U.S. DEPARTMENT OF LABOR

Creating Section 508 Compliant Microsoft 2016 PowerPoint Presentations

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Document Revision History

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1.1	3/1/2019	OCIO	Initial version
1.2	4/10/2019	OCIO	Updated after OPA review
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Introduction

The Department of Labor is committed to providing information that is accessible and usable by people with and without disabilities. The benefits of creating accessible documents are to enable people with disabilities to function within the environment. Accessibility is designed to ensure anyone with a disability can perform and use computer technology at a level equal to those of people without a disability.

Purpose

This guide is intended to help DOL employees and contractors create accessible Microsoft PowerPoint presentations that are compliant with the Section 508 standards, requirements and best practices. Additionally, accessible Microsoft PowerPoint presentations can be exported to an Adobe PDF document with little work necessary to make it accessible in PDF format.

Layout

It is important to understand the structure of PowerPoint and how to access the functions in PowerPoint. A common mistake in PowerPoint is to add content using manually created textboxes to organize content. To create an accessible PowerPoint presentation, use the designated PowerPoint **Layouts** found under the **Home Tab > Layout dropdown.**

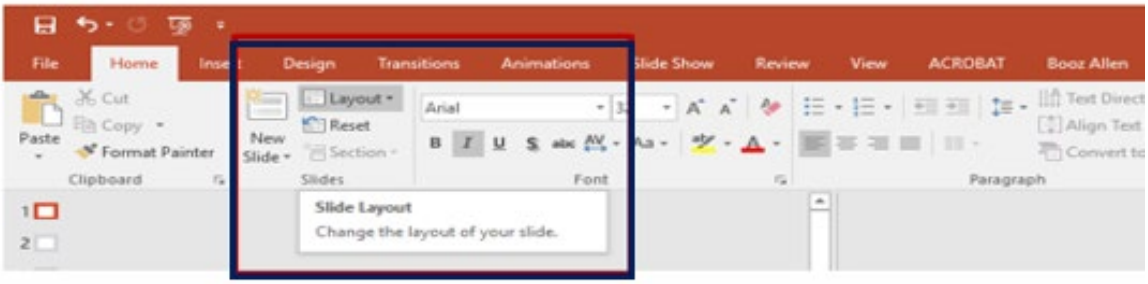


Figure 1. Layout dropdown

Layouts create a common look and feel. Layouts also, enable the outline view so you can verify that your content will be accessible to Assistive Technology users. Using built-in PowerPoint layouts will solve many accessibility issues with your presentation before you even get started.

Document Properties

The document title, author, and language need to be set as part of the document properties.

Set Title and Author

1. Select **File**
2. Select **Info**
3. Select **Properties**
4. Select **Advanced Properties**
5. Select **Summary** tab
6. Enter document **Title** (not the file name)
7. Enter document **Author** as “United States Department of Labor” or “AGENCY NAME - United States Department of Labor”.
8. Select **Ok**

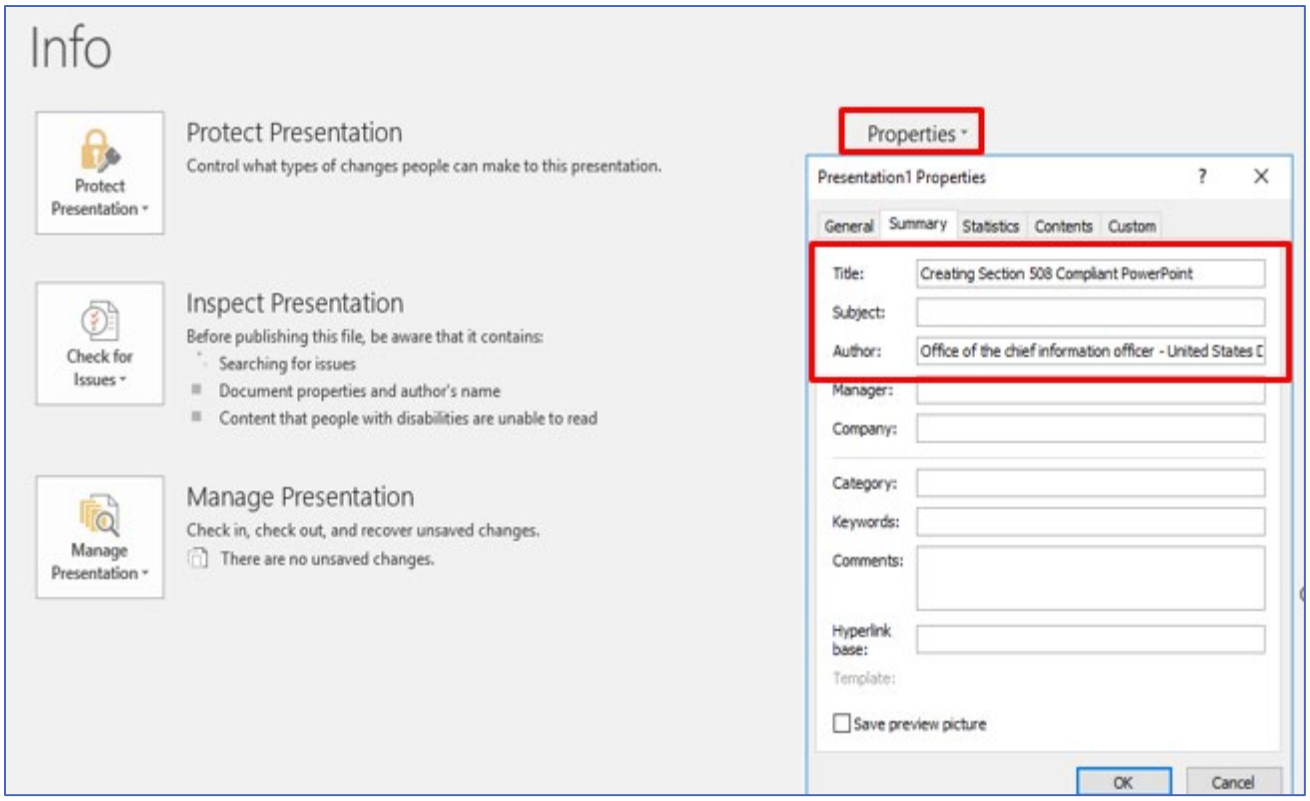


Figure 2. Set title and author

Set Document Language

1. Select **File**
2. Select **Options** (or press T)
3. Select **Language** from the list in the left of the Options dialog
4. Under **Choose Editing Languages,** select the editing language you want to use
5. Select **Set as Default**
6. Select **Ok**
7. Close **PowerPoint** and open it again for the changes to take effect

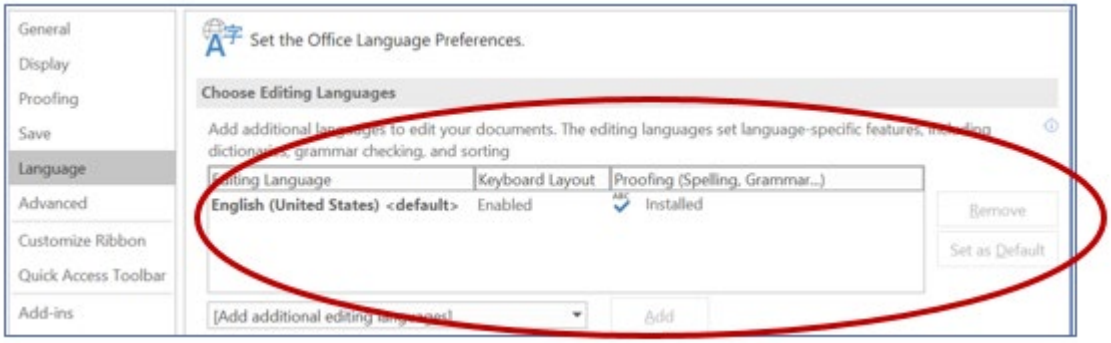


Figure 3. Set language window

Set Language of Specific Text

1. Select the text
2. Select **Review** tab
3. Select **Language**
4. Select **Set Proofing Language…**
5. In the **Mark Selected Text as** box, select the language from the list

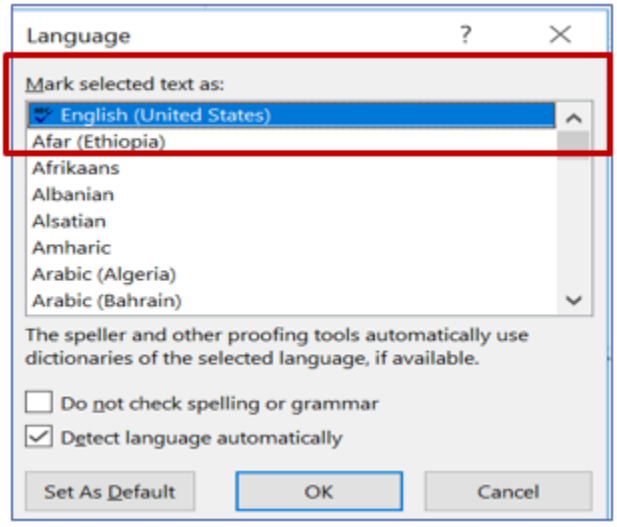


Figure 4. Select language window

Outline View

In order for content to be readable with Assistive Technology, content must be available in the **Outline View** in PowerPoint. Access the **Outline View** by:

1. Select **View** tab
2. Select **Outline View**

Figure 4. Outline view option

This will open up a pane on the left hand side. All content from the slide should appear in the **Outline View EXCEPT**:

- Images
- Slide Numbers
- Tables

Using Slide Masters

A Slide Master slide is a slide that is the master of all slides in look and feel. This look and feel may include a custom presentation of font, colors, contrast, effects, backgrounds, pictures or logos, placeholders, footers, titles, page numbers and more.

If the built-in layouts do not meet your needs, you can add a new layout using the slide master. Here, you can add the slide master that works for you, with the placeholder content tailored to the needs of your slide.

Adding custom slide layouts through the slide master is critical for screen reader accessibility because ONLY placeholders added in a slide master are read by a screen reader. Manually inserted text boxes may be skipped by a screen reader. Slide masters also allow for consistent formatting between slides.

To access the slide master:

1. Select **View** tab
2. Select **Slide Master**

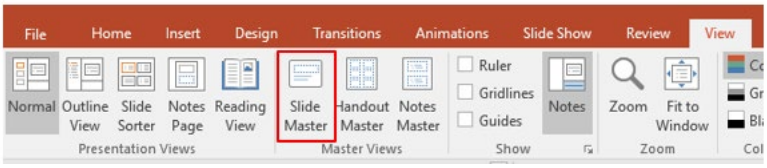


Figure 5. Slide master option

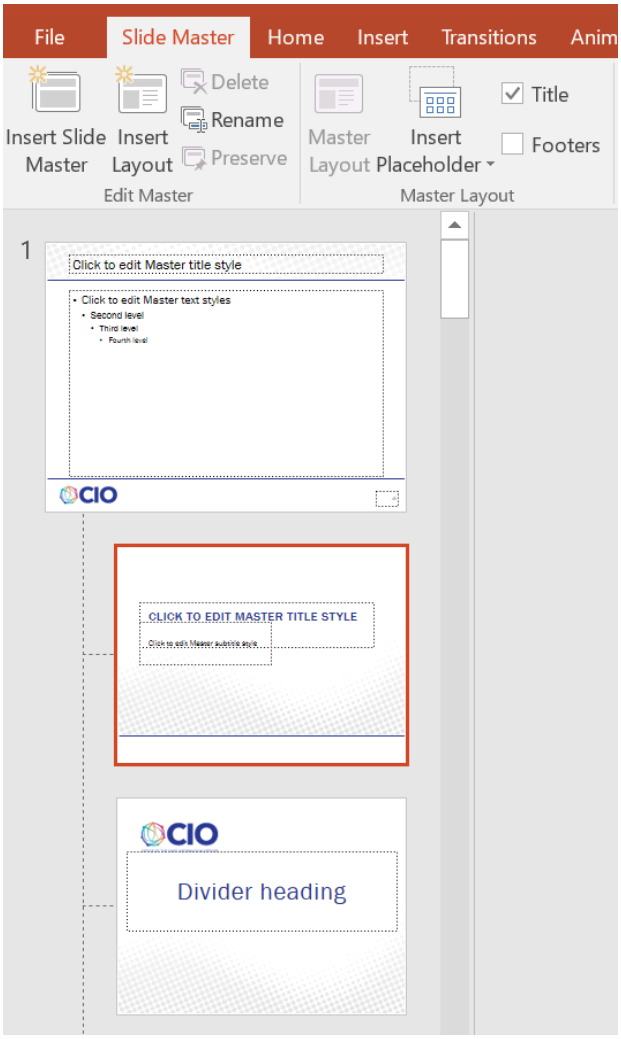


Figure 6. Slide Master view

Modifying Slide Master

In the Slide Master View, scroll down and select in the empty space after the last slide. A blinking black line will appear below the last slide. This is where a new slide will appear.

Select the Insert Layout to add to the existing set of slides. Be sure to select the new blank slide.Description: image of the Insert Layout button needed to add a slide to the theme.

Select Insert Placeholder for a list of placeholders.

Select and use the Content. A screen reader will read and understand all items place in this holder. The other Placeholder selections may not be accessible to some screen readers. Screenshot of the Insert Place holder and drop down selections, highlighting the Content choice.

Draw the Insert Placeholder in your power point slide.

Repeat this step for the slide to arrange the content to your desired format.

Note: The order with which you Content Placeholders, is the order with which the content will be read. Use the Arrange Tool to reorder elements to check and correct the reading order.

When done, select the Close Master View button on the Slide Master tab.Description: Picture of the Close Master View button

Insert Slides

Note: The slides you have created will be available from the Home tab, click the New Slide button and under the Office Theme gallery.

Description: Sample of the the New Slide button drop down menu, displaying the Theme slides that are available from a Normal view screen.

Placing a Picture in the Master Theme Slide (Windows Office 2013)

This procedure allows you to add a background image to multiple slides without needing to add ALT text to each image.

In PowerPoint, go to the Menu bar. Select View.

Select Slide Master.Description: visual aid highlighting the Slide Master Slide view.

This brings you to the Master View screen.Description: Sample display of the Master View Screen.

The first slide highlighted is the “Office Theme Slide Master”. Changes made to this slide will be repeated to all the other slides below. This is the time saver, when placing a picture or logo, repeated resource information or other custom alterations, such as fonts, background colors, etc. to your slides.Description: Sample view of the 'Office Theme Slide Master' slide.

To Insert a picture or logo that repeats on every slide, go to the Insert tab in the menu bar and select Picture.Description: Steps to place picture using tab icons.

Select the image file you desire (if your photo is stored on your hard drive). Locate the picture from you computer. The picture will appear in the center of the slide. In our example we use a logo, but any picture that you would like to appear on every slide may be selected and used.Description: Sample Picture of where a photo populates in a slide.

It may need to be resized and moved. To adjust the size, press and hold Command + Shift and drag the corner in or out.

Hover your cursor over the green point at the top of the picture.

A circle of arrows will appear and allow you to rotate the picture.

Sample of the rotation function of a content placeholder frame.

Sample picture of content being rotated.

Proceed to place the picture in any position you would like.

The picture will populate through all the slides below the Office Theme Master Slide. This is the creation of a Custom Theme.

Sample Picture Highlighting the the additional slides in a Theme, with the picture/logo populated throughout.

Note: This newly added picture in your Office Theme Master Slide would be read last, so be sure to add your Image Alt text when placing this content into your new theme.

Logos and ALT Text

If your master slide includes a logo containing the name of a unit or some other piece of critical information. Make sure the information is repeated elsewhere in the title slide, either as regular text or an invisible pixel image with the correct ALT text. For all other slides, the empty ALT text should be used to avoid repetitive information being read on every slide.

Extra Spaces/Blank Lines in the Outline View

If you are not using all the containers (text boxes, titles, subtitles, etc.) that are provided by the Master Slide, be sure to delete the extra containers. In addition, you do not want extra spaces or blank lines present in the **Outline View** of your slide. This will get read by the screen reader, and does not add value.

1. Open the **Outline View**
2. Check each slide to make sure there is not extraneous content
3. Delete extra spaces

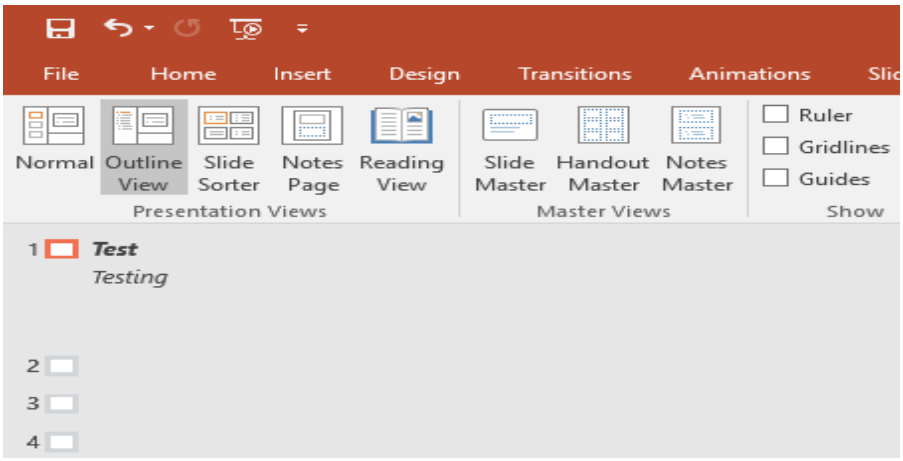


Figure 7. Example of extra spaces

Slide Numbers

The **Slide Number** tool must be used as opposed to manually typing slide numbers.
The slide number function can be found under the **Insert** tab in the **Text** section.

1. Select **Insert** tab
2. Select **Text Box**
3. Position text box to where you want the slide number to appear
4. Select **Slide Number** (with cursor in text box)

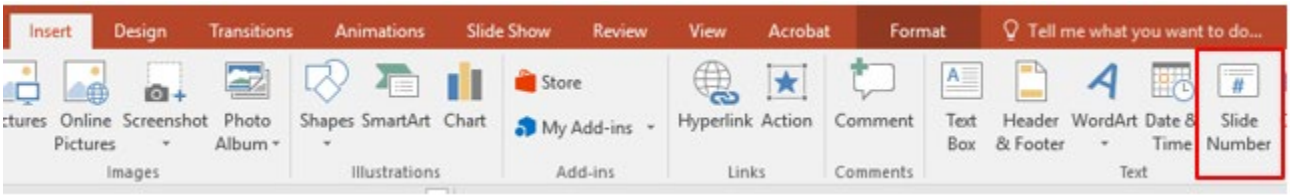


Figure 7. Slide numbers

Reading Order

The reading order of slide content is very important for assistive technology (AT) users, especially those using screen readers. Correct reading order ensures that the content on the slide makes sense chronologically. Screen readers will read content in the order specified in the **Selection** pane.

To open the **Selection Pane:**

1. Select **Home** tab (**Editing** Section)
2. Choose **Select** drop down
3. Select **Selection** Pane

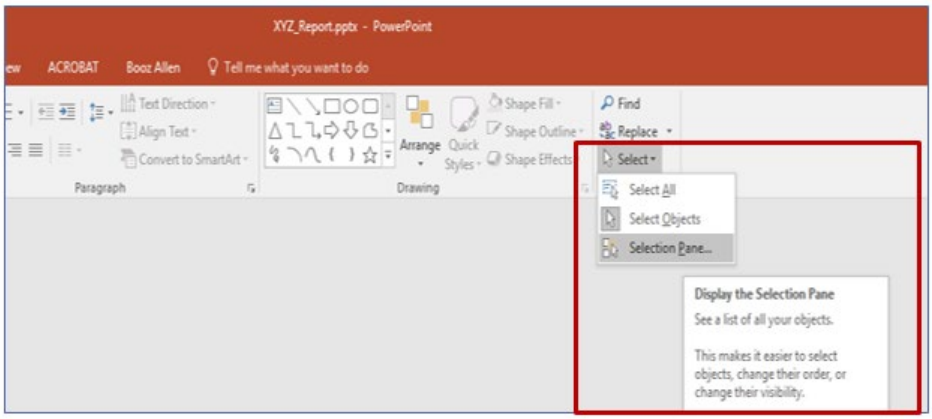


Figure 8. Selection pane option

The selection pane contains a list of all the objects on your slide.
Screen readers will read the content on your slide from bottom to top.

1. Select each item
2. Use the up and down arrows to arrange the content to read the last item first and the first item last.

Note: This may seem counterintuitive at first. It may help to think of each object as a layer, where you lay the first item, such as the title, down first, and then the subsequent layers on top.

Figure 9. Selection pane

Adding Alternative Text (ALT text)

Alternative text (ALT text) needs to be manually entered, and the amount of information and detail given depends on the meaning and purpose of the image. For example, you are trying to demonstrate a technique to use during a storm, and you have an image of a single-family home with plywood over the windows. In the ALT text, the words "Boarded up house" convey more meaning and tell the intended purpose of the image more than just having the word "House."

ALT text must be added for all images, including grouped images, and all non-text elements that convey information.

- Keep the text short and concise while still being meaningful and informative. Ask yourself if the text can stand alone. It should act as an equivalent for the image if the image were removed.
- Enter text only in the **Description** field. Not all Assistive Technology reads the **Title** and if the document is converted to PDF, only the text in the **Description** field is retained.
- Don't use the terms "photo of", "image of", "picture of", etc. in the ALT text because Assistive Technology users are told it's an image.
- Alternative text (ALT text) for **DOL seal** should be: **United States Department of Labor seal**

What about Decorative Images?

Decorative images are things like lines, or rectangles, or anything used for layout. For these, the alternative text (ALT text) should be: "**decorative**" (without quotes).

How to Add Alternative text (ALT text)

1. Select the image
2. Right-click (or press Menu key)
3. Select **Format Picture**
4. Select **Size & Properties** icon (third image from left)
5. Enter text in the **Description** field

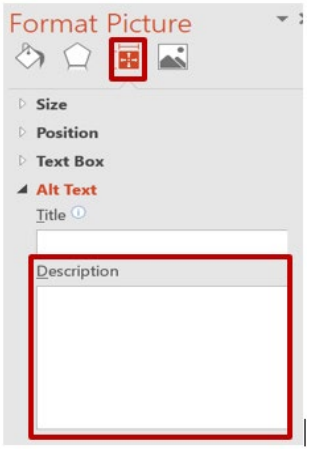


Figure 10. Enter ALT text

DOL Standards

The following DOL standards and best practices are required to increase accessibility, usability, and readability of information. Using underlines only on hyperlinks helps people find them and recognize them. Italics are hard for some people to read, and so is text that is smaller than 12 points. Left-aligning headings and text is easier for all people to read.

1. Only use underlines on hyperlinks
2. Do not use italics. Make text bold instead.
3. Left-align headings and text
4. Do not use more than 2 fonts
5. For body text, use a minimum font size of 12 points
6. Each slide should have a unique title

Data Tables

Create tables in PowerPoint using the built-in function.

1. Select **Insert** tab
2. Select **Table**
3. Select **number of columns**
4. Select **number of rows**
5. Select **Ok**

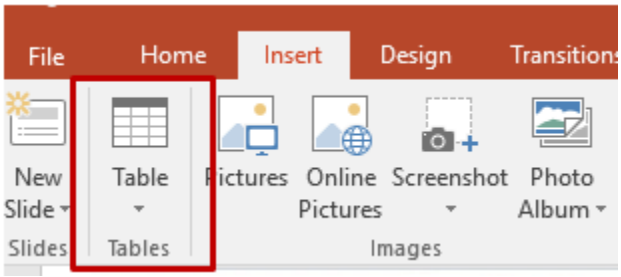


Figure 11. Insert Table

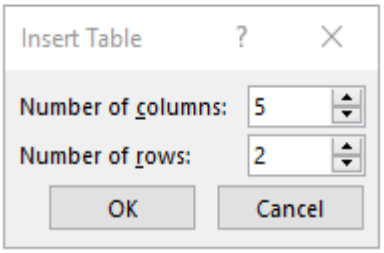
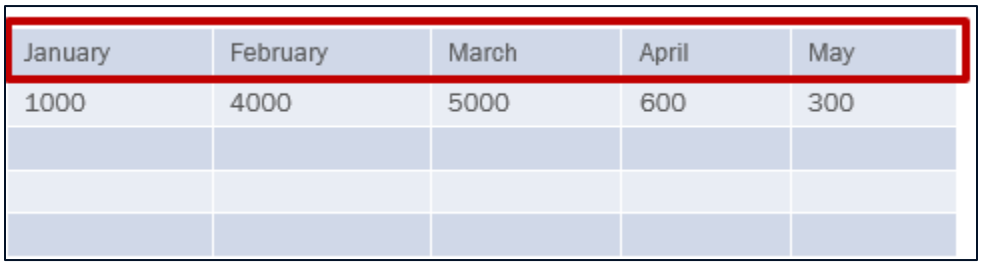


Figure 12. Select columns/rows

Data Table Header Row

Tables in PowerPoint need to have a header row designated.



January	February	March	April	May
1000	4000	5000	600	300

Figure 13. Table with header row

1. Place your cursor in the header row
2. Select **Design** tab
3. Check **Header Row** checkbox in the **Table Style Options** section.

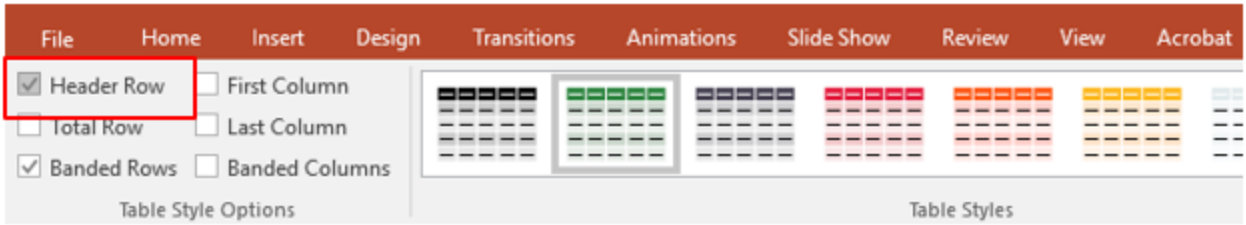


Figure 14. Header row option

List Structure

The **List** style must be used as opposed to manually typed characters (e.g. hyphens), or inserting icons.

1. Select the text you would like to make into a list
2. Select **Home** tab, **Paragraph Section**
3. The icons for creating lists are highlighted below.

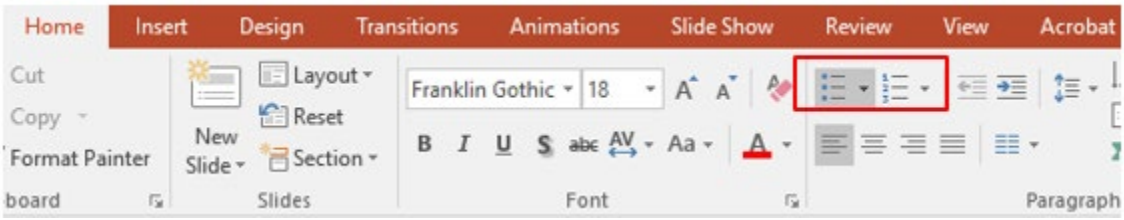


Figure 15. Bullets and numbers option

Grouping Multilayered Graphics

All slides with multi-layered objects must be grouped into one image and use one alternative text (ALT text) for this image. See How to Add Alternative text (ALT text) section.

1. Select images to group
2. Right-click (or press Menu key)
3. Select **Group**
4. Select **Group**

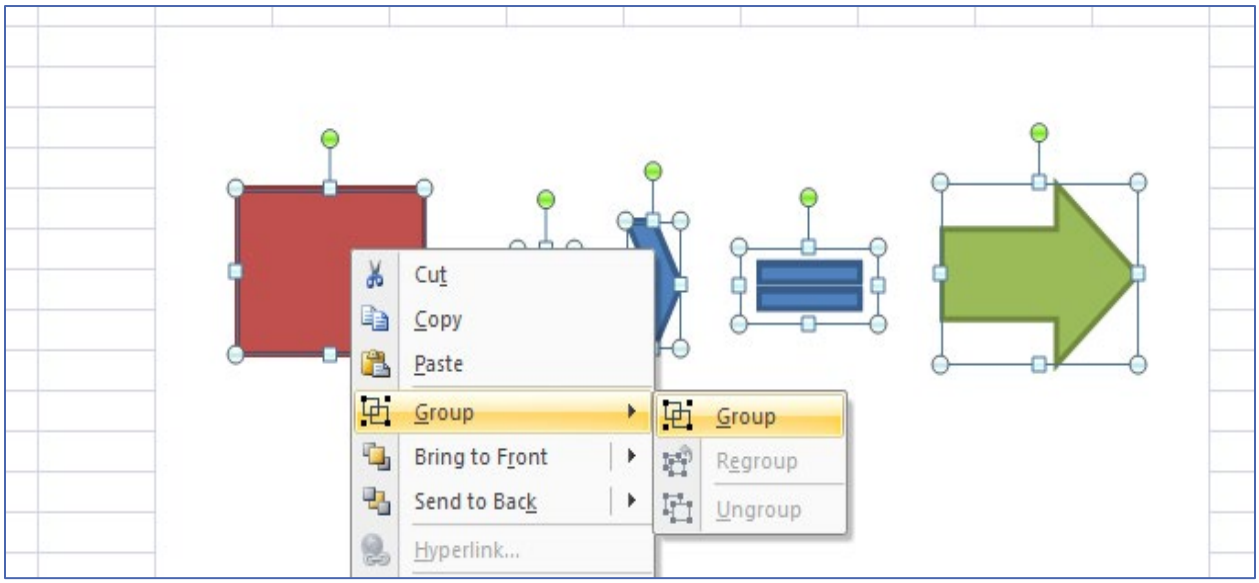


Figure 16. Example of multilayered graphic

Color

Color Contrast

Color contrast ratio between the text and the background is important. If it is too low, some people will not be able to read the text. The Section 508 color contrast standards require a minimum ratio of 4.5:1. Below is an example of low color contrast.

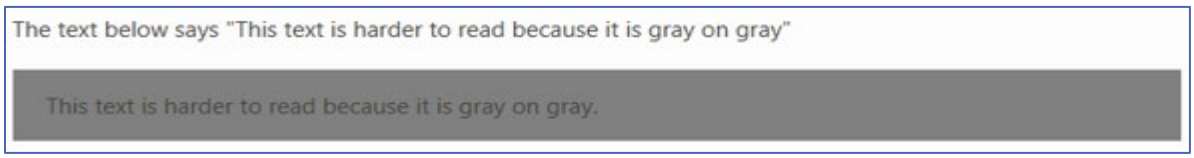


Figure 17. Color contrast example

To test color contrast, you can use an on-line tool, such as the Color Contrast Checker. Just enter the foreground (text) and background colors in either hexadecimal or RGB format. The contrast ratio is displayed. To change the ratio, click on the slider bar.

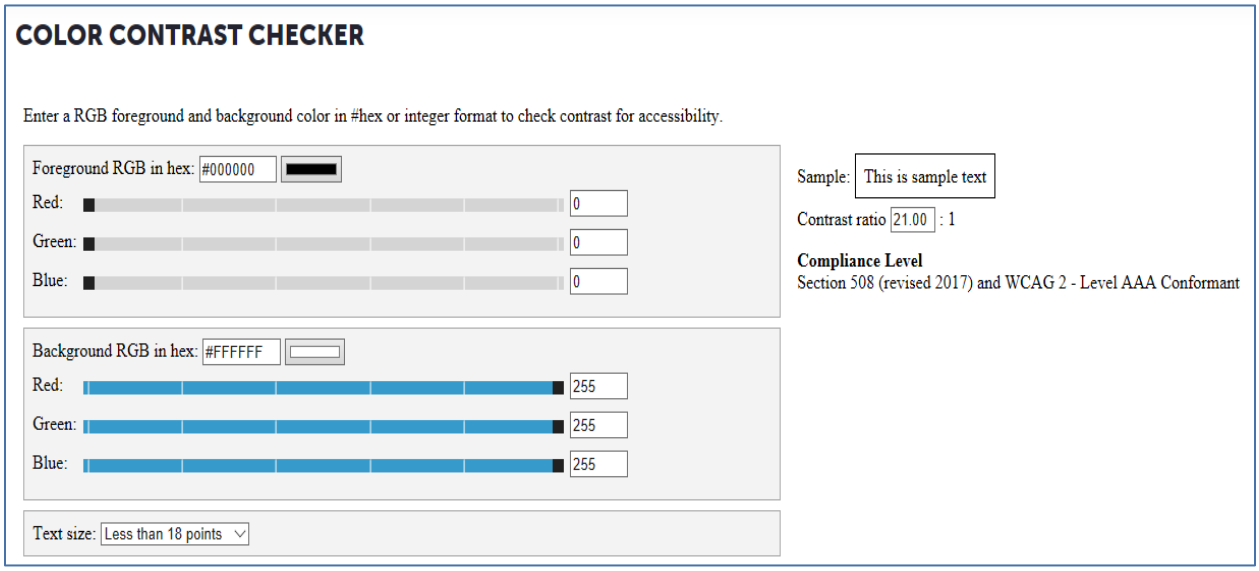


Figure 18. Color contrast checker

Another tool, which would need to be installed by your tech team, is the Color Contrast Analyzer. Enter a foreground (text) and background color in RGB or hexadecimal format (e.g., #FD3 or #F7DA39) or choose a color using the dropper tool to select the foreground and background.

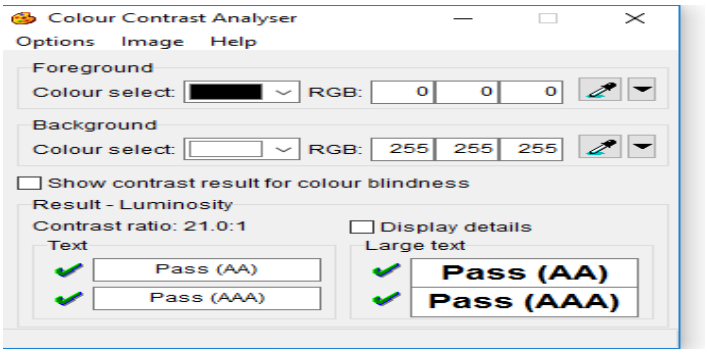


Figure 19. Colour Contrast Analyzer

Color Conveying Meaning

Section 508 requires that when color is used to indicate meaning, direction or other information, that same meaning be provided in a way that does not use color. The form pictured below has three required fields. The required fields are in red. Someone who is colorblind (or blind) might not be able to tell which fields are red. However, this form is Section 508 conformant: the required fields are also marked with an asterisk (*) – and the form instructions indicate that required fields are marked with an (*).

Figure 20. Example of use of color with alternate method

Fonts

Currently, Section 508 does not specify the requirements for choosing an accessible typeface. However, the following fonts are unofficially recommended:

- **Helvetica (Microsoft Sans Serif)**
- **Verdana**
- **Arial**
- **Franklin Gothic Book (OCIO One Voice default)**

Using these fonts will promote ease of reading for most users. Sans-serif fonts are especially easy to read because they are generally more legible. These recommended fonts also ensure accuracy of the Optical Character Recognition (OCR) process whenever that process may be needed. This procedure is a critical step for making scanned documents Section 508 compliant.

The Accessibility Checker

Make use of the built in **Accessibility Checker** in PowerPoint.

The **Accessibility Checker** helps you find and fix accessibility issues, just like **Spell Check** lets you know about potential spelling errors. The **Accessibility Checker** works in Microsoft Word, Excel, and PowerPoint. It displays a report of the issues it finds, and it explains why each issue might create a problem for someone with a disability. It also recommends how to fix the issue.

Use the checker more as a guide rather than a hard-and-fast rule; just because the checker says the slide deck is accessible, doesn't mean the slide deck is fully accessible. The **Accessibility Checker** cannot find all the issues. Some issues can only be found by a person. For instance, the checker can tell if there is no alternative text (ALT text), but only a person can tell if the alternative text (ALT text) makes sense. It's important to remember a few tips involving the **Accessibility Checker:**

- Some things like color contrast can only be checked manually. See the Color Contrast section for instructions.

- Review reminders about important components of your slide deck, such as **Check the reading order** for your slides.

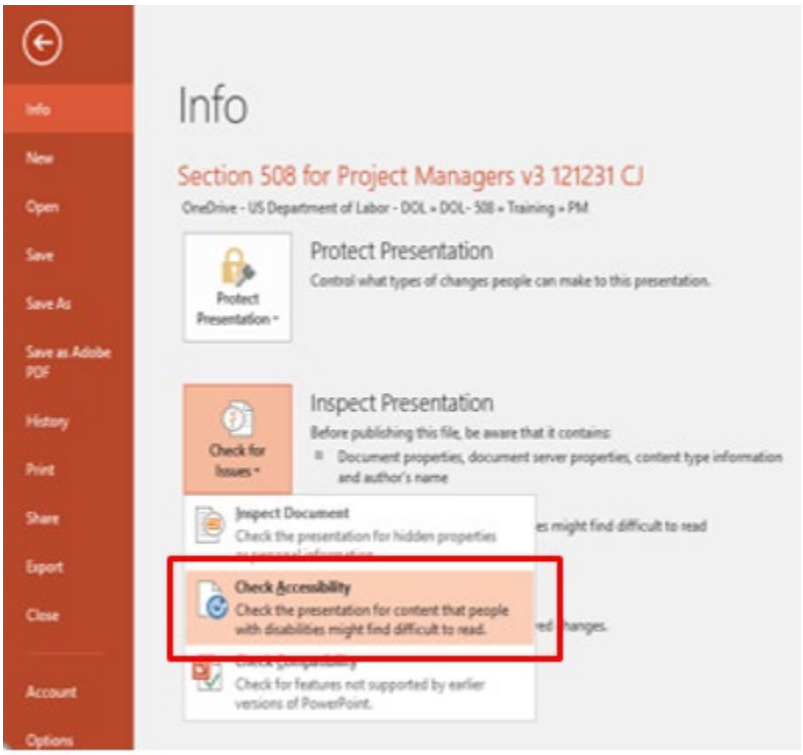


Figure 21. Accessibility Checker