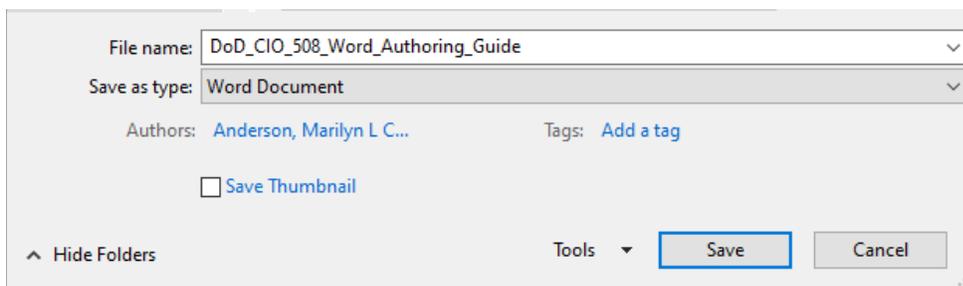# Word Accessibility Guide

Document Formatting

Save as a Word document (.DOCX) with a descriptive filename

A descriptive filename that identifies the document or its purpose helps everyone (including people with disabilities) locate, open, and switch between documents. In addition, the document must be in a ".docx" format. An effort to keep the document title limited to 30 characters should be made.
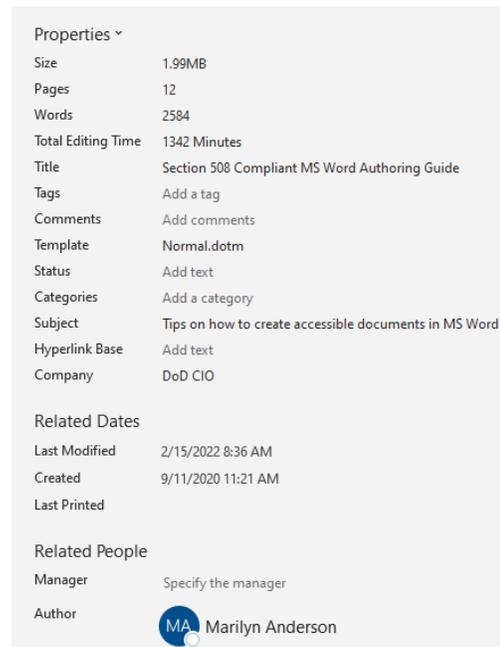
Go to File > Save As

1) Save as a Word Document (.docx).
2) Save your document with a descriptive filename.

File name:	DoD_CIO_508_Word_Authoring_Guide	
Save as type:	Word Document	
Authors:	Anderson, Marilyn L C...	Tags: Add a tag
	☐ Save Thumbnail	

∧ Hide Folders   Tools ▼   Save   Cancel

Add a Title, Subject, Company, and Author to the document Properties

Go to File > Info

1) Enter the document title
2) Enter a brief discription of the subject
3) Enter the company the document was created by
4) Enter the authors name

Properties ˅

Size	1.99MB
Pages	12
Words	2584
Total Editing Time	1342 Minutes
Title	Section 508 Compliant MS Word Authoring Guide
Tags	Add a tag
Comments	Add comments
Template	Normal.dotm
Status	Add text
Categories	Add a category
Subject	Tips on how to create accessible documents in MS Word
Hyperlink Base	Add text
Company	DoD CIO

Related Dates

Last Modified	2/15/2022 8:36 AM
Created	9/11/2020 11:21 AM
Last Printed	

Related People

| Manager	Specify the manager
Author	MA Marilyn Anderson

Text Formatting

Font Style and Size

For users with low vision, fonts should be at least 11 points and an accessible font should be used such as Arial, Tahoma, or Calibri. Avoid decorative fonts.

Use Styles to Create a Title, Headings for sections

Headings are used to break-up content and make finding information easier. Assistive Technology (AT), such as audible screen readers, cannot infer meaning from just formatting (such as bold or underlined text). Styles create a structure that AT can quickly access. Using

styles also allows Word to create a table of contents from the document structure. If you have more than a few tables in your document you should also include a table caption.

Go to Home > Styles and use styles when creating Headings in your document.
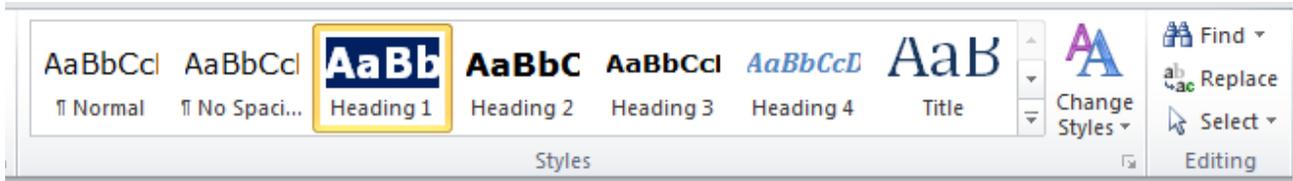
To use Styles, you can either:

1) Click on the style you want and then type your heading, **OR**
2) Type your heading and then click on the style you want to use.

If you have different heading levels (such as Title, Section, Subheading, etc.) that look different, you must use a different Style for each type of heading. You can modify Styles so that you can create the look and feel you want in your document.

Table 1: Style Examples

Heading Type	Visual Characteristics	Heading Level
Title	16 pt. font, no indent, bold	Heading Level 1
Section Heading	12 p.t font, indent, bold	Heading Level 2
Subheading	12 pt. font, indent, italicized	Heading Level 3

To modify styles

1) Create the style you want in the body of the document.
2) While your cursor is at any place in your heading, right click the style you want to modify to match your heading and select 'Update Heading X to Match Selection'.
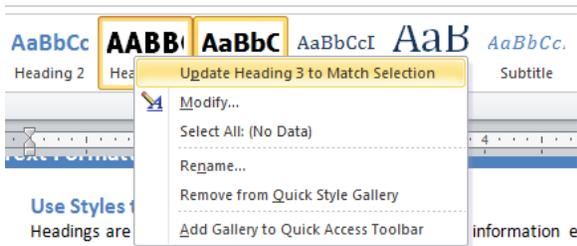

Use Words Built-in Features

Use built-in features to create lists

Lists are used to break-up and simplify content. Screen readers cannot infer meaning from just formatting (a symbol and Tab to line up list itmes). Using built-in list features creates a structure that screen readers can identify.

Go to Home > Paragraph and use Bullets, Numbering or Multilevel List features when putting lists in your document.
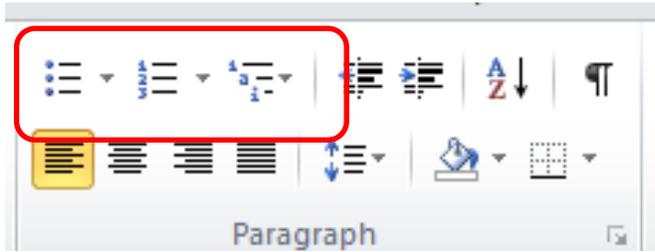

To use the built-in list features, you can either:

1) Click on the list feature you want and then type your list item, **OR**
2) Type your list item and then click on the list you want to use.

Use built-In columns to organize content

Columns are used to break-up and organize content. When you are using a column layout, you must use the built-in column feature rather than creating the appearance of columns by using tabs or spaces. Screen readers and AT cannot read information in the correct reading order if just tabs or spaces are used. Columns create a structure that screen readers and AT can use to read information in the correct order (top to bottom instead of left to right).

Go to the Layout tab > Columns when creating columns in your document.
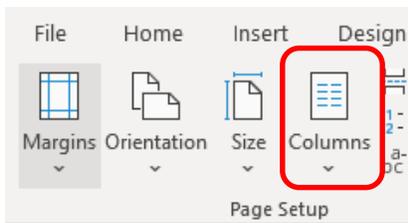
To use Column formatting:

1) Select (highlight) content you want to make into columns.
2) Click on Columns.
3) Click on the icon representing the number of columns you want.

## Use built-in features to create data tables and layout tables

Data tables are those tables where the information in a cell requires information from a row and/or column header to adequately describe the cell's content. If a table is used for placement of text and objects, then it is a layout table. Layout tables should be avoided when possible.

When you create a data tables

You must use the built-in table feature rather than creating the appearance of a table by using tabs or spaces. Keep tables simple (no merged or split cells). If your table has grouped data,

consider created different tables for each group instead of separating the groups in one table using merged cells. Identify the header and or column row. 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 PDF format. Complex data tables cannot be made accessible in MS Word.

Go to Insert > Tables
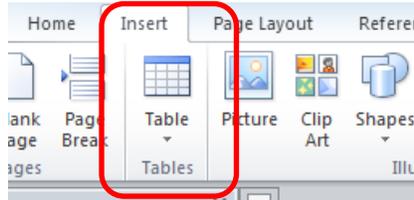
To create a data table:

1) Insert the number of columns and rows you need for your data table.
2) Do not merge or split cells.
3) Only type headers into the first row or column and identify the header row or column.
   a. Click in any cell within the table and select the Table Design tab > be sure there is a check in Header Row and/or First Column depending which have your headers.
   b. If you are using only the first row as column headers, click any cell in the first row and select the Layout tab > select the "Repeat header rows" button.

When creating layout tables

Layout Tables create a structure that screen readers and AT can use to read information in the correct order (left to right then top to bottom). Layout tables should not have a designated header row or column.

Example:

Table 2: Layout Table

Session 1	Technical Team	30 min. presentation
Session 2	Science Team	45 min. presentation

Use built-in features to create charts

Ensure that all charts and graphs have a title, legend and axis label associated with them. It is also helpful to have descriptive text nearby (perhaps as a caption) or provide a description in the text immediately above or below the chart or graph.

Use built-in features to create page numbers

Select the Insert tab > click Page Number > choose a style.

## Use built-in features to create a Table of Contents

Select the References tab > click the Table of Contents button > choose the style you wish to use for your Table of Contents.

Use built-in features to create Footnotes

Put your cursor where you want the footnote to appear > Select the References tab > click Insert Footnote > type in your footnote.

Identify distinct languages

A document can contain sections written in different languages. Identifying distinct languages creates a structure that allows AT to identify and read all languages correctly. You do not have to set a section language for proper names, technical terms, or foreign words that have become part of common use.
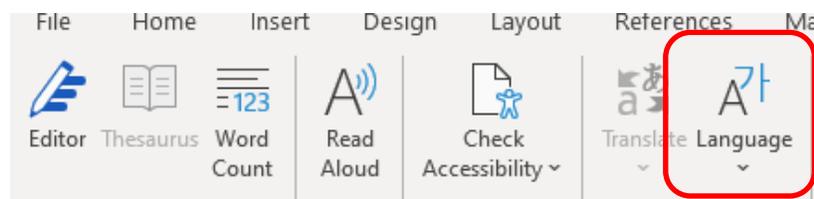
To set a different language:

1) Select (highlight) text written in a different language.
2) Go to Review > Language > Set proofing Language > choose the appropriate language.

Images and Graphics

Adding Alt Text to Non-text Elements

Screen readers cannot infer meaning from images and other objects, therefore, you:

1) Must add descriptive text to images and other objects
   a. Add Alt-Text to images and other objects **OR**
   b. Add a caption **OR**
   c. Add information in surrounding text or in an appendix.
2) Must place objects in line with text so that AT can read them in the proper reading order, unless the object is marked as decorative

If adding Alt-Text to images and other objects, you must add:

1) Text that describes the purpose and/or function for interactive objects, including images used as links
2) If the object includes embedded text, the Alt-Text must match the text verbatim
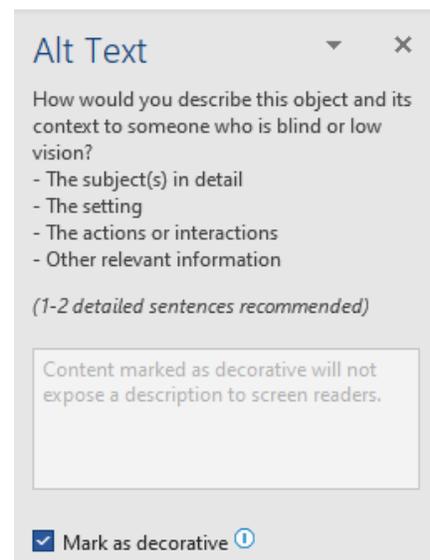
3) If the image does not convey any information or is redundant due to surrounding text, the image must be marked as decorative

To enter Alt-Text, right click on the image and select 'Edit Alt Text…'. In the Alt Text pane, enter a description of the information conveyed in the image.

If the image is decorative, check the box 'Mark as decorative'.

Placing images inline

Images, object and text boxes must be inline with text so that screen readers read the content in the correct order. If text in text boxes are not inline they may be read at the bottom of the page because they are not ancored in the proper place.

To place a images or objects in line:

1) Click on the object
2) Select the Layout Options button that appears at the upper right of the object and select the 'Inline with text' button, and then move the object to the correct reading position. Objects may need to be anchored to their own paragraph line to appear under or above text.
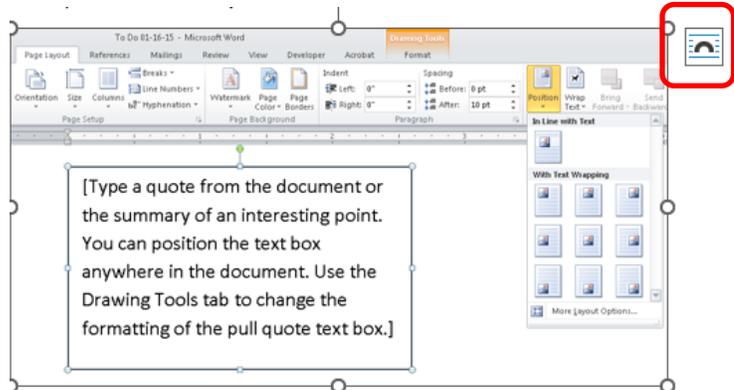
Color Formatting

## Do not use color as the only means to convey meaning or information

In order to use color accessibly, ensure that text is also present for users who may have vision impairments or color blindness.

| Project A	ON TIME
Project B	AT RISK
Project C	LATE

Create the required color contrast

Having a high level of contrast between foreground and background, as well as descriptive text and labels, results in more people being able to see and use the content.
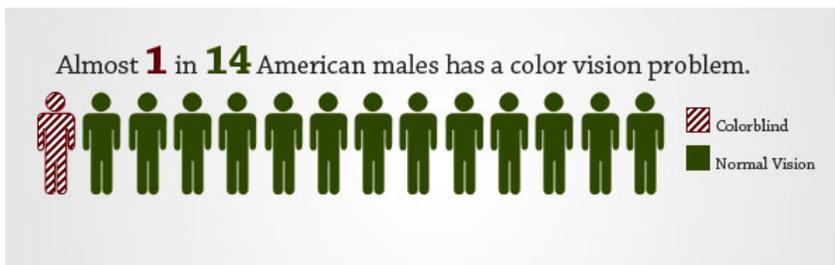
Example of a non-compliant chart where the two colors used are the same contrast level:
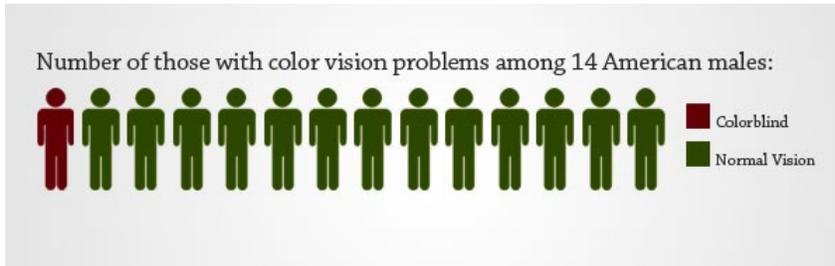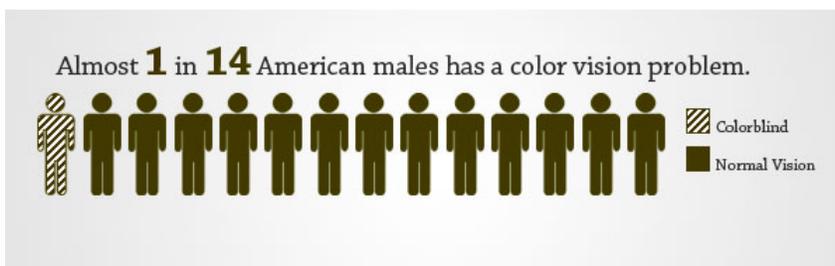

The same chart as viewed by someone with the most common form of color blindness:
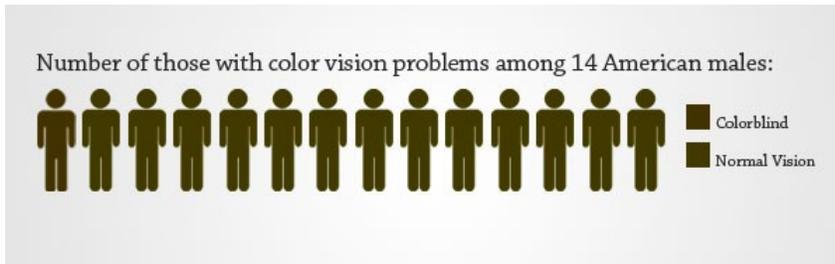

Compliant version:

Compliant version as viewed by a user with color blindness:

The last chart demonstrates how adding a fill pattern is better than relying on color to convey meaning. In this chart we also added text that states the same information gained from the chart.

To check to see if your color contrast is high enough:

1) Select the chart, image, or shape
2) Select the Picture Format or Chart Design tab
3) Select the Color button > Color Saturation (Saturation: 0%) or Change Color to a gray color palette
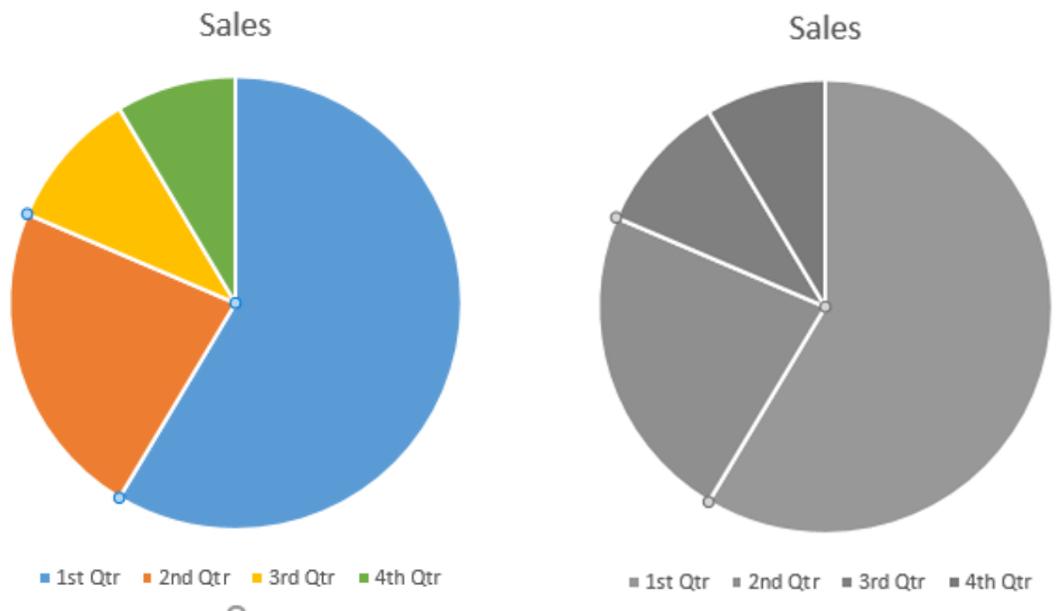
As you can see from the gray image, at least 2 of the pieces of the pie chart look the same indicating a higher contrast is needed. Adding data lables to the inside of the chart instead of using a legend would also make this chart more accessible, as shown below.
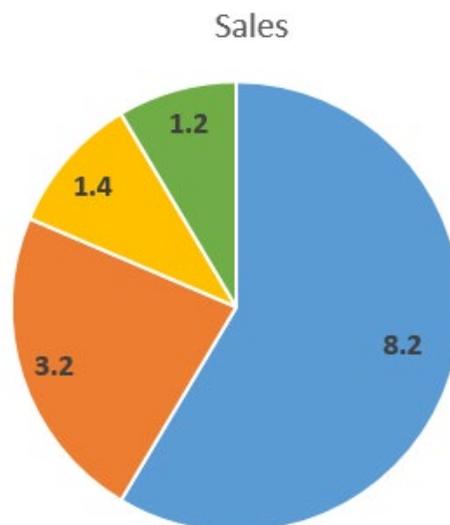
There are many online color contrast checkers that you can use that will tell you if your colors pass the accessibility contrast ratio.

Miscellaneous

Ensure information in Headers, Footers is redundant

Screen readers do not automatically read information in headers/footers and watermarks. Therefore, vital information (such as Respond by X Date, CONFIDENTIAL, or Do Not Distribute) must also be duplicated at or near the start of the main content area.

Create descriptive names for links

It is important to provide names or context for links that describe the destination, function or purpose so that AT can correctly identify information. For example, if you have several links and you name them all "click here," then AT will not be able to convey to individuals with disabilities information that distinguishes distinct links.

Ensure that the destination, purpose or function is described in surrounding text or set descriptive hyperlink text.
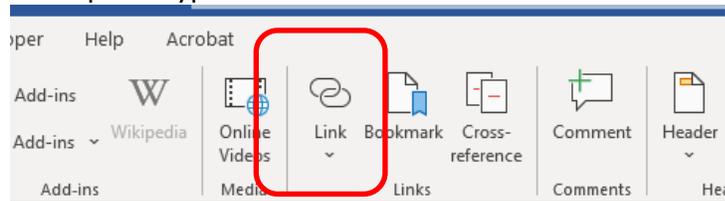
To set hyperlink text:

1) Type the text in your document that describes the destination, function, and/or purpose.
2) Select the text (highlight) in your document that you want to be a hyperlink
3) Go to Insert > Link > Insert Link…
   a. If "Existing File or Web Page," type or copy the accurate URL in Address field.
   b. If "Place in this Document," click on the appropriate line in "Select a Place in this Document."
   c. If "Create a New Document," type in the document name in "Name of New Document."
   d. If "Email Address," type a valid email address in "E-mail address."

Exclude flashing objects

Federal agencies do not typically use flashing objects embedded into MS Word documents. Since flashing objects may be a public safety issue for individuals with photosensitive epilepsy and there is not typically a compelling business need, flashing objects should be excluded

Create accessible embedded files

If you embed an audio-only, video-only or multimedia file that contains meaningful information into your MS Word document, you must also provide additional information so that individuals with disabilities have comparable access to the information.

Table 3: Table Identifying Type of File and Additional Document Required

Type of File	Also include:	What is this?
Audio-only	Accurate and complete transcript	A transcript is a text version of exactly what is being said in the audio-only file.
Video-only	Accurate and complete text description or audio discription	A description is a text or audio version of what is being shown in a video-only file.
Multimedia (audio and video)	Accurate and complete synchronized captions and audio descriptions	Captions are a time-synchronized text version of exactly what is being said and/or a description of the relevant sounds in the multimedia file. Audio descriptions are time-synchronized vocal descriptions of what is being shown in the multimedia file.

Alternative accessible version

Federal agencies have the goal to produce one accessible document for everyone. However, there may be times when this is not feasible, so we are required to create an alternative version that is accessible, up-to-date and has equivalent content.

The Accessibility Checker

To check the accessibility of your document at any time, on the Review tab under the Accessibility group, either:

1. Select the Check Accessibility button – this will open the Accessibility Inspection Results on the right side of your screen. If you leave this pane open while working in your document, you'll be able to see any errors that arrise. The list of errors must be corrected and the list of warnings need a manual check.

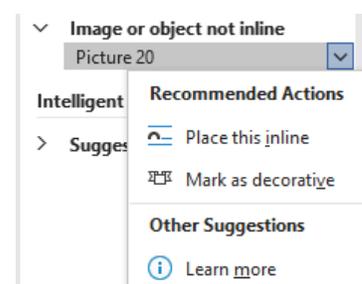2. Select the dropdown arrow on the Check Accessibility button and choose any of the following:
   a. Check accessibility – this will perform the same function as step 1 above
   b. Alt text – this will open the Alt Text pane where you can add alt text to any image or object that conveys information through other means than text. Select any image or object in the document to check its alt text or to add alt text
   c. Navigation Pane – this will open the Navigation pane that will display the headings in your document and their level that is used to create the table of contents and allows users of assistive technology to navigate the document
   d. Focus – this will hide everything on your screen but the document for easier reading
   e. Options: Accessibility – from here you can choose to keep the accessibility checker running while you work or have Word generate automated alt text for you as well as other options. Keep in mind the automated alt text will attempt to describe the image, but alt text should describe the purpose or the image or the information it is conveying, not a description of the image itself.
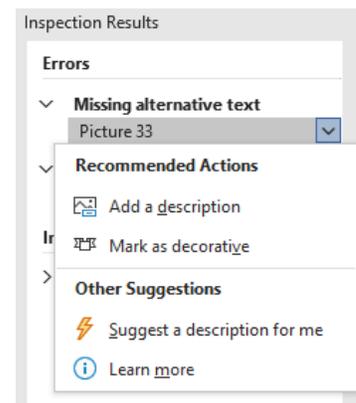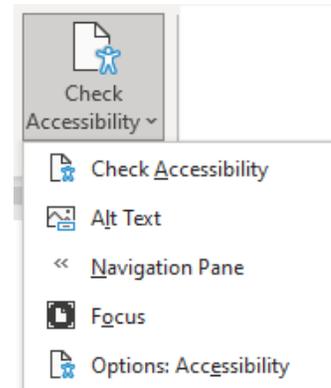
Errors can be fixed by selecting the dropdown arrow next to the item in error and choose one of the recommended actions, such as "Add a description" or "Mark as decorative" for alt text.

When "Mark as decorative" is selected for non-informational objects, the object will be removed from the "Image or object not inline" error.

Check Your Work

Does the document utilize recommended fonts (Arial, Tahoma, Calibri)?	
Has the document been formatted using Styles (Heading 1, Heading 2, etc.)?	
Has the document been formatted using Words built-in features such as footnotes, page numering, TOC, lists, tables, charts, and columns?	
Do all tables have a logical reading order from left to right, top to bottom?	
Do data tables have the entire first row designated as a "Header Row" in table properties? Is First Column chosen if it is a header column? Is the table free of merged cells? Is "Repeat as header row at the top of the page" checked?	
Does the document have it's properties set (Title, Subject, Company, and Author)?	
Do all images, shapes, and other objects have Alt-text or marked as decorative?	
Do images/graphics appear crisp and legible?	
Are graphics In Line with text?	
If color is used to convey meaning, is an alternative method also used, e.g., text?	
Do charts have a title, legend, and axis label?	
Do all URLs contain descriptive text and link to correct and active destinations?	
Is the contrast between foreground text and background easy to read?	