Accessibility Formatting Guidelines

The Michigan Department of Transportation (MDOT) has developed this accessibility formatting guide to assist in the publication of research reports that are accessible and available without restrictions. To be included in the National Transportation Library portal, reports must comply with federal standards within Section 508 of the Rehabilitation Act, which requires electronic document accessibility for individuals with disabilities that may use a screen reader or other assistive device. Reports must be set up initially with attention to the following format elements explained in these guidelines:
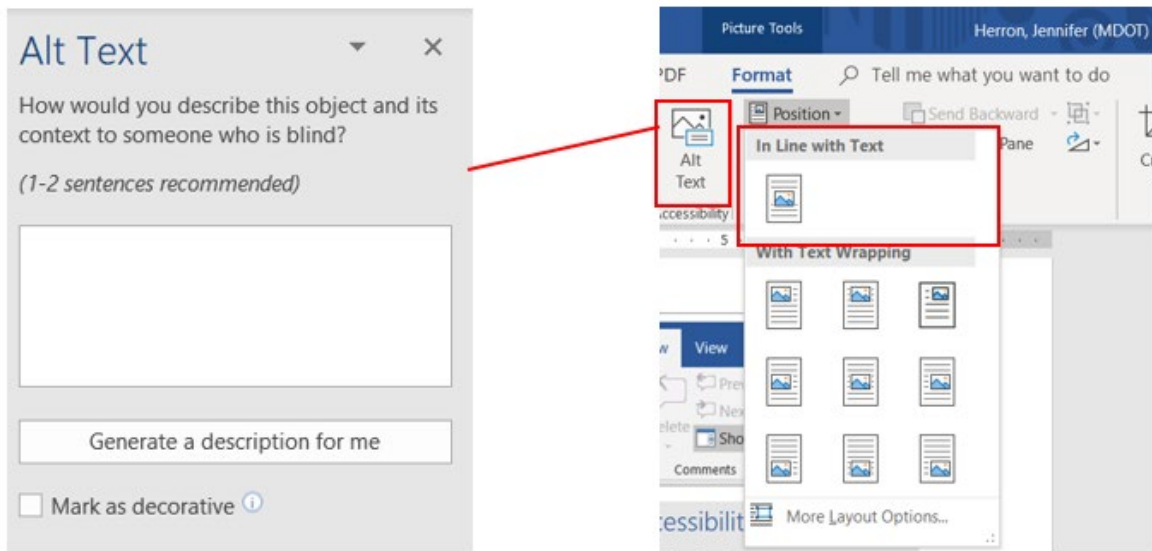
- Figures
- Fonts
- Equations
- Tables
- Charts
- Navigation
- Color Contrast
- Tagging/Bookmarks
- File Properties

Reports and related deliverables must pass a PDF Accessibility Review. If your documents do not pass the accessibility review, you will be notified of the errors that need corrected. Please be aware that appendices added after a draft report review will still be required to pass the final accessibility review.

If you have further questions, please contact MDOT Librarian, Jennifer Herron, at 517-230-6103 or HerronJ1@Michigan.gov.

Figures

After inserting an image or object, review its position to make sure "In Line with Text" is selected. Also, add alternative text (Alt-Text) when adding your image or object. The primary purpose of Alt-Text is to describe graphics to people who are unable to see them. Alt-Text can be added by selecting the image or object then clicking "Alt-Text" under the "Format" tab. If you are adding graphic design elements, please check the box indicating it as "decorative".

Tip: Does your image include labels or is it a diagram? Are you using SmartArt? Keeping a figure in a document with overlaid words and symbols will produce errors when reviewed for accessibility and cause confusion when accessed by a someone who is visually impaired. **Grouping figures together will pass the Word Accessibility check but will fail the PDF check.** Take a screenshot of the image and add it to your document with descriptive Alt-Text that identifies all labels and included symbols.

Don't include a generic description of your image, such as "picture" or "figure."
Do include a description of what the image is and what it is meant to show readers. Repeating the image caption will not provide visually impaired readers the additional information they need in order to understand what your image is conveying.

Don't forget Alt-Text for objects such as charts, tables, and graphs.
Do include a description for objects that provide enough detail for someone who is visually impaired to be able to fully understand what information is being conveyed.

*Don't* rely on auto generated Alt-Text.
Do review Alt-Text for all images.

Fonts

MDOT approved fonts include Arial and Calibri. Please ensure your documents use these fonts, with a minimum font size of 12pt. When using either font, please check that the Ligatures has feature has been set to None.

There are two ways to check and or set the Ligatures feature. If you are starting your document, select the expand arrow in the Font section of the Word ribbon. Alternatively, you can right click and select Font within the body of your document.
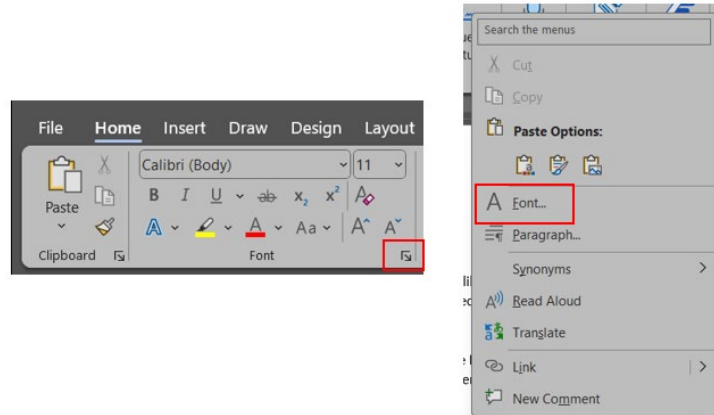

The Ligatures feature is in the Advanced tab, under the OpenType Features. If it is not already set to None, please change it so it is set to None. If this feature is not set to None, the example below shows how font will appear, specifically words with the letter's ti and tt. Screen readers cannot process ligatures and will result in errors in the PDF version of your document, making words that include this combination of letters unreadable.
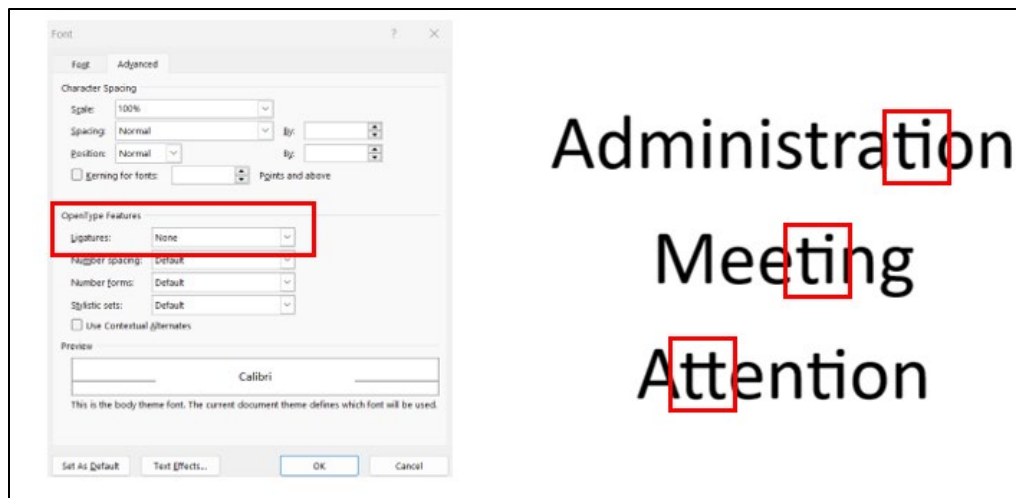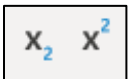
Equations

When adding equations, please use the "Equation" option listed under the "Insert" Tab. This ensures the equation is tagged appropriately and will pass the accessibility check.
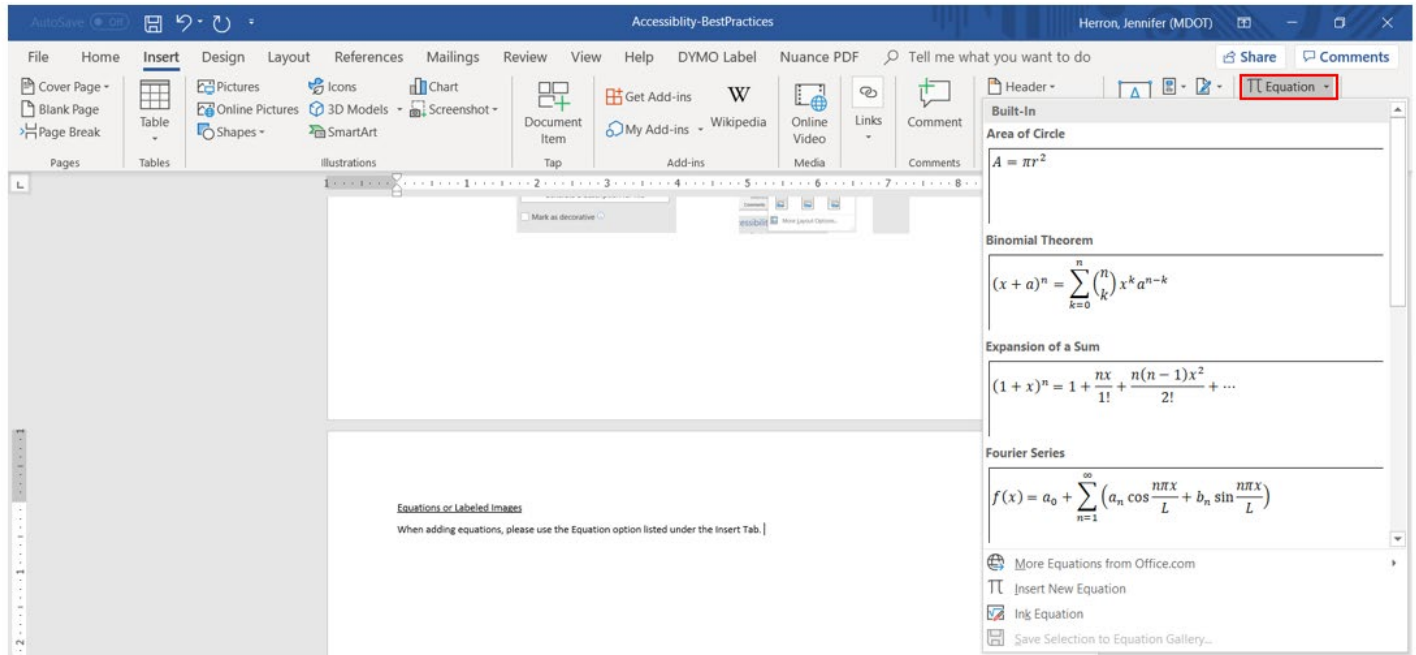
Tip: Does your image include labels or is it a diagram? Keeping a diagram in a document with words and symbols will produce errors when reviewed for accessibility (see page 2) and cause confusion when accessed with a screen reader by someone who is visually impaired.

Don't use the subscript or superscript button when entering or formatting math symbols or formulas.
*Do* use the Insert Equation option within the text of your paragraph.

Don't add equations using Text Boxes.
*Do* use the Insert Equation method described above.

Tables

When including a table, be sure to use the Insert Table function and set the table headers. Select the "Insert" tab, click on "Table," and choose the appropriate number of rows and columns.

Once headers are set, highlight the header row. Click on the "Design" tab under "Table Tools". Check the box for "Header Row". On the "Layout" tab, under "Table Tools", select the option for "Repeat Header Rows" to make sure headers repeat if the table is split between pages.
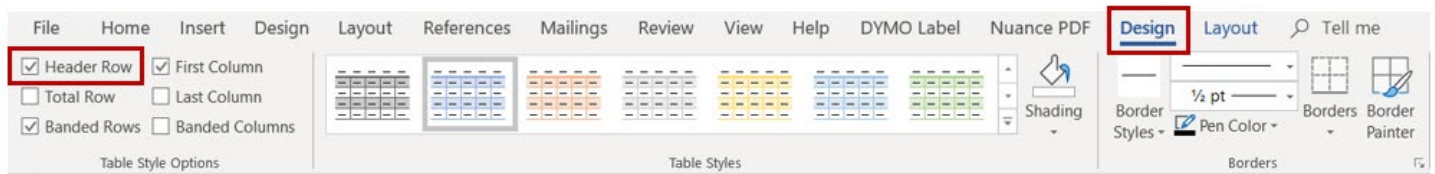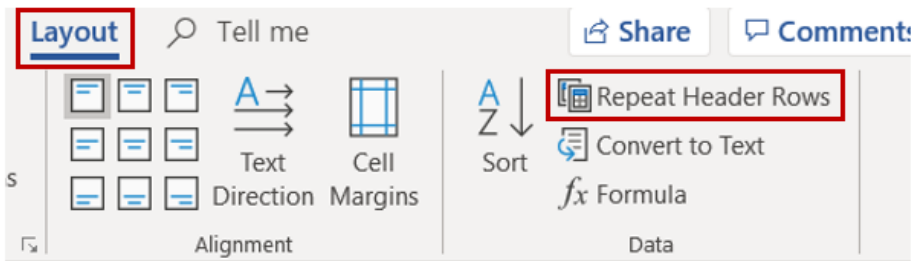
Once your data is entered, highlight the entire table. Right click the highlighted section then click on "Insert Captions" to add your table title. After adding your title, add Alt-Text by right clicking your table and selecting Table Properties.
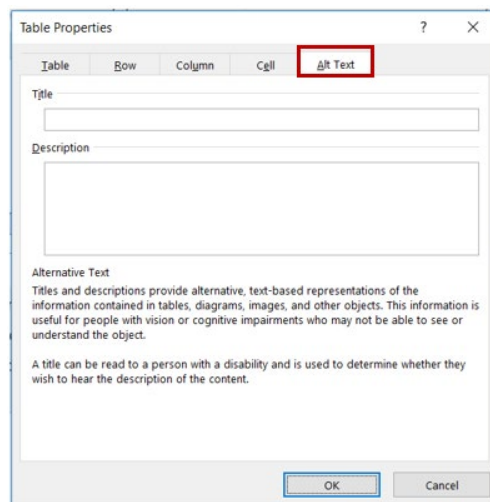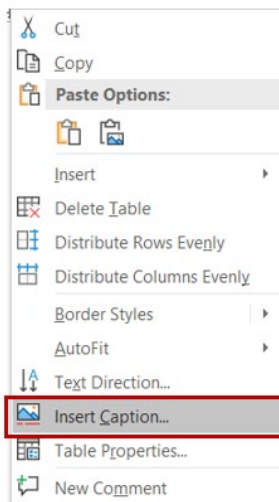
**Don't** merge multiple cells in a table.
Do consider using multiple tables. Merging too many cells causes problems for screen readers making it difficult for them to identify the appropriate elements of your table.

Don't use tables for formatting text to create a better layout. If it does not include headers, do not use a table.
Do use the formatting tools available in Word found under the Layout tab.
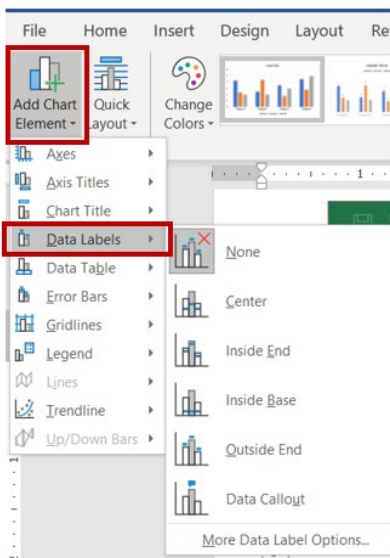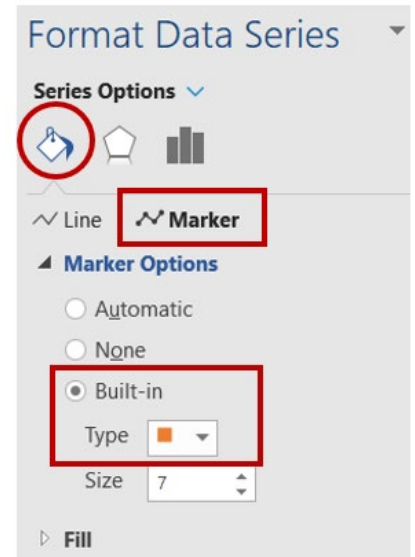
Charts

Color should not be the only element used to distinguish data. Labels, patterns, and shapes/markers will also need to be added to make this information accessible for those who are blind or visually impaired. Charts will also need to include Alt-Text. To add Alt-Text, click the Format tab under Chart Tools and select the Alt-Text option. If you provide the data in a table before or after the chart, reference this in the Alt-Text. If no table with data is provided, you will need to add this information to the Alt-Text.
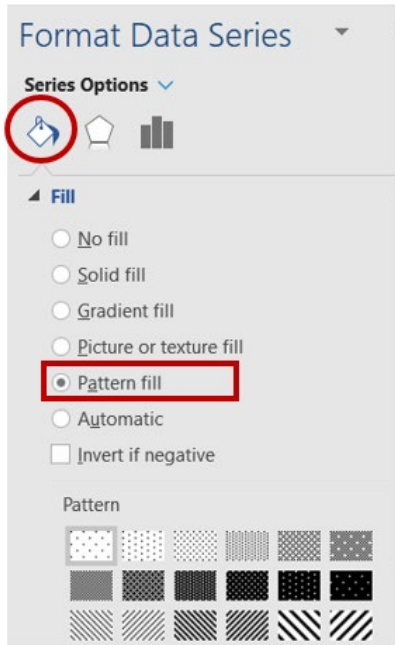
Editing your table to make it more accessible is done through the Design and Format tabs.

To adjust the color and fill, select a data series and double click. This will open the format tab where you can select a pattern fill. The same process can be used to add shapes or markers to line graphs.
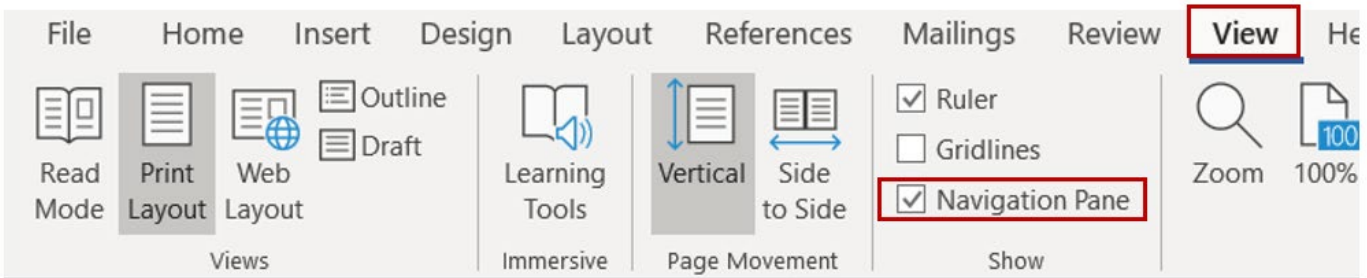

To add labels,click the Design tab and then on the ribbon, click Add Chart Element.

Navigation

When adding new sections to your document, use the options available in the Style box (under the Home tab) to appropriately label headings.
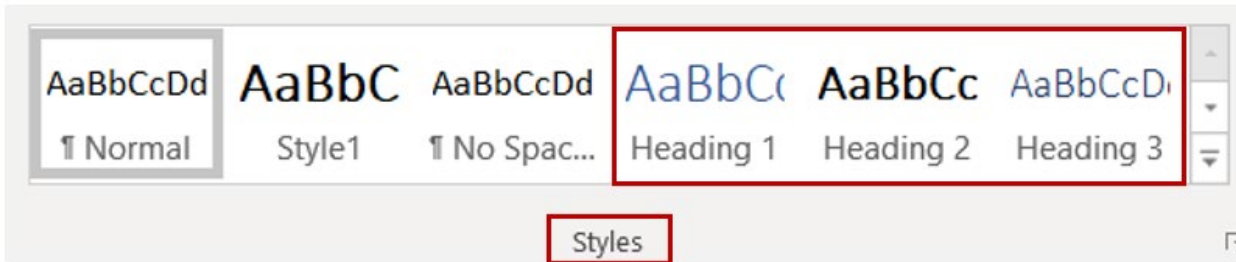
Preview your Navigation by clicking the View tab. From the ribbon, check the box for Navigation Pane.

Once your document is complete, go to the beginning of the document and add a Table of Contents. This can be auto populated based
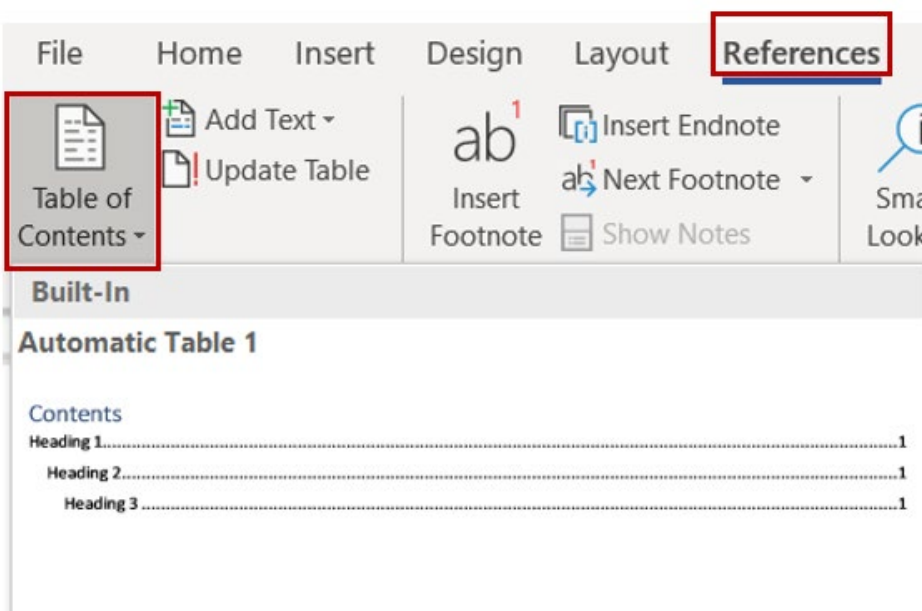
Color Contrast

Does your document include text over a color background? If so, please review the color combinations for appropriate contrast. A contrast ratio of 4.5:1 is required for document accessibility. To test contrast, use WebAIM's Contrast Checker tool - https://webaim.org/resources/contrastchecker/ .

To review your color contrast, visit WebAIM's Contrast Checker tool. Click on the object with filled color to activate the Drawing Tools tab. Click Format and then Shape Fill. From the dropdown menu that opens, click More Colors. From the window that opens, review the Red, Green and Blue color numbers. In WebAIM, click the color for Background Color. Enter the numbers from your Word object into WebAIM's checker tool. Change the Foreground Color to the color of your text. If you used black or white, you can select the color from the list of basic colors.
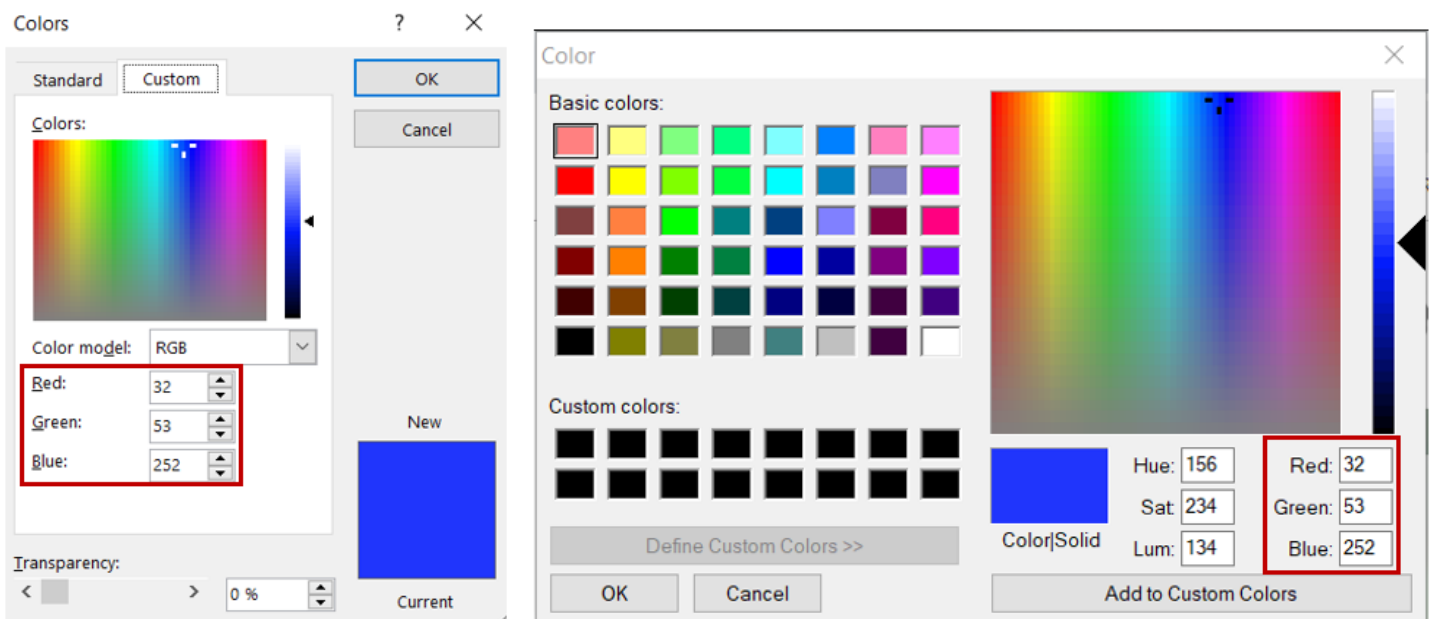

| This color contrast will not pass WCAG | This color contrast will not pass WCAG |

Tagging/Bookmarks

Once you have finished the accessibility scan in Word, please ensure the document is tagged and bookmarked for accesibility. This can be completed as you save your document as a PDF. To do this, click the "File" tab then "Save As." Now click on "More options" and change the file type to "PDF." A new Options button should appear.
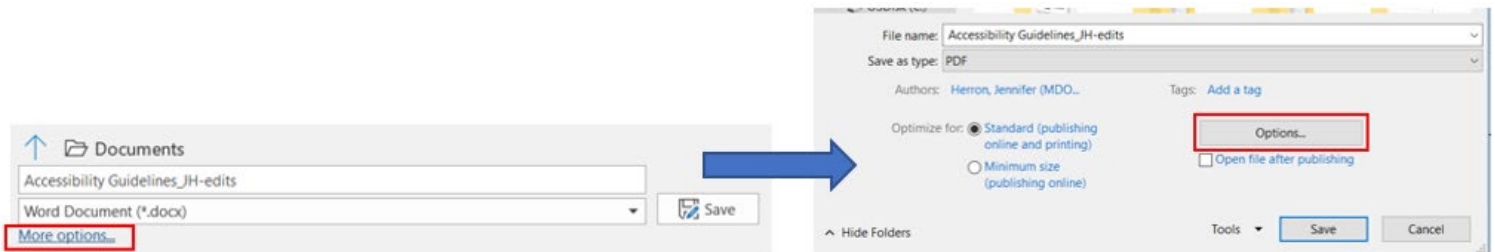
Select this new "Options" button and check the box next to "Create bookmarks using." This will tag your document and add bookmarks to different sections of the report .
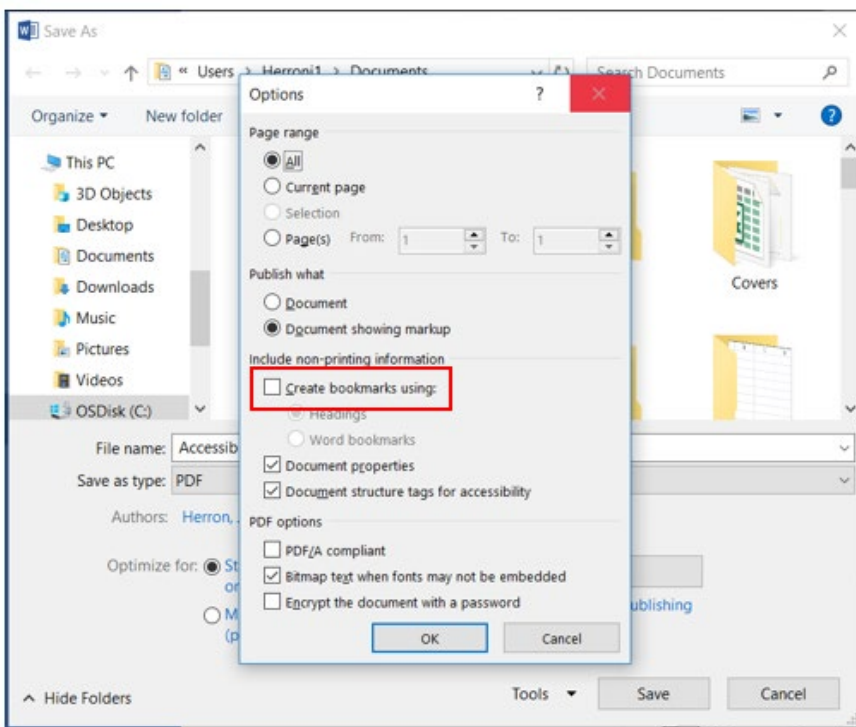
File Properties

When creating your document, it's important to include properties. To edit the properties, access the "File tab" and click the down arrow next to "Properties" to select "Advanced Properties." Please include a Title and for your report. Please list MDOT as the author.

Properties ▾

Size	447KB
Pages	4
Words	276
Total Editing Time	165 Minutes
Title	Add a title
Tags	Add a tag
Comments	Add comments

Related Dates

|	
Last Modified	Today, 2:56 PM
Created	Today, 11:25 AM
Last Printed	Today, 1:34 PM

Related People

Author

HJ   Herron, Jennifer (MDOT)

Add an author

How to Check Accessibility in Word

Once file properties, figures, equations, and tables have been successfully integrated into a report using the Microsoft tools for accessibility, it is time to check the overall accessibility of the document. To do so, go to the "Review" tab and select "Check Accessibility". Any accessibility errors will be identified in the "Inspection Results" window where you will have the ability to review and correct individual errors.
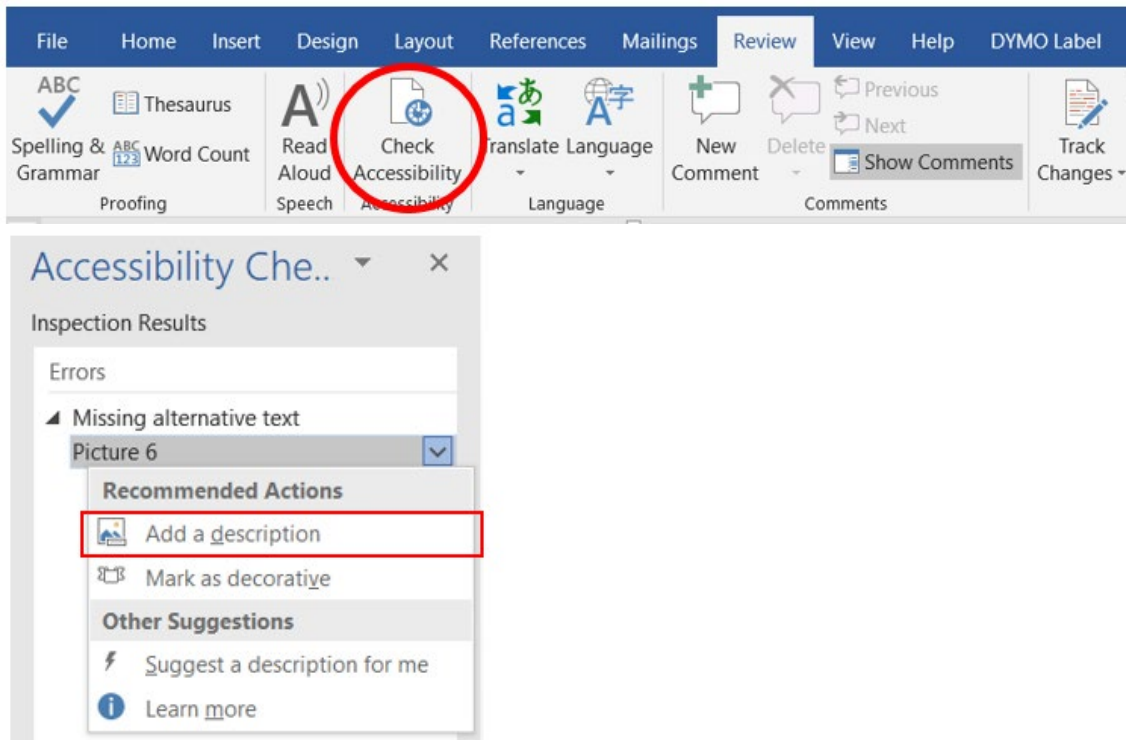
Web Resources

See resources listed below for additional information.

Section 508
- [Create Accessible PDFs](#)
- [Test Electronic Documents](#)
- [Accessibility Training](#)

Web Accessibility in Mind
- [PDF](#)
- [PDF Accessibility Checker](#)
- [Accessible Forms in Acrobat XI](#)
- [Converting Documents to PDF](#)
- [Microsoft Word](#)
- [Microsoft Word Accessibility Checker](#)
- [Converting to PDF](#)
- [Word Accessibility Training](#)

Department of Health and Human Services
- [Intro to Accessibility](#)
- [Tagging PDF's in Adobe](#)
- [How to Identify 508 Errors in PDF](#)

NOAA Central Library
- [Section 508 Compliance - LibGuide](#)

YouTube Videos:
- [Section 508 Just-In-Time Training Video](#)
- [Section 508 CoP: Accessibility](#)
- [Section 508 Workshop: Alternative Text Best Practices](#)
- [Basic PDF Editing](#)
- [Creating Accessible Microsoft Word documents](#)

Great Lakes ADA Center:
- [Creating Accessible Documents with Adobe InDesign](#) (11/15/2018)
- [PDF Accessibility: A Deeper Dive - Exploring Tools and Solutions](#) (1/18/2018)
- [PDF Accessibility: Regulations, Risks, and Strategies](#) (11/16/2017)
- [Creating Accessible Forms with Adobe](#) (1/21/2016)
- [How do I know if my PDF is accessible?](#) (9/17/2015)
- [Advanced Accessible PDF-Part 2: Tables, Forms, and More!](#) (11/21/2013)
- [Advanced Accessible PDFs - Part 1. Building Accessibility into Source Documents](#) (9/19/2013)
- [Quick Checks for PDF Accessibility](#) (3/8/2011)
- [Best Practices in Developing and Disseminating Documents Electronically](#) (3/10/2010)