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Center for Inclusive Design and Innovation

Presentation Accessibility Guide

MICROSOFT POWERPOINT

Accessible Presentations Benefit Everyone

This full how-to-guide was created by the Center for Inclusive Design and Innovation (CIDI) and includes screenshots, examples and key strategies useful for creating accessible Microsoft PowerPoint presentations for your course content.

PowerPoint presentations are a powerful tool to communicate information about your program to a wide-ranging audience. Improving the accessibility of PowerPoint presentations will give everyone the opportunity to engage with the information you present and with your program. Microsoft PowerPoint has built-in accessibility tools and features that you can use to make presentations more accessible to people with a wide range of disabilities. Accessible presentations benefit:

- people who are blind who use screen readers
- people with low vision
- people who are colorblind
- people with learning disabilities such as dyslexia
- people with cognitive disabilities or impairments
- people who are deaf or hard of hearing and benefit from captioned media

While this guide focuses on Microsoft PowerPoint accessibility, many of the best practices and strategies also apply to other presentation software. For more information, see the following accessibility resources for Google Slides and Keynote for Mac. The accessibility tools described in this guide are available in the desktop versions of PowerPoint for Windows and Mac, except for the Reading Order Pane, which is not currently available on Mac. Most of these accessibility tools are not yet available in the Office 365 online version of PowerPoint.

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Key Topics Overview

Improving the accessibility of PowerPoint presentations improves the user experience for everyone. In this guide we will explain the best practices for making PowerPoint presentations accessible and explore the updated accessibility tools in PowerPoint that provide improved functionality for meeting the needs of all users.

Key parts to creating an accessible presentation include:

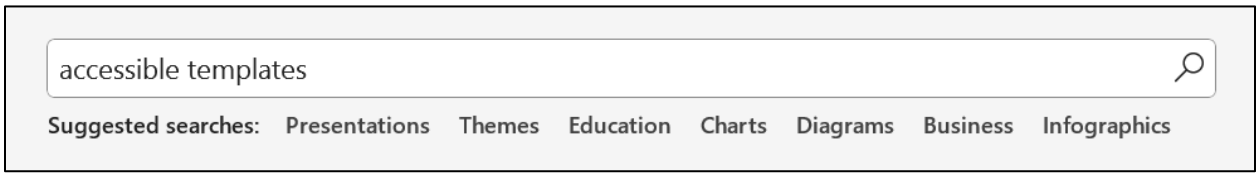
- Accessible Templates and Layouts
- Slide Layouts
- Slide Titles
- Easy to Read Fonts
- Alternative Text for Images
- Accessible Tables
- Color and Contrast Tools
- Logical Reading Order
- Accessible Link Text
- Captions for Videos and Media
- Using Accessibility Assistant to Check Accessibility
- Using the New Accessibility Tab
- Saving as an Accessible PDF

Accessible Templates and Layouts

Accessible templates are structured to support screen reader users with built-in layouts for consistent reading order. They also use color palettes that provide adequate color contrast for people with low vision and learning disabilities. Adequate color contrast improves access for everyone. Always begin a new presentation by selecting a PowerPoint template designed with accessibility in mind.

- Open PowerPoint and select File > New to begin a new presentation.
- Choose an accessible template, create a master layout, or use a template created by your organization that was designed to be accessible.

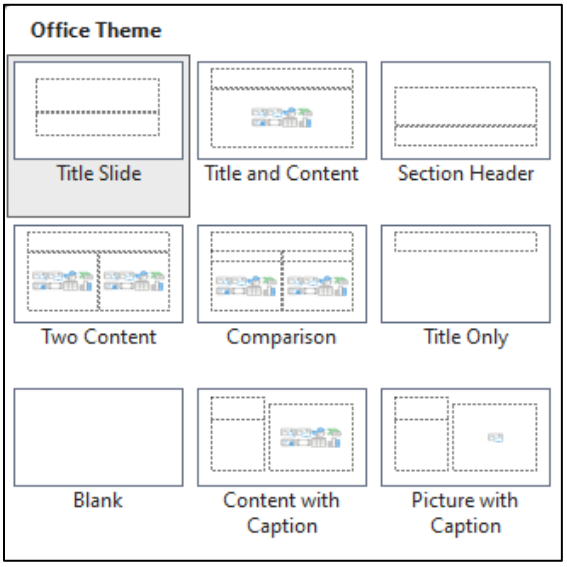
To search for an accessible template when creating a new presentation, go to File > New and enter “accessible templates” in the search box.



Select an accessible presentation template with a theme that includes color palette options with **high contrast** between background colors and text.

Slide Layouts

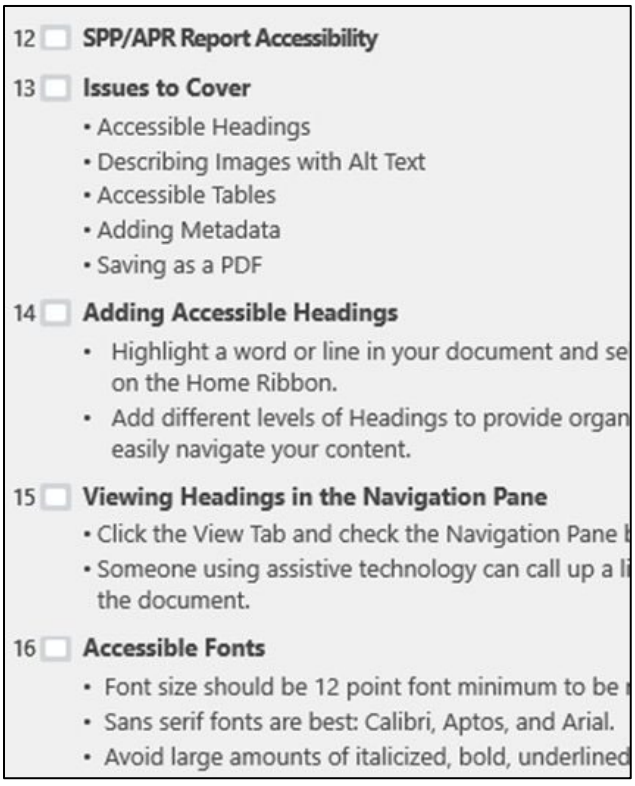
PowerPoint's built-in slide layouts help you maintain a logical reading order. Use the built-in slide layouts instead of creating custom layouts. Built-in layouts also help you keep a consistent design and look throughout the presentation.



When adding a New Slide, select a slide with one of the built-in layout options rather than beginning with a blank slide. Select a layout with the number of placeholders you need. You can always resize or delete extra placeholders if necessary. Screen readers will announce overlapping placeholders, which interrupts the intended content. To prevent this, once you have added all the content to your slide, use Ctrl+A to select all objects on the slide and resize or adjust overlapping placeholders.

Avoid manually adding text boxes. Text boxes are not always read aloud by screen readers, and using the accessible content placeholders of the built-in layouts will ensure your content will be read by a screen reader.

To verify that text is accessible to the screen reader, select Outline View on the View tab. The Outline view displays slide titles and text on the slides. In the screenshot below, you can see all of the slide titles in bold, and all text content appears in regular font. If any of your slides' content is missing in the Outline View, a screen reader may have difficulties accessing the content or, for example, will access the text in a text box, but will interpret it as an object.

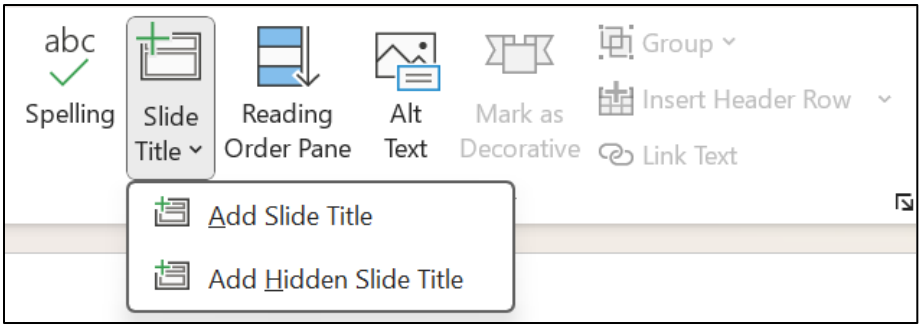


Slide Titles

Give each slide a unique and descriptive title. Slide titles help people who use screen readers navigate through the presentation and can be helpful for increased understanding of the content. Slide titles appear in bold in the screenshot of the outline view above. The slide titles are clear and distinctive, and signal to both the presenter and audience the main content of the slide.

Tips for best practice in writing slide titles are as follows:

1. Use a slide layout that includes a title placeholder.
2. If your slide is missing a title, use the Slide Title tool on the Accessibility tab (see screenshot below, under Tip 7).
3. Provide descriptive titles that directly relate to the content of the slide.
4. Never duplicate slide titles.
5. If the topic of a slide continues to the next slide, add a number to the slide title using a consistent numbering convention, for example:
    - Percent of Population Children with Disabilities, Part 1
    - Percent of Population Children with Disabilities, Part 2
6. Use title case for all slide titles throughout the presentation.
7. Add a **hidden slide title** option from the Slide Title tool dropdown menu on the Accessibility tab if you do not want the title to visually appear on the slide, as shown in the screenshot below. A hidden slide title will be read aloud to a person using a screen reader but will not be visible on the slide. This can help the screen reader user navigate through the slides.



The **Accessibility Assistant** (formerly the Accessibility Checker) will also identify if slides are missing titles and will provide links and suggestions to add a missing title to the slide in the accessibility review.

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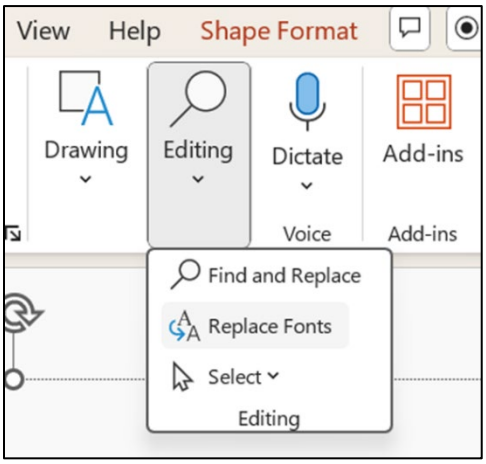
Easy to Read Fonts

Easy to read fonts improve the user experience for everyone and are especially important for people with low vision or learning disabilities such as dyslexia. Sans serif fonts are typically easier to read in a digital format. Follow these recommendations to make content easier to view and understand:

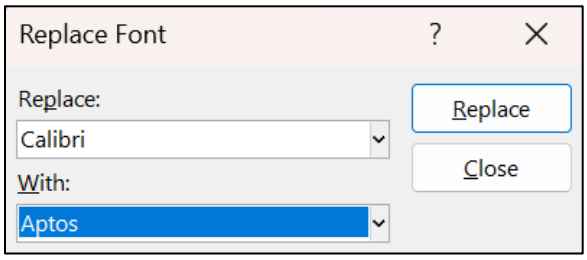
- Choose sans-serif fonts, such as Aptos, Calibri, and Arial.
- Use font size 18pt or larger for body text.
- Avoid decorative fonts.
- Avoid using more than two different fonts in a presentation.

Occasionally, when you are collaborating with others or adding text from other sources such as Microsoft Word or previous versions of slides, you may accidentally add a different font to your slides. Use the **Replace Fonts** option to globally replace fonts in the slide deck when needed.

To change the font globally, go to the Editing options on the Home menu and select **Replace Fonts**, as shown in the screenshot below.



Use the dropdown list to select the name of the font you would like to replace, and select the font to replace with, for example replacing **Calibri** with **Aptos**. The font will be replaced globally throughout your presentation.



Additional considerations include:

- Use bold for emphasis.
- Use bullet points for clarity and avoid large blocks of text.
- Create adequate white space on your slides to improve readability by adjusting line spacing in the Paragraph settings.
- Avoid using blank lines for white space or formatting, as screen reader users may interpret them as the end of the content.

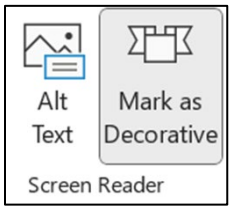
Alternative Text for Images

It is essential to add alternative text (alt text) descriptions to images, charts, graphs, and tables. Alt text descriptions help people who use screen readers access the content and purpose of the image. Alt text should be descriptive and concise. Microsoft recommends that alt text on images in PowerPoint be concise, yet descriptive enough to convey the purpose and context of the image. Typically, the alt text should be around 1-2 sentences, focusing on what is important for the audience to understand.

Consider the **purpose** of the image when adding alternative text descriptions.

Images generally fall into one of **three categories: Informational, Decorative, and Functional (used as a button or link)**.

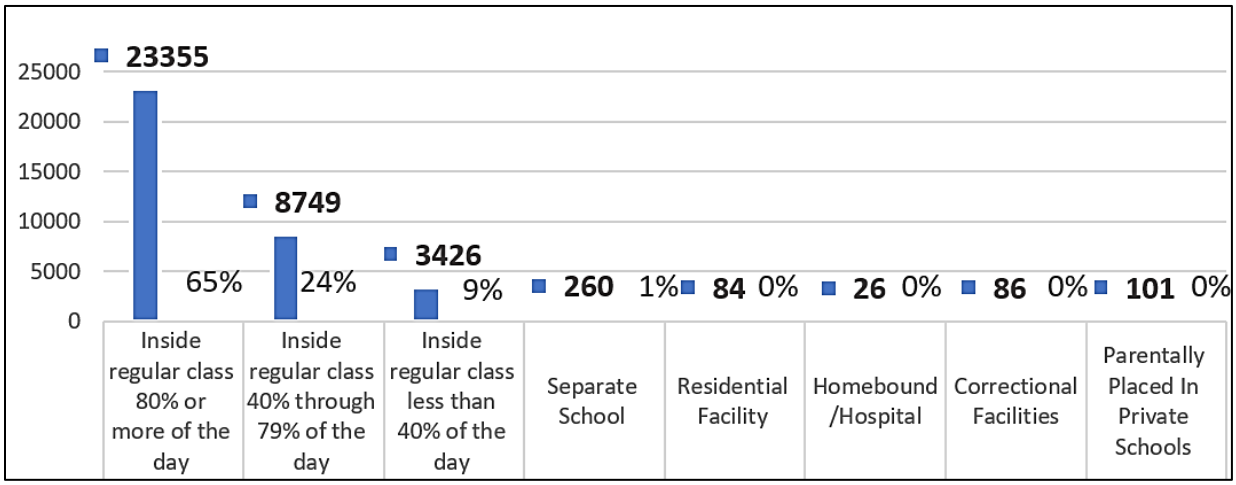
- **Informational** - If the image's purpose is to convey information or meaning, determine what information it is conveying and write a short, concise text description that will convey that information.
- **Decorative** - If the image is decorative, mark the image as “decorative” so the screen reader will skip the image altogether. A decorative image does not convey important information or have a functional purpose.



- **Functional** - If the image performs a function, the alt text should indicate the functional purpose of the image. Example: “Link to Homepage.”

When adding alt text descriptions, use complete sentences with proper punctuation. Avoid using abbreviations or acronyms unless they have been previously defined. You also should not duplicate information present in a caption. See an example of alt text for a bar chart below.

Chart Title: Number of Students with Disabilities by Educational Environment



The alt text description for the bar chart above reads: A bar chart showing the number of students with disabilities by educational environment. The chart includes the following breakdown: 65% of students are inside the regular class 80% or more of the day. 24% of students are inside the regular class 40% through 79% of the day. 9% of students are inside the regular class less than 40% of the day. 1% of students attend a separate school. And fewer than 1% of students are in other environments outside of the school.

For tables of data, it is preferable to include the table itself since the text can be accessed by a screen reader, rather than providing a screenshot of the table with an alt text summary of the data. Providing text, rather than images of text is helpful to everyone in most cases.

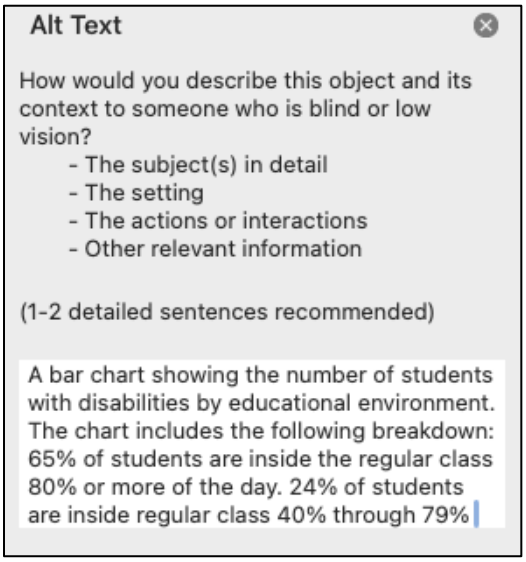
For more guidance and examples of writing alt text, including writing long descriptions for complex images, please see our Writing Alternative Text Guide.

How to Add Alt Text

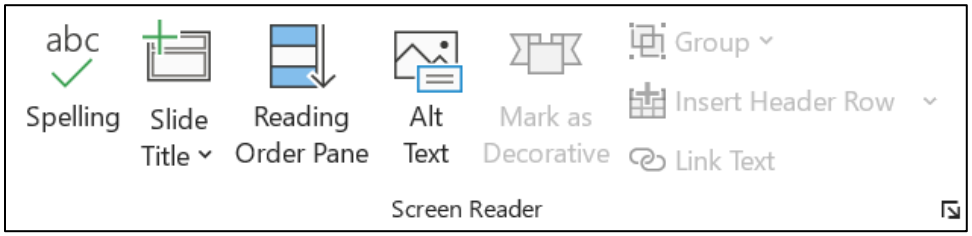
The option to add alt text is now available in several locations:

- **When right clicking on the image**, select View Alt Text.

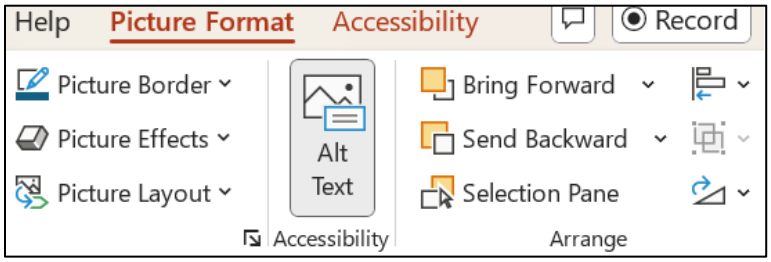
Then add the alt text description as shown in the screenshot below.



- **In the Screen Reader section of the Accessibility tab**



- **In the Picture Format Accessibility section**



- **Within the Reading Order pane,** shown in the example below.

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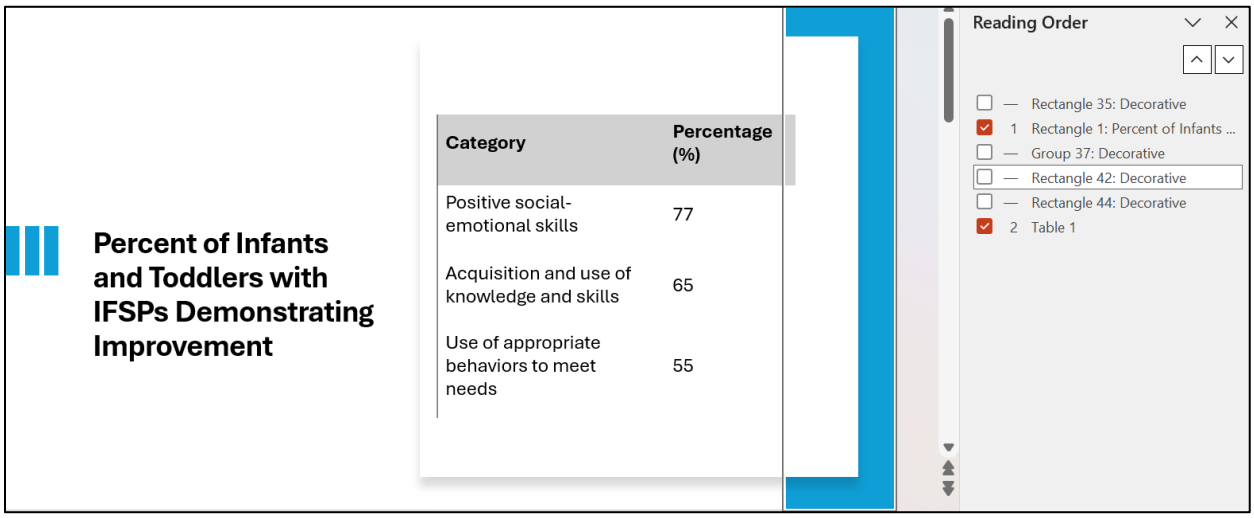
Marking Objects as Decorative

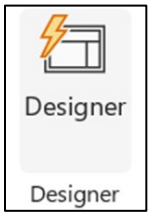
Using the Reading Order pane is a helpful way to review objects on your slides and to mark the decorative visual elements that are not informative as decorative. Some design elements may not convey information that would be useful to a person using a screen reader. These types of images may be useful for people visually accessing information. This includes graphics or shapes used to highlight information on a slide, or a shape that may be part of a design element.

For example, in the screenshot below there is a slide with Reading Order pane open. In the pane, red check marks are only used for the text elements on the slide. Several rectangles are listed in the reading order, but they are marked as decorative, as the check box is unchecked. Only the text elements indicated with the red check mark will be read aloud by a screen reader.



Screen readers will not announce any information about the images that are marked as decorative. If the images are not marked as decorative or do not have alt text added, the screen reader will announce “image” aloud. These types of images can also be marked as decorative in the Alt Text entry area or as an option on the screen reader section of the Accessibility tab.

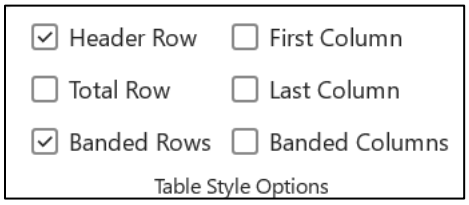
If using the “Designer” feature in PowerPoint, this may result in individual design elements added to the slide. As long as the design elements are marked as decorative, a screen reader can accurately access the content on the slide.



Accessible Tables

Use a simple table structure that is easier to understand for all users. A simple table structure includes column and row header labels that will be read aloud to screen reader users and maintains a left to right logical reading order with no blank or merged cells.

Use the Table Design tab to confirm the table has a Header Row identified. By default, the information in the first row will be identified as a header.



Example of accessible table with simple structure, with column headers identified and no blank or merged cells.

Disability Type	Total	Percentage
Specific learning disability	43227	38.16%
Speech or language impairment	18625	16.44%
Other health impairment	14812	13.07%
Developmental delay	11301	9.98%
Autism	11125	9.82%
Multiple disabilities	4801	4.24%
Emotional disturbance	4714	4.16%
Intellectual disability	2262	2.00%
Hearing impairment	1276	1.13%
Traumatic brain injury	398	0.35%
Orthopedic impairment	378	0.33%
Visual impairment	337	0.30%
Deaf-blindness	33	0.03%

Color and Contrast Tools

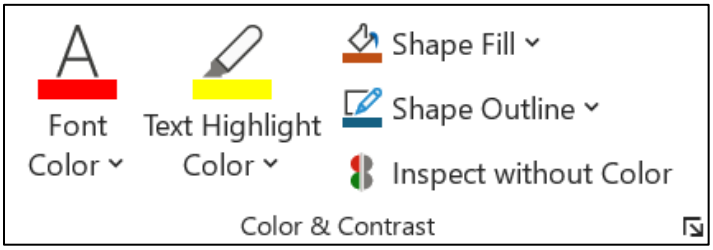
Adequate color contrast is especially important for people with low vision and people with learning disabilities and improves access for everyone.

Colors must have sufficient contrast between text color and background. This includes text on images, icons, and buttons. It also includes colors used to convey information on diagrams, maps, and other types of images.

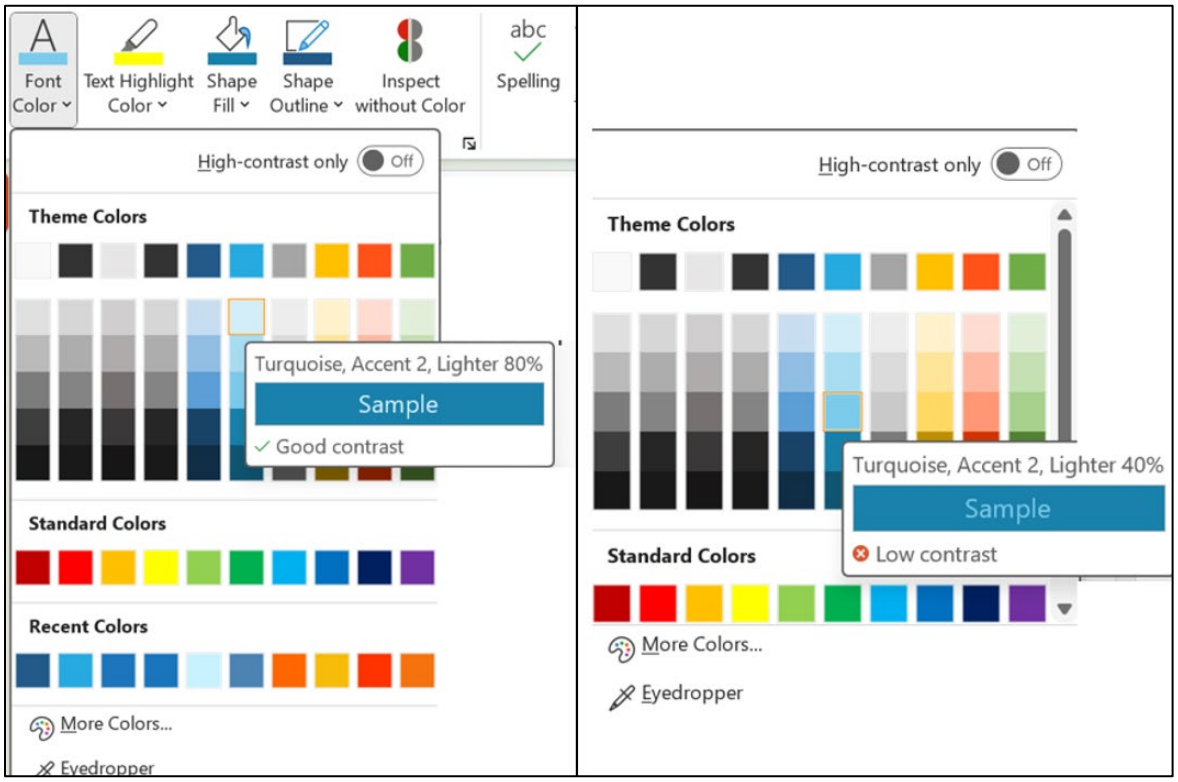
Do not use color as the sole indicator of information. When color is used to convey information, add additional labels. For example, rather than just using the color red to indicate that information is missing or needs to be revised, provide an additional label to identify which information is missing. Avoid color combinations such as red and green that can be difficult for people who are color blind to distinguish. The Inspect without Color tool shows your slide in grayscale and can help you identify instances in which color alone was used to convey information or if color combinations are difficult to perceive.

If the text is difficult to read on selected background when viewed in grayscale, it has low contrast and will be difficult for many viewers to see and understand. This is especially helpful in determining what color combinations may be difficult for individuals who are color blind. Inspect without color also helps you check your slide to see if you have used color alone to convey information.

The color and contrast tools on the Accessibility tab can help you choose colors with adequate contrast.



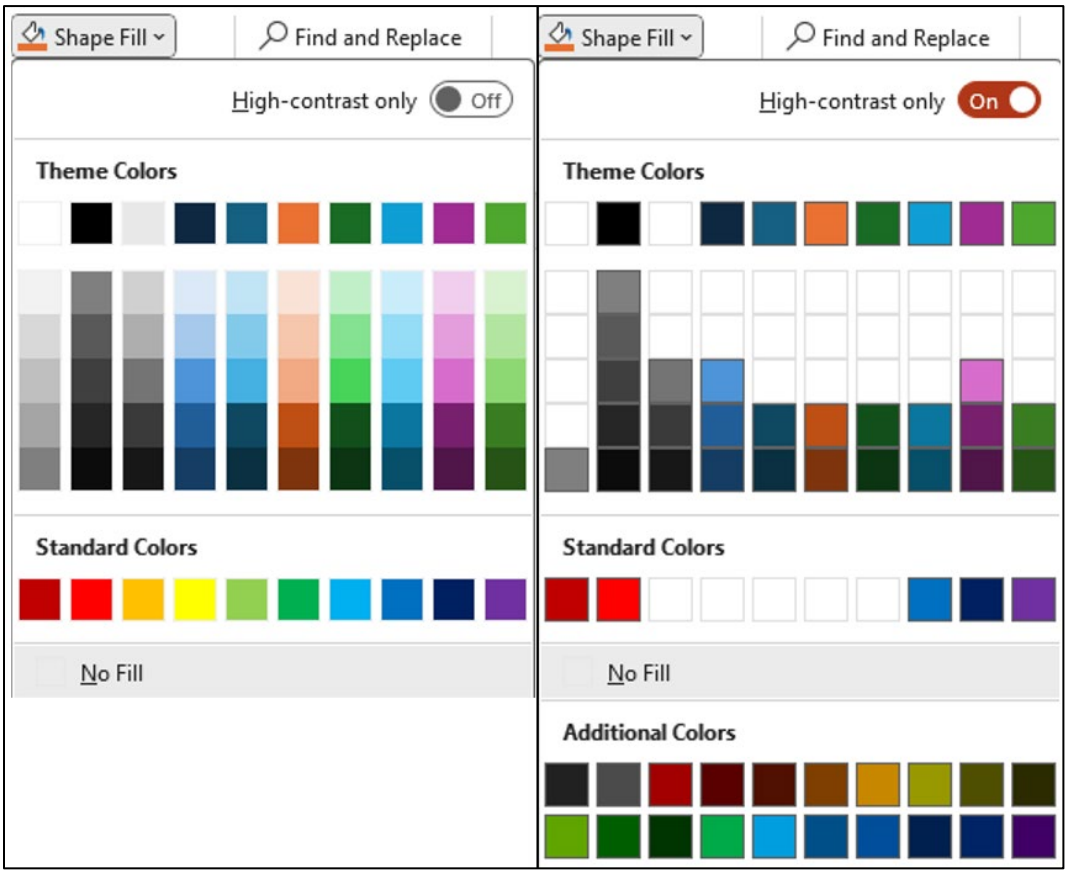
When choosing a background or **Shape Fill** color, the color picker tool will provide you with information regarding the contrast level between the fill color (background) and the text. It will also identify if the color combination provides either **Good contrast** or **Low contrast** during the selection.



Below is an example of **Good contrast** (above) and **Low contrast** (below).

High-contrast only option

The new tools provide the ability to turn on the option to choose only high contrast colors on your slides by selecting **High-contrast only** in the color palette / color bucket fill tool. This will display colors from the theme that are only high contrast options.

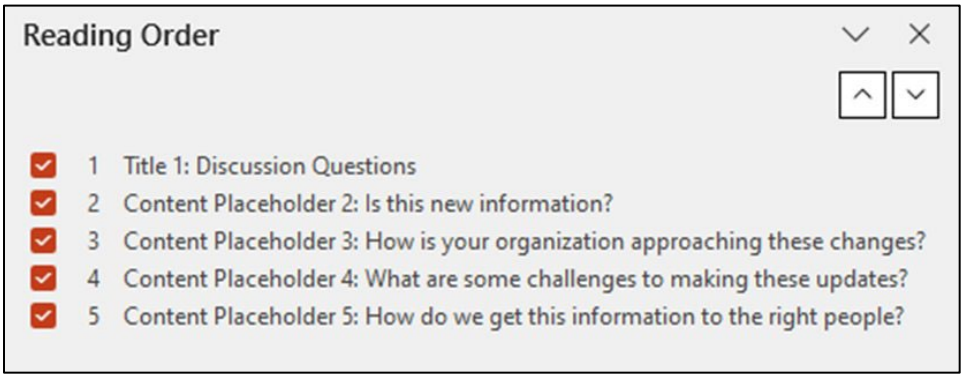


Logical Reading Order

Objects on a slide may not be read in the same order as the visual presentation if objects on the slide have been moved, or additional objects such as images or charts and graphs are added to the slide. The Reading Order pane button will open the reading order pane which allows you to verify the object reading order and make changes so that the content is read by a screen reader in the order you intend it to be read.

To Access the Reading Order Pane:

Go to the Accessibility tab and select the Reading Order Pane. The Reading Order pane will list the objects in the order they will be read by a screen reader.



The title should always appear first in the reading order pane. You can use the up and down arrows to change the reading order of the objects on the slide if needed.

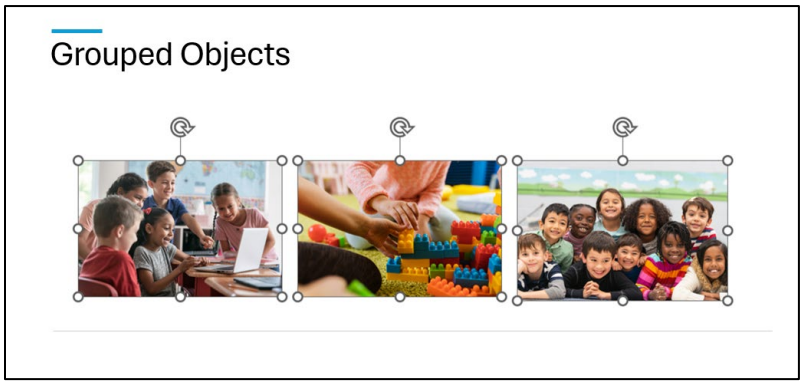
Group Objects on a Slide to Reduce Complexity

When there are several objects on a slide such as images or text boxes, for example, it can be helpful to group them together to create one single object. This can help screen reader users navigate and understand the content more easily. It will also help maintain the reading order and keep the layout consistent.

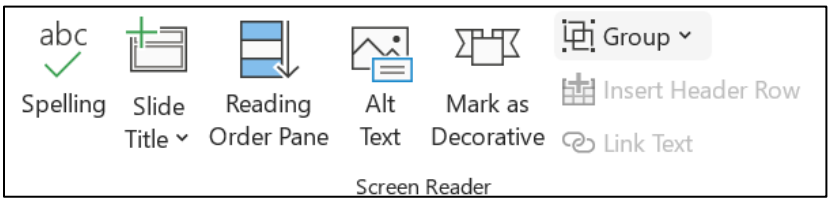
To Group Objects on a Slide:

Select the individual objects or images by selecting one image and then pressing the Shift key while selecting the additional images.

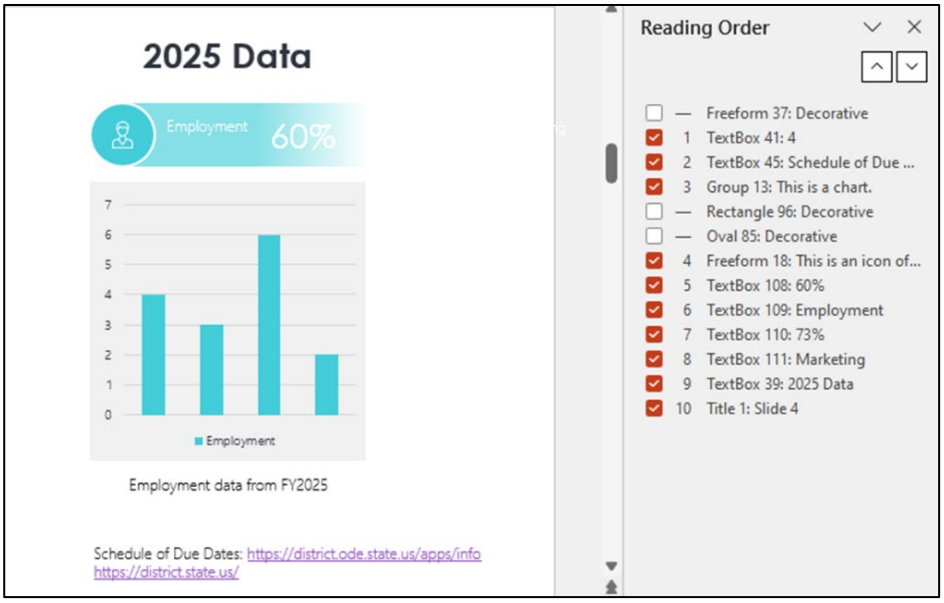
Example showing three individual images selected to be grouped.



Once the images have been selected, go to the Screen Reader section on the Accessibility tab and select Group. Be sure to add alt text description to the grouped image; for example, “Images showing elementary school children in classrooms.”



In some cases, as shown in the screenshot below, diagrams or charts could be constructed out of many lines, borders, shapes, and text. Some online third-party templates may have images that are made this way. This may also occur when using the Designer feature in PowerPoint, which suggests “instant slide makeovers” and design elements in the Designer pane.



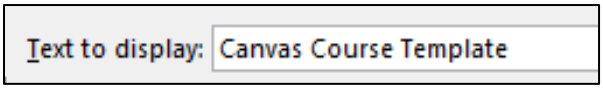
Avoid using third party templates that break charts and graphs into individual pieces, such as the example displayed above. If using this type of graphic, it would be easier for someone using a screen reader to have the separate parts of the graph made into one image with brief alt text instead of having to tab through each object on the slide. You can create a screenshot to capture the entire image.

To create a screenshot on a Windows computer, you can use the Snipping tool to create the image. On a Mac, you can press Command + Shift + 4 to turn your cursor into crosshairs, take a screenshot, and paste it onto your slide. Alternatively, within a slide you can select all components, select “cut,” right click, then choose “Picture” to paste all item as a single image that preserves the resolution.

Accessible Link Text

Provide a descriptive link text that identifies or names the destination of the URL. For example, the link Canvas Course Template is more descriptive and accessible than the URL: https://gatech.service-now.com/home?id=kb_article_view&sysparm_article=KB0041956

To make an accessible link, first select the URL and go to the Link Text option on the Screen Reader section of the Accessibility tab and provide the label in the Text to Display area.



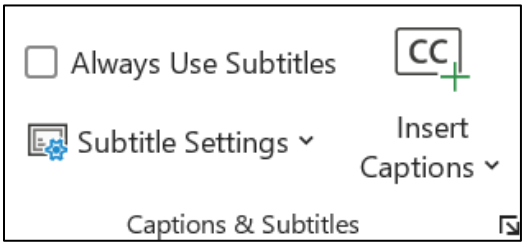
Another option is to write out a text description of the link destination, for example, such as Canvas Course Template, then highlight that text and right click. You will see a Link option and can then paste in the URL to turn your text into a functional link.

Captions for Videos and Media

People who are deaf or hard of hearing will benefit from captioned media on your slides.

When producing videos, always include captions. If you are using a video that does not include captions, but you have a caption file, you can add it to the media on your slide by following these instructions.

1. Select the video clip on your slide.
2. Select the **Insert Captions** button on the **Accessibility** tab or the **Video Format** tab.



3. Select a caption file to include with your video. Caption files are typically in WebVTT or SRT format.

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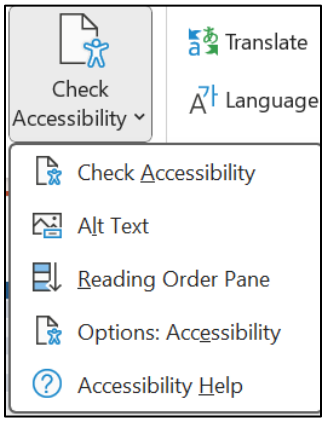
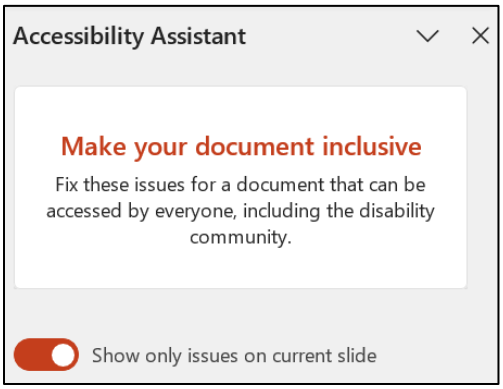
Using Accessibility Assistant to Check Accessibility

The Accessibility Assistant can be accessed in several ways: by going to the Review tab and choosing **Check Accessibility**, or by clicking on **Accessibility: Investigate** at the bottom of the PowerPoint workspace.

When you select **Check Accessibility** on the Review tab, a dropdown menu will open with choices to Check Accessibility, Alt Text, Reading Order Pane, Options: Accessibility, and Accessibility Help.



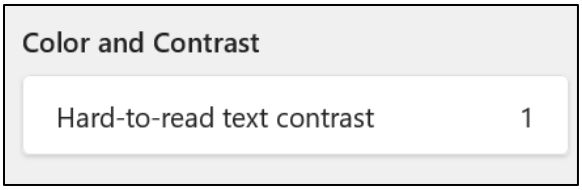
Choose **Check Accessibility** to open the Accessibility tab and open the Accessibility Assistant pane on the right. You can choose to check the entire document or Show issues on current slide as you are working.



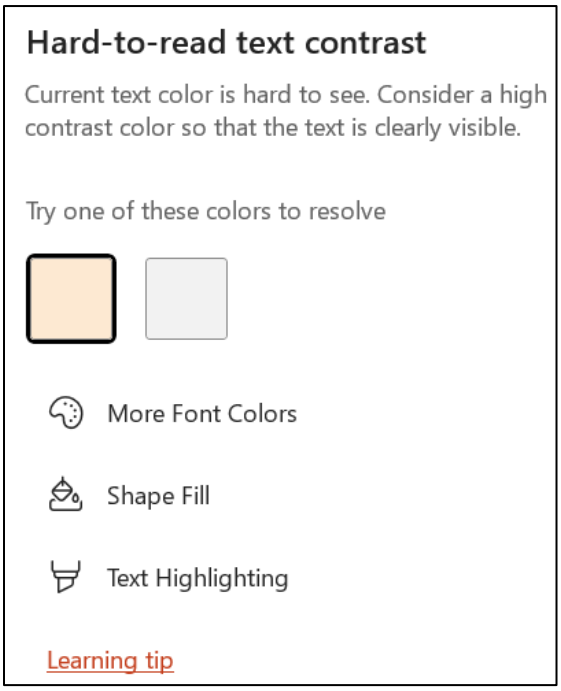
The Accessibility Assistant reviews your document by checking the following categories and listing any accessibility issues found within the categories:

- **Color and Contrast** – identifies hard-to-read text contrast.
- **Media and Illustrations** – identifies missing alt text and missing audio or video subtitles.
- **Tables** – identifies missing table headers and use of merged or split cells.
- **Document Structure** – identifies missing and duplicate slide titles, default and duplicate section names, and prompts you to check reading order on slides.
- **Document Access** – identifies if content is restricted.

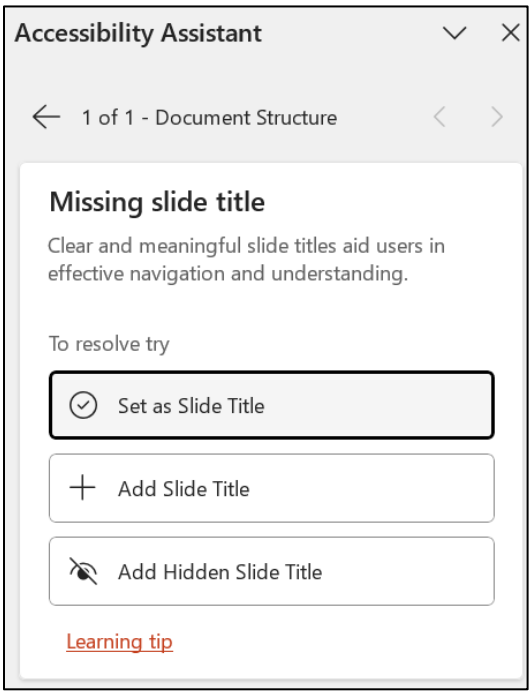
Click on the results to fix the issues found in the report.



The report will also make suggestions for fixing the issue; for example, suggesting text colors with better contrast that are easier to see.



The Accessibility Assistant will also identify other issues such as missing slide titles, tables that are missing headers, and tables that use merged or split cells.

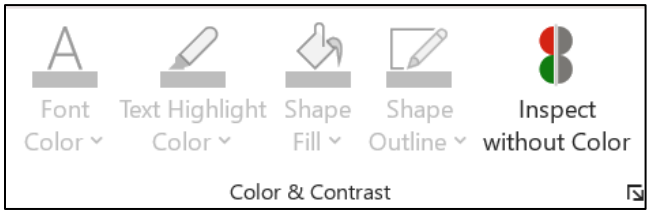


Using the Accessibility Tab

The Accessibility tab includes all of the accessibility tools we have been referring to throughout this guide all in one place. The tab is divided into several sections including Color and Contrast, Screen Reader, Captions and Subtitles, and Accessibility Help.

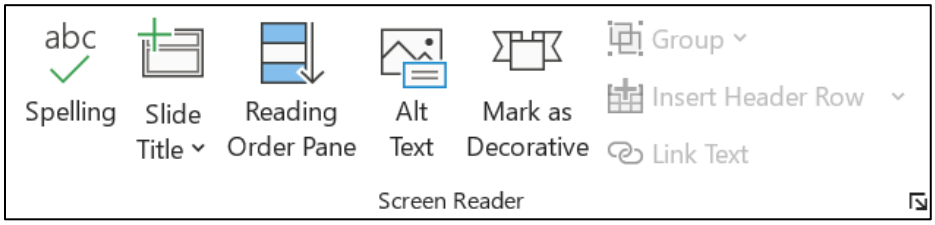
Color and Contrast

Color and contrast tools that help make the presentation easier to see and understand.



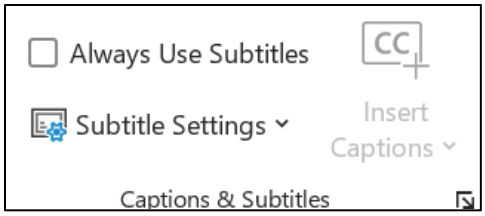
Screen Reader Section

Tools specifically to improve the accessibility for blind people who use screen readers.



Captions and Subtitles

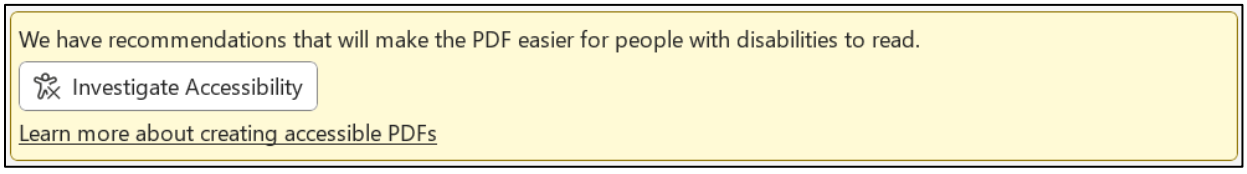
Tools for providing captions and subtitles.



Accessibility Help

Resources to help you make your presentation more accessible.

If the accessibility assistant identifies additional issues, you will have an additional opportunity to Investigate Accessibility (check accessibility) before exporting the file.



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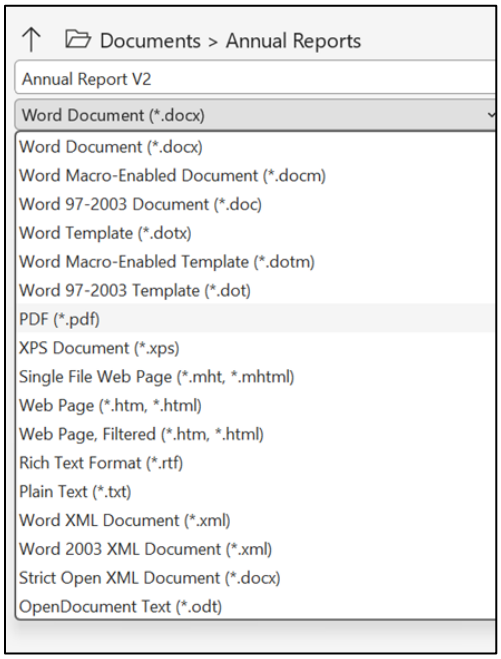
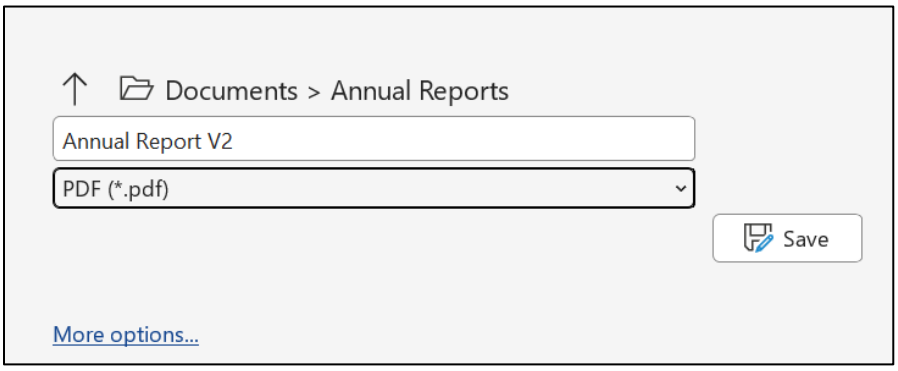
Saving as an Accessible PDF

When you save your PowerPoint as a PDF, the accessibility features you added will be exported to create an accessible PDF. To save your PowerPoint doc as an accessible PDF format:

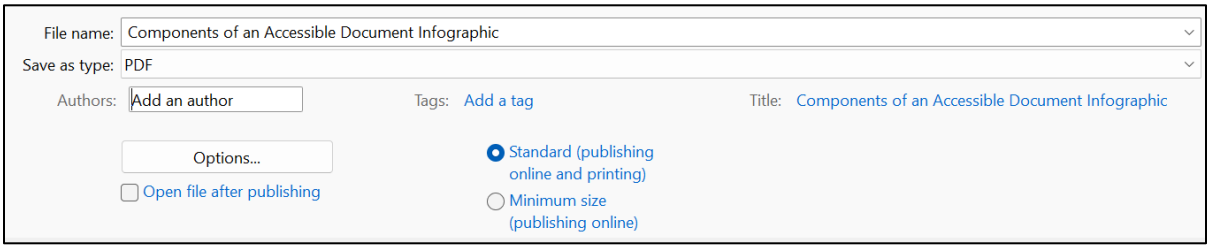
1. Go to **File > Save as** and **choose PDF** as the file type from the drop-down menu.



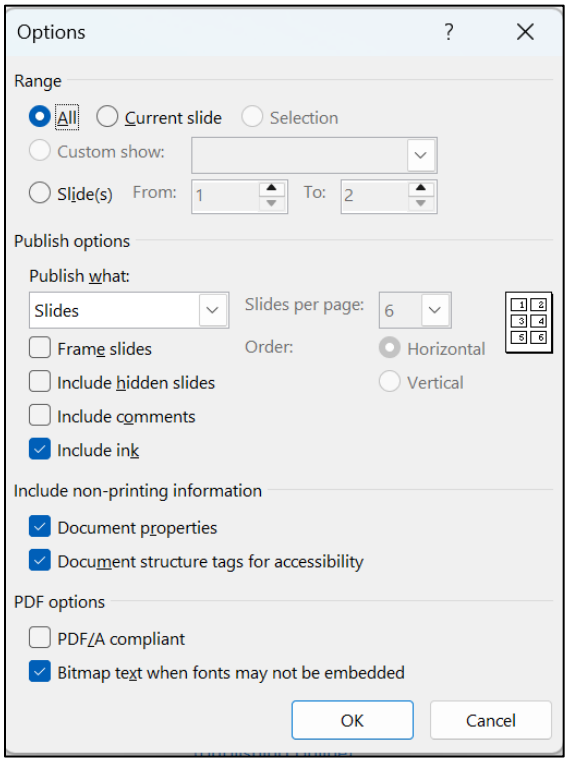
2. Click **More options…** directly below the Save as filetype dropdown menu.



3. Standard **(publishing for online and printing)** should be selected by default.



4. Go to **Options** to ensure that **Document Properties** and **Document Structure tags for accessibility** are selected. Click OK.



5. Click **Save** to save the tagged PDF.

When saving, **do not** choose the “Print to PDF” or “Save as Adobe PDF” as this does not preserve the accessibility features and creates a PDF that will not be accessible.

The resulting PDF will include bookmarks for navigation and structure, while also retaining other accessibility features that include formatted lists and alternative text descriptions, and tags, which will enhance functionality for screen reader accessibility.

Conclusion

Following the recommendations and best practices presented in this guide will help you create PowerPoint presentations that are more accessible and will better meet the needs of all users. Once you have mastered the tips in this accessibility guide, you will be better prepared to create your slide decks with accessibility in mind from the beginning, which will result in far less work for you to retrofit or fix a PowerPoint with accessibility issues. Keep in mind that by making your PowerPoint slides accessible, you are making your content clearer for all users. It is best practice to share slides ahead of time so that people using screen readers can access your content and follow along with your presentation in real time.

The practices in this guide are aligned with ADA Title II and the WCAG 2.1 technical standards, as well as Section 508 requirements. The Center for Inclusive Design and Innovation accessibility specialist team has tested the practices described in this guide with users of assistive technology. For additional information on creating accessible PowerPoint presentations, visit Microsoft Resource for Making Your Presentations Accessible.

Need additional assistance? Our team of accessibility experts is here to help. Whether you have questions, would like to schedule a training, or need guidance on the upcoming deadline for the new Title II regulations, please reach out to our Customer Support team at cidi-support@design.gatech.edu, call (404) 894-7756, or book a free consultation through CIDI's online form. Our team can help assess options and determine level of effort and resources required to meet your needs.

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