# Supplement: Accessibility Requirements

# Purpose

This supplement to the *MDOT Research Consultant Manual* provides guidelines for ensuring that final report products submitted to MDOT meet federal accessibility requirements spelled out in Section 508 of the U.S. Rehabilitation Act of 1973. Reports must comply with Section 508 to be included in the National Transportation Library’s online database. **It is critical that reports are set up initially with attention to the following formatting requirements**. Remediating a noncompliant report after it is completed can be extremely costly and time-consuming.

# Testing

To determine Section 508 accessibility compliance, MDOT will test final reports in Microsoft Word and Adobe Acrobat (PDF) formats using accessibility checkers built into Microsoft Word and Adobe Acrobat. MDOT requires that a Consultant check these files first to assure compliance before submitting files to MDOT.

Instructions for launching accessibility checkers provided here may vary slightly based on the version of these programs a Consultant is using. Very old versions of these programs may not have accessibility checkers; it is the Consultant’s responsibility to acquire more current versions and test these documents appropriately.

Note that some aspects of accessibility, such as reading order of text, must be checked manually.

## Microsoft Word

In Microsoft Word 2013, accessibility may be checked using the following method:

* “File” menu
* “Info” submenu
* “Check for Issues” dropdown list
* Select “Check Accessibility”

## Adobe Acrobat

In Adobe Acrobat Pro 2019, accessibility may be checked using the following method:

* “Tools” menu
* “Accessibility” submenu
* Select “Full Check”
* Select “Start Checking”

# Guidance

The U.S. federal government maintains a [resources website for Section 508 compliance](https://www.section508.gov/). While the guidance through this site is valuable and worth review, MDOT directs its Consultants to the following specific pages within this site and to the specific checklists on each page.

## Microsoft Word

On the page [Create Accessible Documents](https://www.section508.gov/create/documents), the 508 guidance is most complete for Microsoft Word 2013.

The [Detailed Checklist](https://assets.section508.gov/files/MS%20Word%202013%20Detailed%20CheckList.docx) for Word provides comprehensive and easy-to-follow guidance. Sixteen questions are sorted into five areas. With each question, the checklist addresses both “How to test” and “How to author for accessibility.”

### Document Formatting

1. Is the file name descriptive, is the file in the .docx format, and is the file NOT protected?

### Text Formatting

2. Do document headings use the MS Word heading styles?

3. Are lists formatted correctly?

4. Are columns of content formatted correctly?

5. Are layout tables formatted correctly?

6. Is text formatted for the intended language?

7. Are link names descriptive?

### Object Formatting

8. Is vital information in headers, footers, and watermarks duplicated in the document?

9. Did you use built-in features to create data tables?

10. Do images and other objects have alternative text?

11. Are images, objects, and text boxes in line with the text?

### Color Formatting

12. Are colors and other visual characteristics (such as size, shape, and location) that convey information also described in text?

13. Is the contrast ratio between text and background sufficient?

### Miscellaneous

14. Are there corresponding descriptions of your embedded files and are they accurate?

15. Did you avoid forms while using MS Word 2013?

16. Did you exclude flashing objects?

A Consultant seeking more information or instructions about how to address noncompliant formatting should refer to the more detailed document, [Basic Authoring and Testing Guide](https://assets.section508.gov/files/MS%20Word%202016%20Basic%20Authoring%20and%20Testing%20Guide-AED%20COP.docx).

## Adobe PDF

A Word file, once compliant, is converted to PDF where there are further accessibility requirements.

On the page [Create Accessible PDFs](https://www.section508.gov/create/pdfs), the 508 guidance is most fully developed for Adobe Acrobat Pro. In the [PDF Detailed Checklist](https://assets.section508.gov/files/PDF%20Detailed%20508%20Accessibility%20Checklist.docx), 23 questions are sorted into five areas. With each question, the checklist addresses “How to test.”

### Preconditions

A. Is the PDF a PDF Portfolio or does the PDF have file attachments?

B. Was the PDF generated from Adobe LiveCycle?

C. Scripts

D. Is the PDF tagged?

E. Is the PDF an image-only PDF or does it contain scanned pages?

### Document Properties

1. Does the PDF have a descriptive file name?

2. Is Assistive Technology access enabled?

3. Is the document language set?

### Structure Tags

4. Do the tags follow the visual/logical order of the document?

5. Does the document have decorative content?

6. Is vital information in headers, footers, and watermarks duplicated in the document?

7. Are the headings in the document tagged with heading tags?

8. Are lists tagged correctly?

9. Are sections that contain text in different languages tagged with the corresponding language attribute?

### Objects

10. Do all meaningful images and other objects in the PDF have a description of their purpose or function?

11. Does the PDF have data tables?

12. Does the PDF have links and controls?

13. Is the PDF a fillable form?

14. Are colors and other visual characteristics (such as size, shape, and location) that convey information also described in text?

15. Is the color contrast ratio between text and background sufficient?

### Miscellaneous

16. Does the PDF contain audio-only, video-only, or Synchronized media objects that contain meaningful information?

17. Does the PDF have flashing objects?

18. Does the PDF need an alternative accessible version?

A Consultant seeking more information or instructions about how to address noncompliant formatting should refer to the more detailed document, [PDF Testing and Remediation Guide](https://assets.section508.gov/files/PDF%20Testing%20and%20Remediation%20Guide-Adobe%20Acrobat%20DC%20Pro-AED%20COP.docx). While this document is tailored to a different version of Adobe Acrobat (Acrobat DC), the guidance is widely applicable both to the DC and Pro versions.