on both sides that extend horizontally above the landing for 12" and return to a wall, guard, or landing surface. The bottom of the handrails should extend at the slope of the stair flight for a horizontal distance equal to at least one tread depth beyond the last riser nosing.

Criticality

Minor

Timeframe

Short-term



LIHO_Lincoln Home_LMK_094



LIHO_Lincoln Home_LMK_093

Reference Standards and Guidelines: ABA AS 504.2, 504.3, 505.1, 505.2, 505.10

<p>Location: Lincoln Home side exit Corrective Action: Add handrails</p>			
<p><u>Deficiency</u> The steps leading from the side of the house to the boardwalk do not have handrails.</p>	<p><u>Solution</u> Install handrails on both sides of steps that extend horizontally above the landing for 12" and returns to a wall, guard, or landing surface. The bottom of the handrail should extend at the slope of the stair flight for a horizontal distance equal to at least one tread depth beyond the last riser nosing and return to a wall, guard, or landing surface.</p>	<p><u>Criticality</u> Serious</p> <p><u>Timeframe</u> Short-term</p>	 <p>LIHO_Lincoln Home_LMK_100</p>
<p>Reference Standards and Guidelines: ABAAS 505.1, 505.2, 505.10</p>			



Staff Offices

Date: October 12, 2021

Project: Lincoln Home National Historic Site

Purpose, Experience & Use

The staff offices at Lincoln Home National Historic Site are located within the historic buildings dispersed throughout the park. Six buildings were included in this assessment of staff offices: Corneau House, Sprigg House, Dean House, Rosenwald House, Beedle House, and Morse House. All six buildings were originally built in the 1840s and 1850s and have been restored to provide prime examples of residential dwellings in the 19th century. Currently, the only building that has regular public access is Dean House; however, only the first floor is accessed by the public and the staff offices have a separate entrance. Dean House, Rosenwald House, Beedle House, and Morse House are all two-story buildings.

It should be noted that throughout this assessment, deficiencies were identified regardless of historic

status. It is the park's responsibility to remedy those deficiencies to the greatest extent possible while balancing historical integrity with present-day use. Many federal facilities around the country have been able to make changes to historic structures and landscapes to bring them into compliance with accessibility standards. According to the ABA Accessibility Standards, the Advisory Council on Historic Preservation has established procedures for federal agencies to meet this responsibility, including consultation with the State Historic Preservation Officer and involvement by the advisory council in certain cases. Any staff offices containing areas of public access should be considered the highest priority for modifications to meet the necessary accessibility standards.

The objective for evaluation of the staff offices was:

- Review staff offices for compliance with applicable accessibility standards, guidelines, and best practices.

To ensure equal access to staff offices for employees with disabilities, interim solutions must be provided until a larger project is undertaken. Although the ideal permanent solution(s) for accessibility, recommended in the table below, require substantial investigation and planning, interim solutions will need to be provided until those larger projects are funded and underway.

Specific interim and long-term accessibility goals for staff offices include:

Goal	Timeline	Implementation Detail
Offer a more equitable experience for staff of all abilities at Lincoln Home National Historic Site.	Interim*	Ensure that any staff with disabilities are provided with accommodations and assigned workstations in the most accessible office spaces, including those with accessible restrooms. Staff meetings should also take place in the most accessible locations. It is recommended that Morse House be utilized for staff meetings.
Provide accessible amenities in staff office buildings containing areas of public access, or are used to obtain permits, host public meetings, etc.	Interim	Upgrade, rearrange, and/or redesign entrances, meeting rooms, restrooms, and any other public-use amenities to comply with minimum requirements for accessibility.
Provide a universally accessible office experience for current and future staff of all abilities at Lincoln Home National Historic Site.	Long-term*	Redesign all staff office buildings to be fully compliant with ABA Accessibility Standards. Restrooms, doors/gates, entrances, interior routes and clearances, work surfaces, ramps/stairs, and multi-story access should all be considered.

Asterisk (*) indicates priority goals

Observations & Recommendations

Based on observations of the accessibility evaluation team from the Epley Institute, as well as information and feedback provided by Lincoln Home National Historic Site personnel, the following recommendations are suggested for improved access to staff offices for employees with disabilities:

Parking & Arrival

Staff-specific access considerations for parking were outside the scope of this assessment. LIHO does not have a designated staff parking lot. Staff park in several areas of the grounds, including the alleyways behind the conference center and near the visitor parking lot. The areas where staff currently park do not have any designated accessible parking spaces. Furthermore, the alleyways that are used for staff parking are also used by visitors exploring the grounds of the park. This affects wheelchair users in

particular as they have to utilize the park's alleyways as an access route. It was noted by park staff that the alleyways are not wide enough to accommodate both a vehicle and pedestrian traffic at the same time.

Recommendation #1: Investigate the feasibility of adding sidewalks in the alleyways to provide a safer experience for individuals requiring an access route.

Recommendation #2: Develop a policy regarding where staff should park if they require accessible parking. If it is determined that staff could park in the accessible parking spaces provided in the visitor parking lot, consider increasing the number of accessible parking spaces.

Amenities & Site Features

The primary site features assessed in each of the staff offices were the entry/exit, interior circulation routes, kitchen/kitchenette and restrooms. The kitchen/kitchenette areas in Corneau House, Rosenwald House, and Beedle House would need to be updated or redesigned for compliance if/when a staff member has a need for accessible amenities. In the meantime, the kitchens/kitchenettes can remain in their current condition. While not required until the need arises, accessible common-use amenities are desirable and could be beneficial in recruiting a more diverse staff.

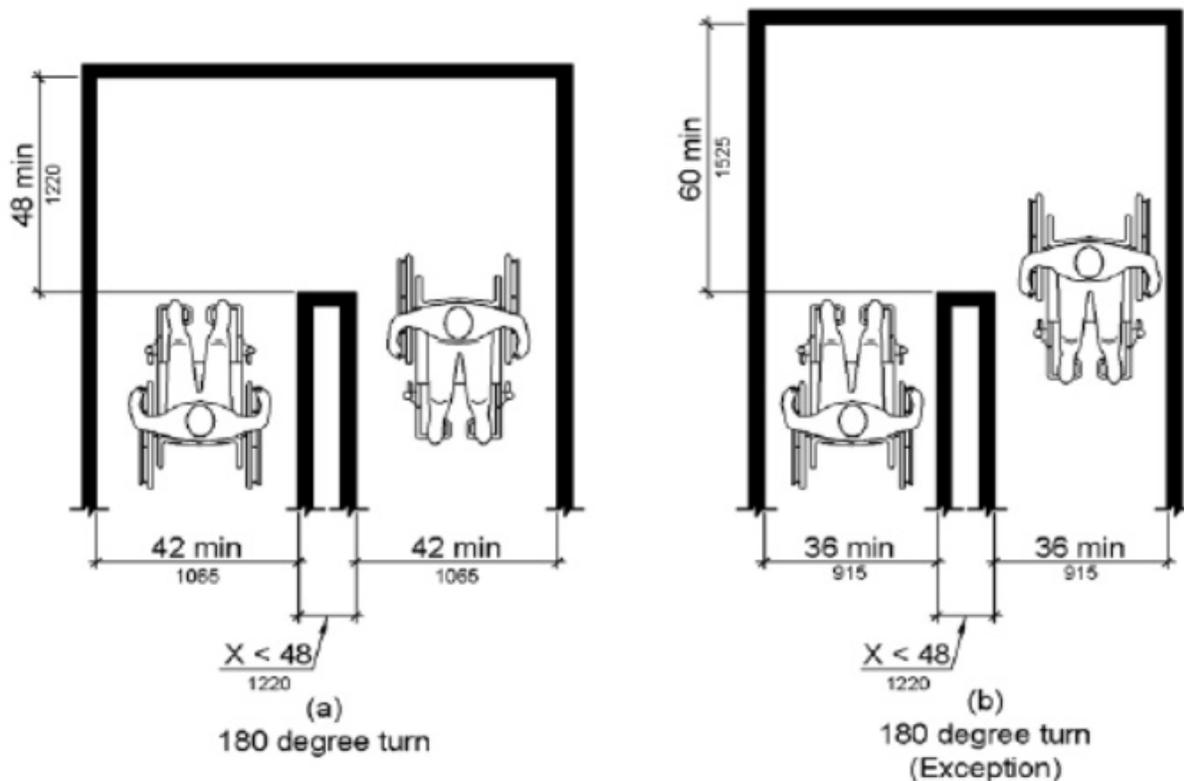
Recommendation #1: Add ramps or independently operated lifts where stairs or a significant change in level are present at the entrance to Sprigg House, Rosenwald House, and Beedle House. Investigate whether staff

could utilize the existing lift at Dean House to gain access to areas of the building used for staff offices.

Recommendation #2: Avoid scheduling staff meetings at Rosenwald House due to the lack of accessible restroom on the first floor. Prioritize Morse House for staff meetings instead.

Recommendation #3: Provide staff with training to maintain physical accessibility of staff offices. Avoid using restrooms for storage or rearranging furniture. At least one accessible route must connect all accessible spaces and elements. Accessible routes should include: clear width of 36", clear width for 180 degree turns (see image), passing space of 60"x60" if the route is less than 60" wide.

Figure 403.5.2 Clear Width at Turn



Recommendation #4: Replace doorknobs with lever-shaped handles that do not require tight grasping, pinching, or twisting of the wrist.

Recommendation #5: Consider replacing turn-key locks with a mechanism that does not require pinching or turning of the wrist. While turn-keys are not prohibited by the standards, alternative security options like a key fob or numerical keypad can provide easier access.

Resources

- [U.S. Access Board Technical Guide – Stairways](#)
- [U.S. Access Board Technical Guide – Floor and Ground Surfaces](#)
- [U.S. Access Board Technical Guide – Accessible Routes](#)
- [U.S. Access Board Technical Guide – Ramps and Curb Ramps](#)
- [U.S. Access Board Technical Guide – Toilet Rooms](#)
- [U.S. Access Board Technical Guide – Operable Parts](#)

Action Tables

Upon receipt of the assessment data and report, 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 Lincoln Home National Historic Site. The corresponding action table(s) represent the Eppley Institute's recommendations for barrier removal for Staff Offices.

Action tables begin on the next page (landscape orientation).

<p>Location: Corneau House Corrective Action: Widen entry gate</p>			
<p><u>Deficiency</u> The staff entry gate at the back of the house is too narrow at 26.5".</p>	<p><u>Solution</u> Replace the gate with one that provides a minimum clear width of 32".</p>	<p><u>Criticality</u> Serious</p> <p><u>Timeframe</u> Short-term</p>	 <p>LHO_Staff Offices_LMK_100</p>
<p>Reference Standards and Guidelines: ABAAS 404.2.3</p>			
<p>Location: Corneau House Corrective Action: Add edge protection to ramp</p>			
<p><u>Deficiency</u> The ramp leading to the entrance does not have edge protection.</p>	<p><u>Solution</u> Add edge protection along each side of the ramp. If a curb is used to provide edge protection, it must be at least 4" high.</p>	<p><u>Criticality</u> Serious</p> <p><u>Timeframe</u> Mid-term</p>	
<p>Reference Standards and Guidelines: ABAAS 405.9, 405.9.2</p>			

STAFF OFFICES

<p>Location: Corneau House Corrective Action: Relocate safety cabinet</p>			
<p><u>Deficiency</u> The yellow safety cabinet located below the fire alarm pull is creating an obstruction.</p>	<p><u>Solution</u> Relocate the safety cabinet to create unobstructed reach range for the fire alarm pull.</p>	<p><u>Criticality</u> Critical</p> <p><u>Timeframe</u> Immediate</p>	 <p>LHO_Staff Offices_LMK_105</p>
<p>Reference Standards and Guidelines: ABAAS 308</p>			
<p>Location: Sprigg House Corrective Action: Replace and add handrail to the stairs</p>			
<p><u>Deficiency</u> The stairs leading to the employee entrance only have a handrail on one side and the handrail does not extend far enough or return to a wall, guard, or landing.</p>	<p><u>Solution</u> Replace the handrail for the stairs and add a second handrail. The handrails should extend 12" minimum at the top, extend the length of one tread beyond the last riser nosing, and return to a wall, guard, or the landing surface.</p>	<p><u>Criticality</u> Critical</p> <p><u>Timeframe</u> Immediate</p>	 <p>LHO_Staff Offices_LMK_107</p>
<p>Reference Standards and Guidelines: ABAAS 505.2, 505.10</p>			

Location: Sprigg House			
Corrective Action: Lower objects to be within reach range			
<u>Deficiency</u> The coat hook on the restroom door, entrance security alarm pad, and bulletin board are all too high.	<u>Solution</u> Reinstall objects to be within reach range at a maximum of 48" high.	<u>Criticality</u> Serious	No photo
		<u>Timeframe</u> Short-term	
Reference Standards and Guidelines: ABAAS 308.2.1			
Location: Dean House restroom			
Corrective Action: Replace handrail			
<u>Deficiency</u> The grab bar installed across the window is not in compliance with standards.	<u>Solution</u> Standards require 1.5" clearance between the grab bar and wall. Consider building over the window with a "false wall" that extends at least 12" above the grab bar in order to position the bar appropriately. The grab bar must be 42" long minimum, located 12" maximum from the rear wall, extend 54" minimum from the rear wall, and sustain 250 pounds of force. Alternatively, replace the window with a smaller one that would allow for the grab bar to be reinstalled on the wall.	<u>Criticality</u> Critical	
		<u>Timeframe</u> Short-term	
Reference Standards and Guidelines: ABBAS 604.5			

STAFF OFFICES

<p>Location: Dean House Corrective Action: Add handrail to stairs</p>	
<p><u>Deficiency</u> The stairs leading to the employee entrance only has a handrail on one side. The handrail does not extend far enough and does not return to the rail, guard or landing surface.</p>	<p><u>Solution</u> Add a second handrail to the stairs. Ensure both handrails extend the length of one tread at the bottom and return to the rail, guard, or landing surface.</p>
<p><u>Criticality</u> Serious</p> <p><u>Timeframe</u> Immediate</p>	 <p>LHO_Staff Offices_LMK_117</p>
<p>Reference Standards and Guidelines: ABBAS 505.2, 505.10, 505.10.3</p>	
<p>Location: Dean House restroom Corrective Action: Relocate paper towel dispenser</p>	
<p><u>Deficiency</u> The paper towel dispenser is currently blocked by furniture.</p>	<p><u>Solution</u> Relocate paper towel dispenser to provide appropriate reach range for individuals using wheelchairs.</p>
<p><u>Criticality</u> Serious</p> <p><u>Timeframe</u> Immediate</p>	 <p>LHO_Staff Offices_LMK_122</p>
<p>Reference Standards and Guidelines: ABBAS 308.2</p>	

Location: Rosenwald House restroom
Corrective Action: Install grab bars

Deficiency
 Restroom has no rear or side grab bars.

Solution

The standards do not allow for a side grab bar to be installed across a window. Consider building over the window with a "false wall" that extends at least 12" above the grab bar in order to position the bar appropriately. The grab bar must be 42" long minimum, located 12" maximum from the rear wall, extend 54" minimum from the rear wall, and sustain 250 pounds of force. Alternatively, replace the window with a smaller one that would allow for the grab bar to be reinstalled on the wall. The vanity will need to be replaced to make space for a rear grab bar.

Criticality
 Serious

Timeframe
 Short-term



LHO_Staff Offices_LMK_130

References Standards and Guidelines: ABAAS 604.5.1, 604.5.2

Location: Rosenwald House restroom
Corrective Action: Replace restroom vanity

Deficiency
 Currently, the sink cannot be accessed via a front approach due to cabinetry beneath the sink.

Solution

Replace the vanity with one that provides a forward approach as well as knee and toe clearance and provides enough room for a grab bar behind the toilet. The grab bar must be at least 36" long and must extend 12" minimum from the centerline of the toilet.

Criticality
 Serious

Timeframe
 Short-term



LHO_Staff Offices_LMK_130

References Standards and Guidelines: ABBAS 606.2

Location: Beedle House restroom			
Corrective Action: Widen restroom doorway			
<u>Deficiency</u> The doorway to the restroom is currently too narrow at 26".	<u>Solution</u> Investigate widening the doorway to provide 32" of clear width.	<u>Criticality</u> Serious <u>Timeframe</u> Mid-term	No photo
Reference Standards and Guidelines: ABBAS 404.2.3			
Location: Beedle House restroom			
Corrective Action: Install grab bars			
<u>Deficiency</u> Restroom has no rear of side grab bars.	<u>Solution</u> Consider building over the window with a "false wall" that extends at least 12" above the grab bar in order to position the side bar appropriately. The side grab bar must be 42" long minimum, located 12" maximum from the rear wall, extend 54" minimum from the rear wall. The rear grab bar must be 36" long minimum, extend from the centerline of the toilet 12" minimum on one side and 24" on the other side. Grab bars must also sustain 250 lbs. of force. Alternatively, replace the window with a smaller one that would allow for the grab bar to be reinstalled on the wall.	<u>Criticality</u> Serious <u>Timeframe</u> Short-term	 <p>LHO_Staff Offices_LMK_138</p>
Reference Standards and Guidelines: ABBAS 604.5.1, 604.5.2, 609.8			

Location: Beedle House restroom

Corrective Action: Lower mirror and relocate items above toilet

Deficiency

The mirror is currently too high.

The shelf above the toilet is out of reach range.

Solution

Reinstall the mirror so that the bottom edge of the reflecting surface is 40" maximum above the finish floor.

Relocate shelf or move items on shelf to a different area within reach range.

Criticality

Serious

Timeframe

Short-term



LIHO_Staff Offices_LMK_136



LIHO_Staff Offices_LMK_138

Reference Standards and Guidelines: ABAAS 603.3, 308.1

**Location: Beedle House restroom
Corrective Action: Wrap pipes under sink**

Deficiency
Pipes under the sink are exposed.

Solution
Wrap the pipes under the sinks in the restrooms to prevent injury from hot/cold and sharp edges for someone who uses a wheelchair and positions their legs under the sink while washing their hands.

Criticality
Critical

Timeframe
Immediate



LHO_Staff Offices_LMK_136

Reference Standards and Guidelines: ABBAS 606.5

Location: Beedle House
Corrective Action: Add handrails to stairs

Deficiency

The stairs leading to the house do not all have handrails on both sides.

Solution

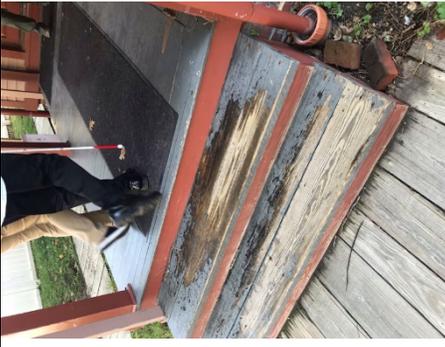
Add handrails to both sides of all stairs. Ensure handrails return to a wall, guard, or the landing surface. Handrails should extend 12" at the top beginning directly above the first riser nosing and should extend for a distance equal to at least one tread depth at the bottom.

Criticality

Serious

Timeframe

Immediate



LIHO_Staff Offices_LMK_133



LIHO_Staff Offices_LMK_141

Reference Standards and Guidelines: ABBAS 505.2, 505.10.2, 505.10.3

<p>Location: Morse House Corrective Action: Add edge protection to ramp</p>			
<p><u>Deficiency</u> The ramp leading to the entrance does not have edge protection.</p>	<p><u>Solution</u> Add edge protection along each side of the ramp. If a curb is used to provide edge protection, it must be at least 4" high.</p>	<p><u>Criticality</u> Serious</p> <p><u>Timeframe</u> Short-term</p>	 <p>LIHO_Staff Offices_LMK_142</p>
<p>Reference Standards and Guidelines: ABAAS 405.9, 405.9.2</p>			
<p>Location: Morse House Corrective Action: Lower alarm keypad</p>			
<p><u>Deficiency</u> The security alarm keypad is currently out of reach range.</p>	<p><u>Solution</u> Reinstall the keypad to be within reach range of 48" maximum from the finish floor.</p>	<p><u>Criticality</u> Minor</p> <p><u>Timeframe</u> Short-term</p>	<p>No photo</p>
<p>Reference Standards and Guidelines: ABAAS 308.2.1</p>			



several exhibits and park films to introduce them to the life and legacy of Abraham Lincoln. In addition to interpretive media, the VC offers park information and orienting information via staff, printed media, and signage.

Visitor access areas and features currently maintained by the NPS include the parking lot, Jackson Street picnic area, and interior of the VC which consists of the front desk, exhibits, a small gift shop, two theaters, and restrooms.

The objectives for evaluation of the visitor circulation route were:

- Discuss opportunities for expanded accessibility to the Visitor Center
- Review the current facilities and visitor engagement opportunities for compliance with applicable accessibility standards, guidelines, and best practices.

Visitor Center

Date: October 12, 2021

Project: Lincoln Home National Historic Site

Purpose, Experience & Use

The Visitor Center is the only visitor contact station at Lincoln Home National Historic Site. The Visitor Center (VC) is located at the intersection of South Seventh Street and East Jackson Street and it is typically open to the public seven days a week, 8:30 a.m. to 5:00 p.m., There are two entrances to the VC. The south-facing entrance is connected to the parking lot via a paved path. The second entrance faces South Seventh Street and is used by visitors arriving in the bus parking lot. While entrance to the park is free, visitors are expected to pay the \$2.00/hr. parking fee inside the VC when they arrive. Additionally, any visitors wishing to take the free tour of Lincoln Home must obtain tickets from the front desk. The tour itself also begins in one of the theaters inside the VC, which is used to orient visitors to the site and the tour. The VC offers visitors



Providing access to the experiences currently provided to visitors utilizing the Visitor Center cannot be deferred until the rehabilitation or replacement of the VC is undertaken. To ensure equal access to opportunities and programs, interim solutions and/or programmatic alternatives must be provided. Specific interim and long-term accessibility goals for the Visitor Center include:

Goal	Timeline	Implementation Detail
Provide objective information about the park's current and planned accessibility features to visitors in an accessibility guide.	Interim*	Display all current and planned accessibility related information about Lincoln Home in an accessibility guide. The guide should be provided online, in print, and in accessible alternate formats at the Visitor Center. The guide should be updated regularly and provide objective information about what visitors will encounter so that they can make their own determinations regarding accessibility.
Provide a fully accessible interpretive experience throughout the Visitor Center exhibits.	Long-term*	Replacement or redesign of current exhibits with fully accessible exhibits; design and installation specifications based on Universal Design principles and Harpers Ferry Center guidance for interpretive media. Exhibits that are designed to consider the needs of individuals with disabilities are likely to include the following features: integration of audio and/or audio description; three-dimensional graphics, bas relief, or tactile maps/models; high contrast text and images; minimal complexity of written descriptions; font selection that is sans or simple serif and of a size that is appropriate for the viewing distance.
Provide alternative formats for information pamphlets, publications, and interpretive labels.	Interim*	Provide all materials for public distribution in large print, braille, or audio version to accommodate individuals who are blind.
Ensure all staff members can interact and communicate with individuals with disabilities appropriately and effectively.	Interim	Provide staff with training on how to appropriately interact and communicate with individuals with disabilities.
Ensure all staff members are aware of current and planned accessibility-related information at Lincoln Home.	Interim	Train all staff on the current and planned accessibility-related information, including the proper use and maintenance of assistive technology (i.e., assistive listening devices).

Asterisk (*) indicates priority goals

Observations & Recommendations

Based on observations of the accessibility evaluation team from the Epley Institute, as well as information and feedback provided by Lincoln

Home National Historic Site personnel, the following recommendations are suggested for improved access to circulation routes for visitors with disabilities:

Parking & Arrival

Please see “Visitor Circulation” report for all parking and arrival recommendations

Orientation, Wayfinding & Signage

Please see “Visitor Circulation” report for orientation, wayfinding, and signage recommendations.

Amenities & Site Features

The front desk of the Visitor Center is a great example of universal design as it has multiple levels of counter space to accommodate visitors of various heights or who may be using a wheelchair. The front desk also has a sign indicating what accommodations are available for visitors. Available accommodations include: wheelchair checkout, printed tour booklet and scripts, wheelchair accessible tour of Lincoln Home (first floor only), Lincoln Home tour with transparent mask guides, open captioned and audio described park films, sensory kit, Lincoln Home tactile book, audio navigation (via AWARE app), assisted listening devices, wayside audio description (via NPS app), and ASL interpreter (2-weeks’ notice required). At the time of this assessment, staff was unclear on the availability of or how to utilize all the listed accommodations; however, this may be due to staffing shortages at the park. The VC also has a small gift shop that consists of a sales counter, several display tables and shelving.

There is one women’s and one men’s restroom located inside the VC. These are the only public restrooms available on park grounds. Both restrooms are accessed via power-assisted doors and both restrooms have an accessible stall that includes a baby changing table. The baby changing table in the accessible men’s stall was broken at the time of this assessment.

There are two theaters located within the VC that have films playing on a loop. Each theater has a large sign labeling it and each also has an LED screen listing the times of each film. The doors to each theater open automatically at the beginning and end of each film or they can be operated at any time with

a push-button. Theater 1 plays a 23-minute film titled “Abraham Lincoln: A Journey to Greatness,” which tells the story of Lincoln before he became President. Theater 2 plays two different films that each last 10 minutes. “At Home with Mr. Lincoln” provides a narrated tour of Lincoln Home and is recommended to visitors who cannot participate in a guided tour of the home. “Homage to Lincoln” highlights the legacy of Lincoln through photos and artifacts. All three films have open captions and audio description available. The assessment team was provided with an assistive listening device, but the audio description functionality was not working for the park films. Theater 2 is also used as a meeting and orientation space for Lincoln Home tour visitors. Participants are instructed to meet inside the theater for a brief orientation with a park ranger before exiting as a group and traveling towards Lincoln Home.

Recommendation #1: Provide the available accommodations sign in alternate formats (large print, braille) and ensure that it is updated to reflect current availability of accommodations. Additionally, ensure that accommodations, such as the braille unigrid, which was published in 2014, are up to date.

Recommendation #2: Provide training for all park staff on available accommodations and how to operate and maintain them. Staff should also be trained to appropriately and preemptively offer accommodations such as assistive listening devices and the tactile book to enhance visitors’ experiences.

Recommendation #3: Provide the film schedule audibly to visitors at regular intervals utilizing the existing PA system. This can be done by park staff stationed at the front desk or via a prerecorded message.

Recommendation #4: Update the signage for each theater with tactile signage for visitors who are blind or have low vision. Ensure tactile signage is in compliance with ABA Accessibility Standards.

Recommendation #5: Work with the gift shop concessionaire to provide their staff

with information on positive interactions with people with disabilities and training on how to appropriately stock merchandise so that it is accessible to visitors with disabilities. Also, ensure that the concessionaire employees have access to and are informed about any accessibility services, accommodations, and features at the park.

Recommendation #6: Replace the baby changing table in the men’s restroom with one that closes properly. Ensure ABA Accessibility Standards for work surfaces are met including height and clear ground space.

Interpretation & Education

The VC has several exhibits that portray the history and importance of Lincoln and his family. Several of the exhibits were designed to be interacted with tactilely, such as “The Feel of the Lincoln Home,” which provides visitors with touchable Lincoln Home related objects and materials. The exhibits are dispersed throughout the one-room visitor center. Most exhibits are located around the perimeter of the VC although there is one cluster of exhibits in the center of the room. The exhibits clustered together are not meant to be touched and are thus enclosed in plexiglass display cases.

Recommendation #1: Interpretive exhibits that are designed to consider the needs of individuals with disabilities are likely to include the following features: installation in a location that is along an accessible route; integration of audio and/or audio description; three-dimensional graphics, bas relief, or tactile maps/models; high contrast text and images; minimal complexity of written descriptions; font selection that is sans or simple serif and of a size that is appropriate for the viewing distance. All future interpretive exhibits for Lincoln Home National Historic Site should be designed and installed in consideration of these minimum best practices for effective communication.

Recommendation #2: Replace display cases with cases that have rounded edges or bevel and smooth the edges to avoid potential injury

to visitors who have limited vision and may lean forward to get a closer look at exhibits. Marking the corners with colored tape could also improve their visibility and prevent injury.

Recommendation #3: Create a tactile model of Lincoln Home to have for visitors to interact with. Ideally, both the interior and exterior would be represented. This would aid visitors before they participate in the Lincoln Home tour, would be beneficial for visitors who view the film about Lincoln Home but cannot participate in the tour, and allow people with vision, cognitive, or other disabilities to better understand the layout and design of the home.

Recommendation #4: Provide a tactile version of the neighborhood map. Including a tactile map of the area and its features will convey the sense of space and distance in a way that is understandable by both those with disabilities and others who process visual information differently.

Resources

- [Harpers Ferry Center Resources for Interpretive Media Accessibility](#)
- [U.S. Access Board Technical Guide – Toilet Rooms](#)
- [U.S. Access Board Technical Guide – Operable Parts](#)
- [U.S. Access Board Technical Guide – Protruding Objects](#)

Action Tables

Upon receipt of the assessment data and report, 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 Lincoln Home National Historic Site. The corresponding action table(s) represent the Eppley Institute’s recommendations for barrier removal for the Visitor Center.

Action tables begin on the next page (landscape orientation).

<p>Location: Both entrances/exits</p> <p>Corrective Action: Replace vending machine</p>			
<p><u>Deficiency</u> Operable parts of the vending machine are out of reach range.</p>	<p><u>Solution</u> Replace existing vending machines with machines that have all operable parts within reach range of 15-48" above the finish floor.</p>	<p><u>Criticality</u> Minor</p> <p><u>Timeframe</u> Short-term</p>	 <p>LHO_Visitor Center_LMK_154</p>
<p>Reference Standards and Guidelines: ABAAS 308.2</p>			
<p>Location: Men's and Women's restrooms</p> <p>Corrective Action: Lower hook and add D-ring door pull</p>			
<p><u>Deficiency</u> The clothing hook on the back of stall door is too high. Stall door latch is not easily graspable.</p>	<p><u>Solution</u> Lower the clothing hook to be within reach range of 15-48" above the finish floor. Install D-ring door pulls to allow for ease of use.</p>	<p><u>Criticality</u> Serious</p> <p><u>Timeframe</u> Short-term</p>	 <p>LHO_Visitor Center_LMK_173</p>
<p>Reference Standards and Guidelines: ABAAS 308.2.1, 309.4</p>			

<p>Location: Men's restroom Corrective Action: Increase water run time</p>			
<p><u>Deficiency</u> Sink faucet does not run long enough.</p>		<p><u>Criticality</u> Serious</p> <p><u>Timeframe</u> Short-term</p>	 <p style="text-align: right;">LIHO_Visitor Center_LMK_168</p>
<p>Reference Standards and Guidelines: ABAAS 606.4</p>			
<p>Location: Men's restroom Corrective Action: Place permanent object below paper towel dispensers</p>			
<p><u>Deficiency</u> The wall mounted paper towel dispensers are protruding objects.</p>	<p><u>Solution</u> Place a permanent or semi-permanent object or structure beneath the paper towel dispensers to be in detectable range of a white cane, 0-27" above the finished floor.</p>	<p><u>Criticality</u> Serious</p> <p><u>Timeframe</u> Immediate</p>	 <p style="text-align: right;">LIHO_Visitor Center_LMK_170</p>
<p>Reference Standards and Guidelines: ABAAS 307.2</p>			

<p>Location: Restroom alcove Corrective Action: Place permanent object below defibrillator</p>			
<p><u>Deficiency</u> The defibrillator located on the wall inside the restroom alcove is a protruding object.</p>	<p><u>Solution</u> Place a permanent object or structure beneath the defibrillator to be in detectable range of a white cane. Consider placing a box around the fire extinguisher that is hanging beneath the defibrillator to create a cane detectable object (0-27" above the finished floor).</p>	<p><u>Criticality</u> Critical</p> <p><u>Timeframe</u> Immediate</p>	 <p>LHO_Visitor Center_LMK_164</p>
<p>Reference Standards and Guidelines: ABAAS 307.2</p>			
<p>Location: Restroom alcove Corrective Action: Reinstall or replace the water fountain</p>			
<p><u>Deficiency</u> The tall water fountain is a protruding object.</p>	<p><u>Solution</u> Reinstall the water fountain so that it is recessed and protrudes a maximum of 4" or replace the water fountain with one that does not protrude or is no more than 27" high.</p>	<p><u>Criticality</u> Serious</p> <p><u>Timeframe</u> Short-term</p>	 <p>LHO_Visitor Center_LMK_162</p>
<p>Reference Standards and Guidelines: ABBAS 307.2</p>			



Visitor Circulation Route

Date: October 12, 2021

Project: Lincoln Home National Historic Site

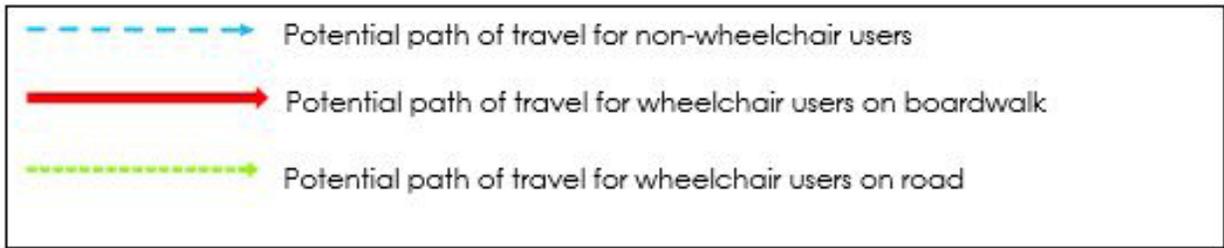
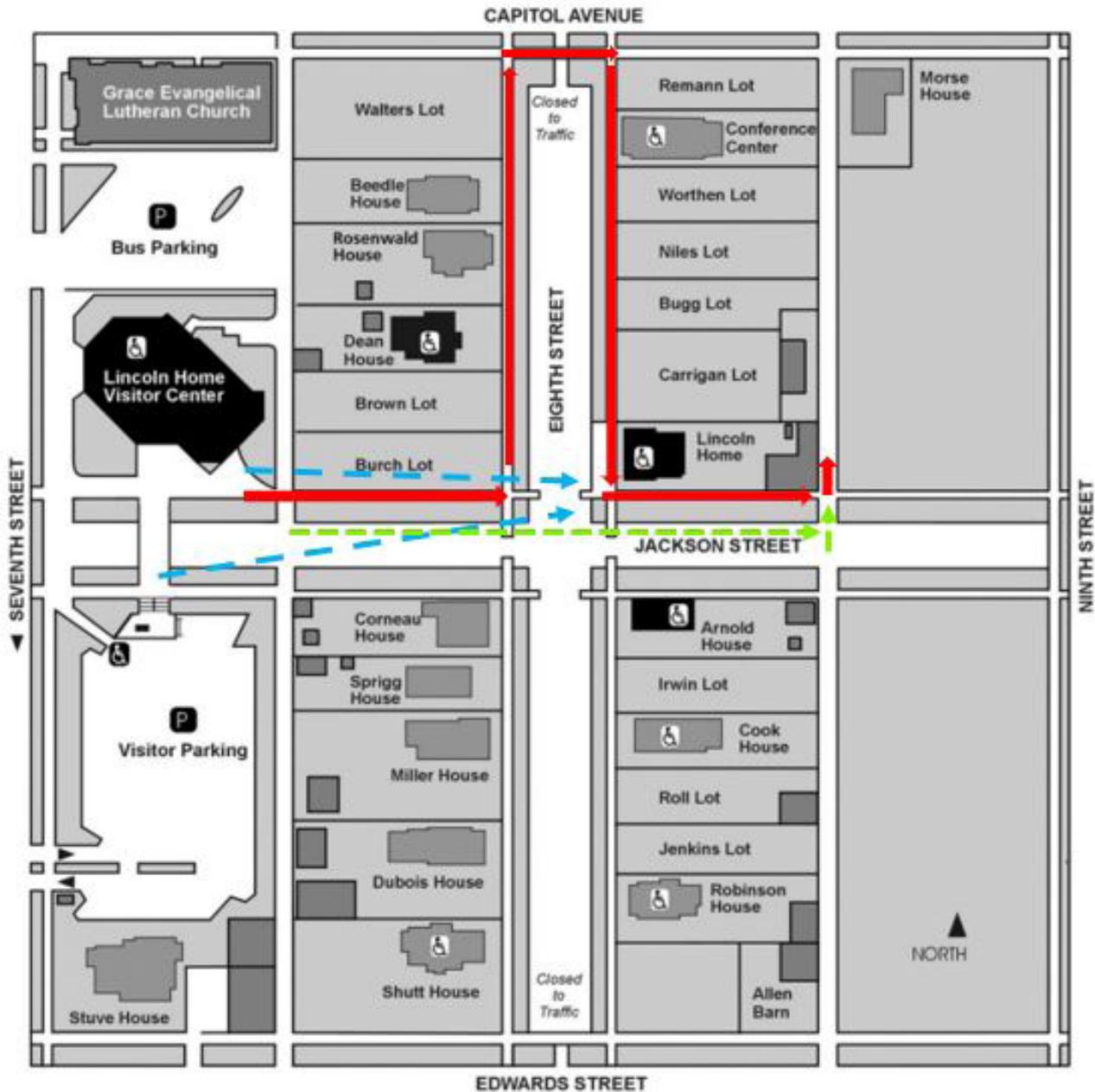
Purpose, Experience & Use

Lincoln Home National Historic Site is a National Historic Landmark comprised of a four-square block area in the city of Springfield, IL. The area at Eighth St. and Jackson St. is closed off to general vehicular traffic and the visitor circulation path at the time of this assessment consists of wooden plank boardwalks, loose aggregate over asphalt roadways, pavers in front of the Lincoln Home and bricks near the parking lot and Visitor Center. The loose aggregate has since been removed from roadways and chip seal asphalt is now exposed. The circulation path generally follows the typical pattern of a city sidewalk with the boardwalk constructed parallel to the street, on each side. Unlike a typical sidewalk, the boardwalk does not currently have any curb cuts or curb ramps that provide access to the street level.

Visitors utilize the boardwalk to access the majority of the site's waysides and buildings that have

public access, including Lincoln Home. Currently, a wheelchair user or individual without the ability to climb stairs does not have direct access to Lincoln Home. To access Lincoln Home from the Visitor Center, a wheelchair user has two options. They must travel east on Jackson St., through the intersection at Eighth St. until they reach the alleyway behind Lincoln Home. Alternatively, they can travel east on the boardwalk down Jackson St., turn left onto the western side of Eighth St., travel to the end of the block and turn so that they can travel back down the eastern side of Eighth St., turn left at Jackson St. and travel east on the boardwalk until they reach the alleyway behind Lincoln Home where they can then access the backyard where the





accessible lift is located. Individuals who do not have mobility limitations can walk east down Jackson St. via the boardwalk or street, cross the intersection at Eighth St. where they can step up onto the paved sidewalk and enter Lincoln Home via the front door.

- Discuss opportunities for expanded accessibility to the visitor circulation route.
- Review the current circulation route for compliance with applicable accessibility standards, guidelines, and best practices.

The current circulation route, including the boardwalks and street level, is being considered for a major renovation project to improve ABAAS compliance and visitor safety, while protecting cultural resources. Therefore, this assessment provides suggestions for both interim and long-term solutions.

Providing access to the experiences currently provided to visitors utilizing the circulation route cannot be deferred until the rehabilitation or replacement of the circulation path is undertaken. To ensure equal access to opportunities and programs, interim solutions and/or programmatic alternatives must be provided. Specific interim and long-term accessibility goals for the circulation path include:

The objectives for evaluation of the visitor circulation route were:

Goal	Timeline	Implementation Detail
Offer a more equitable experience for visitors with mobility disabilities utilizing the circulation route boardwalks.	Interim*	Construct accessible routes where the current boardwalks end at the intersections of Eighth and Jackson Streets to provide Street level access for visitors who cannot step down from the curb. Six total accessible routes should be constructed on the northwest, southeast and southwest corners of the intersection and provide direct access to both Jackson and Eighth streets. An additional accessible route should be constructed to connect the boardwalk extension on the side of Lincoln Home to Jackson St.
Provide a universally accessible experience for visitors of all abilities on Lincoln Home National Historic Site grounds.	Long-term*	<p>Complete, phased redesign of the current circulation route to meet ABA Standards with fully accessible routes to all buildings and site features.</p> <p>Option 1: Keep the current level of the street at the intersection of Jackson and Eighth St. and create upwards sloping routes leading away from the intersection in all four directions so that the street level gradually increases to meet the level of the sidewalk/boardwalk.</p> <p>Option 2: Minimize the height of the curb to reduce the grade of sloped route curb cuts to less than 5%.</p> <p>Option 3: Raise the entire street level so that there is level access provided to all areas of the sidewalk including the paved brick sidewalk in front of Lincoln Home.</p>
Provide a safer and more accessible route by replacing the surface material of the boardwalk.	Long-term	Replace plank boardwalk with concrete to provide more even, accessible and slip resistant surface for circulation. Various concrete design options may be considered, including stamped concrete to imitate the more historically accurate appearance of a plank boardwalk.
Provide an accessible route to Lincoln Home.	Long-term	The area of Eighth St. and Jackson St. is currently closed to regular vehicular traffic; however, emergency vehicles are authorized to use the roadway. Since the primary use of the roadways is pedestrian circulation and since the roadway is used by wheelchair users to reach Lincoln Home, the roadways should be updated to accessible route standards in compliance with the ABA.

Asterisk (*) indicates priority goals

Observations & Recommendations

Based on observations of the accessibility evaluation team from the Eppley Institute, as well as information and feedback provided by Lincoln Home National Historic Site personnel, the following recommendations are suggested for improved access to circulation routes for visitors with disabilities:

Parking & Arrival

There are two parking lots at Lincoln Home – a visitor parking lot and a bus parking lot. The visitor parking lot is on the south side of the Visitor Center and the bus parking is on the north side. The visitor parking lot has a total of 71 parking spaces and three of them are designated accessible parking spaces. The three accessible spaces are nearest to the accessible route leading to the Visitor Center. Each space has an adjoining access aisle and accessible parking sign. The signage for the accessible parking spaces needs to be replaced.

The accessible route to the Visitor Center includes a wide, concrete ramp with edge protection and handrails on both sides. Halfway up the ramp is a trash receptacle with appropriate clear space. The top half of the ramp exceeds the allowable slope at 9.7%.

There are openings up to 2" in the concrete leading to the sidewalk, which is a safety concern for people using canes, crutches or walkers. There is a curb ramp leading to the sidewalk which exceeds slope allowance at 12.5%. There is one bench and one trash and recycling receptacle located at the parking lot level where the paved brick sidewalk begins near the stairs that lead to the Visitor Center. The paved brick sidewalk leading from the stairs to the visitor center has cross slope up to 8%, which technically makes it a ramp. There is an area with picnic tables on either side of the paved brick sidewalk that features a different type of brick, which creates a bumpier surface. There are also two grates in this area with openings up to 1.25" that are parallel to traffic and pose a safety concern for people using canes, crutches or walkers.

The bus parking lot on the north side of the Visitor Center has nine pull-through parking spaces. There

are no curb cuts or loading areas so the entire curb could be used as a bus loading area to allow wheelchair users to enter and exit their bus without leaving the sidewalk. If not using the curb as a bus loading area, wheelchair users would need to make their way towards Seventh St. where there is a sidewalk that meets the level of the parking lot. There are six benches and one trash receptacle located on the sidewalk on the side of the Visitor Center.

Recommendation #1: Replace the parking sign for space 9 and/or 10 to indicate "Van Accessible" parking and ensure it is 60" high measured to the bottom edge.

Recommendation #2: Replace remaining accessible parking space signs so that they measure 60" high to the bottom edge.

Recommendation #3: Fill gaps in concrete with epoxy or concrete fill until entire area is repaved.

Recommendation #4: Replace all current benches with benches that have back and arm rests.

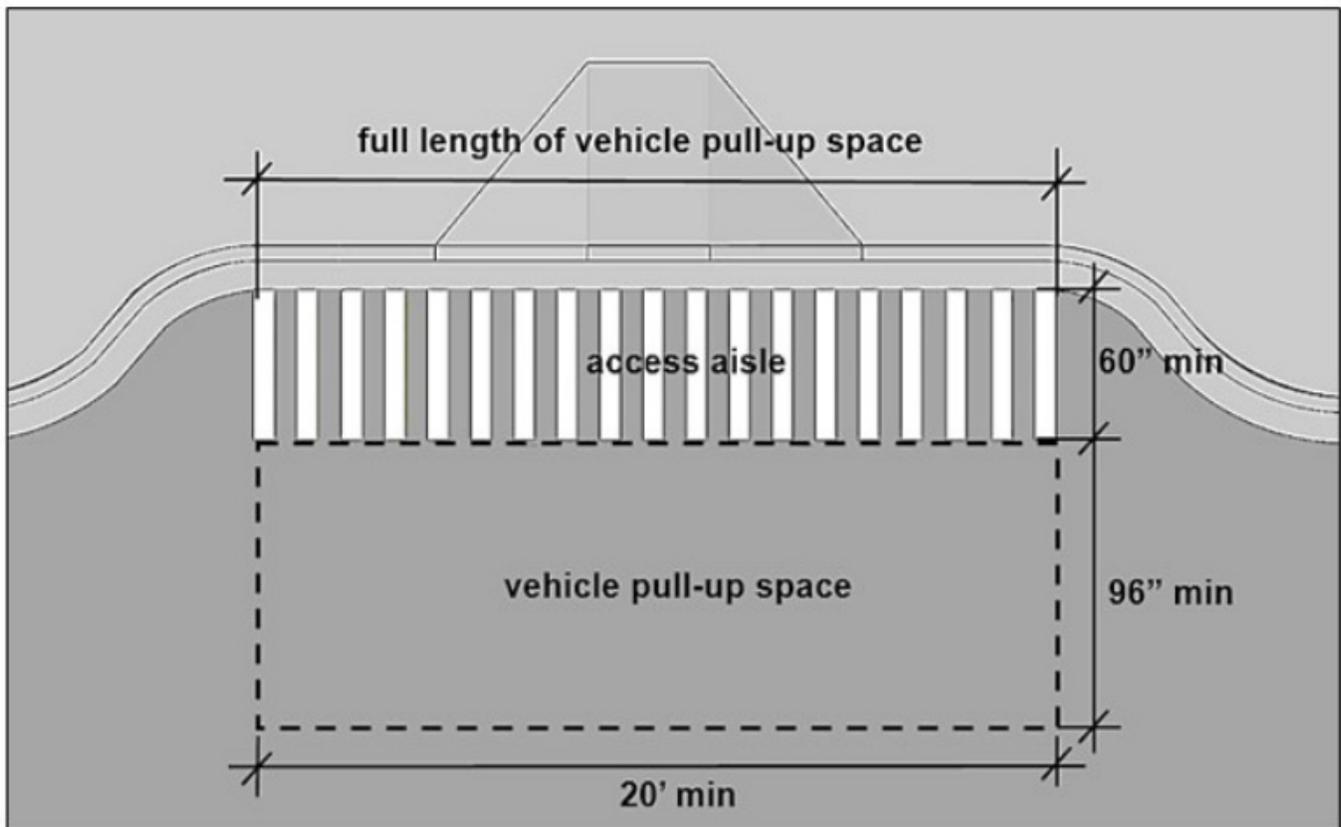
Recommendation #5: Regrade accessible route ramp when entire path is renovated so that slope does not exceed 8.33%.

Recommendation #6: Fill spaces between red paver bricks so that gaps are less than ½" and changes in level are less than ¼".

Recommendation #7: Consider regrading area between parking lot and Visitor Center to minimize cross and running slope. Cross slope should not exceed 2%. Running slope should not exceed 5%.

Recommendation #8: Replace the two grates that have 1.25" openings with a version that has openings no larger than ½".

Recommendation #9: Consider updating the bus parking lot and sidewalk with a designated accessible passenger loading area with appropriate vehicle pull-up space, access aisle, surfaces, and vertical clearance according to ABA Accessibility Standards.



Orientation, Wayfinding & Signage

There is a bulletin board located between the parking lot and the stairs leading up to the Visitor Center. There is a small box with park brochures attached to the bulletin board structure. There is also an intercom system built into the structure but there are no instructions for visitor use. The structure has an LED sign indicating when the next available tour of Lincoln Home takes place, but the sign was not in operation at the time of this assessment. There are green footprints marked on the ground leading visitors from the parking lot, up the stairs, across the picnicking area, to the entrance of the Visitor Center. There is no signage indicating where the accessible route from the parking lot to the Visitor Center is nor is there any signage informing visitors where to go once they reach the top of the accessible route ramp.

Once visitors reach the Jackson St. area with picnic tables via the stairs, they encounter the front of the Visitor Center where there are two orientation and wayfinding signs. The first sign that visitors would approach is located in the plaza area directly in

front of the Visitor Center. This sign is four-sided and each side has a panel that provides directional information for the Visitor Center, parking, Lincoln Home, and Arnold House. The bottom portion of each panel also has a small map of the entire site. On this map, the only buildings that are labeled are also designated with the International Symbol of Accessibility: Visitor Center, Dean House, Lincoln Home, Arnold House, and the Conference Center. The second sign that visitors would approach is the "Welcome" wayside panels. This wayside provides accessibility information, information about Lincoln Home tours, self-guided activities, safety, as well as another version of the site map, which provides labels for each building that has public access.

There is not much signage elsewhere on the site other than where pedestrian access to the site is provided at the intersections of Eighth St. and E Edwards St. as well as Eighth St. and E Capitol Ave. The waysides located at these entrances provide a site map, information on Lincoln Home tour, and safety information.

Recommendation #1: Provide instructions for visitors on how and why they should use the intercom to communicate with park staff.

Recommendation #2: If the LED sign indicating the next available tour is being used by the park, ensure this information is being audibly presented to visitors via the speaker system at regular intervals or by other intuitive use mechanism or software operation.

Recommendation #3: Provide directional signage indicating the location of the accessible route. Signage should be provided at the bottom of the ramp and at the top and bottom of the stairs leading to the parking lot. A sign with a directional arrow should also be added at the top of the ramp to indicate the most accessible route to the Visitor Center entrance. Additionally, differently colored footsteps should be marked on the ground to guide visitors along the accessible route to the Visitor Center.

Recommendation #4: Provide tactile models or tactile maps depicting the layout and location of various site features where visual maps are presented.

Recommendation #5: Waysides that are designed to consider the needs of individuals with disabilities should offer information in multiple formats, for example both visually and via audio description. In addition, adding tactile elements and other sensory features enables individuals of varying abilities to engage with the information.

Amenities & Site Features

The primary site features, excluding the various building interiors and interpretive waysides, are the previously mentioned boardwalks, picnic tables, benches, trash and recycling receptacles and drinking fountain. Of the six picnic tables available for visit use on Jackson St., none are currently accessible. There are approximately seven benches located near the Visitor Center that do not have adequate back or arm rests. The various trash and

recycling receptacles located throughout the site have appropriate clear ground space and reach range. There is one, two-level drinking fountain located near the front of the Visitor Center that was not operational at the time of this assessment.

The park regularly inspects sections of the boardwalk to check for areas where planks have been damaged or where movement has created large openings or created transitions causing significant changes in level. The park replaces boards annually and is considering replacing all boardwalk planks with concrete segments pending compliance and budget concerns. The loose aggregate that was covering the asphalt streets and alleyways at the time of this assessment has been removed. The current chip seal surface is rough. The park has not yet determined if a new surface material will be added to cover the chip seal. It is important to remember the specifications regarding application of and compliance with the ABA Accessibility Standards when considering both the boardwalks and streets/alleyways resurfacing projects. Scoping and technical requirements of the ABA must be applied during the design, construction, addition to, or alteration of facilities, buildings and elements. The standards define "alteration" as:

A change to a building or facility that affects or could affect the usability of the building or facility or portion thereof. Alterations include, but are not limited to, remodeling, renovation, rehabilitation, reconstruction, historic restoration, resurfacing of circulation paths or vehicular ways, changes or rearrangement of the structural parts or elements, and changes or rearrangement in the plan configuration of walls and full-height partitions. Normal maintenance, reroofing, painting or wallpapering, or changes to mechanical and electrical systems are not alterations unless they affect the usability of the building or facility.

Recommendation #1: Through maintenance inspection process, park staff should continue to inspect for locations where movement of the boardwalk planks has created opening between the boards greater than ½", which could be a safety concern for people using canes, crutches, or walkers. Inspect for abrupt transitions and/or

any transition between the boards great than a ¼ "change in level that could result in a tripping hazard. Continue replacing boards as needed.

Recommendation #2: Replace the current benches with benches that have back support and arm rests. Ensure that benches are located along accessible routes and include clear ground space positioned near the bench for companion seating. The clear ground space should not overlap or otherwise obstruct the accessible circulation path.

Recommendation #3: Replace drinking fountain with an accessible unit that includes a high spout for individuals who have difficulty bending or stooping and a low spout for individuals who are seated or of short stature. Alternatively, replace the drinking fountain with a water bottle filling station that meets ABA standards for reach range, clear ground space, operable parts, and other applicable standards.

Interpretation & Education

The main interpretive and educational offerings along the visitor circulation route are the waysides found throughout the park. The waysides are located mostly along the boardwalk route. Two waysides are located on the street level and cannot be easily accessed by wheelchair users. Several waysides are positioned behind fences and cannot be easily accessed by wheelchair users due to the fence height. Narration and audio description of the waysides is available via the NPS mobile app. At the time of this assessment, available staff were uncertain of how to utilize the audio description.

Recommendation #1: Waysides and interpretive exhibits that are designed to consider the needs of individuals with disabilities are likely to include the following features: installation in a location that is along an accessible route; integration of audio and/or audio description; three-dimensional graphics, bas relief, or tactile maps/models; high contrast text and images; minimal complexity of written descriptions; font selection that is sans or simple serif and of a

size that is appropriate for the viewing distance. All future waysides for Lincoln Home National Historic Site should be designed and installed in consideration of these minimum best practices for effective communication.

Recommendation #2: Train staff on how to assist and instruct visitors on how to utilize the audio description available for wayside exhibits. This information should be posted in the Visitor Center, on the park website, and on the NPS Mobile App. Add downloadable audio description files to the website. Audio description files should also be downloaded to a tablet that can be loaned to visitors during their visit.

Resources

- [Harpers Ferry Center Resources for Interpretive Media Accessibility](#)
- [U.S. Access Board Technical Guide – Parking Spaces](#)
- [U.S. Access Board Technical Guide – Floor and Ground Surfaces](#)
- [U.S. Access Board Technical Guide – Accessible Routes](#)
- [U.S. Access Board Technical Guide – Ramps and Curb Ramps](#)
- [U.S. Access Board Technical Guide – Passenger Loading Zones](#)
- [U.S. Access Board Accessibility Standards for Federal Outdoor Developed Areas](#)

Action Tables

Upon receipt of the assessment data and report, 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 Lincoln Home National Historic Site. The corresponding action table(s) represent the Eppley Institute's recommendations for barrier removal for the Visitor Circulation Route.

Action tables begin on the next page (landscape orientation).

VISITOR CIRCULATION

<p>Location: Visitor Parking lot Corrective Action: Replace accessible parking signs</p>			
<p><u>Deficiency</u> Signs indicating accessible parking are too low. No parking is designated as "van accessible".</p>	<p><u>Solution</u> Replace existing signs and poles so that signs are 60" high minimum. Ensure at least one sign indicates "van accessible".</p>	<p><u>Criticality</u> Critical</p> <p><u>Timeframe</u> Immediate</p>	 <p>LIHO_Circulation Path_LMK_188</p>
<p>Reference Standards and Guidelines: ABAAS 502.6</p>			
<p>Location: Visitor Parking lot Corrective Action: Regrade/extend curb ramp</p>			
<p><u>Deficiency</u> Curb ramp leading from parking lot to sidewalk has 12.5% slope.</p>	<p><u>Solution</u> Extend curb ramp to 109" to ensure appropriate slope.</p>	<p><u>Criticality</u> Serious</p> <p><u>Timeframe</u> Mid-term</p>	 <p>LIHO_Circulation Path_LMK_194</p>
<p>Reference Standards and Guidelines: ABAAS 405.2, 406.1</p>			

VISITOR CIRCULATION

<p>Location: Visitor Parking lot Corrective Action: Lower the park brochure holder</p>			
<p><u>Deficiency</u> Park brochure holder attached to bulletin board structure is out of reach range.</p>	<p><u>Solution</u> Lower the brochure holder so that is it no higher than 48" maximum to the highest operable part or outlet.</p>	<p><u>Criticality</u> Critical</p> <p><u>Timeframe</u> Immediate</p>	 <p>LIHO_Circulation Path_LMK_196</p>
<p>Reference Standards and Guidelines: ABAAS 308.2.1</p>			
<p>Location: Visitor Parking Lot Corrective Action: Regrade accessible route ramp</p>			
<p><u>Deficiency</u> Accessible route ramp has slope up to 9.7%.</p>	<p><u>Solution</u> Regrade the ramp so that it does not exceed 8.3%.</p>	<p><u>Criticality</u> Serious</p> <p><u>Timeframe</u> Long-term</p>	 <p>LIHO_Circulation Path_LMK_204</p>
<p>Reference Standards and Guidelines: ABAAS 405.2</p>			

Location: Jackson St. Picnic Area

Corrective Action: Replace picnic tables

<p><u>Deficiency</u> None of the six picnic tables are accessible.</p>	<p><u>Solution</u> Replace at least two of the picnic tables with accessible picnic tables. Ensure tables have appropriate clear ground space of 36" on all sides. Alternatively, replace all picnic tables with accessible versions to meet universal design principles.</p>	<p><u>Criticality</u> Critical</p> <p><u>Timeframe</u> Immediate</p>	 <p>LIHO_Circulation Path_LMK_211</p>
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Reference Standards and Guidelines: ABBAS F245.2.2, 1011.2.1, 1011.4

VISITOR CIRCULATION

Location: Jackson St. Picnic Area
Corrective Action: Replace grates

Deficiency

Two grates have openings up to 1.25" that are parallel to the direction of traffic.

Solution

Replace grates with the same style of grate used in this area that has openings less than ½ ". There is an example of such a grate in the same area of the park; see photo LIHO_Circulation Path_LMK_214.

Criticality

Critical

Timeframe

Short-term



LIHO_Circulation Path_LMK_213



LIHO_Circulation Path_LMK_214

Reference Standards and Guidelines: ABBAS 302.3

VISITOR CIRCULATION

Location: Boardwalk, various locations
Corrective Action: Replace boards

Deficiency

Boardwalk planks have large openings and changes in level.

Solution

Through maintenance inspection, replace boards regularly as needed to ensure changes in level do not exceed 1/4" and openings do not exceed 1/2".

Criticality

Critical

Timeframe

Immediate



LIHO_Circulation Path_LMK_257



LIHO_Circulation Path_LMK_275

References Standards and Guidelines: ABAAS 302.3, 303.2

**Location: Pedestrian Entrance at Eighth St. and E Edwards St.
Corrective Action: Relocate wayside**

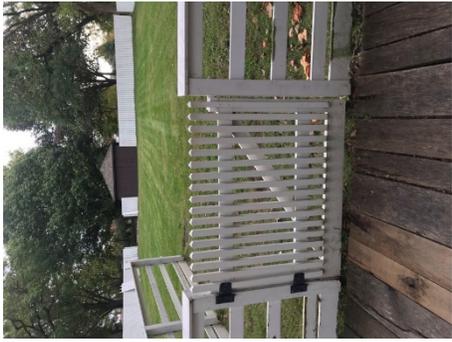
<p><u>Deficiency</u> The orientation wayside at this intersection is located on a curb ramp.</p>	<p><u>Solution</u> Relocate the wayside to an area with level surface ground. Recommend relocating to the street level where pedestrians first enter the site. A level clear ground space measuring 36x48" should be positioned in front of the wayside, centered on the interpretive information, for either a forward or parallel approach.</p>	<p><u>Criticality</u> Serious</p> <p><u>Timeframe</u> Immediate</p>	 <p>LIHO_Circulation Path_LMK_238</p>
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References Standards and Guidelines: Harpers Ferry Center Resources for Interpretive Media Accessibility

VISITOR CIRCULATION

Location: "A Lot of Activism in the Neighborhood" wayside

Corrective Action: Relocate wayside

<p><u>Deficiency</u> The fence in front of the wayside is 42.75" high and blocks the view for individuals with short stature or those using a wheelchair.</p>	<p><u>Solution</u> Relocate the wayside to the section of the fence that has a gated entrance. Remove the gate entirely and place the wayside in the threshold to block visitors from entering the yard.</p>	<p><u>Criticality</u> Serious</p> <p><u>Timeframe</u> Short-term</p>	 <p>LIHO_Circulation Path_LMK_240</p>  <p>LIHO_Circulation Path_LMK_243</p>
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Reference Standards and Guidelines: Harpers Ferry Center Resources for Interpretive Media Accessibility

VISITOR CIRCULATION

**Location: Jenkins Lot Augmented Reality
Corrective Action: Implement tactile model**

<p><u>Deficiency</u> The augmented reality exhibit is solely visual without other ways for visitors to interact with it.</p>	<p><u>Solution</u> Enhance the ability for visitors to interact with the exhibit by providing a tactile model of the wagon.</p>	<p><u>Criticality</u> Serious</p> <p><u>Timeframe</u> Short-term</p>	 <p>LIHO_Circulation Path_LMK_242</p>
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Reference Standards and Guidelines: Harpers Ferry Center Resources for Interpretive Media Accessibility

Location: "Economic and Ethnic Diversity in Springfield"; "Politics in the Neighborhood" waysides
Corrective Action: Relocate waysides

Deficiency
 The waysides are located on the street and there is no direct accessible viewing route.

Solution
 Relocate the waysides so that the information can be viewed from the boardwalk or another location that is accessible to all visitors.

Criticality
 Serious

Timeframe
 Short-term



LIHO_Circulation Path_LMK_246



LIHO_Circulation Path_LMK_248

Reference Standards and Guidelines: Harpers Ferry Center Resources for Interpretive Media Accessibility

VISITOR CIRCULATION

Location: "Politics in the Neighborhood" waysides
Corrective Action: Relocate waysides

Deficiency
 The wayside text is printed over an image and is difficult to read.

Solution
 Reprint the wayside so that the text is not over an image.

Criticality
 Minor

Timeframe
 Short-term



LIHO_Circulation Path_LMK_247

Reference Standards and Guidelines: Harpers Ferry Center Resources for Interpretive Media Accessibility

VISITOR CIRCULATION

Location: Waysides, various

Corrective Action: Reinstall or relocate waysides

Deficiency

Several waysides are positioned too low, on a sloped route, or do not have sufficient turning space.

Solution

Reinstall and relocate waysides as needed to comply with standards. Waysides should be positioned high enough so that the fence is not blocking the view for visitors of low stature or who use wheelchairs. Waysides should be moved to areas that have less than 2% slope and provide appropriate clear ground space (36x48") and turning space (60x60").

Criticality

Serious

Timeframe

Short-term



LIHO_Circulation Path_LMK_249



LIHO_Circulation Path_LMK_261

Reference Standards and Guidelines: Harpers Ferry Center Resources for Interpretive Media Accessibility, ABAS 304.1, 305.1

VISITOR CIRCULATION

Location: "Lincoln's Home Becomes a Shrine" wayside
Corrective Action: Redesign and reposition wayside

<p><u>Deficiency</u> The wayside panel is worn and not readable. The lower viewfinder cannot be accessed by a wheelchair user.</p>	<p><u>Solution</u> Reprint the wayside panel so that all the text is readable. Reposition the lower viewfinder so that there is an unobstructed approach and sufficient maneuvering clearance.</p>	<p><u>Criticality</u> Minor</p> <p><u>Timeframe</u> Short-term</p>	
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LIHO_Circulation Path_LMK_254

Reference Standards and Guidelines: Harpers Ferry Center Resources for Interpretive Media Accessibility, ABAAS 305.6, 305.7

Appendix A: Action Items by Criticality and Timeframe

Critical

Critical—Immediate

STAFF OFFICES

Location: Corneau House

Corrective Action: Relocate safety cabinet

Location: Sprigg House

Corrective Action: Replace and add handrail to the stairs

Location: Beedle House restroom

Corrective Action: Wrap pipes under sink

VISITOR CENTER

Location: Restroom alcove

Corrective Action: Place permanent object below defibrillator

VISITOR CIRCULATION

Location: Visitor Parking lot

Corrective Action: Replace accessible parking signs

Location: Visitor Parking lot

Corrective Action: Lower the park brochure holder

Location: Jackson St. Picnic Area

Corrective Action: Replace picnic tables

Location: Boardwalk, various locations

Corrective Action: Replace boards

Critical—Short-term

STAFF OFFICES

Location: Dean House

Corrective Action: Replace handrail

VISITOR CIRCULATION

Location: Jackson St. Picnic Area

Corrective Action: Replace grates

Serious

Serious—Immediate

STAFF OFFICES

Location: Dean House

Corrective Action: Add handrail to stairs

Location: Dean House restroom

Corrective Action: Relocate paper towel dispenser

Location: Beedle House

Corrective Action: Add handrails to stairs

VISITOR CENTER

Location: Men's restroom

Corrective Action: Place permanent object below paper towel dispensers

VISITOR CIRCULATION

Location: Pedestrian Entrance at Eighth St. and E Edwards St.

Corrective Action: Relocate wayside

Serious—Short-term

ARNOLD HOUSE

Location: Accessible ramp

Corrective Action: Replace handrail

Location: Accessible entrance stairs

Corrective Action: Replace handrails

Location: Main entrance stairs

Corrective Action: Replace handrails

Location: Arnold House exhibits

Corrective Action: Smooth sharp edges

DEAN HOUSE

Location: Exhibit Display Cases

Corrective Action: Remove sharp edges

Location: "Daily Life in 1860" wayside

Corrective Action: Adjust wayside angle

Location: Entry Stairs

Corrective Action: Replace handrails

LINCOLN HOME

Location: Lincoln Home Exterior

Corrective Action: Replace handrails

Location: Lincoln Home Kitchen

Corrective Action: Install new gate with 32" clear width

Location: Lincoln Home Kitchen

Corrective Action: Reinstall stove

Location: Lincoln Home Side Exit

Corrective Action: Add handrails

STAFF OFFICES

Location: Corneau House

Corrective Action: Widen entry gate

Location: Sprigg House restroom

Corrective Action: Lower objects to be within reach range

Location: Rosenwald House restroom

Corrective Action: Install grab bars

Location: Rosenwald House restroom

Corrective Action: Replace restroom vanity

Location: Beedle House restroom

Corrective Action: Install grab bars

Location: Beedle House restroom

Corrective Action: Lower mirror and relocate items above toilet

Location: Morse House

Corrective Action: Add edge protection to ramp

VISITOR CENTER

Location: Men's and Women's restrooms

Corrective Action: Lower hook and add D-ring door pull

Location: Men's restroom

Corrective Action: Increase water run time

Location: Restroom alcove

Corrective Action: Reinstall or replace the water fountain

VISITOR CIRCULATION

Location: "A Lot of Activism in the Neighborhood" wayside

Corrective Action: Relocate wayside

Location: Jenkins Lot Augmented Reality

Corrective Action: Implement tactile model

Location: "Economic and Ethnic Diversity in Springfield"; "Politics in the Neighborhood" waysides

Corrective Action: Relocate waysides

Location: Waysides, various

Corrective Action: Reinstall or relocate waysides

Serious—Mid-term

DEAN HOUSE

Location: Entry stairs

Corrective Action: Rebuild stairs

STAFF OFFICES

Location: Entry stairs

Corrective Action: Rebuild stairs

Location: Corneau House

Corrective Action: Add edge protection to ramp

Location: Beedle House restroom

Corrective Action: Widen restroom doorway

VISITOR CIRCULATION

Location: Visitor Parking lot

Corrective Action: Regrade/extend curb ramp

Serious—Long-term

VISITOR CIRCULATION

Location: Visitor Parking Lot

Corrective Action: Regrade accessible route ramp

Minor

Minor—Short-term

ARNOLD HOUSE

Location: Accessible entrance stairs

Corrective Action: Rebuild stairs

Location: Main entrance stairs

Corrective Action: Rebuild stairs

Location: Arnold House main entrance

Corrective Action: Replace doorknobs

DEAN HOUSE

Location: Interior doors

Corrective Action: Replace doorknobs

LINCOLN HOME

Location: Lincoln Home Backyard

Corrective Action: Replace stairs

STAFF OFFICES

Location: Morse House

Corrective Action: Lower alarm keypad

VISITOR CENTER

Location: Both entrances/exits

Corrective Action: Replace vending machine

Location: Main entrance stairs

Corrective Action: Rebuild stairs

Location: Arnold House main entrance

Corrective Action: Replace doorknobs

VISITOR CIRCULATION

Location: “Politics in the Neighborhood” waysides

Corrective Action: Relocate waysides

Location: “Lincoln’s Home Becomes a Shrine”
wayside

Corrective Action: Redesign and
reposition wayside



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