



Web Accessibility Evaluation: www.Unidescription.org
February, 2019

Background

The following is a Section 508 and WCAG 2.1 AA comprehensive accessibility evaluation conducted by the American Council of the Blind for the site www.Unidescription.org using the WebAIM's WCAG 2 Checklist <https://webaim.org/standards/wcag/checklist>. This checklist was designed as a tool “for implementing accessibility principles and techniques for those seeking WCAG conformance.” It was specifically designed to identify accessibility issues related to web pages and mobile apps and as such is not inclusive of all aspects of the WCAG 2.1 broad applicability.

The evaluation includes consideration of four broad elements, whether the site is: perceivable; Operable; Understandable; and Robust.

Tools used to evaluate the site included: Wave Accessibility Evaluation Tool: <http://wave.webaim.org/>; WebAim Contrast Checker: <https://webaim.org/resources/contrastchecker>; WCAG 2 Checklist: <https://webaim.org/standards/wcag/checklist>. The site was also fully user tested using a variety of browsers and assistive technologies.

Perceivable

Definition: Web content is made available to the senses - sight, hearing, and/or touch

Guideline 1.1 Text Alternatives: Provide text alternatives for any non-text content *Pass

1.1.1 Non-text Content (Level A)

- All images, form image buttons, and image map hot spots have appropriate, equivalent alternative text.
- Images that do not convey content, are decorative, or contain content that is already conveyed in text are given null alt text (alt="") or implemented as CSS backgrounds.
- All linked images have descriptive alternative text.
- Equivalent alternatives to complex images are provided in context or on a separate linked page.
- Form buttons have a descriptive value.
- Form inputs have associated text labels.
- Embedded multimedia is identified via accessible text.
- Frames and iframes are appropriately titled.

Observations: Consistent text for all graphical images are present throughout the site which meets the requirement. Evaluators and evaluation tools noted that the description on the home page for the photos of users at Muir Woods is long, includes redundant text from the caption, and might be better represented in the caption rather than alternative text. It could also be a LongDesc keeping the description on the graphic specific to what is shown. Helpful to remember that users will encounter these graphics every time they hit the page so both brevity and clarity are important.

Guideline 1.2 Time-based Media: Provide alternatives for time-based media *Pass

NOTE: If the audio or video is designated as an alternative to web content (e.g., an audio or sign language version of a web page, for example), then the web content itself serves as the alternative.

1.2.1 Prerecorded Audio-only and Video-only (Level A)

- A descriptive text transcript that includes relevant auditory content is provided for non-live audio-only (audio podcasts, MP3 files, etc.).
- A descriptive text transcript or audio description is provided for non-live video-only (e.g., video that has no audio track), unless the video is decorative.

Observations: Presentation of audio content is in fact the primary aim of this site which supports the development and dissemination of audio described content. Each audio file includes a supporting written transcription of the text. This is significant in accommodating users who have hearing loss and also users who may have difficulty comprehending the poor speech quality. It is integral to the site's mission and is done well.

1.2.2 Captions (Prerecorded) (Level A) (N/A)

- Synchronized captions are provided for non-live video (YouTube videos, etc.).

1.2.3 Audio Description or Media Alternative (Prerecorded) (Level A) (N/A)

- A descriptive text transcript OR audio description track is provided for non-live video.

NOTE: Only required if the video conveys content visually that is not presented via the audio track.

1.2.4 Captions (Live) (Level AA) (N/A)

- Synchronized captions are provided for all live multimedia that contains audio (audio-only broadcasts, web casts, video conferences, etc.)

1.2.5 Audio Description (Prerecorded) (Level AA) (N/A)

- Audio descriptions are provided for all video content

NOTE: Only required if the video conveys content visually that is not presented via the audio track. While not required at level AA, WebAIM recommends descriptive transcripts instead of or in addition to audio descriptions for optimal accessibility.

1.2.6 Sign Language (Prerecorded) (Level AAA)

- A sign language video is provided for all media content that contains audio.

Observations: This level AAA recommendation, is not required for this site but would be encouraged when resources permit. Adding an ASL track to the descriptions would open up access to the text of the brochures for deaf individuals whose primary language is not English.

1.2.7 Extended Audio Description (Prerecorded) (Level AAA) (N/A)

- When audio description cannot be added to video due to audio timing (e.g., insufficient pauses in the audio), an alternative version of the video with pauses that allow audio descriptions is provided.

1.2.8 Media Alternative (Prerecorded) (Level AAA) (N/A)

- A descriptive text transcript is provided for all pre-recorded media that has a video track. For optimal accessibility, WebAIM strongly recommends transcripts for all multimedia content.

1.2.9 Audio-only (Live) (Level AAA) N/A

- A descriptive text transcript (e.g., the script of the live audio) is provided for all live content that has audio.

Guideline 1.3 Adaptable: Create content that can be presented in different ways (for example simpler layout) without losing information or structure *Pass

1.3.1 Info and Relationships (Level A)

- Semantic markup is used to designate headings (<h1>), regions/landmarks, lists (, , and <dl>), emphasized or special text (, <code>, <abbr>, <blockquote>, for example), etc. Semantic markup is used appropriately.
- Tables are used for tabular data and data cells are associated with their headers. Data table captions, if present, are associated to data tables.
- Text labels are associated with form input elements. Related form elements are grouped with fieldset/legend. ARIA labelling may be used when standard HTML is insufficient.

Observations: Evaluation tools identified one heading level 2 on the Home page: "To Create Digital Audio Spaces and More Accessible Places" as semantically incorrect because it is not associated with the page infrastructure. Generally, however, the site exhibits good use of all markup and creates a logical infrastructure for the pages.

1.3.2 Meaningful Sequence (Level A)

- The reading and navigation order (determined by code order) is logical and intuitive.

Observations: The sequence is easy to navigate and is both predictable and logical.

1.3.3 Sensory Characteristics (Level A) (N/A)

- Instructions do not rely upon shape, size, or visual location (e.g., "Click the square icon to continue" or "Instructions are in the right-hand column").
- Instructions do not rely upon sound (e.g., "A beeping sound indicates you may continue.").

1.3.4 Orientation (WCAG 2.1 Level AA)

- Orientation of web content is not restricted to only portrait or landscape, unless a specific orientation is necessary.

Observations: This is particularly important for the associated iOS and Android apps. The site makes no restriction on how content is displayed regardless of orientation or screen resolution.

1.3.5 Identify Input Purpose (WCAG 2.1 Level AA)

- Input fields that collect certain types of user information have an appropriate autocomplete attribute defined.

Observations: This site has a registration form which correctly supports autocomplete for fields such as email.

1.3.6 Identify Purpose (WCAG 2.1 Level AAA)

- HTML5 regions or ARIA landmarks are used to identify page regions.
- ARIA is used, where appropriate, to enhance HTML semantics to better identify the purpose of interface components.

Observations: This AAA requirement is implemented in a limited way on this site. The site is not complex and would not necessarily benefit from additional markup at this time.

Guideline 1.4 Distinguishable: Make it easier for users to see and hear content including separating foreground from background *Pass

1.4.1 Use of Color (Level A)

- Color is not used as the sole method of conveying content or distinguishing visual elements.
- Color alone is not used to distinguish links from surrounding text unless the contrast ratio between the link and the surrounding text is at least 3:1 and an additional distinction (e.g., it becomes underlined) is provided when the link is hovered over and receives focus.

Observation: The purpose of this site is delivery of audio content. Color is not significant to the presentation.

1.4.2 Audio Control (Level A) (N/A)

- A mechanism is provided to stop, pause, mute, or adjust volume for audio that automatically plays on a page for more than 3 seconds.

1.4.3 Contrast (Minimum) (Level AA)

- Text and images of text have a contrast ratio of at least 4.5:1.
- Large text - at least 18 point (typically 24px) or 14 point (typically 18.66px) and bold - has a contrast ratio of at least 3:1.

Observations: Evaluation tools initially identified consistent errors resulting from very low contrast between foreground and background colors. Adequate contrast is necessary for all users, especially

users with low vision. This has been adequately corrected to increase the contrast between the foreground (text) color and the background color.

1.4.4 Resize text (Level AA)

- The page is readable and functional when the page is zoomed to 200%. NOTE: 1.4.10 (below) introduces a much higher requirement for zoomed content.

Observations: All pages responded appropriately when rotated or zoomed.

1.4.5 Images of Text (Level AA) (N/A)

- If the same visual presentation can be made using text alone, an image is not used to present that text.

1.4.6 Contrast (Enhanced) (Level AAA)

- Text and images of text have a contrast ratio of at least 7:1.
- Large text - at least 18 point (typically 24px) or 14 point (typically 18.66px) bold - has a contrast ratio of at least 4.5:1.

1.4.7 Low or No Background Audio (Level AAA)

- Audio with speech has no or very low background noise so the speech is easily distinguished.

Observations: There are no background sounds associated with any of the audio clips on this site.

1.4.8 Visual Presentation (Level AAA) (N/A)

- Blocks of text over one sentence in length:
- Are no more than 80 characters wide.
- Are NOT fully justified (aligned to both the left and the right margins).
- Have adequate line spacing (at least 1/2 the height of the text) and paragraph spacing (1.5 times line spacing).
- Have a specified foreground and background color. These can be applied to specific elements or to the entire page using CSS (and thus inherited by all other elements).
- Do NOT require horizontal scrolling when the text size is doubled.

1.4.9 Images of Text (No Exception) (Level AAA) (N/A)

- Text is used within an image only for decoration (image does not convey content) OR when the information cannot be presented with text alone.

1.4.10 Reflow (WCAG 2.1 Level AA)

- No loss of content or functionality occurs and horizontal scrolling is avoided when content is presented at a width of 320 pixels. This requires responsive design for most web sites. This is best tested by setting the browser window to 1280 pixels wide and then zooming the page content to 400%.
- Content that requires horizontal scrolling, such as data tables, complex images (such as maps and charts), toolbars, etc. are exempted.

Observations: The site reflows properly.

1.4.11 Non-text Contrast (WCAG 2.1 Level AA) (N/A)

- A contrast ratio of at least 3:1 is present for differentiating graphical objects (such as icons and components of charts or graphs) and author-customized interface components (such as buttons, form controls, and focus indicators/outlines).
- The various states (focus, hover, active, etc.) of author-customized interactive components must all present 3:1 contrast.

1.4.12 Text Spacing (WCAG 2.1 Level AA)

- No loss of content or functionality occurs when the user adapts text line height/spacing to 1.5 times the font size, paragraph spacing to 2 times the font size, word spacing to .16 times the font size, and letter spacing to .12 times the font size. This is best supported by avoiding pixel height definitions for elements that contain text.

Observations: Spacing and font adjustments were successful.

1.4.13 Content on Hover or Focus (WCAG 2.1 Level AA) (N/A)

- When additional content is presented on hover or keyboard focus:
- The newly revealed content can be dismissed (generally via the Esc key) without moving the pointer or keyboard focus, unless the content presents an input error or does not obscure or interfere with other page content.
- The pointer can be moved to the new content without the content disappearing.
- The new content must remain visible until the pointer or keyboard focus is moved away from the triggering control, the new content is dismissed, or the new content is no longer relevant.

Operable

Definition: Interface forms, controls, and navigation are operable

Guideline 2.1 Keyboard Accessible: Make all functionality available from a keyboard *Pass

Observations: The site is fully keyboard navigable and meets all applicable requirements for all subsections.

2.1.1 Keyboard (Level A)

- All page functionality is available using the keyboard, unless the functionality cannot be accomplished in any known way using a keyboard (e.g., free hand drawing).
- Page-specified shortcut keys and accesskeys (accesskey should typically be avoided) do not conflict with existing browser and screen reader shortcuts.

2.1.2 No Keyboard Trap (Level A)

- Keyboard focus is never locked or trapped at one particular page element. The user can navigate to and from all navigable page elements using only a keyboard.

2.1.3 Keyboard (No Exception) (Level AAA)

- All page functionality is available using the keyboard.

2.1.4 Character Key Shortcuts (WCAG 2.1 Level A) (N/A)

- If a keyboard shortcut uses printable character keys, then the user must be able to disable the key command, change the defined key to a non-printable key (Ctrl, Alt, etc.), or only activate the shortcut when an associated interface component or button is focused.

Guideline 2.2 Enough Time: Provide users enough time to read and use content *Pass

2.2.1 Timing Adjustable (Level A) (N/A)

- If a page or application has a time limit, the user is given options to turn off, adjust, or extend that time limit. This is not a requirement for real-time events (e.g., an auction), where the time limit is absolutely required, or if the time limit is longer than 20 hours.

2.2.2 Pause, Stop, Hide (Level A) (N/A)

- Automatically moving, blinking, or scrolling content (such as carousels, marquees, or animations) that lasts longer than 5 seconds can be paused, stopped, or hidden by the user.
- Automatically updating content (e.g., a dynamically-updating news ticker, chat messages, etc.) can be paused, stopped, or hidden by the user or the user can manually control the timing of the updates.

2.2.3 No Timing (Level AAA)

- The content and functionality have no time limits or constraints.

Observations: There are no timing requirements on the site.

2.2.4 Interruptions (Level AAA) (N/A)

- Interruptions (alerts, page updates, etc.) can be postponed or suppressed by the user.

2.2.5 Re-authenticating (Level AAA) (N/A)

- If an authentication session expires, the user can re-authenticate and continue the activity without losing any data from the current page.

2.2.6 Timeouts (WCAG 2.1 Level AAA) (N/A)

- Users must be warned of any timeout that could result in data loss, unless the data is preserved for longer than 20 hours of user inactivity.

Guideline 2.3 Seizures and Physical Reactions: Do not design content in a way that is known to cause seizures or physical reactions. *Pass

2.3.1 Three Flashes or Below Threshold (Level A) (N/A)

- No page content flashes more than 3 times per second unless that flashing content is sufficiently small and the flashes are of low contrast and do not contain too much red. (See general flash and red flash thresholds)

2.3.2 Three Flashes (Level AAA) (N/A)

- No page content flashes more than 3 times per second.

2.3.3 Animation from Interactions (WCAG 2.1 Level AAA) (N/A)

- Users can disable non-essential animation and movement that is triggered by user interaction.

Guideline 2.4 Navigable: Provide ways to help users navigate, find content, and determine where they are. *Pass

2.4.1 Bypass Blocks (Level A)

- A link is provided to skip navigation and other page elements that are repeated across web pages.
- A proper heading structure and/or identification of page regions/landmarks may be considered a sufficient technique. Because navigating by headings or regions is not supported in most browsers, WebAIM recommends a "skip" link (in addition to headings and regions) to best support sighted keyboard users.

Observations: Skip Nav links are inconsistently present. There is one on the Academy home page, for example, but not on the site home page. The structure is visually apparent using a list, but sighted keyboard users would benefit from consistent skip nav links.

2.4.2 Page Titled (Level A)

- The web page has a descriptive and informative page title.

Observations: All pages have titles that are consistent with their content.

2.4.3 Focus Order (Level A)

- The navigation order of links, form elements, etc. is logical and intuitive.

Observations: All links are in logical order.

2.4.4 Link Purpose (In Context) (Level A)

- The purpose of each link (or form image button or image map hotspot) can be determined from the link text alone, or from the link text and its context (e.g., surrounding text, list item, table cell, or table headers).
- Links (or form image buttons) with the same text that go to different locations are readily distinguishable.

Observations: The purpose of links and other elements is obvious from the labels and from the context.

2.4.5 Multiple Ways (Level AA)

- Multiple ways are available to find other web pages on the site - at least two of: a list of related pages, table of contents, site map, site search, or list of all available web pages.

Observations: The main site always offers a way to return to the Home page. However, if you venture into the blog or into the forum you may become stuck and it is not intuitive how to return to the main

site. These appear to be third party services and the best way to accommodate returning might be to warn the visitor from the home page and to indicate that these links open in a separate window.

2.4.6 Headings and Labels (Level AA)

- Page headings and labels for form and interactive controls are informative. Avoid duplicating heading (e.g., "More Details") or label text (e.g., "First Name") unless the structure provides adequate differentiation between them.

Observations: Form and interactive controls are consistent and intuitive.

2.4.7 Focus Visible (Level AA)

- It is visually apparent which page element has the current keyboard focus (i.e., as you tab through the page, you can see where you are).

Observations: Tabbing consistently indicates visual focus.

2.4.8 Location (Level AAA)

- If a web page is part of a sequence of pages or within a complex site structure, an indication of the current page location is provided, for example, through breadcrumbs or specifying the current step in a sequence (e.g., "Step 2 of 5 - Shipping Address").

Observations: As the site becomes more complex over time, doing this would be advisable even as a AAA requirement but it is currently not really applicable.

2.4.9 Link Purpose (Link Only) (Level AAA)

- The purpose of each link (or form image button or image map hotspot) can be determined from the link text alone.
- There are no links (or form image buttons) with the same text that go to different locations.

Observations: All link and interactive element text is intuitive.

2.4.10 Section Headings (Level AAA)

- Beyond providing an overall document structure, individual sections of content are designated using headings, where appropriate.

Observations: Section headings are not implemented. Useful consideration as the site expands.

Guideline 2.5 Input Modalities: Make it easier for users to operate functionality through various inputs beyond keyboard. *Pass

2.5.1 Pointer Gestures (WCAG 2.1 Level A) (N/A)

- If multipoint or path-based gestures (such as pinching, swiping, or dragging across the screen) are not essential to the functionality, then the functionality can also be performed with a single point activation (such as activating a button).

2.5.2 Pointer Cancellation (WCAG 2.1 Level A) (N/A)

- To help avoid inadvertent activation of controls, avoid non-essential down-event (e.g., onmousedown) activation when clicking, tapping, or long pressing the screen. Use onclick, onmouseup, or similar instead. If onmouseup (or similar) is used, you must provide a mechanism to abort or undo the action performed.

2.5.3 Label in Name (WCAG 2.1 Level A) (N/A)

- If an interface component (link, button, etc.) presents text (or images of text), the accessible name (label, alternative text, aria-label, etc.) for that component must include the visible text.

2.5.4 Motion Actuation (WCAG 2.1 Level A) (N/A)

- Functionality that is triggered by moving the device (such as shaking or panning a mobile device) or by user movement (such as waving to a camera) can be disabled and equivalent functionality is provided via standard controls like buttons.

2.5.5 Target Size (WCAG 2.1 Level AAA) (N/A)

- Clickable targets are at least 44 by 44 pixels in size unless an alternative target of that size is provided, the target is inline (such as a link within a sentence), the target is not author-modified (such as a default checkbox), or the small target size is essential to the functionality.

2.5.6 Concurrent Input Mechanisms (WCAG 2.1 Level AAA)

- Content does not restrict input to a specific modality, such as touch-only or keyboard-only, but must support alternative inputs (such as using a keyboard on a mobile device).

Observations: No restrictions are placed on alternative input devices on the web site or in the apps.

Understandable

Definition: Information and the operation of user interface must be understandable.

Guideline 3.1 Readable: Make text content readable and understandable *Pass

3.1.1 Language of Page (Level A)

- The language of the page is identified using the HTML lang attribute (e.g., <html lang="en">).

Observations: Page language is identified.

3.1.2 Language of Parts (Level AA) (N/A)

- The language of page content that is in a different language is identified using the lang attribute (e.g., <blockquote lang="es">).

3.1.3 Unusual Words (Level AAA) (N/A)

- Words that may be ambiguous, unfamiliar, or used in a very specific way are defined through adjacent text, a definition list, a glossary, or other suitable method.

3.1.4 Abbreviations (Level AAA) (N/A)

- The meaning of an unfamiliar abbreviation is provided by expanding it the first time it is used, using the <abbr> element, or linking to a definition or glossary.

3.1.5 Reading Level (Level AAA) (N/A)

- A more understandable alternative is provided for content that is more advanced than can be reasonably read by a person with roughly 9 years of primary education.

3.1.6 Pronunciation (Level AAA) (N/A)

- If the pronunciation of a word is vital to understanding that word, its pronunciation is provided immediately following the word or via a link or glossary.

Guideline 3.2 Predictable: Make Web pages appear and operate in predictable ways *Pass

3.2.1 On Focus (Level A)

- When a page element receives focus, it does not result in a substantial change to the page, the spawning of a pop-up window, an additional change of keyboard focus, or any other change that could confuse or disorient the user.

Observations: There are no popup windows or unusual interactions.

3.2.2 On Input (Level A)

- When a user inputs information or interacts with a control, it does not result in a substantial change to the page, the spawning of a pop-up window, an additional change of keyboard focus, or any other change that could confuse or disorient the user unless the user is informed of the change ahead of time.

Observations: There are not popup windows.

3.2.3 Consistent Navigation (Level AA)

- Navigation links that are repeated on web pages do not change order when navigating through the site.

Observations: To the extent feasible, links stay in same order throughout the site. It is noted that a link to return home should be incorporated into the offsite pages or an instruction to return back, to the main site.

3.2.4 Consistent Identification (Level AA)

- Elements that have the same functionality across multiple web pages are consistently identified. For example, a search box at the top of the site should always be labeled the same way.

Observations: This is probably most applicable on the pages with examples of audio described content. The player is consistently used and is intuitive.

3.2.5 Change on Request (Level AAA) (N/A)

- Substantial changes to the page, the spawning of pop-up windows, uncontrolled changes of keyboard focus, or any other change that could confuse or disorient the user must be initiated by the user. Alternatively, the user is provided an option to disable such changes.

Guideline 3.3 Input Assistance: Help users avoid and correct mistakes *Pass

3.3.1 Error Identification (Level A)

- Required form elements or form elements that require a specific format, value, or length provide this information within the element's label.
- Form validation errors are efficient, intuitive, and accessible. The error is clearly identified, quick access to the problematic element is provided, and the user can easily fix the error and resubmit the form.

Observations: There is adequate syntax indication on all forms.

3.3.2 Labels or Instructions (Level A)

- Sufficient labels, cues, and instructions for required interactive elements are provided via instructions, examples, properly positioned form labels, and/or fieldsets/legends.

Observations: All form labels are associated with the corresponding fields.

3.3.3 Error Suggestion (Level AA)

- If an input error is detected (via client-side or server-side validation), suggestions are provided for fixing the input in a timely and accessible manner.

Observations: Form provide syntax error indication such as a malformed email address.

3.3.4 Error Prevention (Legal, Financial, Data) (Level AA) (N/A)

- If the user can change or delete legal, financial, or test data, the changes/deletions can be reversed, verified, or confirmed.

3.3.5 Help (Level AAA)

- Instructions and cues are provided in context to help in form completion and submission.

Observations: The field labels provide sufficient help for accurate form completion.

3.3.6 Error Prevention (All) (Level AAA)

- If the user can submit information, the submission is reversible, verified, or confirmed.

Observations: This site has only one form for registration. It does not appear to do any significant error checking and probably doesn't need to.

Robust

Definition: Content must be robust enough that it can be interpreted by a wide variety of user agents, including assistive technologies

Guideline 4.1 Compatible: Maximize compatibility with current and future user agents, including assistive technologies *Pass

4.1.1 Parsing (Level A)

- Significant HTML/XHTML validation/parsing errors are avoided. Check at <http://validator.w3.org/>

Observations: No parsing errors were found.

4.1.2 Name, Role, Value (Level A)

- Markup is used in a way that facilitates accessibility. This includes following the HTML/XHTML specifications and using forms, form labels, frame titles, etc. appropriately.
- ARIA is used appropriately to enhance accessibility when HTML is not sufficient.

Observations: No HTML errors were identified.

4.1.3 Status Messages (WCAG 2.1 Level AA) (N/A)

- If an important status message is presented and focus is not set to that message, the message must be announced to screen reader users, typically via an ARIA alert or live region.