

Making Your Documents Accessible

A Guide for Washington State Transportation Center (TRAC) Researchers

In response to Section 504 and Section 508 requirements of two federal civil rights laws that guarantee rights to persons with disabilities, the Federal Highway Administration, Washington State Department of Transportation (WSDOT), and other agencies require that documents meet general digital accessibility standards before they will publish them online.

[Section 504](#) of the Rehabilitation Act of 1973, part of a civil rights law that prohibits discrimination against individuals with disabilities, requires all federal government-funded programs and activities to be accessible. [Section 508](#) of the Americans with Disabilities Act (ADA) requires all electronic information and communication technology in these programs to be accessible.

The WSDOT must comply with the above requirements for its federally funded research reports. Additionally, WSDOT is subject to state requirements codified in the Washington Law Against Discrimination ([RCW 49.60.30 et seq.](#)).

Consequently, when you write your final report, it's important to follow a few basic steps to assure that your document is readable by individuals with disabilities. The core principles are the same for all document types. This guide focuses on using Microsoft Word.

Overview

Directions for accomplishing these steps in Microsoft Word are described in more detail in the following pages:

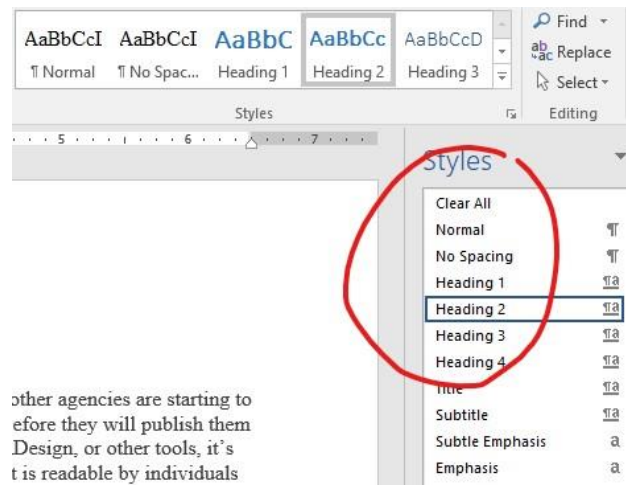
- Use headings
- Use lists
- Use clear hyperlink text
- Add alternate text for images
- Identify the document language
- Use tables sensibly
- Use the accessibility checker
- Export to PDF in a way that preserves accessibility.

Use Headings

Why: Using good heading structure helps people without eyesight understand how the document is organized. Users of screen readers and Braille can also jump between headings, which makes navigation much more efficient.

How: Identify headings and subheadings by using the program’s built-in heading features. Headings should form an outline of the page content (Heading 1 for the main heading, Heading 2 for the first level of sub-headings, etc.).

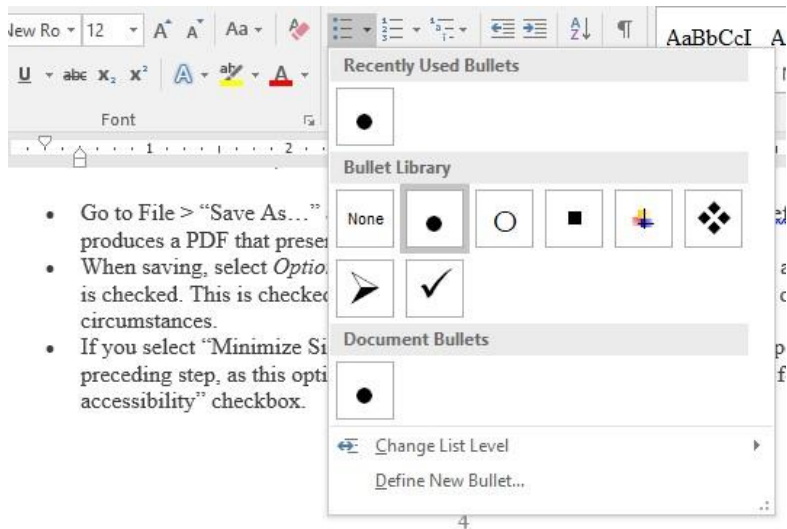
In Microsoft Word, **use the built-in Heading styles** such as “Heading 1” and “Heading 2” available under *Styles* in the *Home* tab. (You can format each Style to your liking.)



Use Lists

Why: When lists are explicitly created as lists, screen readers are able to understand how the content is organized. When screen readers begin a list, they inform users that they’re on a list and may also inform them of how many items are in the list, which can help users decide whether to continue reading.

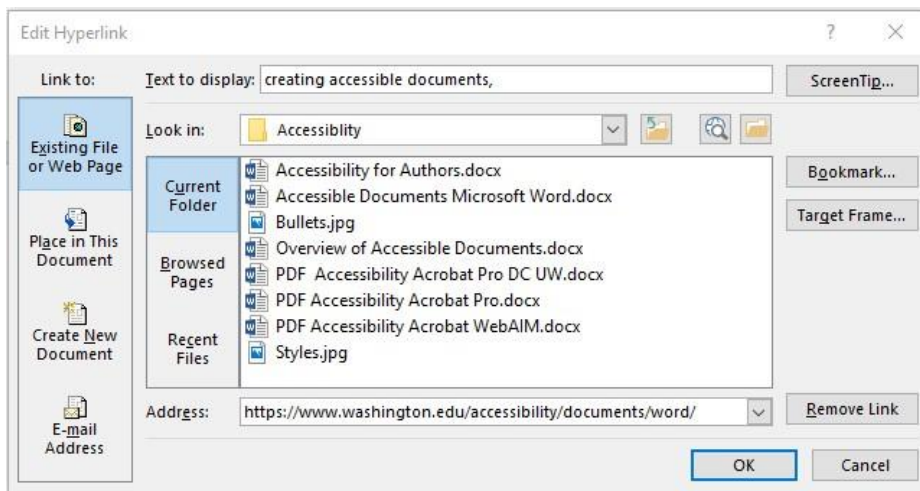
How: Create lists by using Word’s built-in tools for ordered (numbered) and unordered (bulleted) lists within *Paragraph* on the *Home* tab.



Use Clear Hyperlink Text

Why: Clear, relevant, and accurate information about the destination of a hyperlink allows readers to understand where the link will lead.

How: Include language in your text that conveys relevant information about the destination of the link. In Word, highlight that text, then right click and select *Hyperlink*. Include the URL in the *Address* field and select *OK*.



Add Alternate Text for Images

Why: The purpose of alternate text, often abbreviated as “**alt text**,” is to communicate the content of an image to people who can’t see it. The alt text should be succinct, just enough information to communicate the idea without burdening users with unnecessary detail. When screen readers encounter an image with alt text, they typically announce the title of the image and then read the alt text.

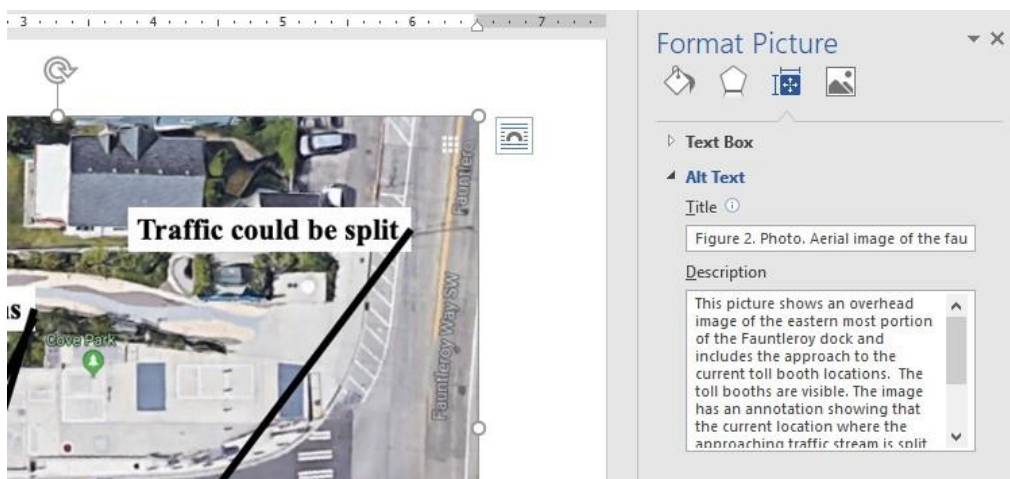
If images are purely decorative and contain no informative content, they do not require a description. However, they may still require specific markup so that screen readers know to skip them.

How: In later versions of Word, you can enter alternate text by right clicking an image and selecting *Format Picture*. Within the *Format Picture* dialog, select *Alt Text*.

In the *Title* field, enter the figure number, the type of figure, and the title. Examples:

- Figure 1. Graph. Name of graph.
- Figure 5 Photo. Name of photo.
- Figure 1a. Formula. Name of formula.
- Figure 6. Chart. Name of chart
- Figure 3. Equation. Name of equation.

In the *Description* field, enter the alternate description information.



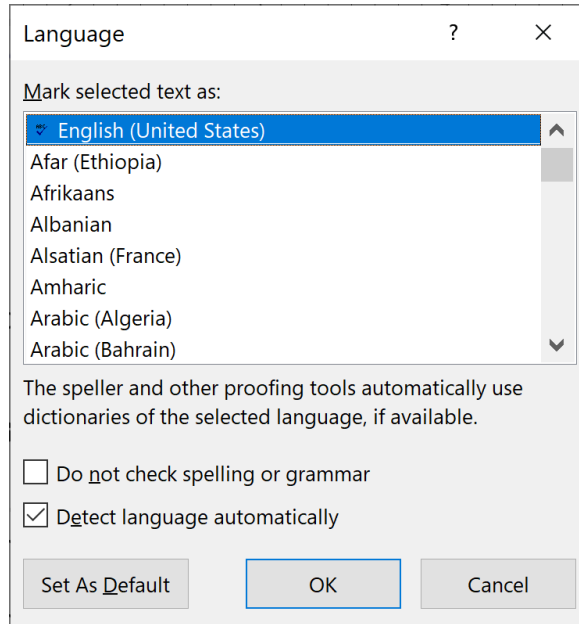
Identify the Document Language

Why: Leading screen reader software programs are multilingual and can read content in English, Spanish, French, and other languages. To ensure that screen readers will use the appropriate language profile, you must identify the document's language.

In addition, the language of any content written in a language other than the document's default language should be identified. With this information, screen readers will switch between language profiles as needed.

How: In Word, to define the default language, select *Review* from the *Home* tab. Under the *Language* tab, select *Set Proofing Language*. Select the language, then click *Set As Default*.

To define a different language for part of the document (e.g., a word or paragraph), highlight the text individually, then select *Review* from the *Home* tab, select *Set Proofing Language* under the *Language* tab, and select the language.



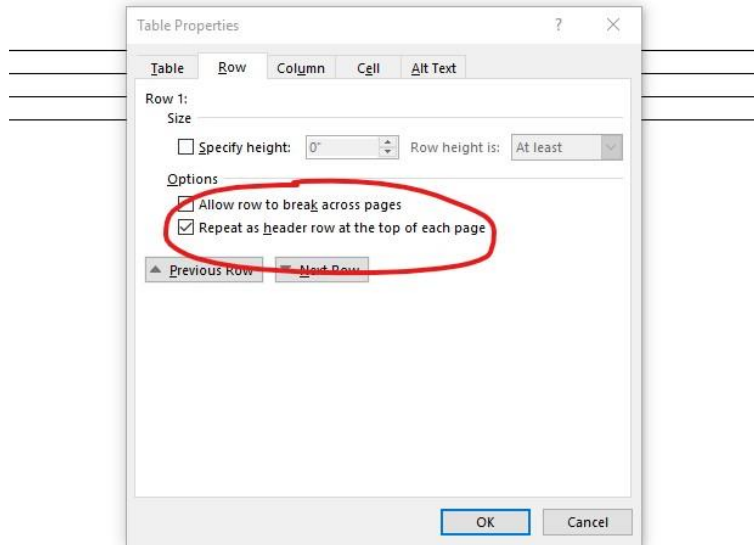
NOTE: Currently language settings only affect the accessibility of the Word document. They do **not** survive when exported to PDF. If PDF will be the final distribution format of your document, language in the PDF will need to be defined with Adobe Acrobat Pro.

Use Tables Sensibly

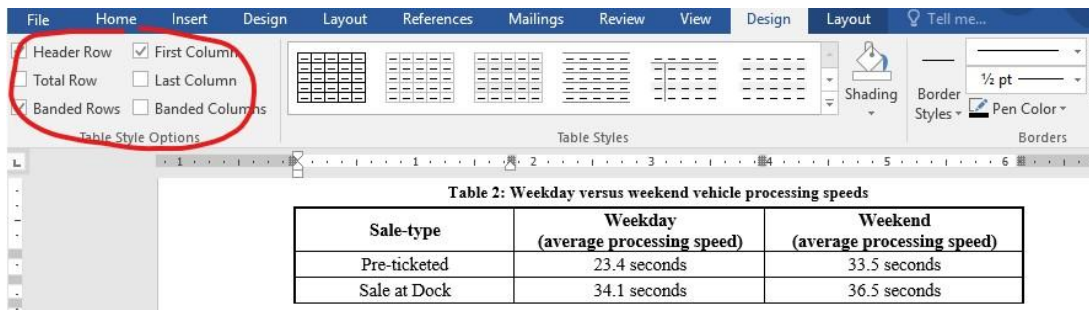
Why: Tables in documents communicate relationships among data where those relationships can be best expressed in a matrix of rows and columns. If your data are best presented in a table, try to keep the table simple. If the table is complex, especially with interior subheadings, consider dividing it into multiple smaller tables with a heading above each. Note: *Tables should not be used to control layout.*

How: A key to making data tables accessible to screen reader users is to clearly identify column and row headers. Also, if there are nested columns or rows with multiple headers for each cell, screen readers need to be explicitly informed as to which headers relate to which cells.

For simple tables, the only step necessary for accessibility is to **identify which row contains the column headers**. To do this in Word, select that row, then right click the row and select *Table Properties*. In the *Table Properties* dialog box, click the *Row* tab, and check the checkbox that says “Repeat as header row at the top of each page.”



In addition, when you create or work with a table, two new tabs will appear in the top ribbon. Select the *Design* tab to reveal the *Table Styles Option* group where you can define your Header Row.

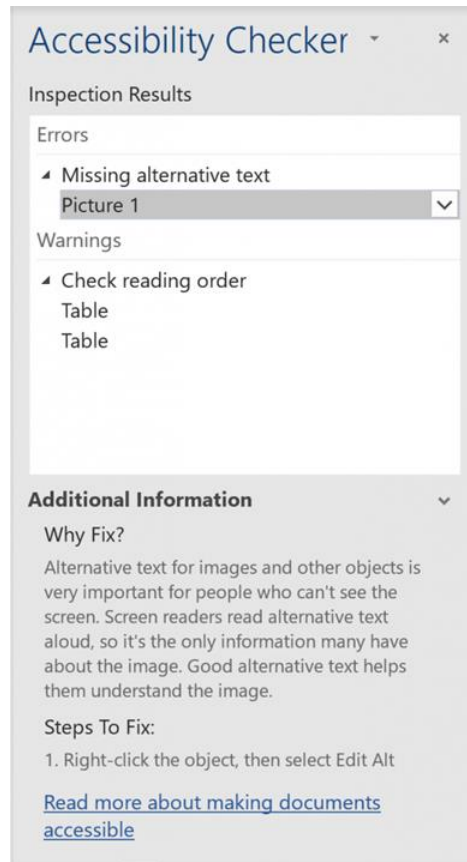


Visit the Microsoft website for more information about [creating Accessible Tables](#). Word has limitations when it comes to making tables accessible. More complex tables can be made accessible only within HTML or Adobe PDF (accessible table markup can be added to the PDF using Adobe Acrobat Pro).

Use the Accessibility Checker

Why: Microsoft products have a built-in accessibility checker that can help authors test the overall accessibility of their documents. The checker provides Inspection Results, feedback about the importance of each item, and tips on how to repair issues.

How: In Word, select *File*, click the *Check for Issues* button, then select *Check Accessibility*.



When Exporting to PDF, Preserve Accessibility

Why: For an Adobe PDF document to be accessible, the underlying structure, including all of the features already described, must be “tagged.” Some methods of exporting to PDF preserve those tags, and others do not.

How: **In Word, do not print to PDF.** This method of creating a PDF does not preserve the document’s accessibility features. The correct method of exporting to PDF depends on which version of Microsoft Office you’re using.

Word 2013 and Word 2010 (Windows)

1. Go to *File > Save As*” and after selecting a destination, select PDF from the *Save as Type* drop-down menu. By default this produces a PDF that preserves the document’s accessibility features.
2. When saving, select *Options* and be sure that “Document structure tags for accessibility” is checked.
3. If you select *Minimize Size* to reduce the size of your PDF, be sure to repeat the preceding step, as this option might uncheck the “Document structure tags for accessibility” checkbox.

Word 2016 (Mac)

In Office 2016, Word can now generate a tagged PDF that preserves a document's accessibility features. To use this feature:

1. Go to *File > Save As...* and select PDF from the drop-down menu. By default this produces a PDF that preserves the document's accessibility features.
2. When saving, be sure the box labeled "Best for electronic distribution and accessibility" is checked.

Older Versions of Word

- In Windows, exporting to an accessible PDF in Office 2007 and 2003 requires a plug-in. The Adobe PDFMaker Plugin ships with Adobe Acrobat Pro, and the plugin is installed into Office and appears as an Adobe toolbar and menu item. With this plug-in installed, use the Adobe toolbar or the Adobe menu item to *Save As PDF*. By default this produces a PDF that preserves the document's accessibility features.
- On a Mac, Word did not include accessibility features at all until Office 2011, and did not support saving to tagged PDF until Office 2016. In Office 2011, you can create an accessible Word document, but to export to tagged PDF you must take that final step in Word for Windows or LibreOffice for Mac.

References

The University of Washington has published general guidelines on [creating accessible documents](#), instructions for [creating accessible documents in Microsoft Word](#), and instructions for [creating accessible PDFs from Microsoft Word](#), from which this document for University researchers has borrowed extensively.

For additional information on the importance of providing accessible publications and online information, including tips and instructions, please refer to the following resources:

National Transportation Library LibGuide: <https://transportation.libguides.com/accessibility>

Creating accessible documents: <https://www.section508.gov/create/documents>

ARA Webinar – 508 Compliance: Creating Accessible Documents:
<https://www.youtube.com/watch?v=TFzEq-kjrwY&feature=youtu.be>

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