Demystifying 508 Compliance

A Resource Document

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Introduction

We would like to issue a special word of thanks to Marla Roll and the Assistive Technology Resource Center (ATRC) at Colorado State University for providing the resources for this guide. For further details on other components of 508 compliance visit the ATRC website (https://accessibility.colostate.edu/). Some the content below also comes from Minnesota's IT Services, Office of Accessibility.

As state programs, we need to ensure the content we create is universally usable, including to those who rely on assistive technology in their daily lives. By following best practices for creating accessible documents, we ensure that content is usable, versatile, and legally compliant. Accessible content is good for everyone:

- Items load better and faster on mobile devices.
- Captioning allows people to watch video without disturbing anyone else.
- Navigating content without a mouse may be easier.
- Printing in black and white helps those who are colorblind or overly sensitive to color and also saves money.

The purpose of this guide is to demystify 508 compliance and help you think through how to structure your document from the beginning to help ensure it will achieve 508 compliance. This guide condenses the best practices in 508 compliance as it relates to the documents and processes you as a state Brain Injury Program primarily use: Word, PowerPoint, and PDF.

There is a range of what accessibility means. The Administration for Community Living (ACL) expects that grant recipients strive to be proficient in meeting 508 compliance. A checklist is provided at the end of each section to help you meet the proficient level. Consider each item in the checklist in order to meet this level of compliance.

A common term you might encounter while reading 508 compliance information is Web Content Accessibility Guidelines (WCAG); these guidelines explain how to make content more accessible to people with disabilities. WCAG covers websites, applications, and other digital content, including electronic documents. It is developed by the World Wide Web Consortium (W3C) Web Accessibility Initiative (WAI). WCAG 2 is an international standard, and the 508 standards are closely tied to the WCAG 2 success criteria and

requirements (Level A and Level AA). Therefore, you will encounter WCAG 2 criteria and requirements as you conduct your own review of 508 compliance materials and content.

There are many excellent resources available to you as you learn to make documents 508 compliant. However, this too can be overwhelming. The secondary objective of this guide is to condense the best practices resources so that you have one convenient source for information.

You will find a section for each of the aforementioned document types to make it easier for you to go directly to each section for the type of document that you are focused on making 508 compliant.

Making Word Documents 508 Compliant

Best Practice Overview

- Use document styles - Use heading and paragraph styles to structure the document.
- Add alt text to images and objects - This includes pictures, clip art, charts, shapes, SmartArt graphics, and embedded objects.
- Use short titles in headings - Keep headings short (fewer than 20 words or one line long). This makes it easy for readers to quickly navigate your document.
- Name your hyperlinks appropriately - Your link should contain meaningful text that reflects the link destination or subject, rather than simply saying “click here.”
- Use simple table structure - Avoid using nested tables, merged or split cells, or blank cells for formatting.
- Set column header rows in tables - Clear column headings provide context and assist navigation of the table contents.
- Avoid using repeated blank characters - Extra spaces, tabs and empty paragraphs can cause people using screen readers to repeatedly hear the word “blank.” Instead, use styles with formatting and indenting to create white space.
- Avoid using floating objects - Place objects in line with text for easy navigation.
- Avoid watermarks - Watermarks and other background images may be hidden or confusing to people with vision or cognitive disabilities. Instead of using a watermark to identify a document as a “draft” or “confidential,” include the text in the document title or heading.
- Fill in document properties - In advanced document properties, enter title, subject, and author.
- Use the Accessibility Checker - This built-in tool will tell you about some possible accessibility issues in your document and give suggestions on how to correct them.

Best Practice Instructions

When ensuring accessibility of a Word document the following should be considered:

- Headings
- Descriptive links
- Tables and header rows
- Images and alt text
- Color contrast

Below are strategies for how to ensure each of these are 508 compliant.

Headings

Headings are used to create an outline, or table of contents, that structures your document and helps users navigate the content more efficiently. You can apply the concept of headings in almost every kind of electronic content, including Word documents and websites.

- Use headings to provide a page structure or outline, breaking down content into manageable subsections.
- Do not skip heading levels; for example, don't go from a Level 2 to a Level 4 heading without a Level 3 heading.
- Use headings to indicate sections of content.

Using "Styles" in Word

Styles controls the appearance of text (size, color, spacing, etc.) and embed the structure of the document such as headings (levels 1-9) and lists (bulleted and numbered).

Word comes with a lot of built-in styles, which are preformatted in appearance yet fully customizable. You can also add new styles of your own. It is important to realize that the appearance of a style can be modified without changing its structural meaning. For example, the style "Heading 2" can be modified to appear in any size, font, and color without altering its meaning as a second-level page heading. That said, it's important to stick with basic design principles for showing the relationships of headings (e.g., first level headings should be larger and bolder than subsequent headings).

In a long document, Styles help you maintain consistent visual and structural formatting. Change the characteristics of the Style and everything to which that style has been applied will instantly be updated.

The structural aspect of Styles has additional benefits. For example, once you have applied heading styles to the text, Word's Navigation pane will display a hierarchical outline that lets you jump from heading to heading. Word can also use the headings to create a table of contents, complete with page numbers that update dynamically as you edit the document. That way, readers can easily move from section to section and be able to follow the document's flow.

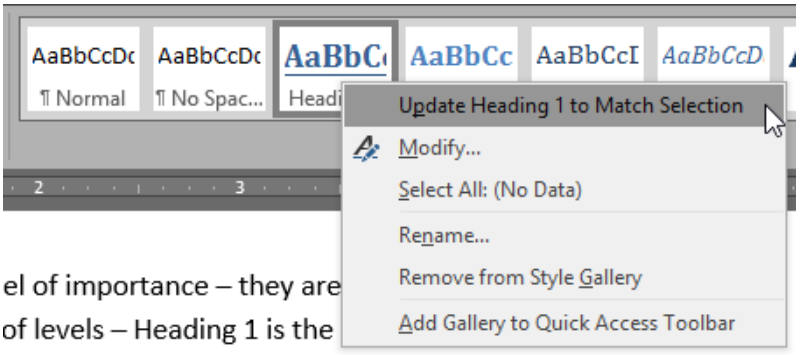
How to use the Styles Toolbar:

Select the heading level using the Styles toolbar on the Home Ribbon.

You can quickly change the visual appearance of headings across an entire document to match your formatting preferences.

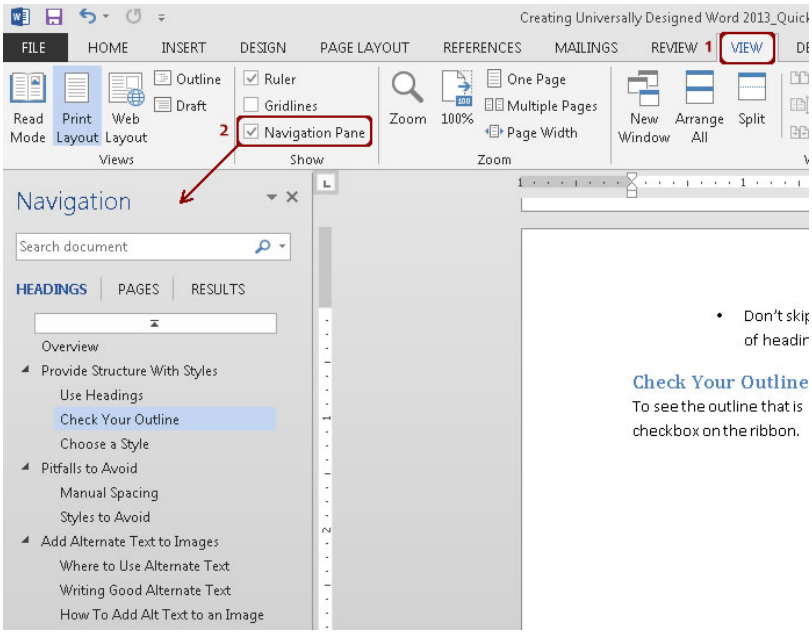
- Set the font, color, spacing, etc., to what you would like Heading 1 to be.
- Highlight the correctly formatted text.
- Right-click on Heading 1 in the Ribbon and click Update Heading 1 to Match Selection.

Now each Heading 1 will use your preferred formatting. You should see that all Heading 1 text has changed throughout your document. (You can also click **Modify** for more formatting options.)



Check the Table of Contents

- To see the Table of Contents that is generated by the headings, click on the **View Ribbon**, then check the **Navigation Pane** checkbox.
- The document outline appears on the left side of the document in the Navigation Pane.
- Click on any of the headings in the Navigation Pane to go to that section.
- You can also drag headings in the navigation pane to quickly reorder content.



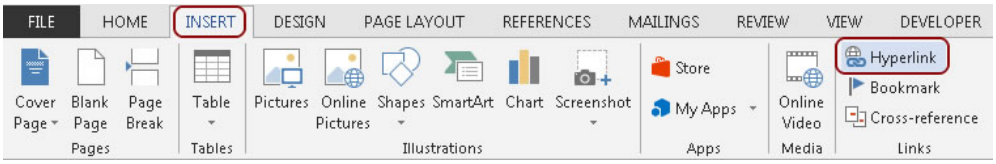
For more details on how to use headings, please visit the page [Accessibility by Design, Word Documents, Headings (https://accessibility.colostate.edu/ud-word-docs/#1499875762827-ee92fc3a-ed25)](https://accessibility.colostate.edu/ud-word-docs/#1499875762827-ee92fc3a-ed25) on the Colorado State University website.

Descriptive Links

When including links out to webpages in a Word document, such as the one above, the link should be descriptive. Stay away from naming hyperlinks as “click here” or “here” as these do not allow a screen reader to let the user know what the link is.

To make a hyperlink descriptive use the following:

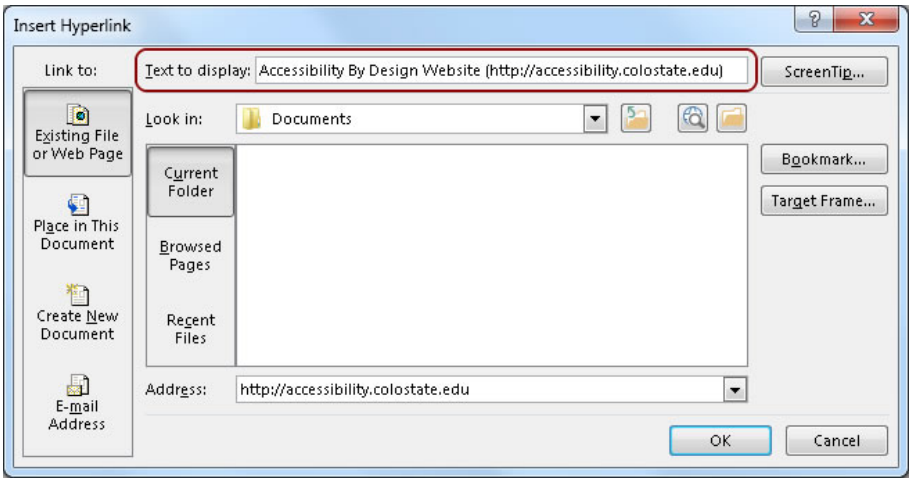
To format links in Microsoft Office, **Select** the link text. On the **Insert** Ribbon, click **Hyperlink.**



Type the text that will be displayed in your document in the **Text to Display** field.

- This should be a description followed by the link in parentheses: *Description (Link)*
- For example: Accessibility By Design Website (http:/accessibility.colostate.edu)
- This formatting allows for links to be readable in both electronic and paper copy

Type the actual link in the **Address** field. This is the link that will be followed.

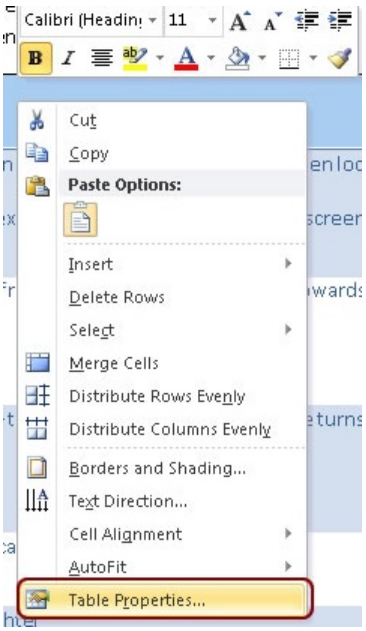


Tables and Header Rows

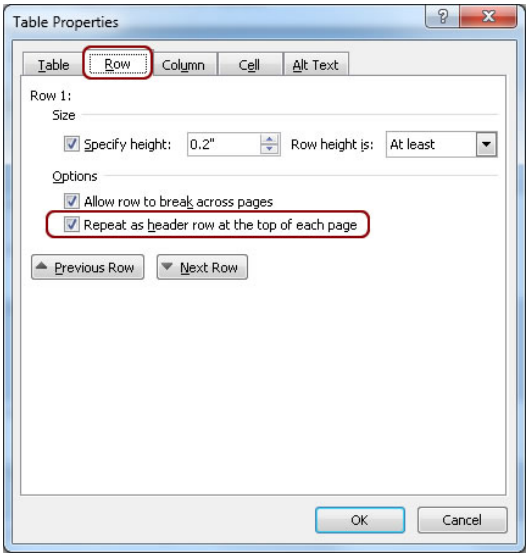
While many authors try to indicate a header row by changing its *appearance* (e.g., font and background color), a change of this type provides little or no information about the *structure* of the table. A document that relies entirely on visual formatting will, when converted to HTML or PDF, lack the structural information needed by readers who use assistive technology.

Fortunately, Word offers a setting for table headers that provides this important structural information.

To define the header row on a table in Word, right-click on the top row of the table and select **Table Properties**.



Next, select the Row tab, and click on “repeat as header” so that each page shows the same information at the top of the table:



Images and Alternative Text

Images can be used to convey information quickly and powerfully—assuming they can be seen and understood. However, some readers may not understand the meaning of the image; others may not be able to see it due to visual impairment, personal viewing preferences (especially on the web), or technological limitations.

Alternate text (“alt text” or “alt tag”) is added to an image to provide a textual alternative to visual information. Why is this important? Remember, some users will not *see* your information; instead, they will *hear* it using text-to-

speech or screen-reading software. By adding an alt text to an image, you make its meaning available to people who, for whatever reason, cannot see it.

Alternate text should be added to all non-text elements, including:

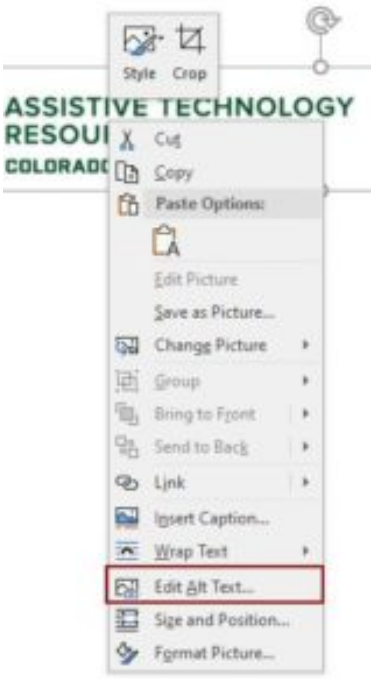
- Pictures
- Graphs
- Charts
- Tables
- Microsoft Office SmartArt

Make alternate text meaningful to a listener:

1. What is the context of the image? What meaning does it add to the page?
2. Be concise. Describe only what you expect visual users to get out of the image.
3. If the image is already described in the surrounding text, the alt text can be very short.
4. Avoid redundant statements like “Image of” or “This is a picture of.” Simply state the contents.
5. If an image is purely decorative, mark it as such (methods are described on the following pages).

How to use alternate text: Office 365

Right-click on the image, then select **Edit Alt Text** from the menu.



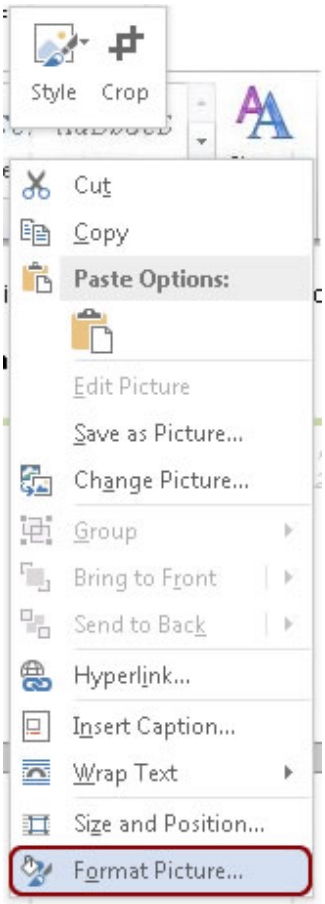
An **alt text panel** will open in the document pane to the right. Type a short description in the text box.

If the image is decorative, you can check the **Mark as Decorative** checkbox instead. You should only use this option if no meaning will be lost to any audience who cannot see the image. (Note, older versions of Word do not have the “Mark as decorative” checkbox; there are other methods depending on the version you use.)

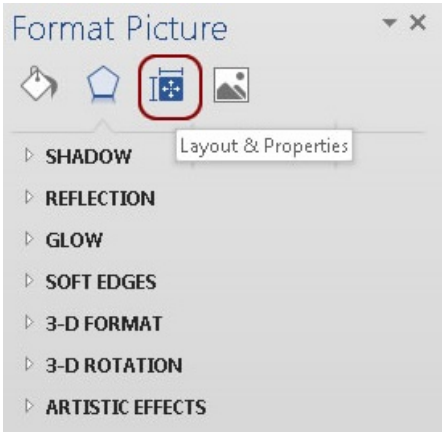
How to use alternate text: Office 2013 – 2016

Note: Sometimes images that are downloaded from the web have "junk" alternate text (usually a long file name). Make sure to manually check every image.

Right-click on the image, then select **Format Picture** from the menu. (This menu option may be **Format Shape** on other types of graphics).

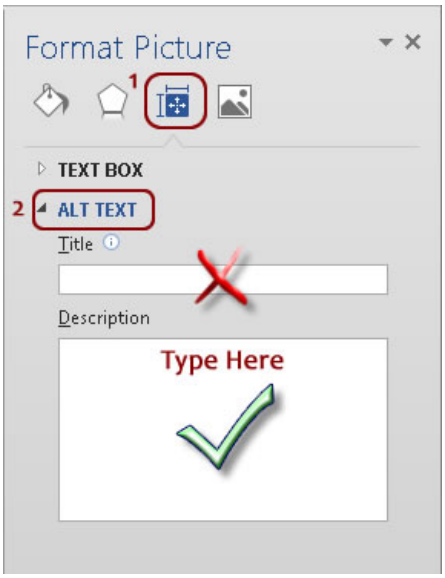


A **Format Picture** menu will open in the document pane to the right. Select the **Layout and Properties tab**, the third option in the Format Picture Pane.



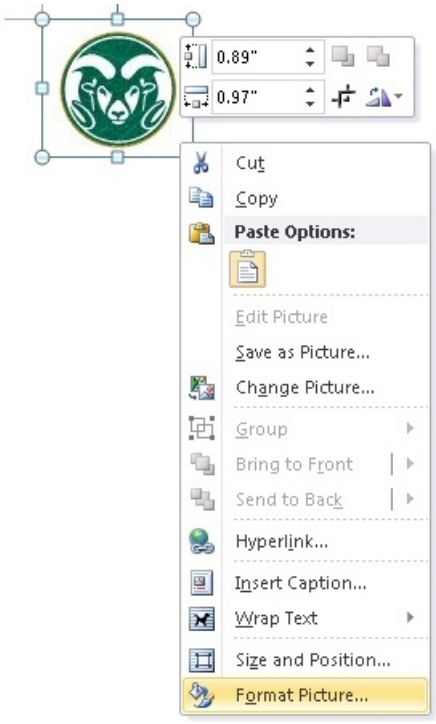
If it is not expanded already, open the **Alt Text** menu by clicking on the arrow.

Type the alt text in the **Description** box. Ignore the **Title** field since it will not be read by a screen reader.



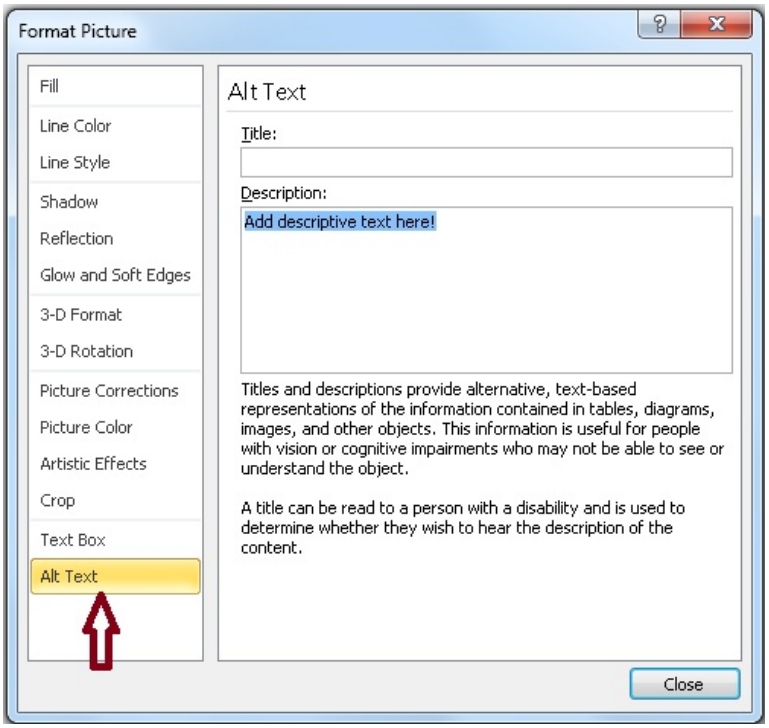
How to use alternate text: Office 2010 & Earlier

Right-click on the image to get the "Format Picture" menu option.



Click on the "Alt Text" menu on the bottom left.

The text goes in the "Description" section on the right (not the "Title" section).



Color Contrast

The term “color contrast” describes the difference between text and the background. Low contrast affects readers with low vision and color blindness (https://nei.nih.gov/health/color_blindness/facts_about). Bright colors and patterns can adversely impact someone with traumatic brain injury and their ability to focus or read content with bright colors or patterns.

Tips for Color Use

- Choose a color scheme that provides high contrast between the text and the background. If you have a dark background, the text should be light, and vice versa. (Black and white provide maximum contrast.)
- Avoid the following color combinations:
    - Green and gold
    - Green and red (or related colors)
    - Blue and yellow (or related colors)
- Use larger text and simple (not ornate) fonts. Sans serif fonts are preferable.
- Use a contrast checking tool. We recommend the Colour Contrast Analyser by the Paciello Group (https://developer.paciellogroup.com/resources/contrastanalyser/).
- Don’t rely on color as the sole means of conveying information. For example, don’t use color as your only method of indicating heading levels.
- Text can be difficult to read on photographic or gradient backgrounds. Set text against a solid background when possible.

For more instruction on color contrast visit the page Information on color contrast (https://accessibility.colostate.edu/color-contrast/#1513890905436-b2ca1a2f-ec53) on the Colorado State University website.

Following these steps will help ensure your document is accessible. In addition, Microsoft Office has a built-in tool that generates a report on the accessibility of a document. The tool is available in both Word and PowerPoint. For more information on the Accessibility checker please visit the page Information on Accessibility Checker (https://accessibility.colostate.edu/ud-word-docs/#1499876534462-3ca463a5-2e04) on the Colorado State University website.

Word Document Accessibility Checklist

- ☐ includes headings and styles
- ☐ uses formatted lists
- ☐ links are descriptive
- ☐ uses designated header rows for tables
- ☐ provides alternative tests for images, charts, graphs
- ☐ has good color contrast

Making PowerPoints 508 Compliant

PowerPoint is a widely used tool. However, for audience members with disabilities, especially those with blindness or vision impairments, or individuals with cognitive challenges (learning disability, traumatic brain injury, etc.), PowerPoint can present several barriers that presenters need to keep in mind when creating presentations.

A universally designed PowerPoint presentation takes into account the various needs of your audience members, whether they are viewing the presentation on a laptop, a projector screen or a printed handout, or listening to it with text-to-speech software or a screen reader. The following pointers will help you create presentations that are beneficial to everyone.

Best Practice Overview

- Add alternative text to all images and objects.
- Use clear, concise terms.
- Use simple tables - These are easier for all to read, including people using screen readers and people sitting at the back of the room at a presentation. Avoid using nested tables, merged or split cells, or blank cells for formatting.
- Ensure each slide has a unique title - Slide titles are used for navigation and selection by people who are not able to view the slide.
- Check slide reading order - People who cannot view the slide will hear slide text, shapes and content read in a specific order. Items in the selection pane read from the bottom up.
- Name your hyperlinks appropriately.
- Include captions and audio descriptions - If you use audio or video components, ensure that all audio is captioned and any visuals are audio-described.
- Use color carefully - High contrast color schemes and texture variations in graphs improve readability. Test your designs by printing in black & white.

- Fill in document properties - In advanced document properties, enter title, subject, and author.
- Use content placeholders, not text boxes - To check if you have done this correctly, open View – Outline View. All text (except tables and alt text) should display in this pane. This ensures all readers have access to the text in your slides.
- Notes may not be read - Some users of assistive technology cannot easily access your notes from your presentation. Consider adding them into a slide or sharing them in another format.
- Sharing accessible presentations - When sharing electronically with your audience or on the web, consider converting to an accessible PDF.

Best Practice Instructions

This section will provide strategies for the following:

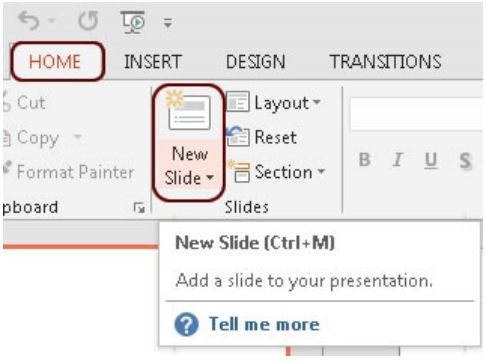
1. Slide layouts
2. Reading order
3. Images and alternative text
4. Table header row

Slide Layout

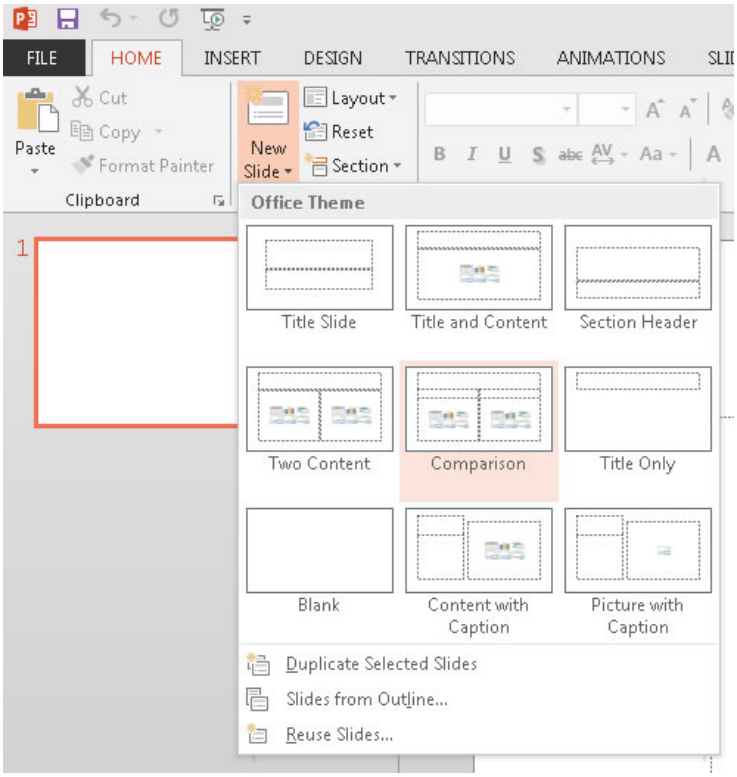
Tip #1: Use the built-in slide layouts

Microsoft's built-in slide layouts provide a correct reading order that screen reading software can detect. Use layouts instead of drawing text boxes manually – the contents of text boxes will be ignored by software such as screen readers.

Choose a slide layout from **Home > New Slide**, or **Home > Layout.**



Select the layout that fits best with your content:



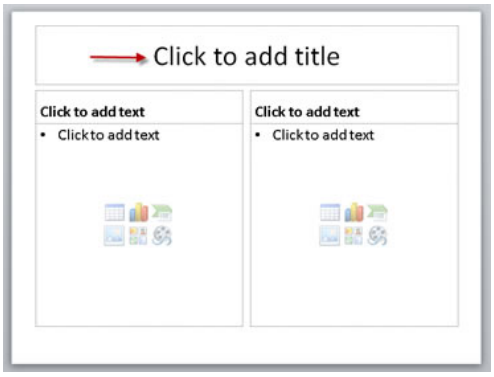
Tip #2: Use the fields provided

- Use only the fields included in the slide layout.
- Avoid drawing your own text boxes to add more content. Only add content via a placeholder (placeholders are the boxes with dotted borders that reside in a slide layout and hold space for specific content).
- It is OK to leave fields unused, except for the title field.

Tip #3: Use a unique title for each slide

Each slide should have a title, and it should be unique and descriptive so that you can get the gist of the presentation from the outline view.

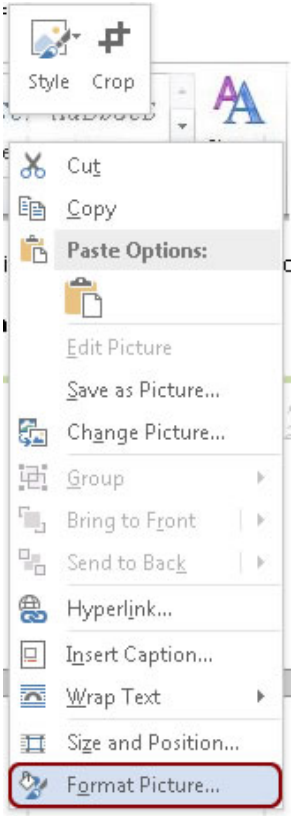
- Use the **Click to add title** field on every slide.
- Other fields can be left empty, but not the title field.
- Even if the entire slide is covered by an image, have a title behind it.



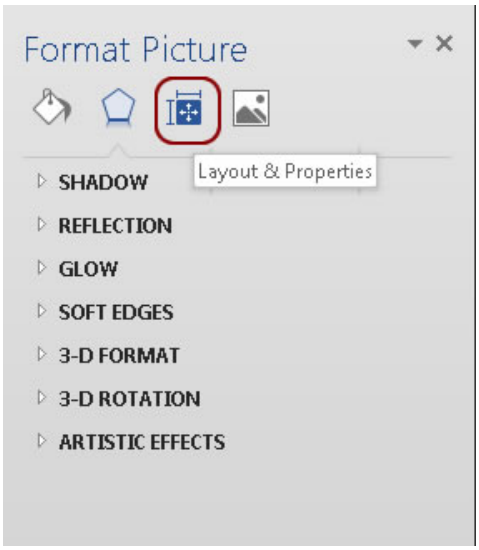
Alternative Text: Office 2013-2016

Note: Sometimes images that are downloaded from the web have “junk” alternate text (usually a long file name). Make sure to manually check every image.

Right-click on the image, then select **Format Picture** from the menu. (This menu option may be **Format Shape** on other types of graphics).

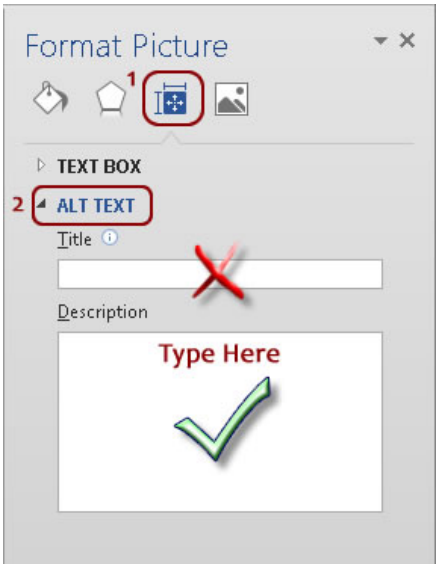


A **Format Picture** menu will open in the document pane to the right. Select the **Layout and Properties tab**, the third option in the Format Picture Pane.



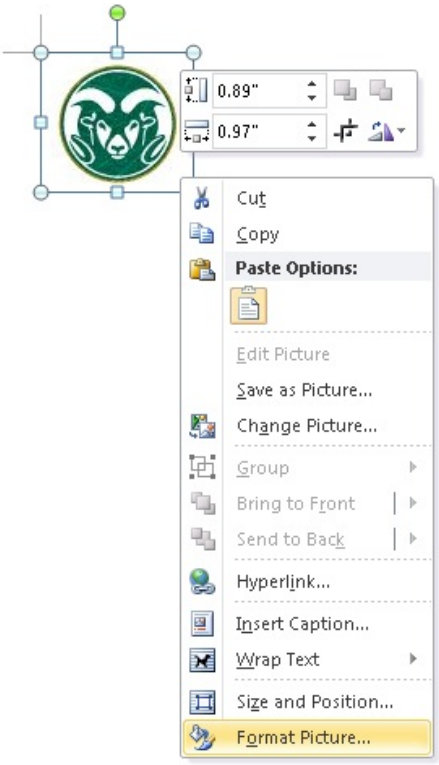
If it is not expanded already, open the **Alt Text** menu by clicking on the arrow.

Type the alt text in the **Description** box. Ignore the **Title** field since it will not be read by a screen reader.



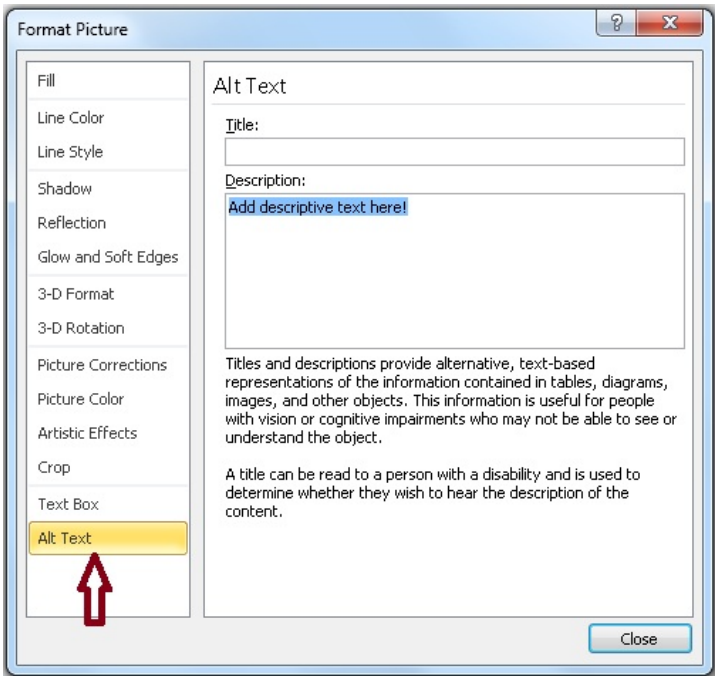
Alternative Text: Office 2010 & Earlier

Right-click on the image to get the "Format Picture" menu option.



Click on the "Alt Text" menu on the bottom left.

The text goes in the "Description" section on the right (not the "Title" section).

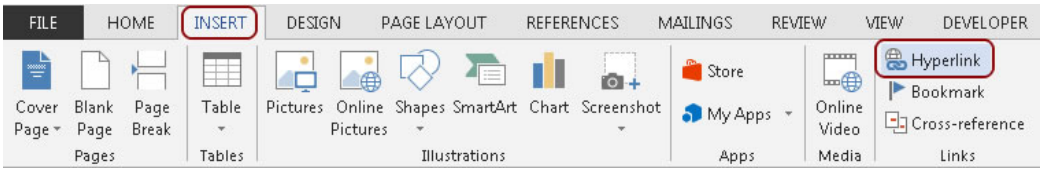


Descriptive Links

Links in a PowerPoint should be descriptive. Stay away from naming hyperlinks as “click here” or “here” as these do not allow a screen reader to let the user know what the link is.

To make a hyperlink descriptive use the following:

To format links in Microsoft Office, **Select** the link text. On the **Insert** Ribbon, click **Hyperlink.**



Type the text that will be displayed in your document in the **Text to Display** field.

- This should be a description followed by the link in parentheses: *Description (Link)*
- For example: Accessibility By Design Website (http:/accessibility.colostate.edu)
- This formatting allows for links to be readable in both electronic and paper copy

Type the actual link in the **Address** field. This is the link that will be followed.

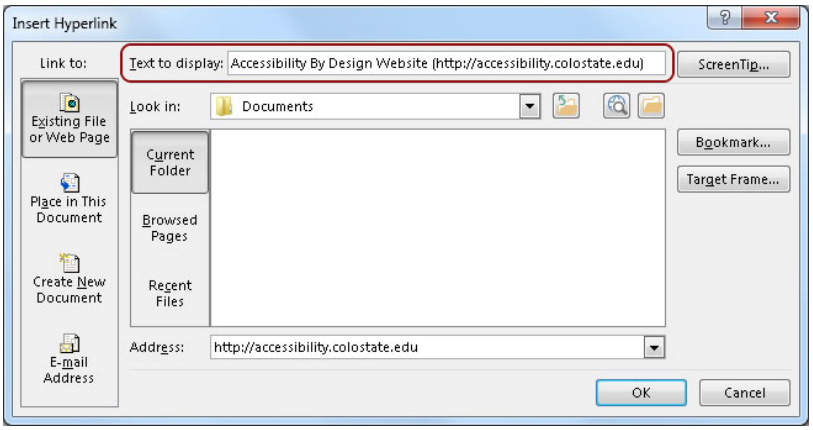


Table Header Row

It is important to mark header rows in your table; otherwise, readers using assistive technology may not be able to read items within a table in the correct order. To set the header row on a table in PowerPoint, first **Select** the entire table.

Select the **Design** tab in the ribbon under **Table Tools**.

Check the checkbox titled **Header Row** at the top left of the Design ribbon.

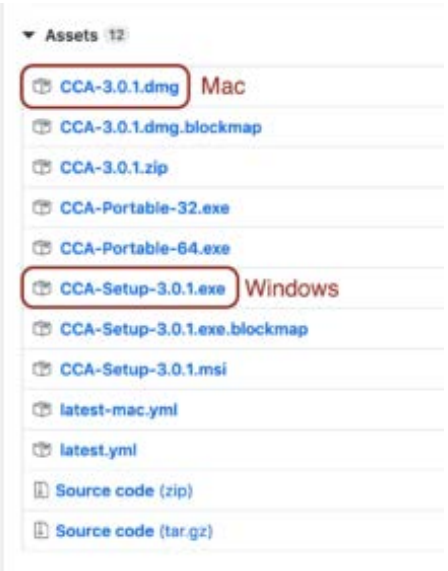
Color Contrast

It's best practice to use a solid background when creating slides so text placed on slides are easy to read and not difficult to cognitively process. It is recommended that you use the free Colour Contrast Analyser (https://developer.paciellogroup.com/resources/contrastanalyser/) to determine whether the contrast ratio passes WCAG AA standards.

Installing the Colour Contrast Analyser (CCA)

On the download page under Assets:

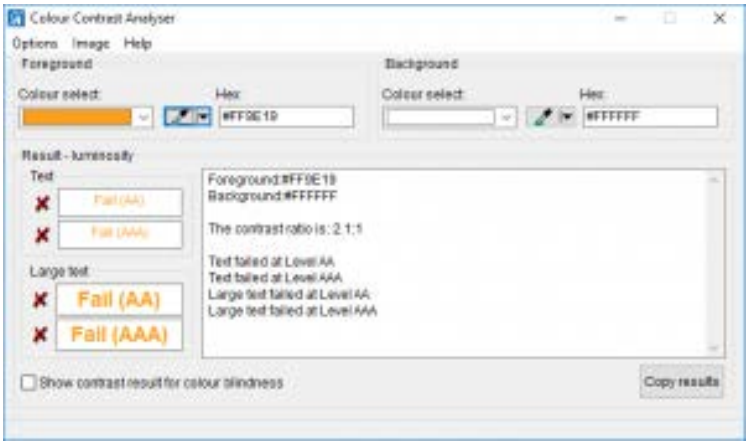
- For Mac, download the CCA-3.0.1.dmg file
- For Windows, download the CCA-Setup-3.0.1.exe file



Using the CCA

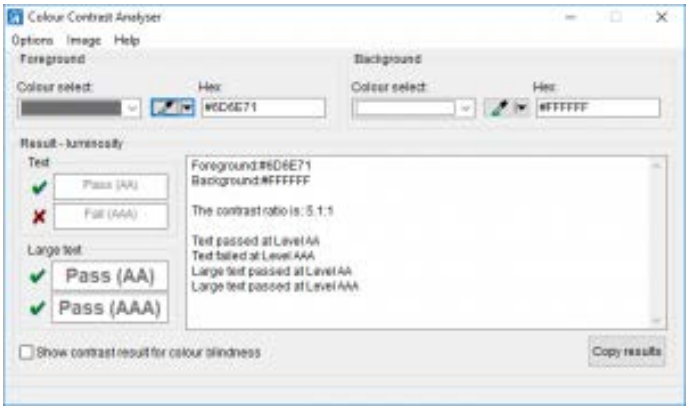
Use the eyedropper tool to select foreground and background colors. The results display immediately, showing either pass or fail for both AA and AAA (WCAG 2) standards. In the following example, we have run the CCA on a website designed with orange headings, gray text, and blue link text.

There is insufficient contrast between orange text and the white background. To find a different color with sufficient contrast, you can use the drop-down menu or insert hex codes. You would want to select a darker orange color from the drop-down color palette.

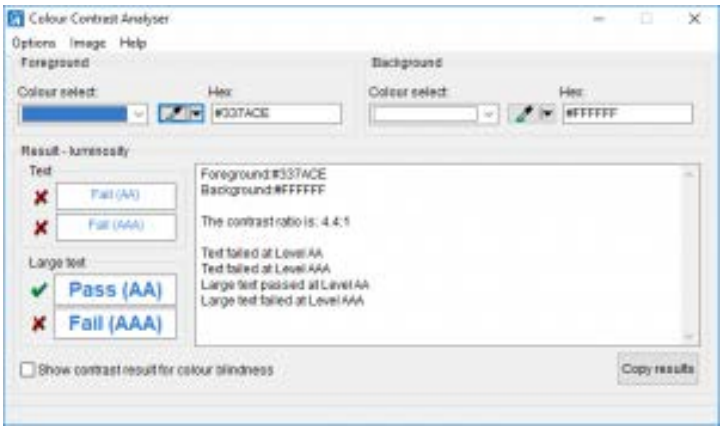


AA vs AAA

When we check the gray text against the white background, the CCA shows mixed results. This color combination passes at the "AA" standard, but not the more stringent "AAA" standard, which is the goal for most university and public websites. A darker gray would be better.



Finally, we test the blue link text against the white background. This combination of colors fails both the “AA” and “AAA” standards for normal text sizes, as well as the “AAA” test for larger sizes. It passes only the “AA” standard for large text. A darker blue is required for universal readability.

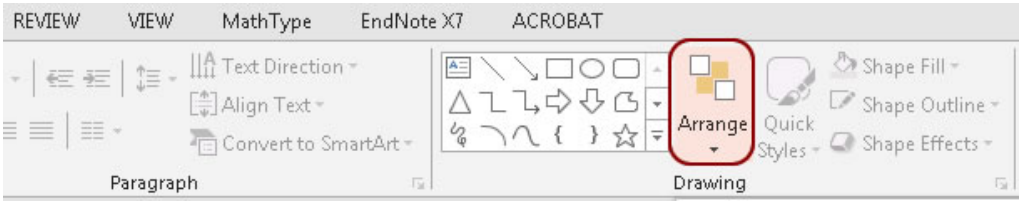


Reading Order

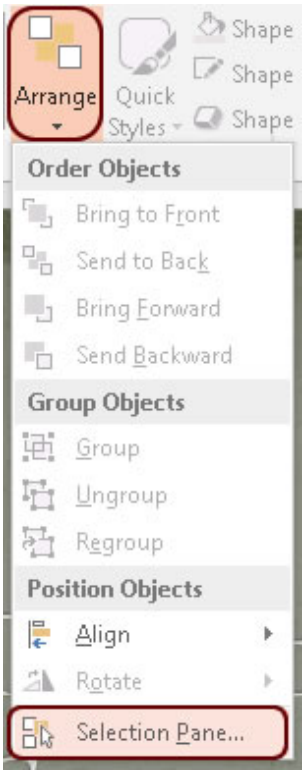
Reading order is important to consider for content that isn't linear. It applies to the more heavily visual layouts such as websites and PowerPoint presentations, as well as to PDF documents with columns, images, or forms. Setting the reading order allows text-to-speech or screen reading software to read the information in a logical order. It also ensures that links and form fields can be tabbed through sequentially for users who navigate with a keyboard or screen reader.

How to set the reading order:

On the Home Ribbon, select the **Arrange** drop-down menu.



Click on **Selection Pane** at the bottom of the Arrange menu.

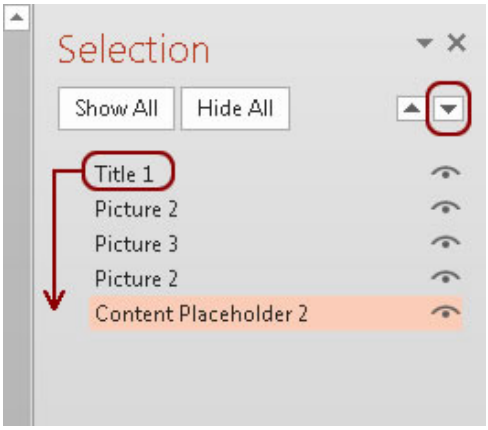


The Selection Pane will appear on the right side of the document. This lists each element on the slide and the order in which it will be read.

Important! The reading order starts at the bottom and moves upwards.

Click on an element in the Selection Pane to see the corresponding element highlighted in the slide.

In the following screenshot, the Title will not be read first since it is not at the bottom of the list. Content Placeholder 2 will be read first.



To fix the reading order, Select Title 1 and Click the down arrow at the top right corner of the Selection pane to move it down to the bottom of the list.

Click on each item, going from bottom to top, and adjust the order as necessary. This process needs to be done on every slide.

Tip: Newer documents using slide layouts will be much less work than older documents that have been reused and updated year after year. To save time on fixing the reading order, transfer your content to a new document made with a version 2013 or newer template and slide layouts.

Following these steps will help ensure your document is accessible. In addition, Microsoft Office has a built-in tool that generates a report on the accessibility of a document. The tool is available in both Word and PowerPoint. For more information on the Accessibility Checker tool, please visit the page Information on PowerPoint Accessibility Checker (https://accessibility.colostate.edu/ud-powerpoint/#1497913626925-fc217696-e485) on the Colorado State University website.

PowerPoint Accessibility Checklist

- ☐ has unique slide titles
- ☐ uses built-in slide layouts
- ☐ has links that are descriptive
- ☐ uses designated header rows for tables
- ☐ uses solid backgrounds and contrasting color
- ☐ provides alternative tests for images, charts, graphs
- ☐ has an accurate reading order for all slides

Making PDF Documents Compliant

Best Practices Overview

- Use the Accessibility Checker - This built-in tool will tell you about possible issues in your document and give suggestions on how to correct them.
- Convert scanned text - Make sure the document contains real text (scanned documents often render text as unreadable). If it does not, recreate the PDF file using the source document or convert it to include true text.
- Set the document language - Setting the document language in a PDF enables some screen readers to switch to the appropriate language.
- Check alternative text for all non-text elements.
- Use color carefully - Make sure to use good color contrast, such as 4.5:1 ratio of text to background, to ensure readability. It's always best to start with an accessible source document (e.g., Word), then save it as a PDF.
- Check for tags - Tags enable assistive technologies to read and interact with PDF documents. Headings (H1), paragraphs (P), and figures are examples of tag types. Check the tags pane to ensure there are tags, and if not, add them.
- Check the reading order - Review the order of the tags in the Tags Pane to ensure the correct reading order.
- Check for proper tag use - Use the Tags pane to check whether tagged elements are properly sequenced and applied. For example, is a first-level heading tagged as an H1 and not an H3? Are lists, tables and images tagged appropriately? Do the tags match the text? Rearrange or rename tags as needed.
- Artifacts - Artifacts are elements that are ignored by a screen reader, such as a background texture that does not contain important text. You can change an element to or from an artifact using the tag tree menu or the Touch Up Reading Order (TURO) tool.
- Check form fields and buttons - If the PDF is intended to be an interactive document, add meaningful labels to the fillable form fields

and buttons. Set the tab order for the form fields, provide instructions, ensure proper keyboard focus, and ensure any error handling is accessible.

Best Practices Instruction

When you first scan a printed page to PDF, it creates a document that contains no actual text, just an *image of text*. Lacking any recognizable text, it does not allow interaction with reading tools, and is also difficult to read on a mobile device.

In a few short steps, software such as Adobe Acrobat Professional, ABBYY FineReader, or OmniPage can take an image-only PDF and make it "Searchable" using a process called Text Recognition, or Optical Character Recognition (OCR). The resulting document has text that you can interact with using a variety of technologies.

Benefits of a searchable PDF include the ability to:

- Search text
- Select text
- Highlight text
- Create a Table of Contents
- Listen to text

This section will focus on two types of inclusive PDF creation:

1. Electronic conversion
2. Creating fillable forms

1. Electronic Conversion

PDFs can be created from various software, but the resulting PDF may not automatically be accessible. Start with an accessible document, and configure the export options to include accessibility information. When exported correctly, components such as headings and alternate text will carry over to the PDF. For more details on electronic conversion, visit the page Converting documents to PDFs (https://accessibility.colostate.edu/ud-pdf/) on the Colorado State University website.

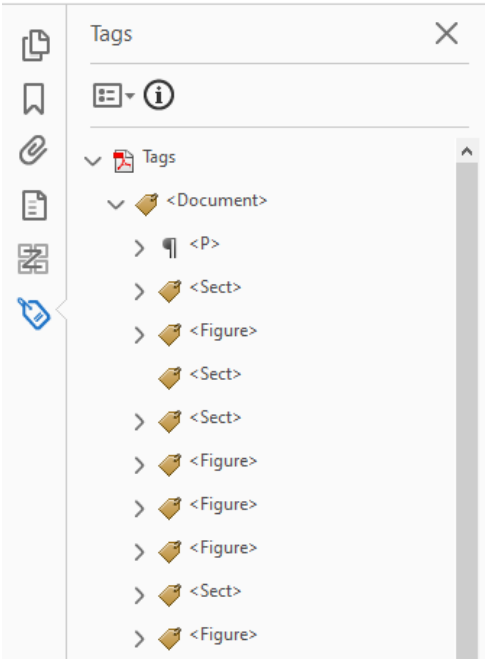
Tags

Reading order is important to consider for content that isn't linear. It applies to the more heavily visual layouts such as websites and PowerPoint presentations, as well as to PDF documents with columns, images, or forms. Setting the reading order allows text-to-speech or screen reading software to read the information in a logical order. It also ensures that links and form fields can be tabbed through sequentially for users who navigate with a keyboard or screen reader.

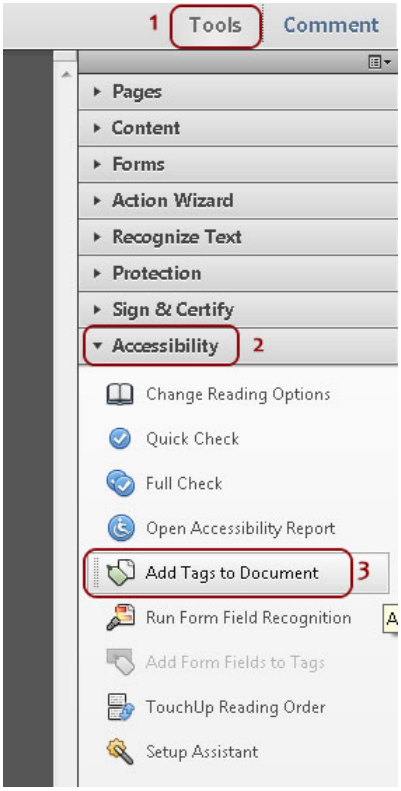
Tags are how Adobe designates document structure in a PDF. They indicate reading order as well as headings and alternative text for images.

If you converted an accessible Word document or PowerPoint to PDF, you'll be starting with a well-tagged PDF file; in most cases, PDF files created using this method are 90% accessible. To be fully accessible, all page content must be tagged, and the tags must correspond with the reading order.

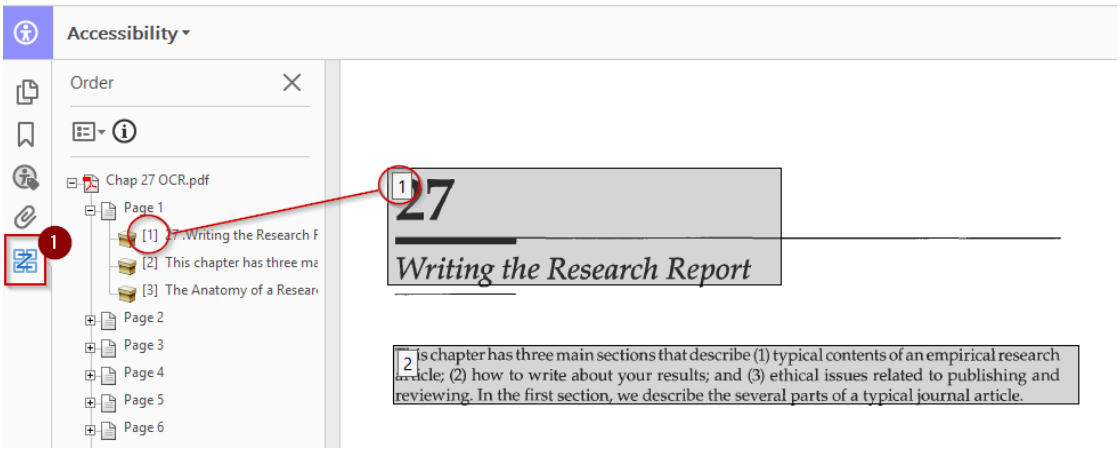
To view the tags in **Acrobat DC**, open the **Tags panel**. From here you can edit a tag title, change a tag location, or change a tag type if needed.



To view tags in **Acrobat XI**, open the Accessibility Toolbar, and click Add Tags to Document.

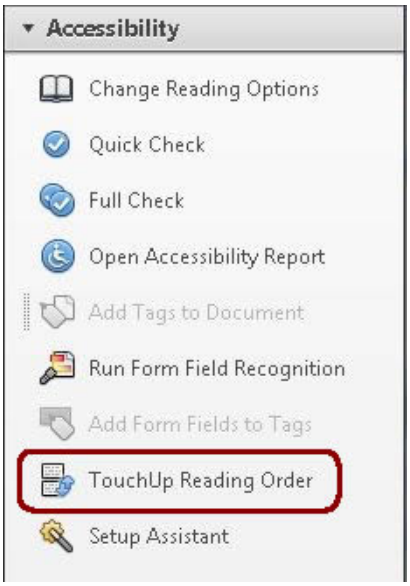


To check the accuracy of autotags, switch to the Order Panel to see if the document has been tagged correctly. The numbers in the panel correspond to the numbers highlighted on the page.



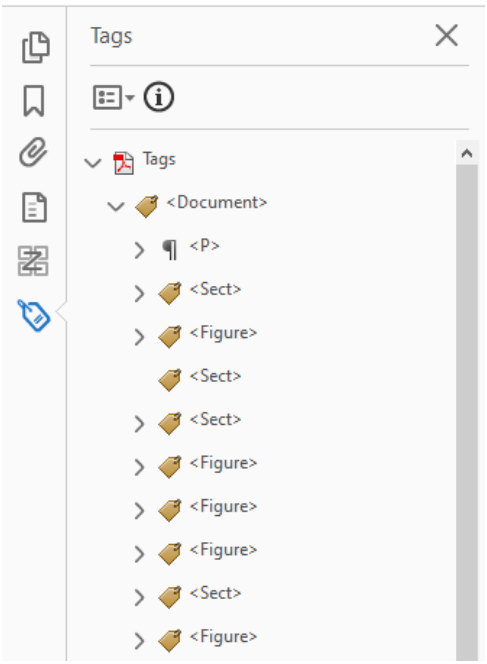
Reading Order

On the Accessibility Toolbar, select **Reading Order** (Acrobat DC) or **TouchUp Reading Order** (Acrobat XI).

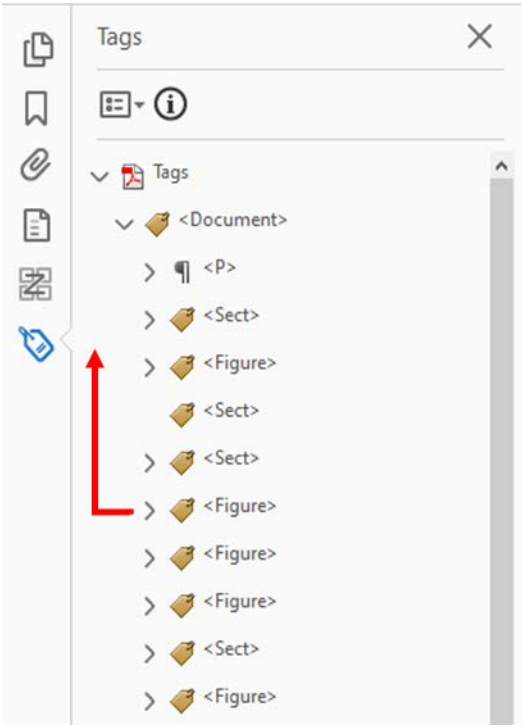


Your page should now have some numbers on it. These are the 'Tags' that determine the reading order.

If the order is incorrect, it's best to go back into the **Tags panel** to adjust it.



You can drag the tagged elements into the correct order.



Images and Alt Text

Images convey information quickly and powerfully—assuming they can be seen and understood. However, some readers may not understand the meaning of the image; others may not be able to see it due to visual impairment, personal viewing preferences (especially on the web), or technological limitations.

Alternate text (“alt text” or "alt tag") is added to an image to provide a textual alternative to visual information. Why is this important? Remember, some users will not *see* your information; instead, they’ll *hear* it using text-to-speech or screen-reading software. By adding alt text to an image, you make its meaning available to people who, for whatever reason, cannot see it.

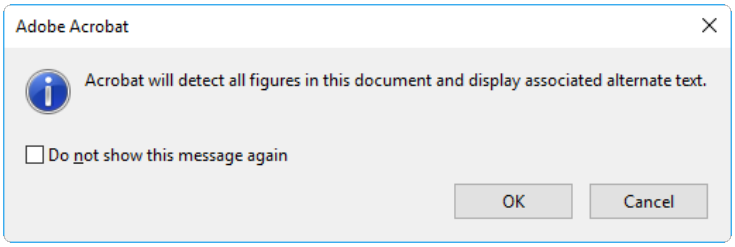
Alternate text should be added to all non-text elements, including:

- Pictures
- Graphs
- Charts
- Tables
- Microsoft Office SmartArt

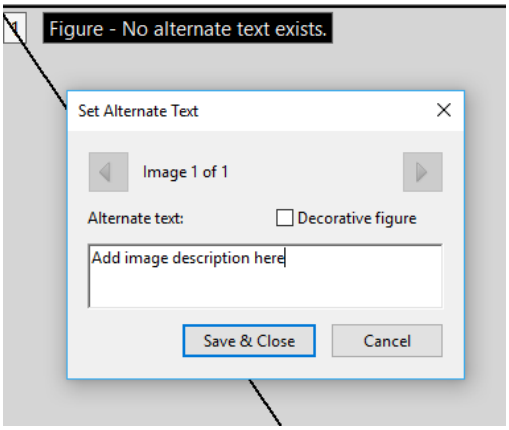
Make alternate text meaningful to a listener:

1. What is the context of the image? What meaning does it add to the page?
2. Be concise. Describe only what you expect visual users to get out of the image.
3. If the image is already described in the surrounding text, the alt text can be very short.
4. Avoid redundant statements like “Image of” or “This is a picture of.” Simply state what it is.
5. If an image is purely decorative, mark it as such (various methods depending on software; Office 365 provides a “Mark as Decorative” option, but older versions of Word do not).

Use the Action Wizard in Acrobat to detect any images (Figures) in a PDF. (See [instructions on using the Accessibility Checker in Acrobat (https://accessibility.colostate.edu/ud-pdf/#1503006362254-ea4e9739-5014)](https://accessibility.colostate.edu/ud-pdf/#1503006362254-ea4e9739-5014).)



The Wizard will prompt you to add alternate text to any images it finds.



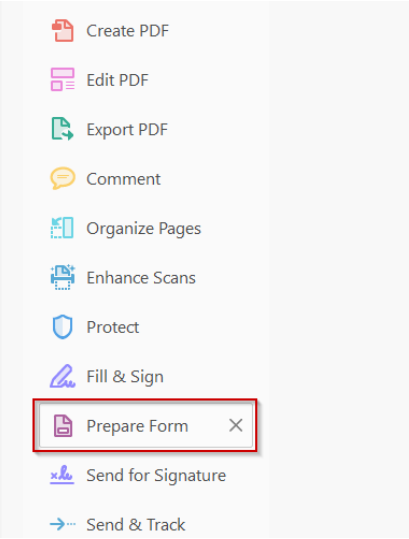
Following these steps will help ensure your document is accessible. In addition, Microsoft Office has a built-in tool that generates a report on the accessibility of a document. The tool is available in both Word and PowerPoint. For more information on the Accessibility checker please visit the page [Information on PDF Accessibility Checker (https://accessibility.colostate.edu/ud-pdf/#1499879148274-46cc3507-67e2)](https://accessibility.colostate.edu/ud-pdf/#1499879148274-46cc3507-67e2) on the Colorado State University website.

2. Fillable Forms

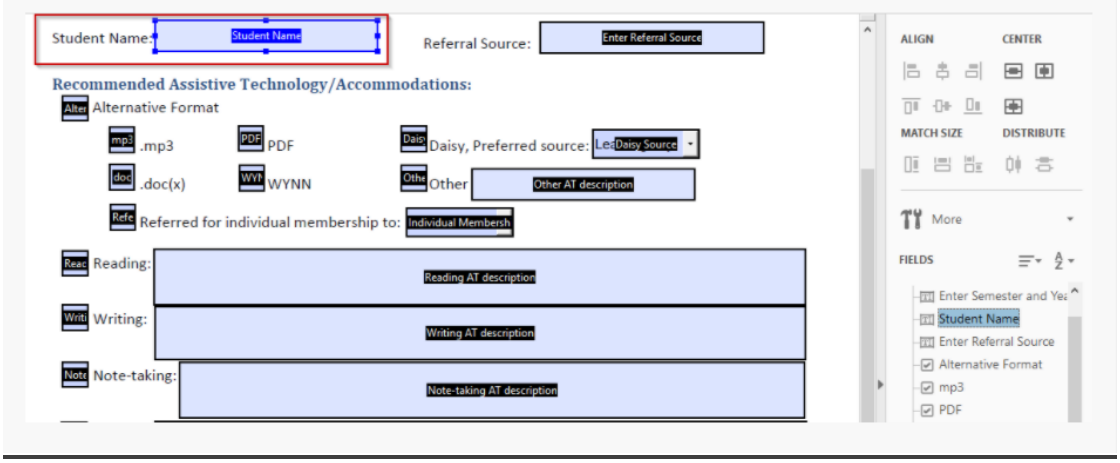
For a form to be accessible, it should be usable by people who use a screen reader or a keyboard to navigate.

1. A user should be able to complete a form using only a keyboard, including interacting with dialog boxes.
2. Form fields should be labeled descriptively.
3. Tab order should be logical.

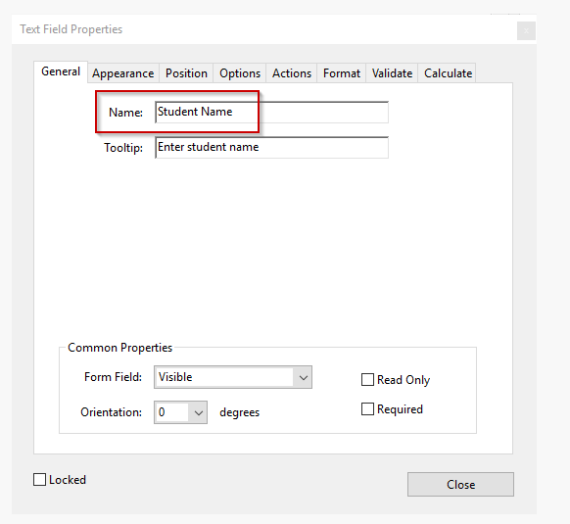
To edit a form in Acrobat, open the form editor tool. In Acrobat DC go to **Tools > Prepare Form**. In earlier versions of Acrobat, go to **Tools > Forms > Edit**.



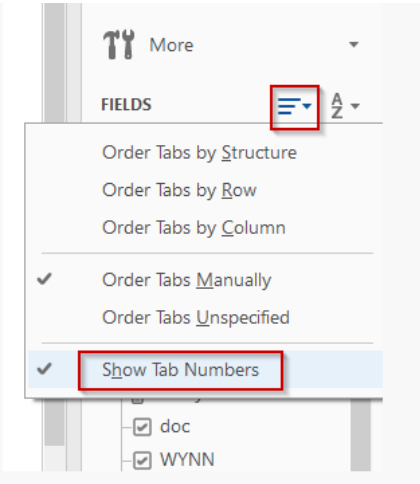
Once the form field editor is open, existing form fields will be highlighted within the document. The form field labels will appear inside fields. Check these labels to make sure they are descriptive. In the example below, you can see that the Student Name field matches the label:



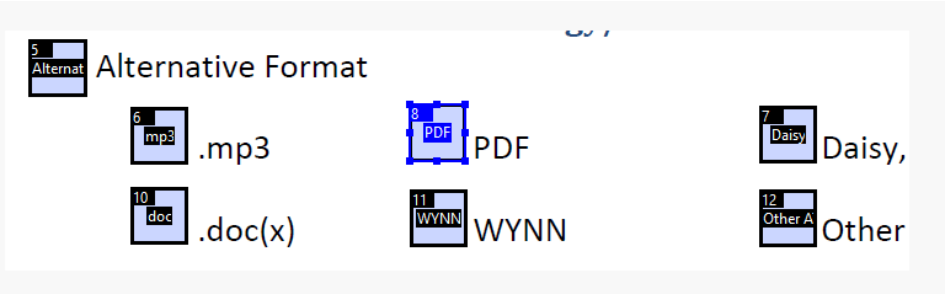
If the label does not match, double-click on the label to edit it. In the Text Field Properties dialog box that appears, edit the **Name** field:



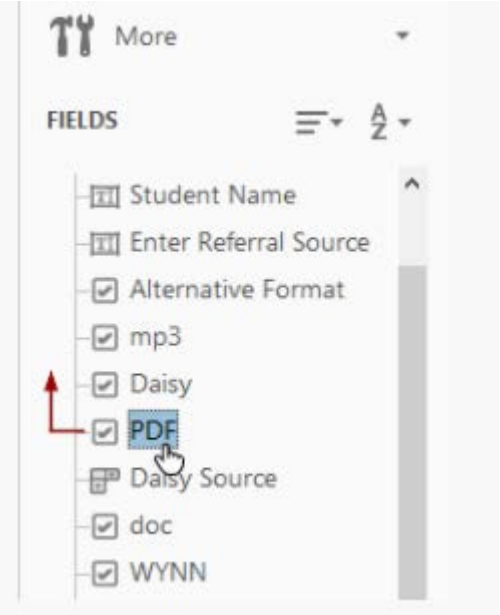
Once your labels are correct, check the tab order. Keyboard and screen reader users will use the Tab key to jump from one field to the next, and this needs to happen in a logical order. To see the tab order, click on the drop-down menu icon next to "Fields" in the Form toolbar (Acrobat DC).
Select **Show Tab Numbers**.



Now you should see numbers inside of each form field that tell you the tab order. In the following screen shot, the logical order for the checkboxes is mp3 (6), PDF (7), then Daisy (8). With the current incorrect tab order, it will be read as mp3, Daisy, then PDF.



To fix the tab order, select the PDF label on the form. This will also select the correct label in the toolbar on the right. In the toolbar, select and drag "PDF" upwards into the correct position between mp3 and Daisy.



PDF Accessibility Checklist

- ☐ has clear, legible copy
- ☐ has readable text (if a converted document)
- ☐ has sufficient color contrast
- ☐ has accurate tags
- ☐ has an accurate reading order
- ☐ includes alt text for images, charts, graphs

Resources for Outsourcing 508 Compliance

There are a number of vendors in this space and more are emerging all of the time due to the need for making products 508 compliant. Here are just a few (not at all a comprehensive list) that have been used to produce favorable results. Who you choose to use may vary based on cost, length of time to produce documents, ability to access services, and methods of payment. Your agency might require a vetting process in order to select a vendor. Pricing will certainly vary based on the number and complexity of documents.

Captioning

Closed captioning services providers give visual aid to videos in the form of subtitles, integrating transcribed text from dialogue and sounds as they happen. Closed captioning, originally designed to help individuals with hearing challenges understand spoken words and music on television shows and movies, is now also used in different situations where it would benefit audiences that are not necessarily hearing impaired to understand dialogue clarification and contextual details. Here are two websites containing lists of vendors that can provide these services:

- Live (Open) Captioning Service Vendors (https://dcmp.org/learn/10-captioning-service-vendors)
- Closed Captioning Service Vendors (https://www.g2.com/categories/closed-captioning-services)

Document remediation

In the event you wish to use an outside service for making Word, PDFs, PowerPoints, and Excel documents 508 compliant, here are a few vendors to consider.

- Open Access Technologies (https://www.openaccesstech.com/)
- AccessibilityOz (https://www.accessibilityoz.com/)
- CommonLook (https://commonlook.com/)
- Braille Works (https://brailleworks.com/)
- SensusAccess (https://www.sensusaccess.com/)
- Equidox (https://equidox.co/)
- Appligent (https://appligent.com/)
- Abledocs (https://abledocs.com/)

About TBI TARC

The Traumatic Brain Injury Technical Assistance and Resources Center (TBI TARC) is an initiative from the Administration for Community Living that helps TBI State Partnership Program grantees promote access to integrated, coordinated services and supports for people who have sustained a TBI, their families, and their caregivers. The Center also provides a variety of resources to non-grantee states, people affected by brain injury, policymakers, and providers.

ACL
Administration for Community Living

TBI SPP
Traumatic Brain Injury
State Partnership Program

TBI TARC
Traumatic Brain Injury
Technical Assistance and
Resource Center