

Nuts & Bolts of Web Accessibility



TEXAS ASSOCIATION *of* COUNTIES
COUNTY INFORMATION
RESOURCES AGENCY



Nuts & Bolts of Web Accessibility

The Department of Justice's final rule established the Web Content Accessibility Guidelines (WCAG) as the technical standard to be met for website accessibility. The guidelines are comprehensive and can be overwhelming. While this is not inclusive of all the guidelines, these "Nuts & Bolts" will help you address some of website accessibility's foundational components.

Topics

1. Link text should be descriptive and meaningful.
2. Use consistent formatting for all hyperlinks.
3. Links should indicate what type of file will open when clicked.
4. Ensure all images have sufficient alternative text.
5. Avoid posting images that include critical text-based information.
6. Ensure your website content has sufficient color contrast.
7. Avoid using color alone to convey information or emphasize importance.
8. Apply heading levels to create a logical structure.

1. Link text should be descriptive and meaningful.

While a screen reader can read aloud all the text on a webpage, screen reader users often will jump from link to link to find what they're looking for more efficiently. In that case, the screen reader will read aloud the link text but not any of the surrounding text, so it's important that link text is meaningful and descriptive of what will open when clicked.

Best Practice #1: Avoid using vague terms like "click here" or "learn more" for link text. Instead, link text should be descriptive, even when taken out of context, and indicate the purpose of the link.



[Make Online Payments](#)



To make online payments, [click here](#).

Best Practice #2: Avoid using URLs as link text. Instead, use a descriptive phrase that represents the link's destination.



[Texas Department of State Health Services website](#)



<https://www.dshs.texas.gov/>

Reference: [WCAG 2.1, SC 2.4.4 Link Purpose](#)



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2. Use consistent formatting for all hyperlinks.

Using consistent formatting for links helps users quickly recognize and navigate links. For someone using a screen reader, consistent formatting ensures links are easily identified when read aloud, making navigation more intuitive.

Best Practice #1: Use predictable and consistent visual cues, such as color and underlining, to ensure links stand out from surrounding content.

Best Practice #2: Avoid using all caps in hyperlink text, as it can hinder readability, especially for users with visual impairments or reading disabilities.



[Proclamation by the Governor of the State of Texas \(PDF\)](#)
[Order of Election \(PDF\)](#)
[Notice of Election \(PDF\)](#)



[Proclamation by the Governor of the State of Texas](#)
[ORDER OF ELECTION](#)
[Notice of Election](#)

Reference: WCAG 2.4.4 Link Purpose (In Context)

3. Links should indicate what type of file will open when clicked.

Including the file type, such as “PDF” or “DOC,” informs assistive technology users that the context will change if they click on the link. This also benefits people with cognitive disorders by reducing unexpected changes. For those using assistive technologies like screen readers, clear link text provides crucial context when links are read aloud. Similarly, users navigating with a keyboard benefit from knowing exactly where each link will lead.



[Child Support Disbursement Form \(PDF\)](#)
[District Clerk Fees and Court Cost \(DOC\)](#)
[Statement Regarding Periods of Possession and Access Under the Texas Family Code \(PDF\)](#)



[Child Support Disbursement Form](#)
[District Clerk Fees and Court Cost](#)
[Statement Regarding Periods of Possession and Access Under the Texas Family Code](#)

Reference: WCAG 2.4.6 Headings and Labels, WCAG 2.4.9 (AAA) Link Purpose (Link Only)



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4. Ensure all meaningful images have sufficient alternative text.

Alternative text (also called alt text) provides a textual description of images. Because those unable to visually see an image may use a screen reader to interpret it, meaningful, descriptive alternative text ensures images on a website are accessible to all users.

Best Practice #1: Ensure every meaningful image on your site has alternative text.

Best Practice #2: Ensure your alt text clearly and concisely describes the image's content and purpose.

Best Practice #3: Avoid generic phrases like "image of" or "picture of." Instead, focus on describing the essential details relevant to the image's context.



Alt Text: A group of Lonestar County staff members standing outside the Lonestar County courthouse.

Alt text is present and sufficient.



Alt Text: Courthouse

Alt text is present but not sufficient.



Alt Text: (blank)

Alt text is not present.



Best Practice #4: Hide non-informative images, such as icons and those used purely for decorative purposes, by applying a "null" alt attribute.

Absentee Ballot by Mail (ABBM) must be applied for annually.

You may call our office to request an application be mailed to you

-OR-

click [HERE](#) for a printable application for FPCA application

click [HERE](#) for a printable application (english).

click [HERE](#) for a printable application (spanish).

[Track your Ballot by Mail](#)



Reference: [WCAG 1.1.1 Non-text Content](#)



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5. Avoid posting images that include critical text-based information.

Text-based information that is housed inside of an image is inaccessible to users who rely on assistive technologies like screen readers. Instead, use plain text to convey important information, ensuring it can be read, resized and translated as needed. By keeping text separate from your images, you improve accessibility, usability and the overall adaptability of your website's content.

Best Practice #1: Avoid posting images of text if the text-based information cannot be fully captured and conveyed through descriptive alt text. This ensures users relying on assistive technologies can access the information in the image.



Alt Text: The burn ban in effect has been extended to December 2nd.

The image's critical text-based information is fully captured by the image's alt text.

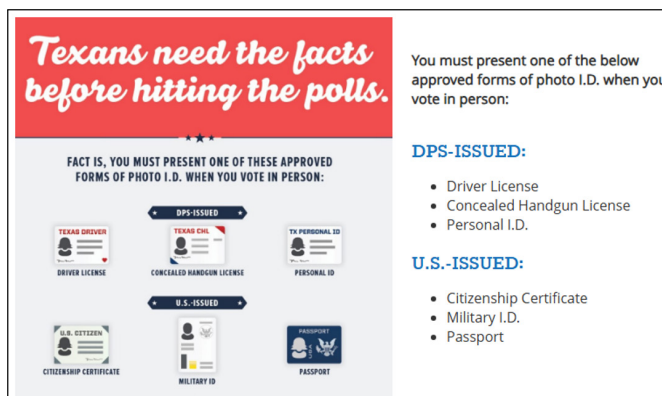


Alt Text: Things you need to bring with you to vote.

The image includes critical text-based information that is not captured by the image's alt text.



Best Practice #2: If an image must include text, ensure the same information is also provided in plain text elsewhere on the webpage.



The critical text-based information that is not accessible within the image on the left is also provided in plain text on the right.

Reference: [WCAG 1.4.5 Images of Text](#)



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6. Ensure your website content has sufficient color contrast.

Ensuring sufficient color contrast on a website is essential for making content accessible to all users, including those with visual impairments or color blindness. High contrast between text (foreground) and background improves readability, especially for users with low vision or in poor lighting conditions.

Use a free online tool, such as [WebAIM](#) or the [WAVE browser extension](#), to check color contrast ratios and ensure they meet accessibility standards. WCAG specifies that normal text needs a contrast ratio of at least 4.5:1, while large text — defined as 18 points (approximately 24 pixels) or larger, or 14 points bold (approximately 19 pixels) — must have a ratio of at least 3:1.

Office Hours:
Monday-Thursday: 7 AM – 5 PM
Friday: 8 AM – 12 PM

Foreground
Hex Value: #003366
Color Picker: [Dark Blue] Alpha: 1
Lightness: [Slider]

Background
Hex Value: #D3D3D3
Color Picker: [Light Gray] Alpha: 1
Lightness: [Slider]

Contrast Ratio: **8.42:1**



The WebAIM color contrast checker confirms that the dark blue foreground color and the light gray background color have a contrast ratio of at least 4.5:1.

Office Hours:
Monday-Thursday: 7 AM – 5 PM
Friday: 8 AM – 12 PM

Foreground
Hex Value: #6FC4F9
Color Picker: [Light Blue] Alpha: 1
Lightness: [Slider]

Background
Hex Value: #FFFFFF
Color Picker: [White] Alpha: 1
Lightness: [Slider]

Contrast Ratio: **1.91:1**



The WebAIM color contrast checker confirms that the light blue foreground color and the white background color *do not* have a contrast ratio of at least 4.5:1.

Reference: [WCAG 1.4.3 Contrast \(Minimum\)](#)



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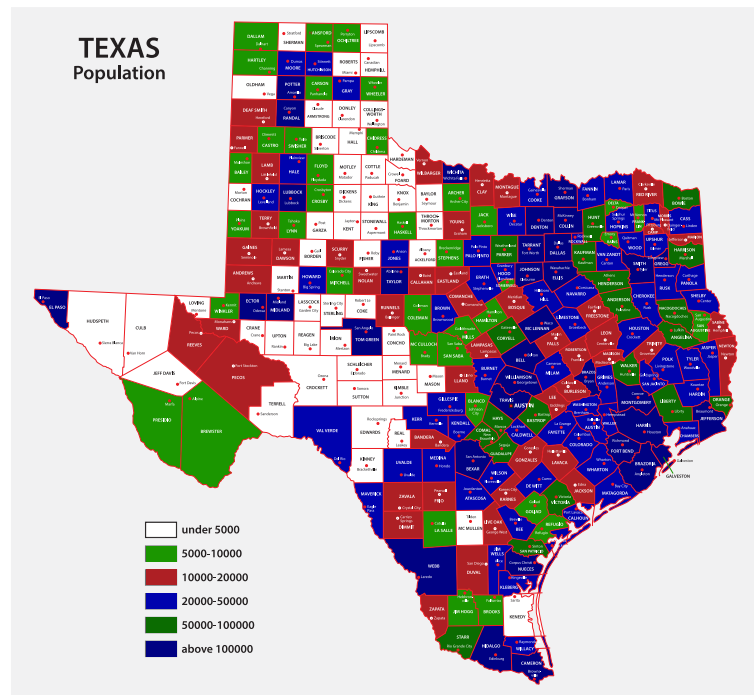
7. Avoid using color alone to convey information or emphasize importance.

Using color alone to convey information or emphasize importance can exclude individuals with visual impairments, such as color blindness or low vision, and those who rely on assistive technologies, as these devices do not interpret color.

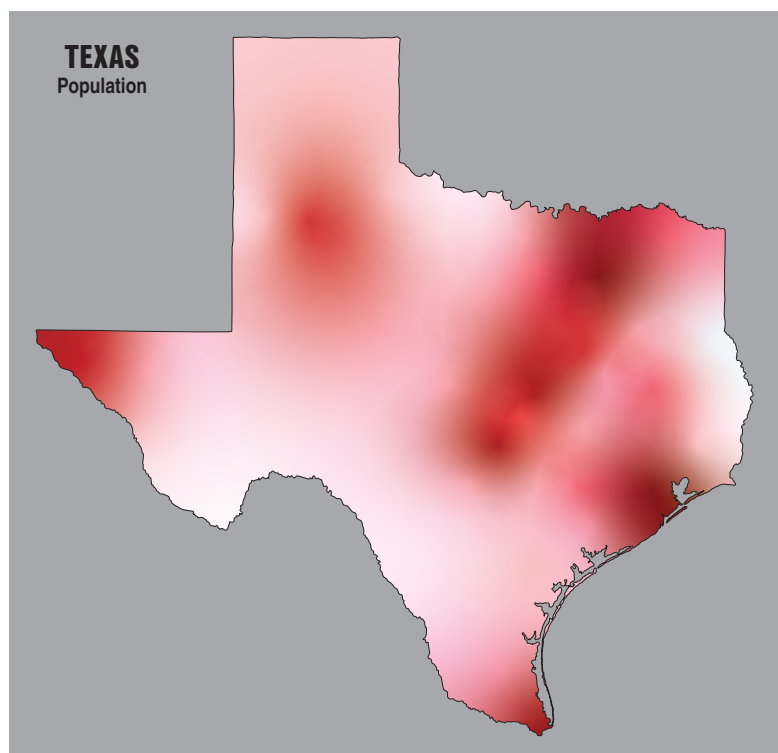
Best Practice #1: When using color to convey information or meaning, supplement with text or symbols with text alternatives to ensure clarity.



The population map uses high contrast color, in addition to text and borders, to indicate the specific population breakdown across Texas.



A population map uses color to show population density without any supplemental text, symbols, or outlines to indicate specific population breakdown across Texas.





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Best Practice #2: Avoid using color alone to emphasize importance. To make emphasis inclusive, combine color with techniques like bolding, underlining or making the font bigger. This approach ensures that the emphasis is noticeable to all users, regardless of visual ability.



NOTICE: Shelter in place. Lonestar County Courthouse is not a certified tornado shelter.

Color is combined with additional techniques (bolding and increasing font size) to drive attention to a notice and emphasize its importance.



NOTICE: Shelter in place. Lonestar County Courthouse is not a certified tornado shelter.

Color alone is being used to drive attention to a notice and emphasize its importance.

Reference: [WCAG 1.4.1 Use of Color](#)



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8. Apply heading levels to create a logical progression and page structure.

Headings provide the foundation for a well-structured and accessible website. They guide users through content by creating a logical hierarchy, much like an outline, and help assistive technologies, such as screen readers, navigate the page effectively. By applying proper heading levels, you ensure your content is organized, easy to understand and inclusive for all users.

Best Practice #1: Create a logical progression by starting with a heading level 1 tag, followed by heading level 2 tags for subsections and heading level 3 tags for smaller subtopics. Maintaining this order creates a clear, logical progression, ensuring that content is easy to follow.

Best Practice #2: Ensure your headings are clear and descriptive of the content that follows to help users quickly understand the purpose of each section. Avoid vague titles like “Section 1” and instead use meaningful and descriptive phrases.

Best Practice #3: Always move sequentially through heading levels without skipping, such as jumping from a heading level 1 to a heading level 3 within the same section. Skipping levels can confuse assistive technologies and make content harder to navigate.

The screenshot shows the Lonestar County Texas website with several annotations indicating heading levels:

- H1:** Lonestar County Texas (Main header)
- H2:** County Judge (Section header)
- H3:** Helpful Links (Section header)
- H3:** Contact the County Judge (Section header)
- H3:** County Judge Reports (Section header)
- H4:** 2024 (Year header for reports)
- H4:** 2023 (Year header for reports)

The website content includes a search bar, navigation links (HOME, CONTACT US, TRANSLATE), a QUICKLINKS menu, and a list of County Judge Reports for 2024 and 2023.

Reference: [WCAG 2.4.6 Headings and Labels](#), [WCAG 1.3.1 Info and Relationships](#)

Note to CIRA website members:

TAC CIRA is ready to support you as you implement accessibility improvements on your county website. If you have questions or need assistance making changes, please contact our team at support@county.org or submit a request at county.org/contact-cira.

To learn more about website accessibility and how to comply with the Department of Justice’s final rule, visit county.org/webaccessibility.

Created by TAC County Information Resources Agency. Technical expertise provided by Crownpeak, a company that specializes in website accessibility. Please consult your county attorney or outside counsel with questions about your county’s compliance.



NOTES

[illegible]



NOTES

This image shows a full page of blank, lined paper. It features approximately 20 horizontal blue lines spaced evenly across the page, typical of notebook paper. The lines are thin and extend from the left edge to the right edge. There are no margins, text, or other markings on the page.



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