

Accessibility Formatting Guidelines

September 2026

This document is subject to updates to reflect current best practices.

The Michigan Department of Transportation (MDOT) is committed to ensuring that all research reports are accessible and available without restrictions. To support this goal, MDOT Research Administration has developed this accessibility formatting guide to assist in the preparation of reports to meet federal accessibility standards.

MDOT adheres to the Web Content Accessibility Guidelines (WCAG) 2.1 AA standards for digital accessibility. All new and existing digital systems and content must, at a minimum, comply with these standards. The Research Accessibility Guidelines incorporate these requirements and provide additional guidance specific to research reports. These guidelines are intended to serve as a supportive resource to help ensure your final report is compliant.

- [What's New](#)
- [Figures](#)
- [Formatting & Layout](#)
 - [Fonts](#)
 - [Navigation](#)
 - [In Line with Text](#)
- [Equations](#)
- [Tables](#)
- [Charts](#)
- [Color Contrast](#)
- [Tagging/Bookmarks](#)
- [File Properties](#)

All reports and related deliverables must pass a **PDF Accessibility Review** before publication. If your document does not pass the review, you will be notified of the specific errors that need to be corrected. Please note that **any appendices added after the draft report review must also pass the final accessibility review** to ensure full compliance. Final deliverables that will be posted online will also need to include a Word version. **If a final Word version is not provided, vendors will be responsible for addressing and resolving any accessibility issues that arise.**

MDOT Research Administration reserves the right to modify final reports if an accessibility issue occurs and cannot be remedied. These modifications will be limited to formatting adjustments necessary to ensure accessibility compliance.

A comprehensive Accessibility Compliance Checklist is included at the end of this guide to help you verify that your document meets all MDOT accessibility requirements before submission.

Draft documents may be submitted to MDOT Librarian, Jennifer Herron, at HerronJ1@Michigan.gov. Please allow for at least one week to review and provide comments.

What's New

The September 2026 update includes the following new requirements:

- Tables must include borders for all rows and columns.
- Table content will be reviewed to ensure that all content can be accurately read by screen readers.
- Vertical text cannot be used. An exception is made for charts, which are treated as figures; vertical text may be used within charts when necessary.
- MDOT Research Administration reserves the right to modify final reports if an accessibility issue occurs and cannot be remedied. These modifications will be limited to formatting adjustments necessary to ensure accessibility compliance.

The March 2026 update included the following new requirements:

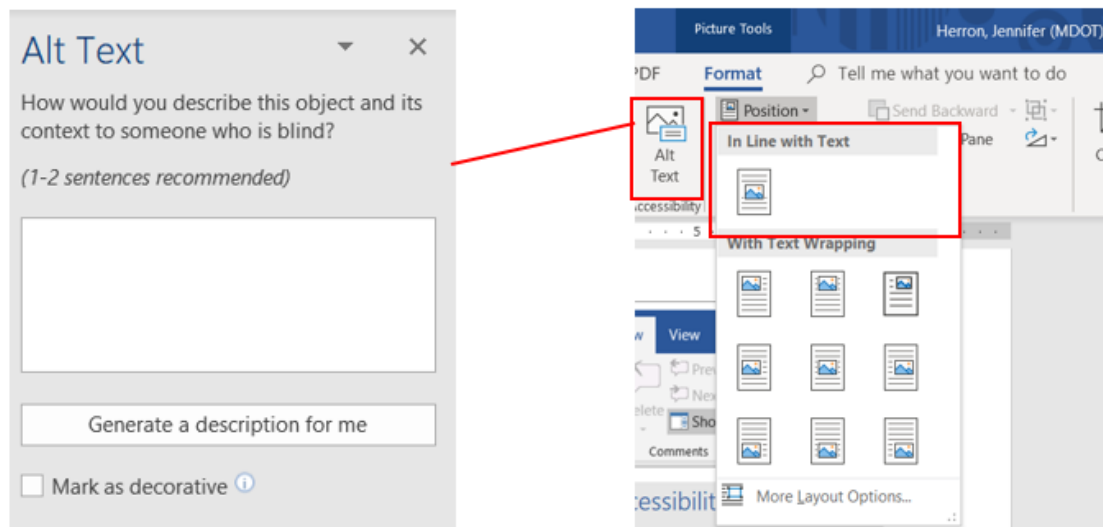
- A Word version of final deliverables must be included for any submissions that will be posted online.
- Draft documents can be reviewed by the MDOT Librarian at any time. Please allow for at least one week to review and provide comments.
- Text cannot use Justification for the alignment.
- Tables must be created using the Insert Table function. Images of tables will not pass accessibility.
- Documents saved from Word to PDF should use the Export to PDF option, not Save As Adobe.

Figures

After inserting an image or object into your document, ensure its **positioning is set to “In Line with Text”** to maintain proper layout and accessibility.

Be sure to add **alternative text (Alt-Text)** to all images and objects. Alt-Text provides a meaningful description of visual content for individuals who are unable to see it. To add Alt-Text, select the image or object, then click **“Alt Text”** under the **“Format”** tab.

If the image is purely decorative and does not convey meaningful information, check the box labeled **“Mark as decorative”** to indicate that screen readers can skip it.



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 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.

Formatting & Layout

To save time and prevent formatting issues in your final report, it is recommended that you follow the formatting guidelines outlined below as you create your document. Making changes to these elements after the report is complete can lead to layout problems and will be time-consuming to fix.

Please note that these guidelines are based on the use of **Microsoft Word**. If you choose to use other software, it is your responsibility to ensure that the final document meets accessibility requirements and formatting standards using the appropriate tools.

MDOT Research Administration reserves the right to modify final reports if an accessibility issue occurs and cannot be remedied. These modifications will be limited to formatting adjustments necessary to ensure accessibility compliance.

Fonts

MDOT-approved fonts include **Arial** and **Calibri**. Please ensure your documents use one of these fonts, with a **minimum font size of 12 pt**.

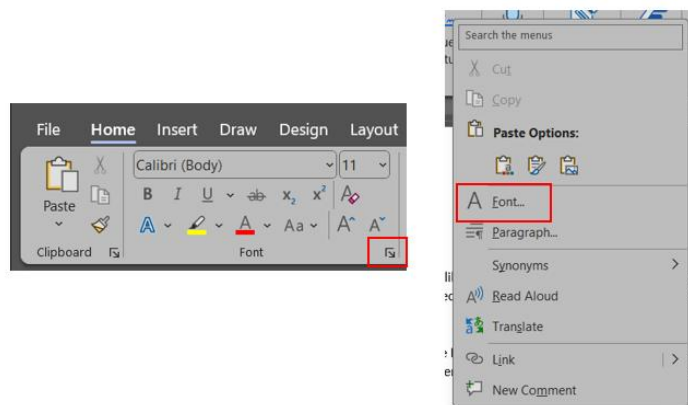
Vertical text cannot be tagged correctly for accessibility and cannot be used.

Do not use **justified text alignment**, as it can create uneven spacing between words, which may cause difficulty with readability and comprehension.

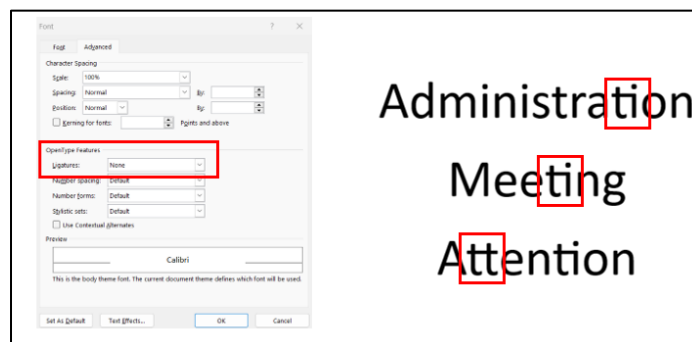
Additionally, when using either font, make sure the **Ligatures** feature is set to **"None"**. Ligatures can affect the clarity of certain character combinations and may impact accessibility.

There are two ways to check or adjust the Ligatures setting in Microsoft Word:

1. If you're starting a new document, click the **expand arrow** in the **Font** section of the Word ribbon.
2. Alternatively, right-click within the body of your document, select **Font**, and adjust the Ligatures setting from there.

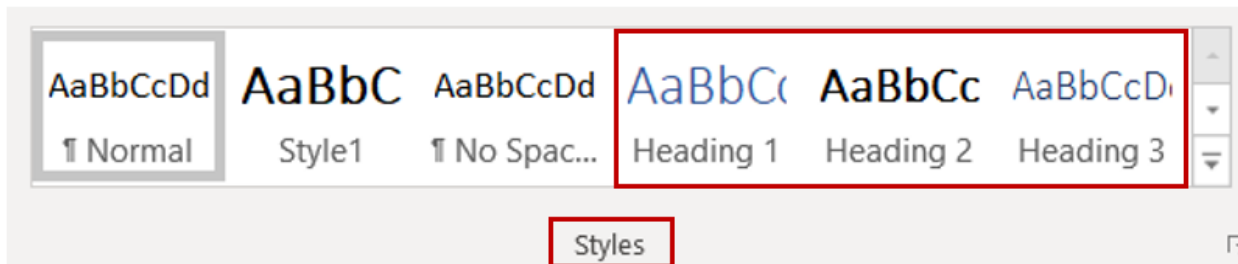


The Ligatures feature is in the Advanced tab, under the OpenType Features. If it is not already set to None, please change it so it is set to None. If this feature is not set to None, the example below shows how font will appear, specifically words with the letter's ti and tt. Screen readers cannot process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

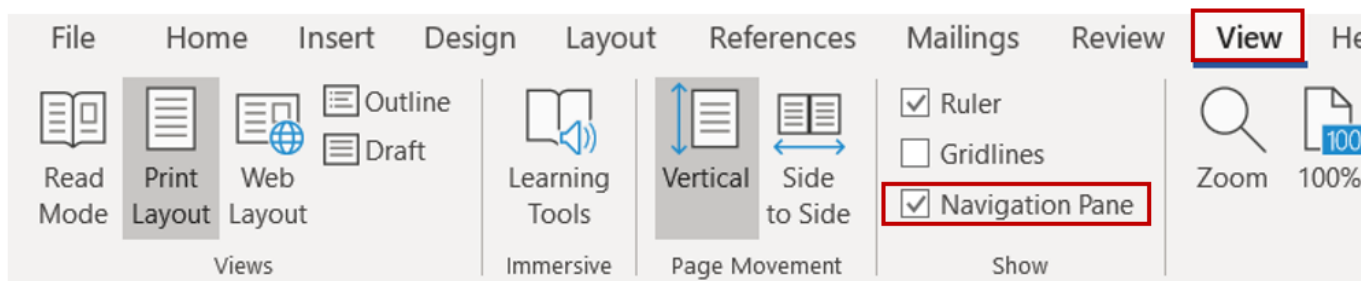


Navigation

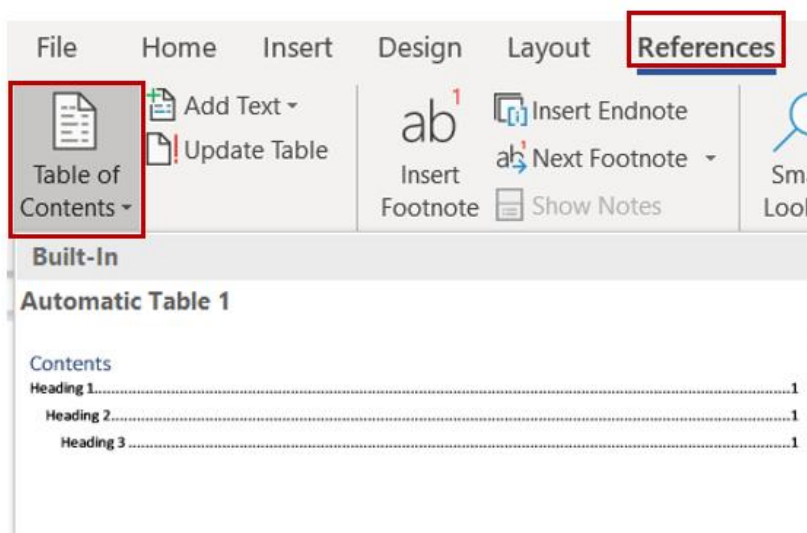
When adding new sections to your document, use the **Styles** options available under the **Home** tab to apply the appropriate heading levels. This ensures consistent formatting and improves accessibility for screen readers.



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 on selected headings.



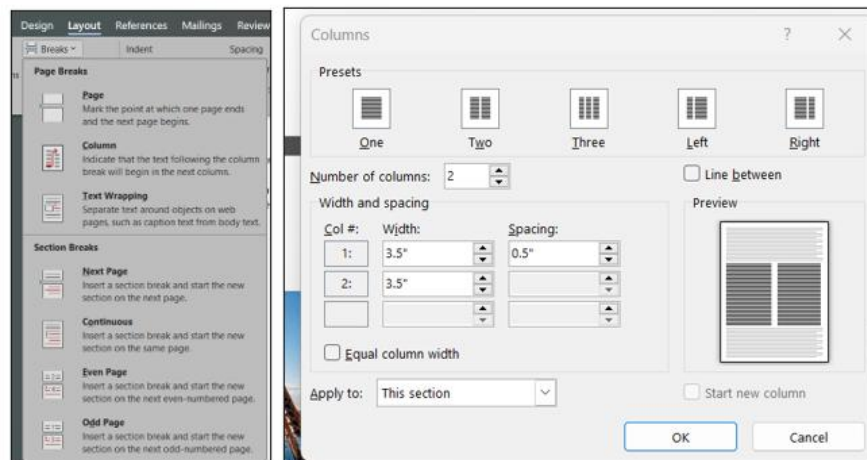
Formatting – In Line with Text

All figures must be set to “**In Line with Text**”, and **text wrapping should not be applied**, as it can interfere with accessibility and document layout. While this may present formatting challenges, the following best practice allows you to achieve the appearance of wrapped text while maintaining accessibility compliance.

Do not use tables for layout purposes, as this can result in table errors and accessibility issues.

Instead, use **section breaks (specifically, continuous breaks)** to create a layout that visually wraps text around a figure while remaining accessible to screen readers:

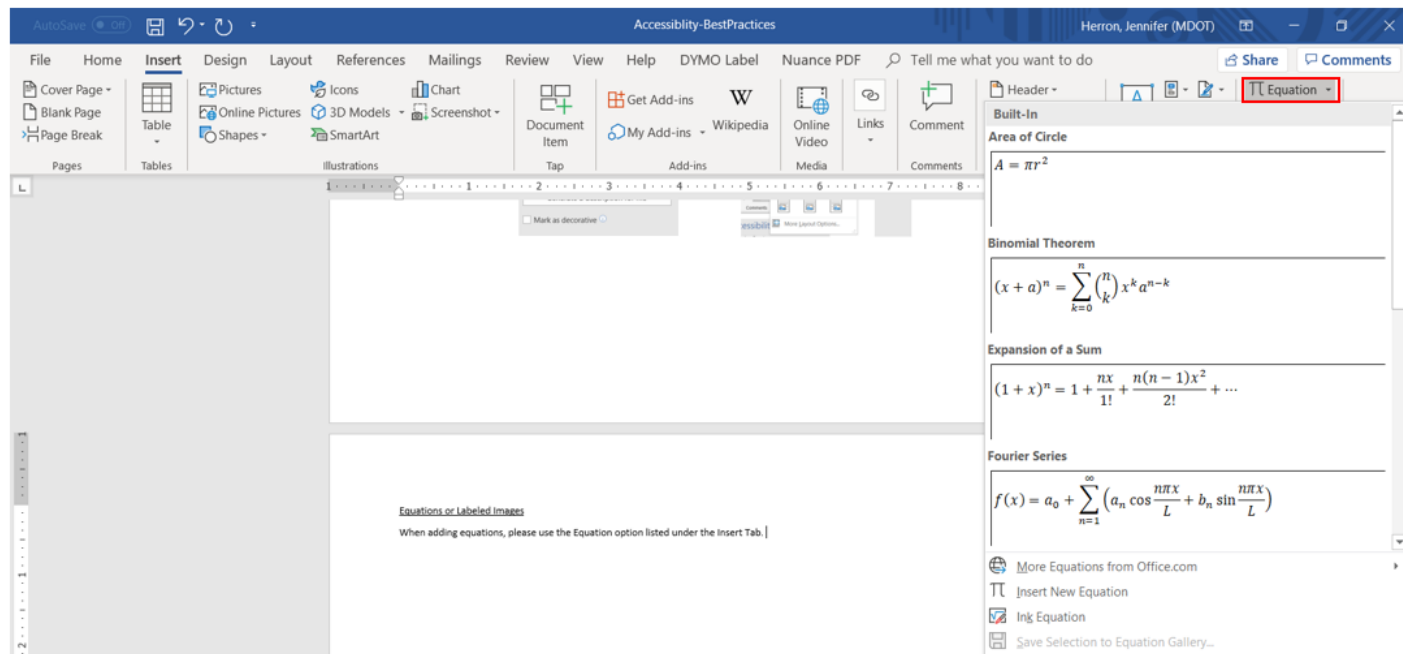
1. **Insert a section break** above the figure.
2. Change the layout to **two columns**.
3. Adjust the column widths as needed. To do this:
 - Go to the **Layout** tab.
 - Select **Breaks > Continuous**.
 - Double-click the **ruler** to open column settings.
 - **Uncheck “Equal column width”** and adjust the widths as desired.
4. After the figure, **insert another section break** and return the layout to a single column.



This is how a report can include a figure and have the formatting and layout like the effect wrapped text provides, but retaining the formatting that allows a screen reader to correctly read the text and figure details.

Equations

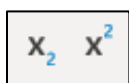
When adding equations, please use the “Equation” option listed under the “Insert” Tab. This ensures the equation is tagged appropriately and will pass the accessibility check.



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 #) 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.



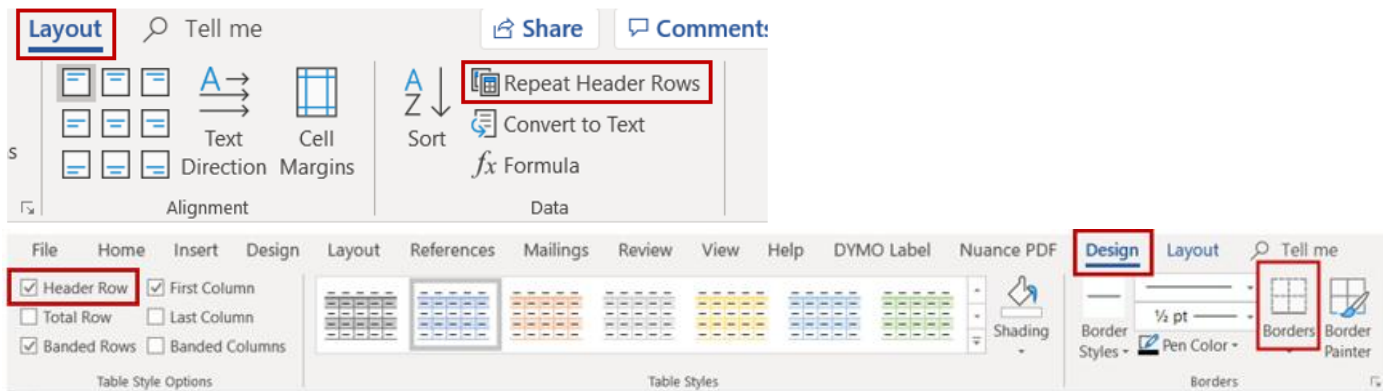
Don't add equations using Text Boxes.

Do use the Insert Equation method described above.

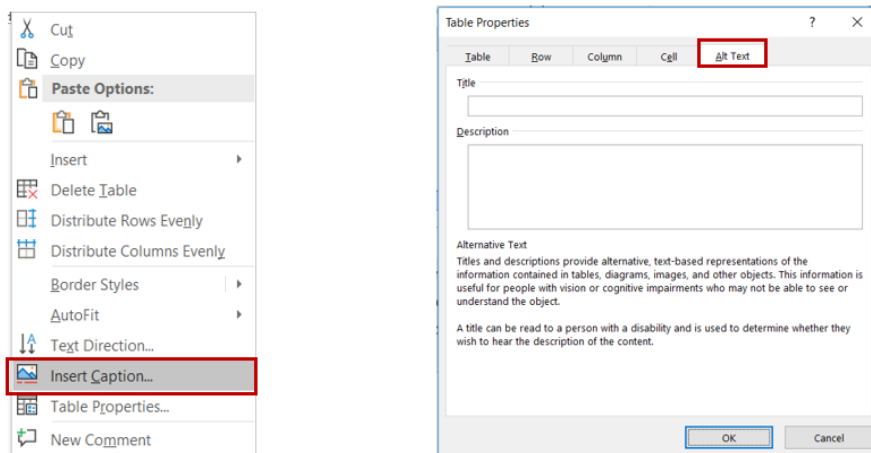
Tables

All tables must be created using the Insert Table function, with properly defined headers to meet accessibility requirements. **Tables inserted as images will be returned for revision.** Table content will be reviewed to ensure that all content can be accurately read by screen readers. **Text that does not wrap correctly will be returned for revision.**

1. Go to the **Insert** tab, click **Table**, and select the desired number of rows and columns.
2. After inserting the table, highlight the **header row**.
3. Under **Table Tools**, click the **Design** tab and check the box for **Header Row**.
4. Then, under the **Layout** tab (also within Table Tools), select **Repeat Header Rows**. This ensures that the header row is repeated if the table spans multiple pages, improving readability and accessibility.
5. **Borders** is available in the Design tab. Tables must include borders for rows and columns.



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.



Avoid merging multiple cells in a table.

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 method used to convey information in charts or graphics. To ensure accessibility for individuals who are blind or visually impaired, use **labels, patterns, shapes, or markers** in addition to color to distinguish data.

All charts must also include **alternative text (Alt-Text)**. To add Alt-Text:

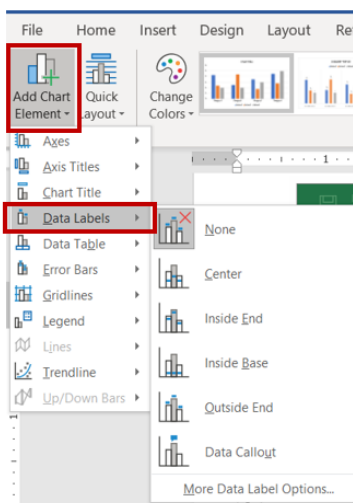
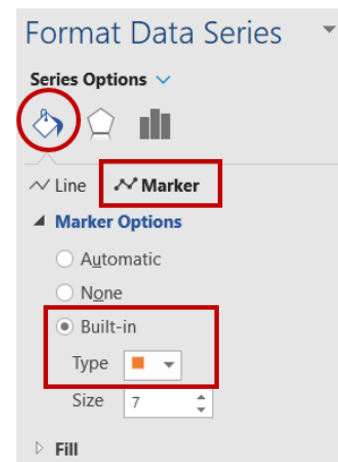
1. Select the chart.
2. Click the **Format** tab under **Chart Tools**.
3. Choose the **Alt-Text** option.

If the chart's data is also presented in a table before or after the chart, reference that table in the Alt-Text. If no table is provided, include a **brief summary of the chart's key data and trends** directly in 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.

Color Contrast

If your document includes **text over a colored background**, it's important to ensure there is sufficient **color contrast** for readability and accessibility. According to accessibility standards, a **minimum contrast ratio of 4.5:1** is required between text and background colors.

To check your color contrast, use the **WebAIM Contrast Checker**:

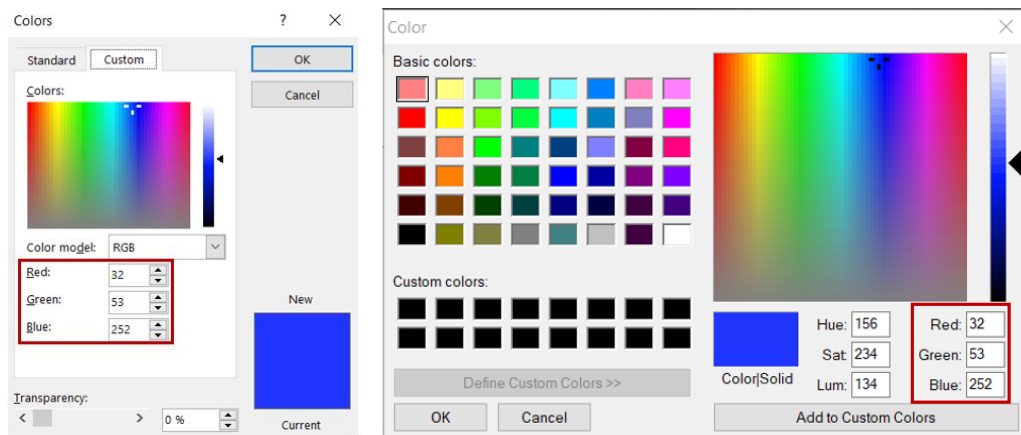
<https://webaim.org/resources/contrastchecker/>

How to Check Color Contrast in Microsoft Word:

1. Click on the object with the filled background color to activate the **Drawing Tools** tab.
2. Select **Format**, then click **Shape Fill**.
3. From the dropdown, choose **More Colors**.
4. In the window that appears, note the **Red, Green, and Blue (RGB)** values.

Using WebAIM's Contrast Checker:

- In the tool, enter the RGB values from your Word object into the **Background Color** fields.
- For the **Foreground Color**, enter the RGB values of your text color. If you're using standard black or white, you can select those from the basic color options.
- The tool will display the contrast ratio and indicate whether it meets accessibility standards.



This color contrast will
not pass WCAG

This color contrast will
not pass WCAG

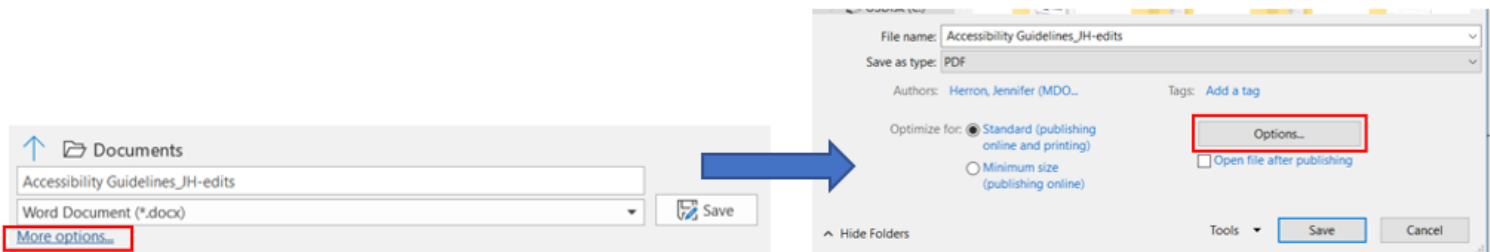
Tagging/Bookmarks

After completing the accessibility check in Microsoft Word, ensure that your document is properly **tagged and bookmarked** for accessibility when saving it as a PDF.

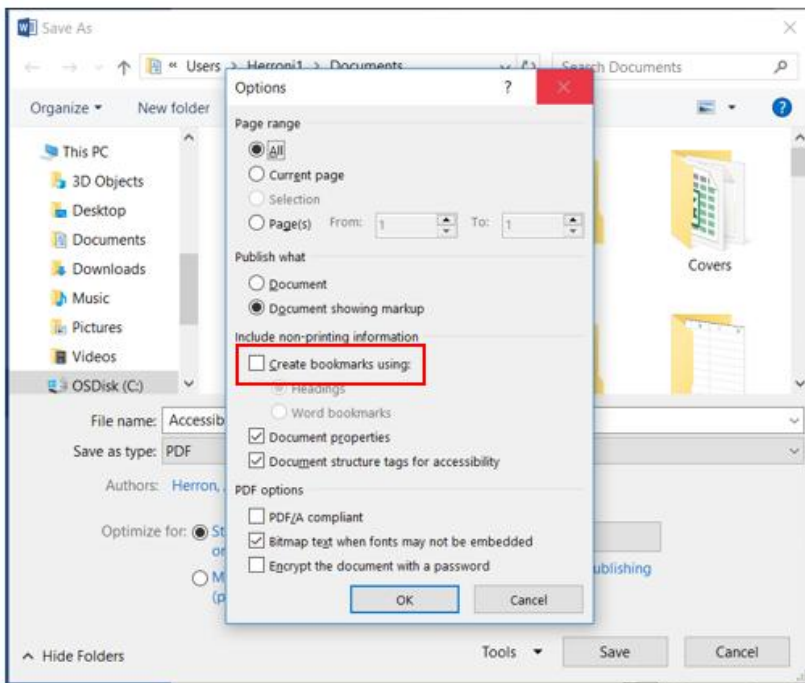
To do this:

1. Click the **File** tab and select **Save As**.
2. Choose **More Options** to open the full Save As dialog box.
3. Change the file type to **PDF**.
4. Once PDF is selected, click the **Options** button that appears.
5. In the Options window, make sure to check the boxes for:
 - **Document structure tags for accessibility**
 - **Create bookmarks using headings**

These settings help ensure that your PDF remains accessible to screen readers and other assistive technologies.



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 **document properties** to support accessibility and proper metadata tagging.

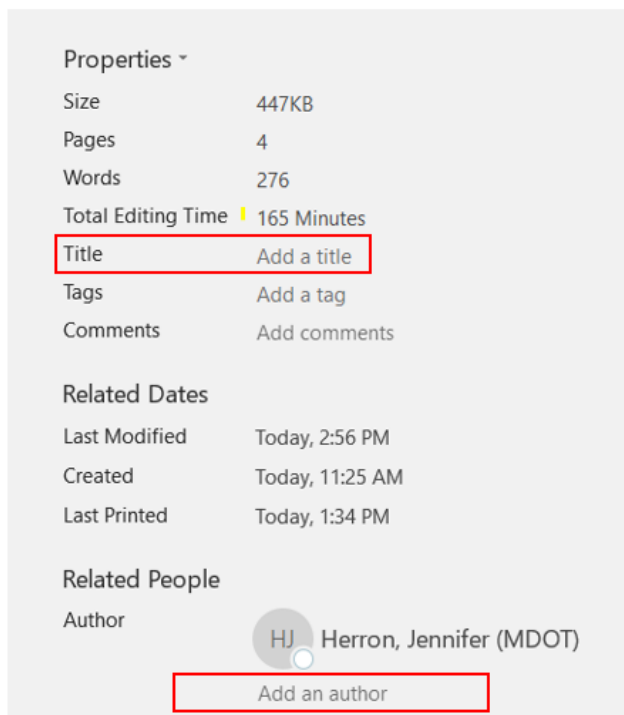
To edit the properties:

1. Click the **File** tab.
2. Click the **down arrow** next to **Properties** (on the right side of the Info screen).
3. Select **Advanced Properties**.

In the dialog box that appears:

- Enter a **Title** for your report.
- Set **MDOT** as the **Author**.

Including these properties ensures your document is properly identified and searchable, especially when converted to a PDF.



The screenshot shows a 'Properties' dialog box with a dropdown arrow. It is divided into three sections: 'Properties', 'Related Dates', and 'Related People'. The 'Properties' section includes fields for Size (447KB), Pages (4), Words (276), Total Editing Time (165 Minutes), Title (Add a title), Tags (Add a tag), and Comments (Add comments). The 'Related Dates' section includes Last Modified (Today, 2:56 PM), Created (Today, 11:25 AM), and Last Printed (Today, 1:34 PM). The 'Related People' section shows the Author as 'HJ Herron, Jennifer (MDOT)' with a red box around the 'Add an author' button below it.

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	

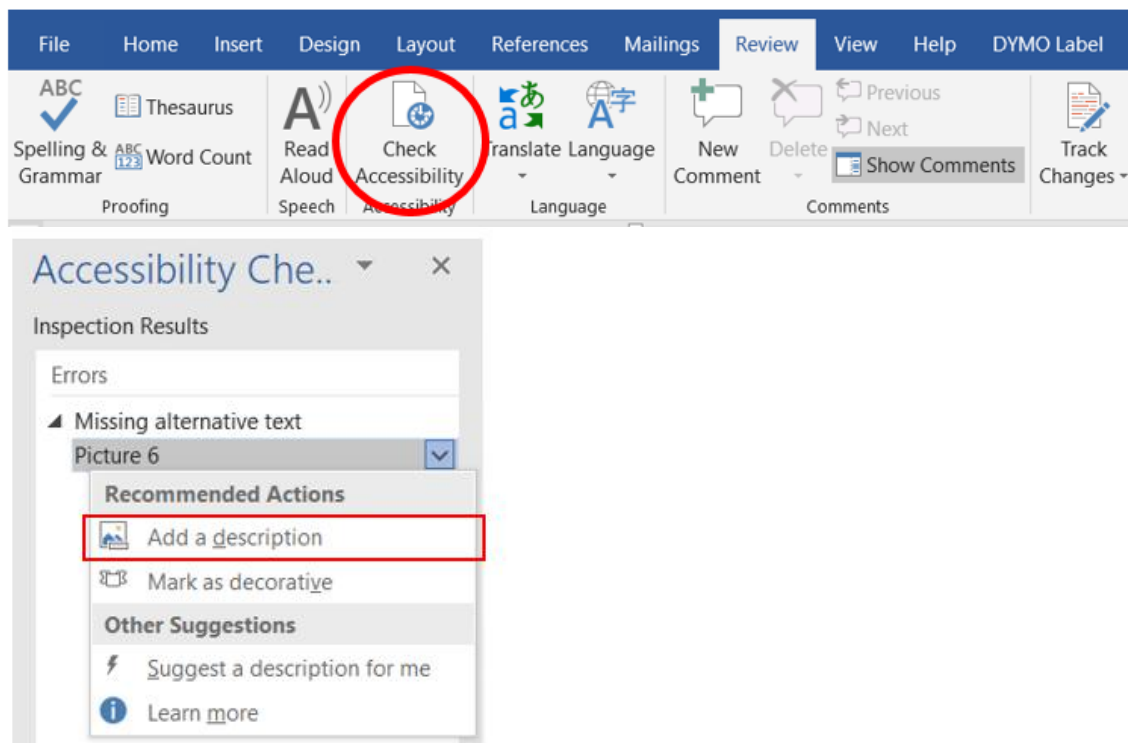
How to Check Accessibility in Word

Once you've added all required elements—such as **file properties, figures, equations, and tables**—using Microsoft Word's accessibility tools, it's time to perform a final **accessibility check** on your document.

To do this:

1. Go to the **Review** tab.
2. Select **Check Accessibility**.

The **Accessibility Checker** will open in the **Inspection Results** pane, where any issues will be listed. You can review and correct each item directly from this panel to ensure your document meets accessibility standards.



Accessibility Compliance Checklist

Use this checklist to ensure your research report meets MDOT’s accessibility standards before submission:

Document Setup

- ☐ Document uses **Arial** or **Calibri**, minimum **12 pt** font.
- ☐ **Ligatures** are set to **None**.
- ☐ **Justified alignment** is not used.
- ☐ **Document properties** include a **Title** and list **MDOT** as the **Author**.

Headings & Navigation

- ☐ Headings are applied using **Styles** under the **Home** tab.
- ☐ **Navigation Pane** has been reviewed.
- ☐ A **Table of Contents** is included and auto-generated from headings.

Figures & Images

- ☐ All images are set to **“In Line with Text”**.
- ☐ **Alt-Text** is added to all images and objects.
- ☐ Decorative images are marked as **“decorative”**.
- ☐ No grouped SmartArt or overlaid text on images.

Tables

- ☐ Tables are inserted using the **Insert Table** function.
- ☐ **Header Row** is checked and **Repeat Header Rows** is enabled.
- ☐ **Borders** are added for all columns and rows.
- ☐ No merged cells or tables used for layout purposes.
- ☐ Text is wrapped appropriately – no cut off words.

Charts & Graphs

- ☐ Color is not the only method used to convey information.
- ☐ **Labels, patterns, or markers** are used to distinguish data.
- ☐ **Alt-Text** is added to each chart.

- ☐ Data tables are referenced or summarized in Alt-Text.

Equations

- ☐ Equations are inserted using the **Insert > Equation** tool.
- ☐ No text boxes or manual superscripts/subscripts are used.

Color Contrast

- ☐ Text over colored backgrounds meets **4.5:1 contrast ratio**.
- ☐ Contrast has been verified using WebAIM Contrast Checker.

Final Steps

- ☐ Accessibility check has been run using **Review > Check Accessibility**.
- ☐ Document is saved as a **tagged PDF** with **bookmarks using headings**.

Resources

See resources listed below for additional information.

Accessibility resource guide created by the Transportation Research and Connectivity Pooled Fund Study

- <https://transportation.libguides.com/c.php?g=1028270&p=7596790>

Training

- <https://www.section508.gov/training/>

Color contrast checker

- <https://webaim.org/resources/contrastchecker/>

Program Specific Support

Microsoft Word

- <https://support.microsoft.com/en-us/office/make-your-word-documents-accessible-to-people-with-disabilities-d9bf3683-87ac-47ea-b91a-78dcacb3c66d>

Adobe InDesign

- <https://helpx.adobe.com/indesign/using/creating-accessible-pdfs.html>

Google Docs

- <https://support.google.com/docs/answer/6199477?hl=en>