

Welcome to the AccessibilityOnline Webinar Series



A collaborative program between the
ADA National Network and the
U.S. Access Board



The Session is Scheduled to begin at 2:30pm Eastern Time
We will be testing sound quality periodically

Audio and Visual are provided through the on-line webinar system. This session is closed captioned. Individuals may also listen via telephone by dialing 1-712-432-3100 code 930098 (This is **not** a Toll Free number)

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www.AccessibilityOnline.org

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Listening to the Webinar



- The audio for today's webinar is being broadcast through your computer. Please make sure your speakers are turned on or your headphones are plugged in.
- You can control the audio broadcast via the Audio & Video panel. You can adjust the sound by "sliding" the sound bar left or right.
- If you are having sound quality problems check your audio controls by going through the Audio Wizard which is accessed by selecting the microphone icon on the Audio & Video panel



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Listening to the Webinar, *continued*

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Listening to the Webinar, *continued*

MOBILE Users (iPhone, iPad, or Android device and Kindle Fire HD)

Individuals may listen** to the session using the Blackboard Collaborate Mobile App (Available Free from the Apple Store, Google Play or Amazon)



**Closed Captioning is not visible via the Mobile App and limited accessibility for screen reader/Voiceover users

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Captioning

- Real-time captioning is provided during this webinar.
- The caption screen can be accessed by choosing the  icon in the Audio & Video panel. ↓



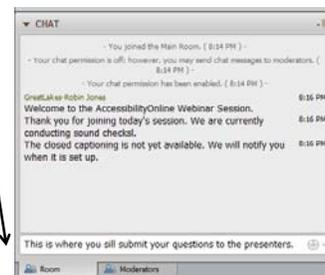
- Once selected you will have the option to resize the captioning window, change the font size and save the transcript.

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Submitting Questions

- You may type and submit questions in the Chat Area Text Box or press Control-M and enter text in the Chat Area
- If you are connected via a mobile device you may submit questions in the chat area within the App
- If you are listening by phone and not logged in to the webinar, you may ask questions by emailing them to webinars@accessibilityonline.org



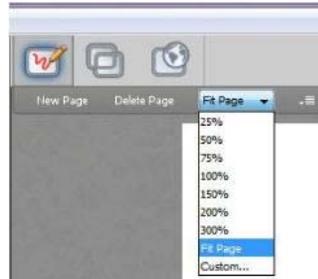
Please note: This webinar is being recorded and can be accessed on the AccessibilityOnline website at www.accessibilityonline.org/Archives within 24 hours after the conclusion of the session.

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Customize Your View

- Resize the Whiteboard where the Presentation slides are shown to make it smaller or larger by choosing from the drop down menu located above and to the left of the whiteboard. The default is “fit page”



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Customize Your View *continued*

- Resize/Reposition the Chat, Participant and Audio & Video panels by “detaching” and using your mouse to reposition or “stretch/shrink”. Each panel may be detached using the  icon in the upper right corner of each panel.

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Setting Preferences

- Depending on your system settings you may receive visual and audible notifications when individuals enter/leave the webinar room or when other actions are taken by participants. This can be distracting.
- To turn off notifications (audible/visual)
 - Select “Edit” from the tool bar at the top of your screen
 - From the drop down menu select “Preferences”
 - Scroll down to “General”
 - select “Audible Notifications” Uncheck anything you don’t want to receive and “apply”
 - Select “Visual Notifications” Uncheck anything you don’t want to receive and “apply”
 - For Screen Reader User – Set preferences through the setting options within the Activity Window (Ctrl+slash opens the activity window)

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Technical Assistance



- If you experience any technical difficulties during the webinar:
 1. Send a private chat message to the host by double clicking “Great Lakes ADA” in the participant list. A tab titled “Great Lakes ADA” will appear in the chat panel. Type your comment in the text box and “enter” (Keyboard - F6, Arrow up or down to locate “Great Lakes ADA” and select to send a message); or
 2. Email webinars@accessibilityonline.org; or
 3. Call 877-232-1990 (V/TTY)

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Accessible Museum Exhibits

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Presenters U.S. Access Board



Marsha Mazz



Michele Hartley

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Session Agenda

- **Communication Barriers**
 - Addressed by the standards
 - Addressed by the DOJ ADA Regulations
- **Media accessibility highlights from the National Park Service (NPS)**

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Communications Barriers Addressed by the ADA Standards

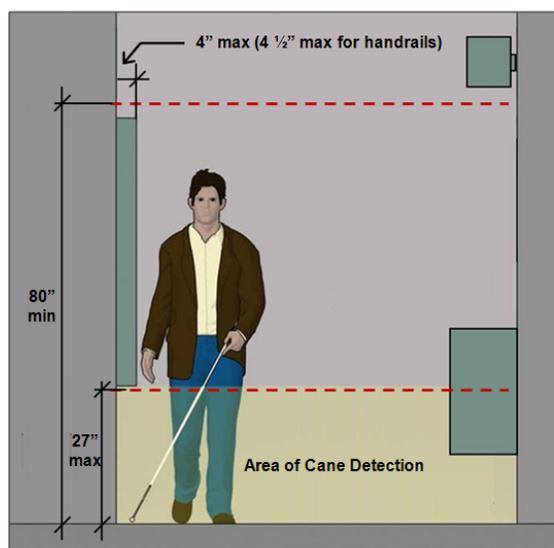
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Protruding Objects

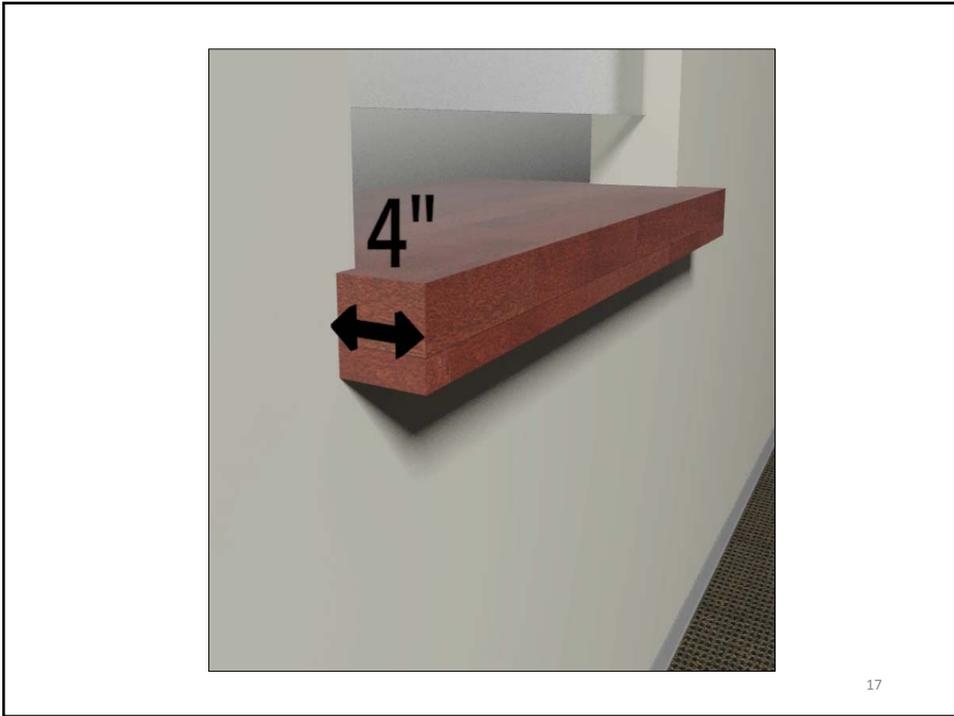
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Protruding Objects

ALL circulation paths, *not* just Accessible Routes

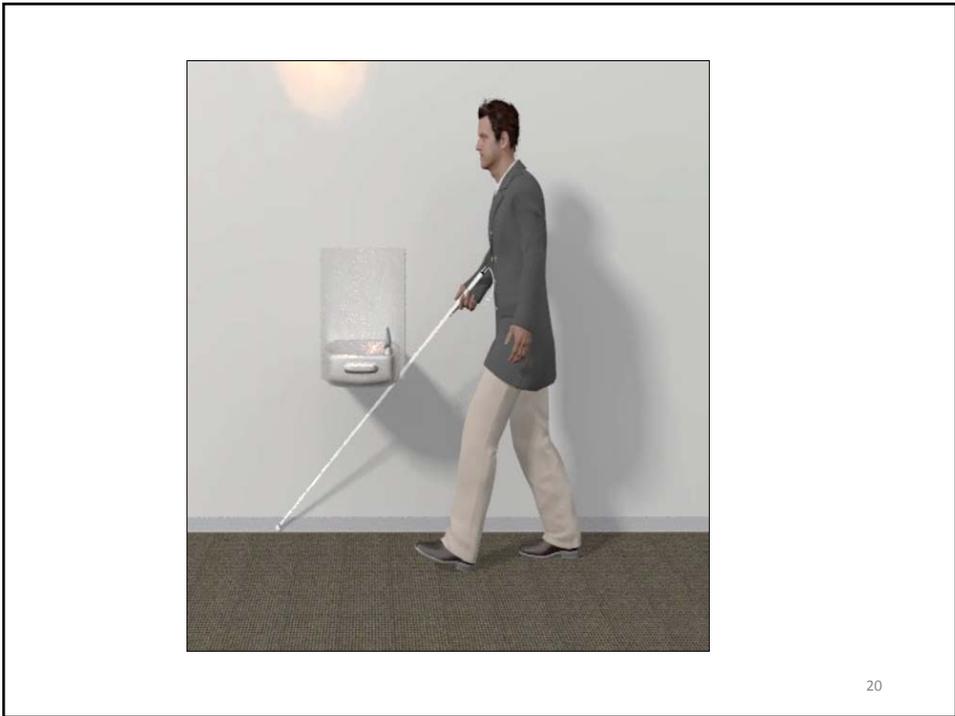


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4" Measured from the Circulation Path





Cane Detection Barriers Should Not Look or Feel Like Steps



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A More Effective Barrier



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New Construction and Alterations Cane detection barriers must be permanent



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Get the Point?

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Maintenance of Accessible Features – DOJ Regulations



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Signs (not exhibit labels and descriptions)

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Signs: Scoping (216)

Certain pictograms and directional signs are required; otherwise, standards apply only to signs where provided

Both interior and exterior signs are covered

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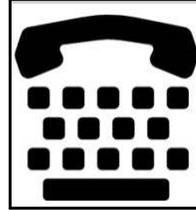
Exempt Signs

- **Building addresses**
- **Company names/logos**
- **Occupant names**
- **Directories and menus**
- **Temporary signs (7 days or less)**



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Required Designations



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ISA

Entrances and toilet/bathrooms:

- ISA label at accessible locations
- Directional signs at inaccessible locations



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TTY Signs

Used to label TTY-equipped phones



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Volume Control

All public phones
must have volume
control and be
labelled



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Assistive Listening

Required for Assembly Areas



Sign required at each assembly area or ticket office/ window

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Where Loops are Provided



HEARING LOOP INSTALLED
Switch hearing aid to T-coil
www.hearingloop.org

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Informational and Directional Signs Visual Access Only

- **Finish (non-glare)**
- **Contrast (light-on dark or dark-on-light)**
- **Characters (style, proportion, height)**
- **Spacing (character, line)**
- **Upper and lower case encouraged**

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Visual Access

**UPPER AND LOWER
CASE ARE OFTEN
EASIER TO READ THAN
ALL UPPER CASE**

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Signs Designating Permanent Rooms and Spaces Must be Tactile



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Tactile Signs

- **Raised characters (uppercase letters)**
- **Grade 2 Braille**
- **Visual access (finish and contrast)**
- **Pictograms with descriptors where they designate rooms or spaces**

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Tactile Signs

Scoping (interior & exterior)

- Restroom labels (at entry)
- Room numbers/ names (not likely to change)
- Floor levels
- Exit access/discharge
- Areas of refuge

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Assistive Listening

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Assistive Listening Systems (ALS)

- Bring sound directly from the microphone to the hearing aid or ear without picking-up sounds in the intervening space
- Poor acoustics can make ALS even more necessary



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TTYs

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TTYs at Public Pay Phones

- Both TTYs and public pay phones are rapidly disappearing
- Try a videophone to allow sign language users to communicate in their own language



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Alarms

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Visible Fire Alarms

- Notify all occupants of an emergency



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Communications Barriers Addressed by the DOJ ADA Regulations

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Current DOJ Regulations

State and Local Governments (28 CFR part 35)

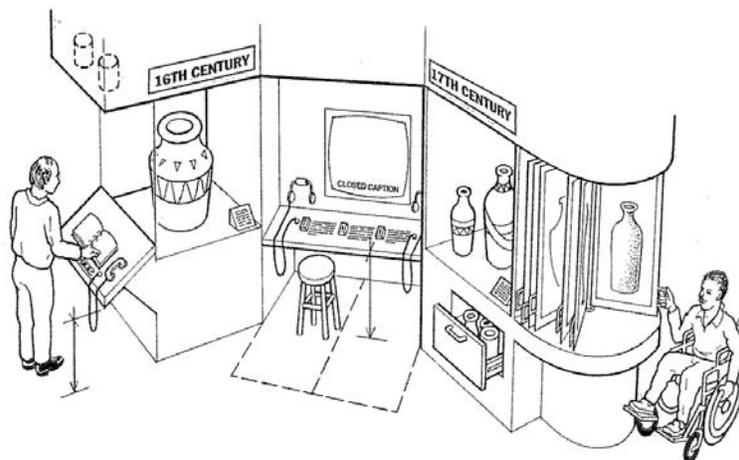
- Subpart D Program Access (Subpart D)
- Subpart E Communication

Public Accommodations (28 CFR part 36)

- 36.302 Modifications in policies, practices, or procedures.
- 36.303 Auxiliary aids and services.
- 36.304 Removal of barriers.

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Effective Communication Auxiliary Aids and Services



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Accessible Content



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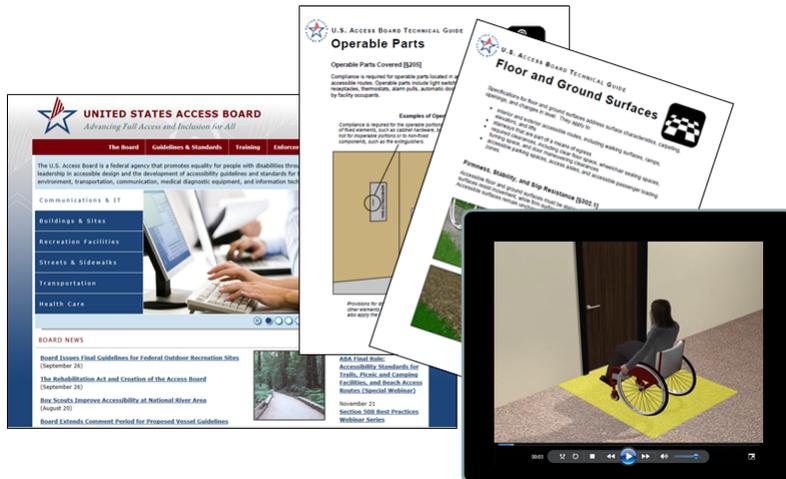
DOJ ANPRM on Equipment and Furniture

Whether a type of equipment or furniture is fixed or not is generally not relevant from the perspective of the user. For example, an ATM or vending machine that is fixed is used for the same purpose and in the same manner as an equivalent ATM or vending machine that is not fixed. To the extent that ADA standards apply requirements for fixed equipment and furniture, the Department will look to those standards for guidance on accessibility standards for equipment and furniture that are not fixed.

(IV B. Legal foundation for equipment and furniture coverage)

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Technical Guides on the Standards Available on the Board's website



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National Park Service
U.S. Department of the Interior

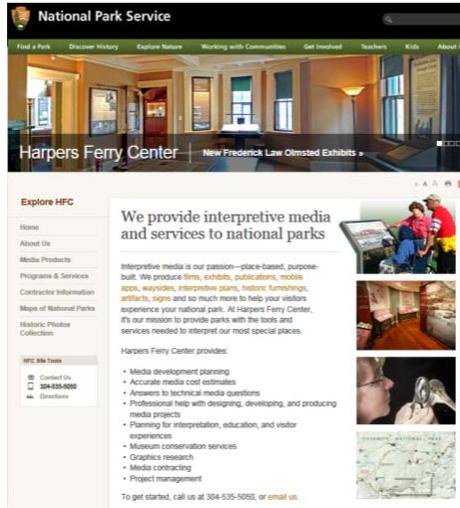


Media Accessibility Highlights An NPS Sampling

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Harpers Ferry Center

<http://www.nps.gov/hfc/>



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Physical and Communication Access

- They are intricately connected.
- If you can physically access a facility or exhibit, but cannot access the content, we've missed the mark.

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Videos

- Captions (open caps at sites/closed caps online)
- Assistive Listening
- Audio Description
- Note when videos don't have sound



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Effective Audio Description and Captions

Audio Description

Plan and produce programs to leave enough space to describe the visual information critical to understanding the content.

Captions

Design the real estate on screen to ensure that text, other important visual information, and the captions, do not interfere with one another. Include important audio cues in addition to the narration.

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Audio Programs

- Synchronized captions
- Handsets w/ volume control, automatic volume reset, t-coil compatible
- Number selections in text and braille



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Audio Programs Continued

Captions vs. Scripts

- Location options, access to electrical wiring, and the amount of audio content matter
- Regardless, captions and scripts should be placed at the exhibit program site (signage is also helpful)



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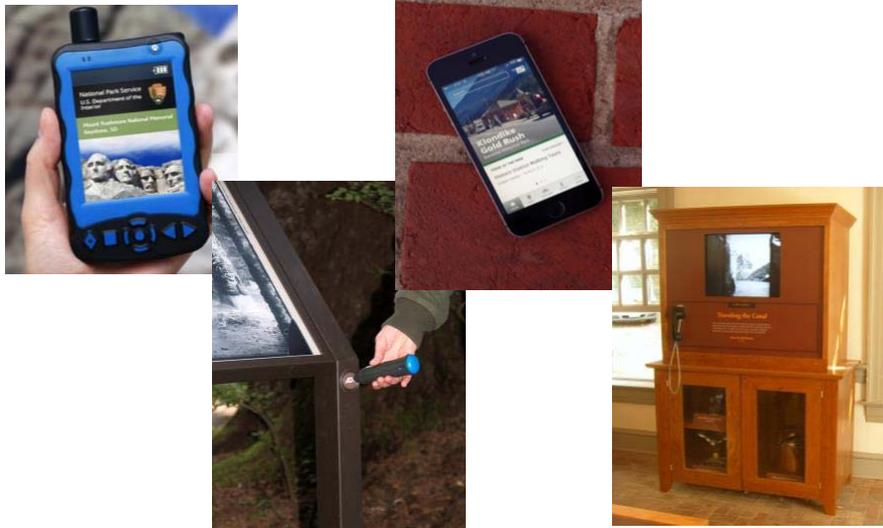
Exhibit Audio Description

- Provides access to text and important visual information
- Provides orientation and wayfinding
- Is used in conjunction with other methods such as tactile models



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Audio Description Playback



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Waysides and Audio Description



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Exhibit Audio Description Script Example

Audio Description Script
History of Mammoth Cave Mapping Interactive

page 2 of 16
As Recorded - 6/15/12



On this main menu screen, the 5 maps are represented by vertical sections, which show, at the top, a small portion of the map, and below, an engraving or photograph along with the name of the map and its year.

When exploring each map, there's a contemporary image of Mammoth Cave as well as a close-up of the Rotunda, a large cave room that was used for processing as part of the saltpeter mining operation in the early 1800s.

From this main menu, you may choose between the 5 maps by pressing Button 2 to move forward through the choices or pressing Button 3 to move backwards through the choices. When you hear the name and date of the map you would like to explore, press Button 1.

AD-3: SCREEN #2 - MAIN MENU - EYE-DRAUGHT, 1810

To choose the Eye-Draught map from 1810, press Button 1.

AD-4: SCREEN #2 - MAIN MENU - LEE, 1835

Bold = unspoken
Plain Text = description
Missing or Questioned Information
Italic = reading from text, captions, quotations, signs, etc.
Translation Needed

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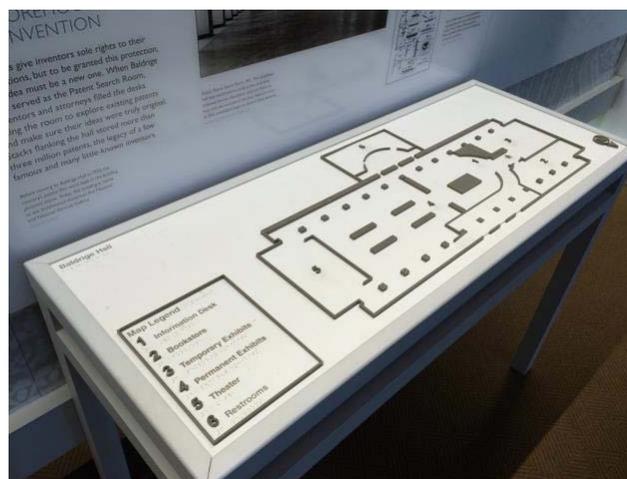
Orientation to Exhibits and the Site

Raised-Line
Maps



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Approaches to Maps



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Exhibits, Tactiles, and Glass Cases

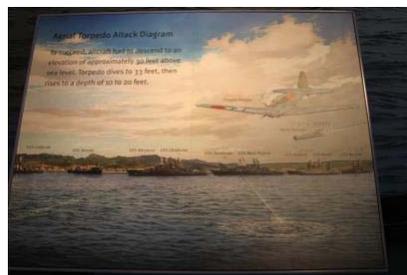


“The tactile model of the USS Arizona Memorial was excellent. [I] had always heard that there was a turret exposed above the water and it was nice to be able to see that part and where it was in relationship to the Memorial structure over the entire submerged ship.”

User Feedback, 2014

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Tactile Maps and Models



“The attack airplane sound at the entry of the attack museum was very good--sounded like it was passing through the space and [you]could hear the distinct splash sounds of something diving into the water. The tactile airplane was also good as well as the mini anti-aircraft cannons.”

User Feedback, 2014

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One Size Doesn't Fit All



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Different Shapes and Forms



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Bas Relief: Does it Work?



National Center on Accessibility's project in cooperation with the U.S. Access Board on Exhibit Design Related to Low Vision and Blindness
<http://www.ncaonline.org/resources/articles/exhibitdesignlowvision.shtml>

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Redundancy is Good!



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Outdoor Tactiles Redundancy is Interesting!



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Redundancy Provides Reinforcement! Touchscreen Interactives



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The Result/Inclusive Design

Universal Design =

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.

<https://www.ncsu.edu/ncsu/design/cud/>

The Principles of Universal Design



<p>Equitable Use The design is useful and marketable to people with diverse abilities.</p> <ol style="list-style-type: none"> Provide the same means of use for all users identical whenever possible; equivalent when not. Avoid segregating or stigmatizing any users. Provisions for privacy, security, and safety should be equally available to all users. Make the design appealing to all users. 	<p>Flexibility in Use The design accommodates a wide range of individual preferences and abilities.</p> <ol style="list-style-type: none"> Provide choice in methods of use. Accommodate right- or left-handed access and use. Facilitate the user's accuracy and precision. Provide adaptability to the user's pace. 	<p>Simple and Intuitive Use Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or education level.</p> <ol style="list-style-type: none"> Eliminate unnecessary complexity. Be consistent with user expectations and intuition. Accommodate a wide range of literacy and language skills. Arrange information consistent with its importance. Provide effective prompting and feedback during and after task completion.
<p>Perceptible Information The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.</p> <ol style="list-style-type: none"> Use different modes (pictorial, verbal, tactile) for redundant presentation of essential information. Provide adequate contrast between essential information and its surroundings. Maximize "legibility" of essential information. Differentiate elements in ways that can be described (i.e., make it easy to give instruction or direction). Provide compatibility with a variety of techniques or devices used by people with sensory limitations. 	<p>Tolerance for Error The design minimizes hazards and the adverse consequences of accidental or unintended actions.</p> <ol style="list-style-type: none"> Arrange elements to minimize hazards and errors; most used elements, most accessible hazardous elements eliminated, isolated, or shielded. Provide warnings of hazards and errors. Provide fail safe features. Discourage unproductive action in tasks that require vigilance. 	<p>Low Physical Effort The design can be used efficiently and comfortably and with a minimum of fatigue.</p> <ol style="list-style-type: none"> Allow user to maintain a neutral body position. Use reasonable operating forces. Minimize repetitive actions. Minimize sustained physical effort.
<p>Size and Space for Approach and Use Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user's body size, posture, or mobility.</p> <ol style="list-style-type: none"> Provide a clear line of sight to important elements for one seated or standing user. Make reach to all components comfortable for any seated or standing user. Accommodate variations in hand and grip size. Provide adequate space for the use of assistive devices or personal assistance. 		

Effective Communication Doesn't Stop with Accessible Exhibits

- Assistive listening and sign language interpretation for docent-led tours
- Alternate formats of the printed materials provided at or about your exhibits
- Regular and reoccurring training for staff
- SOPs for the maintenance of equipment

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Advertising Accessibility

- On your website
- Public outreach
- At your site



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Options & Enjoyment



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“Good Design Enables, Bad Design Disables”

Design for all Europe: <http://dfaeurope.eu/>



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The Stories We Tell



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Getting There

- Plan early and often
- Don't approach access as an add on
- Approach access as an opportunity to create dynamic, universally-designed multisensory experiences for a multitude of diverse users

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Part and Parcel



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Guidelines and Best Practices www.nps.gov/hfc/accessibility/index.htm



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National Park Service Harpers Ferry Center

Michele Hartley
michele_hartley@nps.gov
304-535-6083

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Questions?

**You may type and submit questions in the
Chat Area Text Box or press Control-M
and enter text in the Chat Area**

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U.S. Access Board



(800) 872-2253 (voice)

(800) 993-2822 (TTY)

E-mail: ta@access-board.gov

www.access-board.gov

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**Thank you for participating
in today's webinar**



Next session:

"Protruding Objects"

January 7, 2016

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Continuing Education



AIA Provider Number: I017
LA CES Provider Name: Great Lakes ADA Center
AICP Provider Name: Great Lakes ADA Center



Course Title: Accessible Museum Exhibits
Course Number: GL20151203
Date: December 3, 2015



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Questions will be addressed at the conclusion of this presentation.

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