

# The Americans with Disabilities Act (ADA) and Web Sites: What is Required?



Jared Smith  
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**ADA National Network**

*Information, Guidance and Training on the American with Disabilities Act*



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- If you are connected via a mobile device you may submit questions in the chat area within the App
- Questions may also be emailed to [webinars@ada-audio.org](mailto:webinars@ada-audio.org)



**Please note:** This webinar is being recorded and can be accessed on the ADA Audio Conference Series website at [www.ada-audio.org](http://www.ada-audio.org) within 24 hours after the conclusion of the session. The edited written transcript will be posted at this same site within 7 business days following the conclusion of the session.

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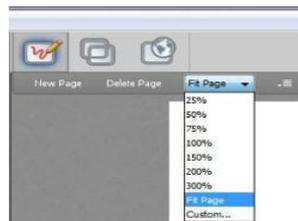
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# Customize Your View

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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## The Americans with Disabilities Act (ADA) and Web Sites: What is Required?



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8.5% of the population has a disability that affects computer use

...does not include those with cognitive/learning disabilities, color blindness, etc.

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Google is blind

...and deaf

...and can't use a mouse

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Do you use a form of  
assistive technology?

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## WCAG 2

- Principles based
  - Perceivable
  - Operable
  - Understandable
  - Robust
- Principles (POUR) > Guidelines > Success Criteria
- Success Criteria are assigned levels – A, AA, or AAA
- WCAG 2.0 finalized in 2008
- WCAG 2.1 finalized June 2018.

### Principle 1: Perceivable

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

| Success Criteria                                    | Recommendations   |
|---|---|
| <a href="#">1.1.1 Non-text Content</a><br>(Level A) | <ul style="list-style-type: none"> <li><input type="checkbox"/> All images, form image buttons, and image map hot spots have appropriate, equivalent alternative text.</li> <li><input type="checkbox"/> 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.</li> <li><input type="checkbox"/> Equivalent alternatives to complex images are provided in context or on a separate linked page.</li> <li><input type="checkbox"/> Form buttons have a descriptive value.</li> <li><input type="checkbox"/> Form inputs have associated text labels.</li> <li><input type="checkbox"/> Embedded multimedia is identified via accessible text.</li> <li><input type="checkbox"/> Frames and iframes are appropriately titled.</li> </ul> |

#### Guideline 1.2 Time-based Media

Provide alternatives for time-based media

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.

| Success Criteria   | Recommendations   |
|--|---|
| <a href="#">1.2.1 Prerecorded Audio-only and Video-only</a><br>(Level A) | <ul style="list-style-type: none"> <li><input type="checkbox"/> A descriptive text transcript that includes relevant auditory content is provided for non-live audio-only (audio podcasts, MP3 files, etc.).</li> <li><input type="checkbox"/> 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.</li> </ul> |
| <a href="#">1.2.2 Captions</a><br>(Prerecorded)                          | <ul style="list-style-type: none"> <li><input type="checkbox"/> Synchronized captions are provided for non-live video (YouTube videos, etc.).</li> </ul>  |

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Your site can be compliant,  
yet inaccessible

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Your site can be technically accessible,  
yet functionally inaccessible

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Accessibility > Compliance

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## Section 508

- Applies to federal government.
- Agencies may require compliance for recipients of federal funds.
- Many states have adopted Section 508 guidelines as state law
- Updated January 2018 to incorporate WCAG 2.0 A/AA
- VPAT – Voluntary Product Accessibility Template

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## Americans with Disabilities Act

- Pre-dates the web
- Title I – Employment
- Title II - State and local governments
  - Including education
- Title III - Public and commercial facilities
  - “Places of public accommodation”

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What is required?

Don't discriminate based on disability!

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## Americans with Disabilities Act

- Does not define technical standards for web accessibility
- Lawsuits, complaints, and DOJ settlements require WCAG 2.0 A/AA
  - Are starting to shift to WCAG 2.1 A/AA

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## ADA Compliant?

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## Legal Requirements – WCAG 2.1

- California GC § 11546.7
  - State agencies and entities
  - WCAG 2.0 “or a subsequent version”
  - July 2019
- European Union EN 301 549
  - New websites: September 2019
  - All websites: September 2020

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## Minimizing Risk

- Ensure your content is accessible
- Have a policy and implementation plan in place
  - Samples at [ncdae.org/goals](http://ncdae.org/goals)
- Address automatically detectable errors

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## Auditory Disabilities



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1. Provide captions for video & live audio.
2. Provide text transcripts for all audio content.

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## Transcription Methods

- Typing
- Stenographer or “Shadow Speaker”
- Automated captioning



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What are additional benefits of captions and transcripts?

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# Low Vision

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Vitally Important Text

vs

Vitally Important Text

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Provide Sufficient Contrast

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## Inverted and High Contrast



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## WCAG Contrast Formula

$$(L1 + 0.05) / (L2 + 0.05)$$

where

$$L = 0.2126 * R + 0.7152 * G + 0.0722 * B$$

where

R, G, and B =

$$R_{sRGB} \leq 0.03928 \text{ then } R = R_{sRGB} / 12.92$$

$$\text{else } R = ((R_{sRGB} + 0.055) / 1.055) ^ 2.4$$

where

$$R_{sRGB} \leq R_{8bit} / 255$$

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21:1

21:1

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## Level AA Contrast Examples

**4.5:1**

**3:1 – “Large” text**

Gray (#767676) on White

≥18pt (24px)

Purple (#CC21CC) on White

Red (#F30000) on Yellow (#FFFF00)

**BOLD: ≥14pt (18.67px)**

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# WebAIM Contrast Checker

[webaim.org/resources/contrastchecker/](http://webaim.org/resources/contrastchecker/)

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## WCAG 2.1: Non-text Contrast

- Level AA
- 3:1 contrast of:
  - User Interface Components
    - Including states (keyboard focus indicators, hover states, etc.)
  - Graphical Objects
    - Images, icons, etc.

I have read and agree to the [Terms of Use](#)



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## Color Reliance

The green mushrooms listed here are okay to eat. The red mushrooms will kill you.

- Amanita
- Chanterelle
- Porcini
- Shiitake
- Tylopilus

43

## Color Reliance

The green mushrooms listed here are okay to eat. The red mushrooms will kill you.

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## Screen Reader Users

- Not all screen reader users are completely blind.
- Most have low vision.
  - 45% of respondents to our low-vision survey use a screen reader.
- Some users have a reading or cognitive disability.

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## Structure and Semantics

- Provide proper alternative text for images
  - Content and Function
- Use headings appropriately
- Define page regions (header, footer, main content, navigation, etc.)

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## Structure and Semantics

- Associate label text to form inputs
- Associate table headers to data cells
- Provide a descriptive page title
- Define the document language

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## Operable

- Ensure functionality is available via the keyboard
- Make keyboard accessibility efficient
- Ensure keyboard users can see where they are at within the page – provide focus indicators/outlines

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## Operable

- Provide meaningful link text (avoid “click here”, “more”, etc.)
- Provide a “skip” link to facilitate keyboard navigation

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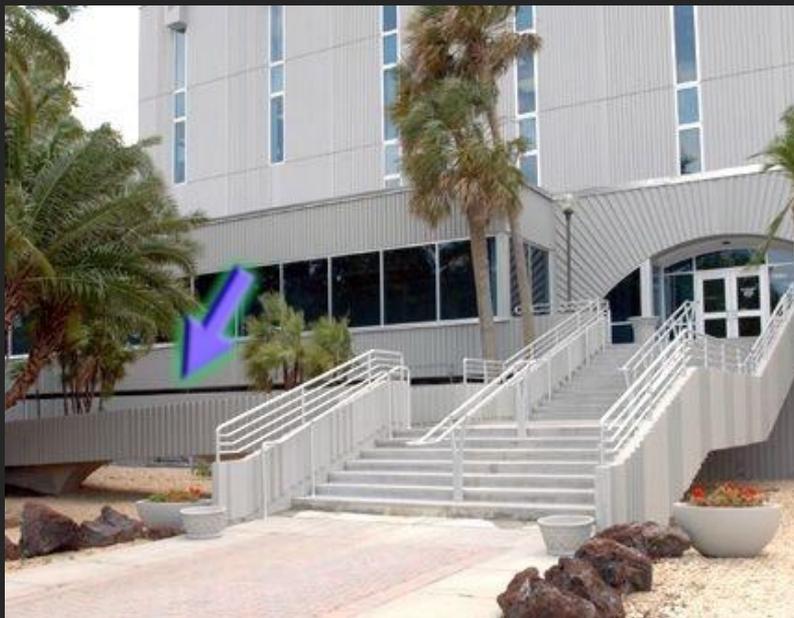
## Understandable

- Consider reading level and legibility. Use good design.
- Simplify and be consistent
- Avoid animation, carousels, and auto-playing video
- Conduct usability testing with users with disabilities

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[wave.webaim.org](http://wave.webaim.org)

“For people without disabilities, technology makes things convenient, whereas for people with disabilities, it makes things possible.”  
- Judy Hueman

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## Thank You!

<http://webaim.org>

- E-mail discussion list
- Monthly newsletter
- Tutorials, articles, and resources
- Blog

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web accessibility in mind

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