



Section 508 Accessibility Guidance

Authoring and Testing Guide for Microsoft Word

Updated December 2020

Introduction to 508 Compliance and Accessibility

What is accessibility and 508 compliance?

Accessibility is the practice of making content usable for as many people as possible. This includes people with disabilities, but also groups of people using different kinds of digital devices – desktop computers, cellphones, tablets, etc. The term “508 compliance” refers to adhering to accessibility laws. Section 508 of the Rehabilitation Act requires electronic materials (i.e. web pages, digital document files, email, etc.) to be made accessible for people with disabilities. Disabilities may include visual, auditory, speech, dexterity, cognitive, and mobility. Technology is considered accessible if it can be used as effectively by people with disabilities as by those without. This means creating new content and updating old content so assistive technologies, such as screen readers, are able to accurately translate web page and document information to the user.

Why does it matter?

Compliance to Section 508 is important not just because it's the law, but because it allows users with different disabilities to access our content, as well as users operating different devices. Having our content accessible to all is mutually beneficial to users and the institution. It also protects the institution from accessibility lawsuits.

Does my content need to be made 508 compliant?

The answer to this question depends on the content you are distributing and the means with which you are distributing it. If it is being used on and/or distributed by digital devices, which is often the case in the digital age, the answer is yes. If it being created solely for the purpose of print, then the answer is likely no.

What is the purpose of this guide?

The purpose of this guide is to help you create documents that are accessible. Each document creator is responsible for their own material, and each document is expected to meet accessibility requirements before distribution. If a document needs to be published on the WSC website, the document should be prepared *before* sending it to the WSC web team. If you have questions along the way, we are here to help guide you, but ultimately making your content accessible is the creator's responsibility.

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Making Accessible Content

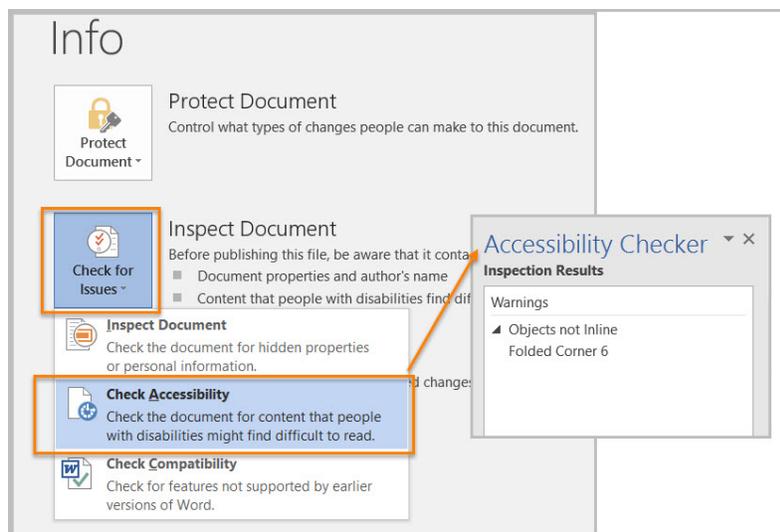
How to check if your content is accessible

Checking whether your document is 508 compliant is best done in the original (source) document. Microsoft Word has a built-in accessibility checker.

How to use the built-in checker:

On Windows: Go to “File,” “Check for Issues / Inspect Document,” and “Check Accessibility.” Word will then list any compliancy issues with the document. On Mac: Go to the “Tools” menu at the top and select “Check Accessibility.”

Figure 1: Check Accessibility option in the Word Info Panel



Tip: If you are creating a document from scratch in Word, open the accessibility checker first before beginning your content. As you add your content, you'll see the checker flag non-compliant items as it senses them, and you can fix them as you go.

If you have only the PDF version of your document rather than the source document, please contact our team for instructions on checking accessibility. Please note that if your PDF fails the accessibility check, you will be required to create the document from scratch in Word so that accessibility issues can be resolved.

If you are using a desktop publishing software other than Word, you may contact our team for help in checking for accessibility.

General Guidelines / Formatting Do's and Don'ts

There are several things to remember that will make creating a 508-compliant document easy. As a general rule, use the built-in formatting tools available in Word to create your document. Use techniques such as heading styles, tables, and columns, and bulleted, dashed, and numbered lists, etc., rather than tweaking things manually.

File names

The name of your document should be descriptive. The file name should state clearly what the document is, so users do not have to guess or open the file to know what the contents are about. An example of a good, descriptive title is "Wayne State College Spring 2021 Class Schedule." If you have multiple versions of the document, the one you submit or distribute should have a file name that identifies clearly what it is and should never include words like "final version" or the default "Document1."

Text, language rules, and fonts

- **Headings** – Heading styles can be accessed in the "Home" tab in Word. You can easily modify each "style" by right-clicking each heading style and selecting "Modify" to change text font, size, and more. This allows you to format without manually tweaking. Headings should also be used in logical order – Heading 1, Heading 2, Heading 3, etc. Avoid skipping a heading order (for example, do not skip Heading 2 by following Heading 1 with Heading 3). Also, there should be only one heading marked as Heading 1 in your document. This is usually used on the first page to identify the title of the document.
- **Symbols** – Do not use symbols in place of words, such as ampersand (&) or pound/number sign (#).
- **Abbreviated words** – Common abbreviations may be used (for example, "Jan." is acceptable for January). Do not make up your own abbreviations (for example, do not write "curr." in place of curriculum, as this is not a commonly accepted abbreviation) – instead, spell out the word on each reference.
- **Acronyms** – Commonly known acronyms are acceptable on all references. Acronyms that are not commonly known are also acceptable if they are defined with their full name on first reference. An acronym should be written in expanded form the first time it is used. The acronym is then allowed subsequently. For example: To refer to NENTA, the first reference should include the name in full, followed by the acronym in parentheses: "Northeast Nebraska Teacher Academy (NENTA)." This allows users to program their assistive technologies accordingly.
- **Underlines** – Do not underline any text unless it is a hyperlink.
- **Hyperlinks** – Hyperlinked text should be descriptive and concise. Descriptive hyperlinks more clearly explain what information they are linking to, and concise hyperlinks help a user scan quickly and determine whether they want to select it. The color of the hyperlink should be the

common default of blue. Do not hyperlink the URL. An example of using a descriptive, concise hyperlink in a sentence is: Visit the [admissions page](http://www.wsc.edu/admissions) on the WSC website at www.wsc.edu/admissions.

- **Repeating characters** – Avoid using the same character several times in a row. Spaces are the most common example of repeating characters. Instead of using a series of single spaces to put the needed space between elements of your document, use tabs, the return key, or page breaks in order to eliminate or reduce the number of repeated characters.
- **Fonts** – The most important rule of fonts is to choose those that are readable, no matter what type of document you are creating. For the purpose of consistency, Wayne State College strongly encourages the use of Arial. We have adopted Arial as an official branding font for those who are creating their own documents and may not have our special marketing fonts installed on their computers. Arial is a system font that is compatible with most commonly operating systems.

Objects, images, and colors

- **Tables** – Tables are only to be used for tabular data and should not be used solely for the purpose of layout and design. Though sometimes tables are required, it's often easier to rework the information into a different format to make it easier to understand if read by a screen reader or other accessibility tool. If a table must be used to convey your information, use the built-in tools to create and format tables, and be sure to assign table header rows and alt text.
- **Colors and shapes** – Generally, use black and white when possible. Avoid bright or light colors that might be difficult to read. If placing text on a colored background, make sure the contrast ratio is high, which makes it easier to read. Do not use language that references color as an indicator. The distinguishing characteristic of an item should not be a color, shape, or anything that exclusively requires vision to understand the content. For example: Do not say "Please see the red text" or "Please write your name in the circle."
- **Graphics or images** – Do not use images with embedded text (text that is part of an image, or in image format) unless it is a logo. Avoid using graphics or images unless they can be easily described to a user with alternate text. Alternate text (or alt text) is read by assistive technologies to describe to the user what the image includes or what purpose the image serves. It is not seen on the document itself.

How to Make Accessible Content in Microsoft Word

Formatting Text

Document headings and styles

Headings organize content and make finding information easier. Assistive technology cannot infer meaning if you just format the text (such as increased font size, bold, or underlined text). Heading styles create a structure that assistive technologies can quickly access and aid document navigation based on the heading levels.

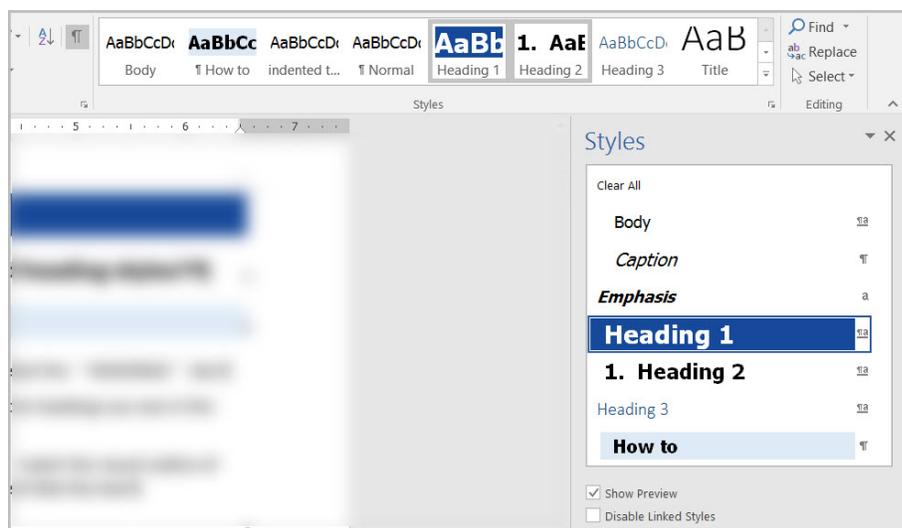
How to use heading styles:

Select “Home tab>Styles” (or “Ctrl+Alt+Shift+S” to open the “Styles pane”) and apply heading styles to the headings in your document.

To use built-in heading styles, you can:

- Select the heading style you want and then type your heading, **or**
- Type your heading, place your cursor anywhere within the heading, and then select the heading style you want to use.

Figure 2: Styles pane and options window with Heading 1 style selected



If you have different heading levels (such as chapter, article, section, topic, etc.), then you must use a different style for each heading type. You can also modify styles to create the look and feel you want in your document.

Formatting lists

Lists organize and structure content. Assistive technology users cannot infer meaning if you just format with tabs, a dash, or a number. Using built-in list features applies the formatting that assistive technology needs to both identify and present lists to users with disabilities.

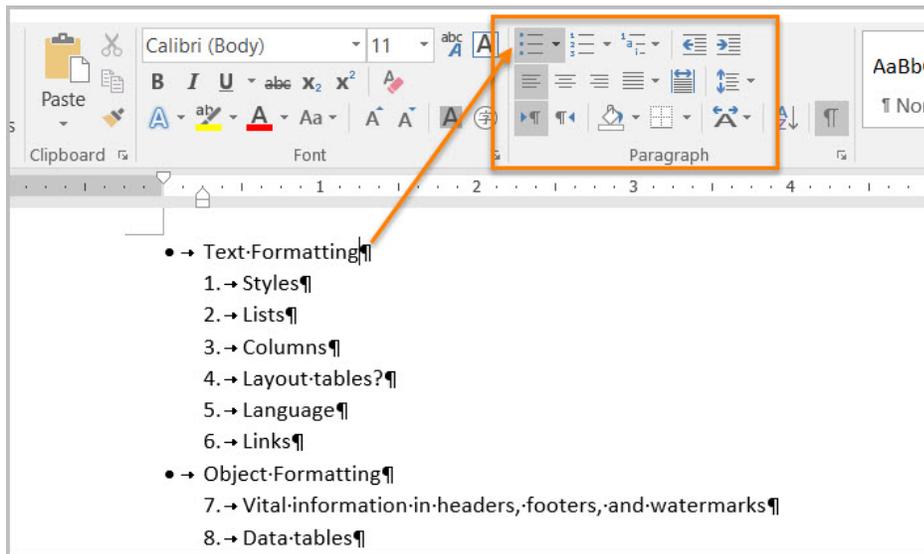
How to format lists:

Select “Home tab>Paragraph” and use the “Bullets,” “Numbering,” or “Multilevel List” features when formatting lists in your document.

To use the built-in list features, you can:

- Select the list feature you want and then type your list item, **or**
- Type your list item and then select the list feature you want to use.

Figure 3: Paragraph tab displaying options for bulleted, numbered and multilevel lists



Formatting columns

Screen readers and assistive technology cannot read information in the correct reading order when using tabs or spaces to separate content into columns.

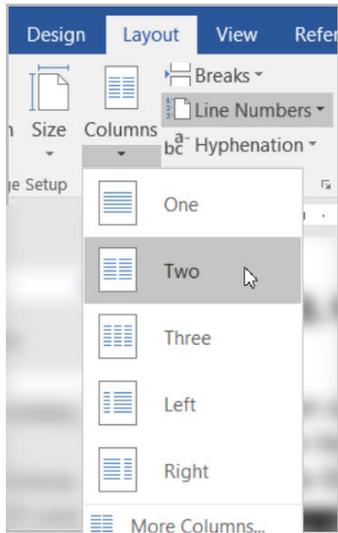
How to format columns:

Select “Layout tab>Page Setup>Columns” when creating columns in your document.

To use the built-in column feature:

- Select content you want to format.
- Select “Columns.”
- Select the number of columns you want.

Figure 4: Columns menu set to Two columns option



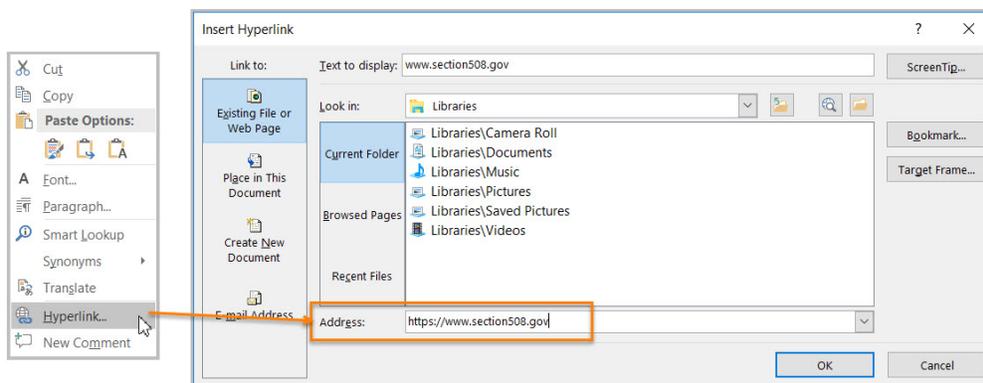
Hyperlink names

Assistive technology users rely on meaningful names to determine the destination, function, or purpose of links. For example, multiple “click here” links confuse assistive technology users because the name for each link is the same, while the destinations may be different.

How to name and create links:

- To edit the name of a link, place your cursor on the link and edit the text.
Note: deleting the last character in the link name will remove the link.
- To create a hyperlink, select or type the hyperlink text and either right click and select “Hyperlink” or use “Ctrl+K” to open the “Insert Hyperlink” configuration window. Specify/verify the “Text to display” and the “Address” for the link and its destination, and select “OK.”

Figure 5: Insert Hyperlink configuration window

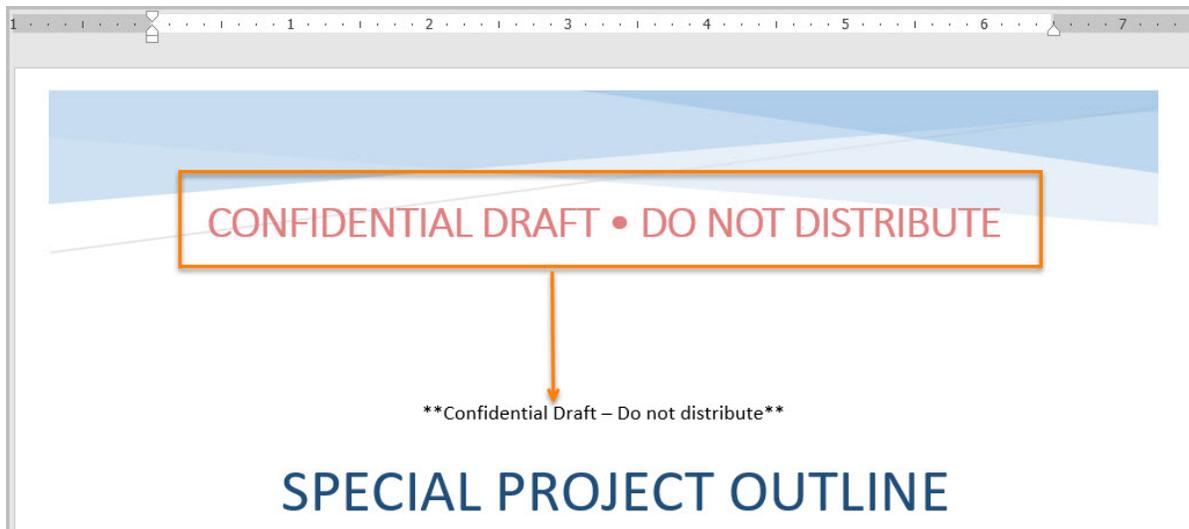


Formatting Objects

Vital information in headers, footers, and watermarks

Assistive technology does not automatically read information in headers, footers, and watermarks, so you need to duplicate any vital information at or near the start of the related information.

Figure 6: Example of vital information in a header repeated in the body of the document



Data tables

Assistive technology users need to identify column headers in data tables so the user can understand the association between table cells and their respective headers.

To create an accessible data table:

- Select “Insert tab>Table.”
- Select the number of columns and rows desired.
- Do not merge or split cells.
- Place the cursor on the first row, “right click” or “Shift+F10,” and select “Table Properties>Row tab>Repeat as header row” button.

Note: If you need to create complex data tables (data tables with more than one header row, one or more header column, and/or merged or split cells), then you must convert the document to an accessible format (i.e. a PDF document remediated for accessibility). Complex data tables cannot be made accessible in MS Word.

Figure 7: Table Properties with Repeat Header Row setting selected

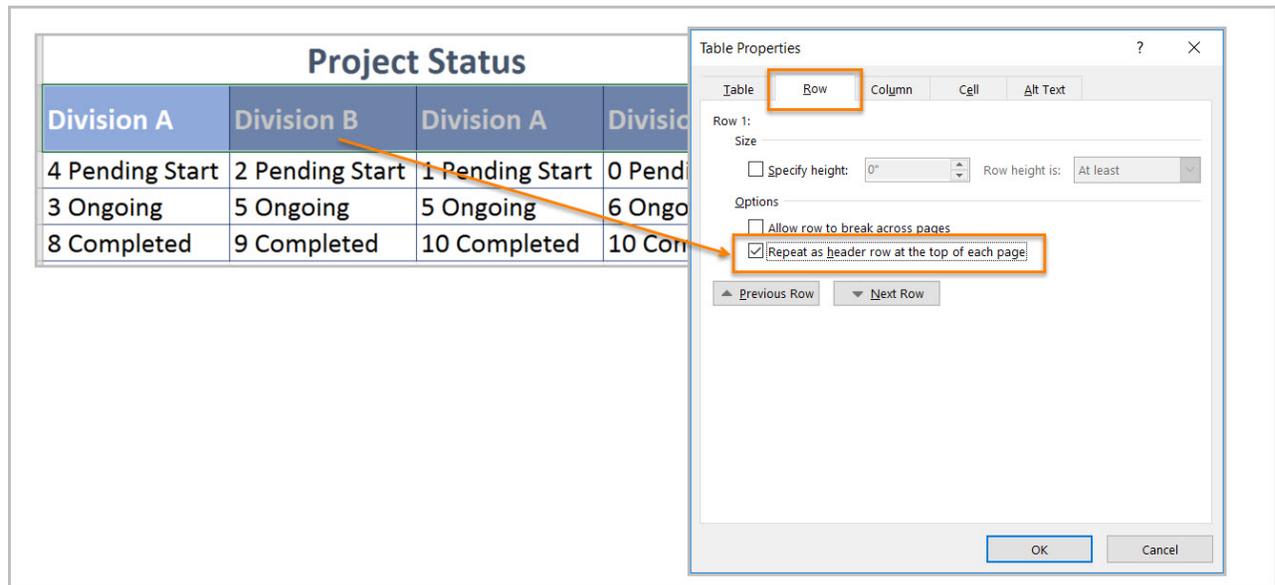


Figure 8: Complex table with merged and split cells

The image shows a complex table with the following structure:

Assigned Projects					Future Projects	
Division A			Division B		Funded	Pending
Initiated Pending Ongoing	Completed	Initiated Pending Ongoing	Completed			
1	3	8	2	2	8	2

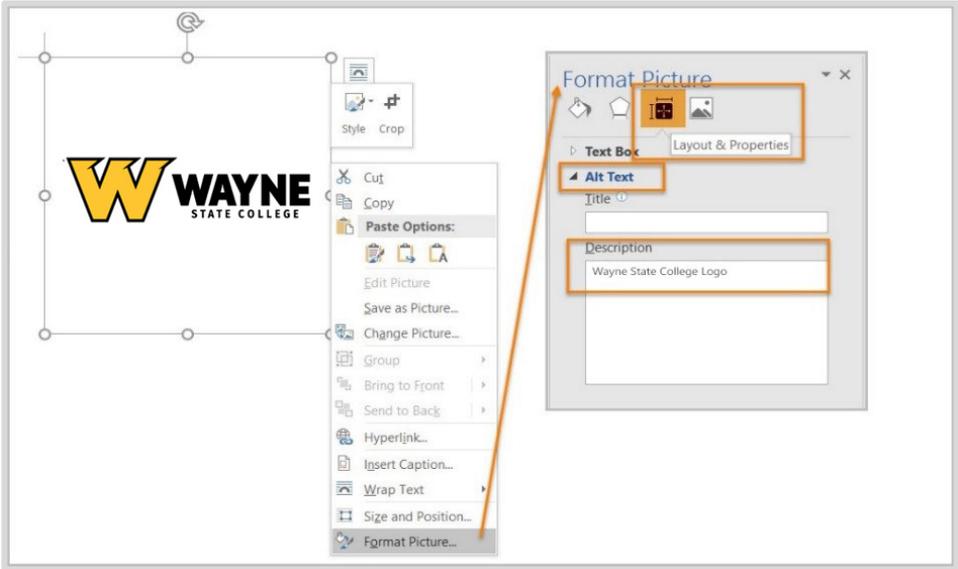
Labels "Merged Cells" and "Split cells" are shown with arrows pointing to the corresponding parts of the table.

Images, objects, and alternate text

Assistive technology cannot infer meaning from images and other objects. Images and other objects include pictures, images of text, images of tables, shapes, icons with hyperlinks, etc.

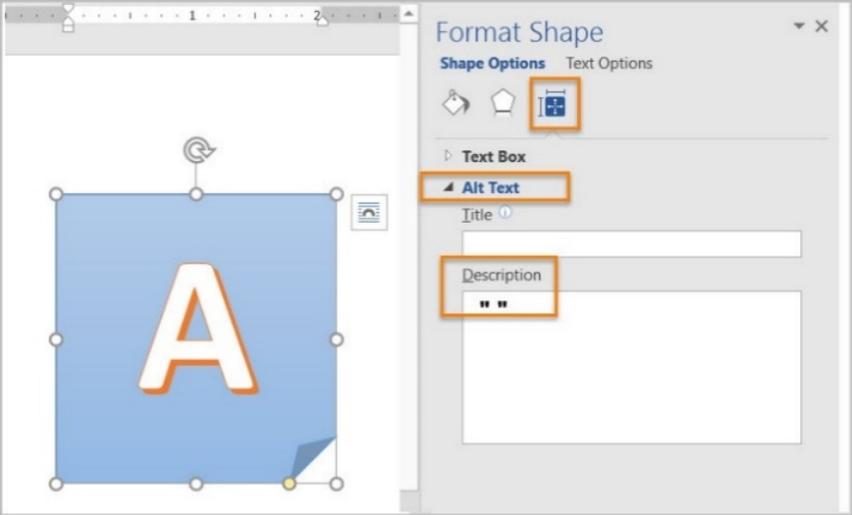
To enter "Alt Text," select the image, object, or shape. "Right click" or "Shift+F10" and select "Format Picture (Note: could say Format Object, Format Shape, etc.)>Alt Text." In the "Description" field, enter information that states the purpose (in as few words as possible while remaining clear) for a meaningful image or object **or** enter a space or two spaces between quotes for decorative objects. Then select "close."

Figure 9: Format Picture – Alt Text Options



If your image is a decorative item, such as a border or outline, “right click (or Shift+F10)>Format Picture (Note: could say Format Object, Format Shape, etc.)>Layout and Properties icon>Alt Text,” and read the “Description” field.

Figure 10: Decorative Content – alternative text using “quote space space quote.”



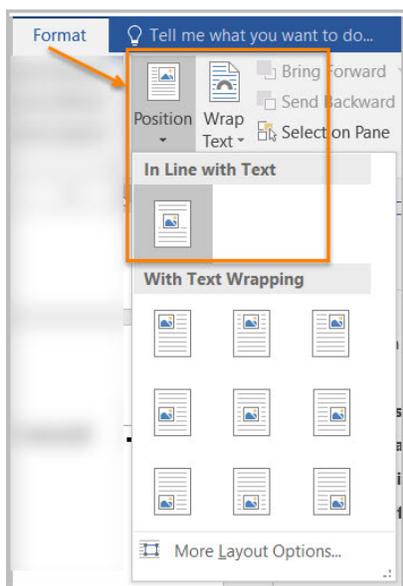
Images, objects, and text boxes in line with the text

Screen readers and other assistive technologies cannot access or edit information in images, objects, and text boxes unless they are in line with text.

To place images, objects, and text boxes in line you:

- Select the image, object, or text box.
- Select “Picture (Note: could say Object, Shape, etc.) Tools>Format>Position>In Line with Text.”

Figure 11: Format tab Position menu option “In Line with Text” selected



Note: Some visual layout effects are not possible when objects are set as “In Line with Text.” For example, text cannot be wrapped around an object. If floating objects are absolutely necessary, then fix all remaining accessibility issues with the document. The College Relations team can then fix the issue after we have converted the document to a PDF.

Formatting Colors

Colors and other visual characteristics

Using only color or other visual characteristics (such as size, shape, and location) to convey meaning will not provide comparable access to people who are blind, have low vision, or are color blind.

The following layout tables use colors to symbolize the current project status. The table on the left is an example that does not provide comparable access. When items are only indicated by color, they may look identical to someone who is colorblind, or they will sound the same to someone using a screen reader. By adding text to duplicate the meaning of color (shown below in the table on the right), this provides comparable information to users of assistive technology and people who are colorblind.

Table 1: Examples of project status table using only color and color with text

Project	Status	Project	Status
Project A		Project A	On Time
Project B		Project B	At Risk
Project C		Project C	Late

Contrast ratio between text and background

People who are colorblind or have low vision will have comparable access if there is sufficient contrast between the text and the background. Create content with text uses sufficient color contrast. If the contrast ratio does not pass, then adjust your foreground or background until it does pass.

The contrast standards are:

Table 2: Table with contrast ratios for types and sizes of text

Type or Size of Text	Contrast Ratio
Standard text (12 pt regular)	4.5:1
Large Text (14 pt bold or 18 pt regular)	3:1
Incidental text, text overlaid on images, and logotypes	Excluded from requirement

Table 3: Examples of good and insufficient color contrast ratios

Good Color Contrast	Insufficient Color Contrast
Black text on white ratio 21:0:1 (Passes)	WSC gold text on white ratio: 1.5:1 (Fails)
Black text on light gray ratio 18.75:1 (Passes)	WSC gold text on light gray ratio 1.4:1 (Fails)
Black text on WSC gold ratio 7.6:1 (Passes)	White text on WSC gold ratio: 1.5:1 (Fails)
White text on black ratio 21:1 (Passes)	Dark gray text on black ratio 3.0:1 (Fails)
WSC gold text on black ratio 13.4:1 (Passes)	Red text on black ratio 4:1 (Fails unless font is 18pt or larger, or bold above 14pt)
Black text on red ratio: 5.25:1 (Passes)	White text on red ratio 4:1 (Fails unless font is 18pt or larger, or bold above 14pt)
Dark blue text on white ratio: 5.14:1 (Passes)	Red text on white ratio 4:1 (Fails unless font is 18pt or larger, or bold above 14pt)
White text on dark blue ratio: 5.4:1 (Passes)	Black text on dark blue ratio 4:1 (Fails unless font is 18pt or larger, or bold above 14pt)
Purple text on white ratio: 5:1 (Passes)	Green text on white ratio 2.86:1 (Fails)

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