DOR DEPARTMENT of
REHABILITATION
Employment, Independence & Equality

DOCUMENT ACCESSIBILITY STANDARDS 1.0

As instructed in the Rehabilitation Administrative Manual (RAM), Chapter 8, these accessibility standards shall apply to all Department of Rehabilitation (DOR) documents, regardless of where they are posted, including documents on DOR web sites. Accessible documents ensure that everyone receives the same information, including persons using assistive technology (A T).

The Document Accessibility Standards apply to Microsoft Word, Excel, PowerPoint and PDF documents. Standards that apply to only one document type are listed below in the General Document Standards. This document can be used as a resource document for DOR employees and external entities.

DOR Document Accessibility Standards are based on the DOR Office Procedures and Reference Manual standards, the requirements specified in Section 508 of the federal Rehabilitation Act of 1973, as amended; California Government Code section 11135; and the Web Content Accessibility Guidelines (WCAG 2.0) developed by the World Wide Web Consortium (W3C).

Disability Access Services (DAS) provides free training to DOR personnel on creating accessible documents, as well as creating accessible Word and PDF forms. Check with the DAS Trainings web page for class schedules and availability.

Accessibility Testing

Accessibility testing should be conducted on all created documents and forms that will be submitted for review as well as distributed to the public. A designated person within the unit or division should ensure the documents and forms meet DOR Document Accessibility Standards. Testing tools used can include: Microsoft Office Accessibility Checker, Adobe Accessibility Checker, Color Contrast Analyzers, as well as Screen Readers. Microsoft Office 2010 and later have a built-in Accessibility Checker.

Most accessibility testing tools do not test for font style and size, or color contrast. Proofreading/review of documents is needed in the testing process to ensure that font and color issues are addressed, appropriate alternative text has been applied, as well as the logical reading order.

Testing tools can perform many helpful tasks. Screen readers will read relevant information contained in the Help Text in Word forms and Tooltips in PDF forms.

Before submitting your document, please review the [DOR Document Accessibility Standards: Minimum Checklist.](#)

1. Font style and size meet DOR standards
2. Color has been used appropriately
    a. Color is not used alone to convey information
    b. Text and background color has a sufficiently high level of contrast
3. Alternative Text is identifiable and the description is accurate
4. Heading Structure – all documents include a Heading style
5. Hyperlink text is meaningful
6. Header Rows in data tables have been identified
    a. Data tables are simple tables
7. A Logical Reading order is assured
    a. Text boxes are not present
    b. Visual objects are In Line with Text

Resources for Accessibility Testing Tools

Microsoft Office and Adobe have built-in accessibility checkers. The following are additional tools that can be used to check accessibility. Ensure you comply with DOR's policies and procedures to install software on your computer by seeking approval and work with the Information Technology Services Division.

Tools for checking color contrast for persons with color blindness:

- [Colour Contrast Analyser](#) (downloadable tool)

Screen Readers:

- [NVDA](#) (free download)
- [JAWS for Windows](#) (must purchase a license)

General Document Standards

Plain Language

In an effort to ensure all consumers understand and will benefit from DOR services, communication must be written in Plain Language. Written communication is clear, organized, and understood in a single reading. Plain Language means that a reader can find what they need, understand what they find, and use the information to meet their needs. Plain Language requirements are specified by the Federal Plain Writing Act of 2010, Public Law 111-274; and California Government Code Section 6219 (a)(b).

Font Style and Size

- DOR's standard font style and size is Arial 14 for all documents.
- However, the Governor's Office and the Health and Human Services Agency request documents in Arial 12. One may use Arial 12, if there are space considerations, and as long as it will not prove a hardship to readers of the document.

Basis: Rehabilitation Administrative Manual (RAM) Chapter 8, Section 810

Text Alignment

- It is acceptable to align to the left margin or the right margin. Do not justify text.

Basis: WCAG 1.4.8

Color – Contrast Ratio

(Font and Background)

- Black text on a white background should be used whenever possible on printed documents. Other colors may be used if they provide a contrast ratio between text and background of at least 4.5:1 for font size up to 17, and 3:1 for font size 18 and larger. This contrast ratio also applies to the text and background of an image of text.
- Logos are exempt from this rule.

Basis: WCAG 1.4.3

Color – Using color to convey information

- Never use color alone to convey important information indicating an action, prompting a response, or distinguishing a visual element.
- Information conveyed by colored text must be associated with another keyboard created symbol; such as brace, bracket, parenthesis, or asterisk.

Basis: Section 508, subsection 1194.22 (c), Web-based Intranet and Internet Information and Applications; WCAG 1.4.1

Alternative Text for Non-Text/Visual Items

(Items that visually present information: Images, Tables, Graphs, Shapes, etc.)

NOTE: Alternative Text should be 180 characters or less. Screen Readers stop reading after this point.

- Descriptive alternative text must be included for all visual elements used in the document, including images of text.
  - o If an image is purely decorative, and does not provide information to the reader, the Alternative Text may be omitted.
- If there is a group of images in the document, provide alternate text on one image in the group that describes all of the images in the group.

Basis: Section 508, subsection 1194.22 (a), Web-based Intranet and Internet Information and Applications; WCAG 1.1.1

Wrapping Style for Non-Text/Visual Items

(Items that visually present information: Images, Tables, Graphs, Shapes, etc.)

- When adding visual elements set the wrapping style for these elements to **In Line with Text**.

Basis: WCAG 1.3.2

Headings

- All documents must have at least one Heading style.
- The first heading in a document must be a Heading 1.
- Heading levels are assigned by their relationship to one another, and should be assigned in a logical (sequential) order. Heading levels should not be skipped.
  - For example, the heading of a primary topic in the document would use the Heading 1 style, while a secondary topic that is part of the primary one would use a Heading 2 style.

Basis: WCAG 1.3.1

Hyperlink Text

- Hyperlink text by itself must provide enough meaning to describe where the hyperlink leads the reader. The surrounding text may not be available to persons using A T.
- Non-meaningful text, such as Click Here, More information, etc. should not be used.
- Once meaningful hyperlink text has been added, the author may include the URL address in the document. If the document is intended to appear in print (such as a brochure) including the URL would be appropriate. If the document remains mostly online, including the URL would be redundant and it should be left off.

Basis: WCAG 2.4.4, 2.4.9

Lists

- Lists must be created using built-in list formatting tools.
- Lists should **not** be created using the tab key or space bar.

Basis: WCAG 1.3.1

Table of Contents

- If your Word document includes a Table of Contents, you should generate the Table of Contents using the built-in style from the Reference tab of the Home ribbon. Built from applied Heading Style in the document, a Table of Contents will reflect the structure of the document, and provide an effective way to navigate the document.

Basis: WCAG 2.4.5

Multimedia

- If a video is embedded or hyperlinked, it must be captioned and player controls must be accessible.
  - If captions are closed, the control for applying the **on** and **off** must be as accessible as the volume control. If not, open captions should be used.
- Audio Descriptions must be available if elements of the story are being conveyed visually without spoken text.
- If an audio file is embedded, a transcript must be included.

Basis: Section 508, subsection 1194.24 (c), (d), (e), Video and Multimedia Products; 1194.22 (b), Web-based Intranet and Internet Information and Applications; WCAG 1.2.2, 1.2.3, 1.2.4, 1.2.5

Logical Reading Order

- Content must be read in the correct, logical reading order.
  - Pages with complex layouts with graphics, tables, footnotes, side-bars, form fields, and other elements might not convert to PDF in the correct reading order.
  - Do not use text boxes in Word documents as they will not be read by A T in the correct order.

Basis: WCAG 1.3.2

Page Numbering

- If using page numbering, it must be consistent with the numbering displayed in the page navigation tool bar.

Basis: WCAG 1.3.1

Tables – Header Row

- Header rows need to be identified in tables that present tabular data.
- Create tables using the Grid or the Insert Table function.
- Do not create tables using the Draw Table function.
- Ensure that the header row is repeated at the top of each page.

Basis: Section 508, subsection 1194.22(g) Web-based Intranet and Internet Information and Applications; WCAG 1.3.1

Tables – Layout

- Whenever possible, keep the layout of the table simple. Simple table layouts:
  - Use only one row in the Header.
  - Do not merge or split cells.
  - Avoid leaving cells, rows, or columns blank (use N/A, No Data, Intentionally Blank, or None, in blank cells).

Basis: WCAG 1.3.1

Abbreviations and Acronyms

- For the first occurrence in a document of the abbreviation or acronym, provide the expansion or explanation of the abbreviation or acronym.

Basis: WCAG 3.1.4

Document Title

- A descriptive title must be included in the document properties.

Basis: WCAG 2.4.2

Excel Standards

In addition to the General Document Standards, the following standards apply to Excel spreadsheets.

Blank Cells, Rows and Columns

- Do not leave entire rows or columns blank. If there is no data to enter for the row or column, it is preferable to enter text describing that they were purposely left blank, such as N/A or Intentionally Blank.
- Avoid merging or splitting cells.

Basis: WCAG 1.3.1, 2.4.6

Sheet Names

- Each sheet in the Excel file must have a unique, meaningful name based on the information it contains.
- Blank sheets in the file must be deleted.

Basis: WCAG 2.4.2

PowerPoint Standards

In addition to the General Document Standards, the following standards apply to PowerPoint files. It is DOR's recommendation that font used on PowerPoint slides be no smaller than 24 points. Use larger fonts when projecting slides in a large venue. Test for readability from the back of the room.

With every Slide Design option in PowerPoint, nearly 100 color combinations, as well as several hundred font options exist for each. This equates to literally having thousands of Slide Design options to choose from. Many of these slide design options, possibly the majority, will present problems with font style and color contrast. Keep the General Document Standards for font and color in mind when designing a PowerPoint presentation.

Slide Titles

- All slides must have a Title.
- Each slide title must be unique.

Basis: WCAG 2.4.2

Layout

- Use one of the pre-set slide layouts for the slideshow.
- Don't add Text Boxes to a slide layout, add another Content Placeholder if you need more room for text, images or media. The use of multiple Text Boxes may cause problems in reading order of the slide by A T.
- Text added to a slide using a Text Box will also not appear when viewing the presentation in Outline view. This may become problematic when converting the presentation to HTML.

Basis: WCAG 1.3.2

Animations and Transitions

- If publishing a PowerPoint, do not use animation. The use of animation can cause confusion with screen readers when accessing the file.
- Automatic slide transitions are to be avoided. They may present problems for persons with certain visual or cognitive disabilities.

Basis: WCAG 2.2.2

Data Tables

- Do not publish the PowerPoint presentation in a PowerPoint format, if the slide show contains a data table. Data table Header rows cannot be identified in PowerPoint.
  o Convert the file to PDF and make the data table accessible in the PDF file

Basis: Section 508, subsection 1194.22 (g), Web-based Intranet and Internet Information and Applications; WCAG 1.3.1

PowerPoint Notes

- The Notes panel allows the speaker to add notes and information that will not appear on the slides. Notes can be useful if the information placed there will help the speaker during a live presentation.
- Notes will not be read automatically by a screen reader, so any important information placed in Notes may be missed, and; if the PowerPoint presentation is saved to PDF or some other format all information placed in Notes may be lost. Therefore the use of Notes outside of the exclusive use within a live presentation is discouraged.

Form Standards

In addition to the General Document Standards, the following standards apply to Word, Excel and PDF fillable forms.

Instructions

- Provide text instructions at the beginning of a form or set of fields that describe the necessary input.

Basis: WCAG 3.3.2

Time Limits

- If a time limit is set by content, the user must be allowed to turn off the time limit before encountering it, adjust the time limit, or extend the time remaining to complete the task.
- Time limits are discouraged

Basis: Section 508, subsection 1194.22 (p), Web-based Intranet and Internet Information and Applications; WCAG 2.2.1, 2.2.3

Form Field Labels

- Meaningful text labels must be provided for interactive form controls.
- Descriptive Help Text/Tooltips must be added to make forms clear to users of A T.
- Position labels before text fields
- Position labels after checkboxes and radio buttons are added.

Basis: WCAG 1.3.1, 2.4.5, 3.3.2, 3.3.5

Required Fields

- Required fields must be clearly designated. One possibility is to use an * to denote required fields.
  - Color alone may not be used to designate required fields.

Basis: WCAG 1.3.1, 1.4.1

Keyboard Controls

- All functionality of the content must be operable through a keyboard interface without requiring specific timings for individual keystrokes.
- If keyboard focus can be moved to a component of the page using a keyboard interface, then focus must be able to be moved away from that component using only a keyboard interface.
  - If moving focus away requires nonstandard keyboard or exit methods, the user must be advised of the method for moving focus away.

Basis: WCAG 2.1.1, 2.1.2

Focus

- The keyboard focus indicator must be visible to indicate which element has the keyboard focus.
- Use activate rather than focus or mouse over as a trigger for changes of context.
  - A change of context is a major change in the content that, if made without user awareness, can confuse users who are not able to view the entire page simultaneously, such as opening a new window, or a new page, etc.

Basis: WCAG 2.4.7, 3.2.1

Tab Order

- The tab order of a form must be sequential and logical in an order that preserves meaning and operability.

Basis: WCAG 2.4.3

Submit Button

- If the form includes the ability to submit information electronically, the form must use a submit action using the mouse up event prior to change of context, including submission of data entered onto the form.

Basis: WCAG 3.3.4

Document Title

- A descriptive Document Title must be included in the document properties.
- In PDF ensure Document Title is shown in Initial View rather than File Name.

Basis: WCAG 2.4.2

Set Default Language

- For PDF files, the default language must be set in the document properties.
- For PDF files, if the document contains a passage, phrase or word that is in another language the language must be specified for that content.

Basis: WCAG 3.1.1, 3.1.2

Input Assistance

- If an input error is automatically detected, the item that is in error must be identified and the error described to the user in text.
- If an input error is automatically detected and suggestions for correction are known, then the suggestions must be provided to the user, unless it would jeopardize the security or purpose of the content.
- For forms that modify or delete user-controllable data in data storage systems, or that submit user test responses, at least one of the following must be true (this is especially true for financial or legal forms):
  - Submissions are reversible
  - Data entered by the user is checked for input errors and the user is provided an opportunity to correct them.
  - A mechanism is available for reviewing, confirming, and correcting information before finalizing the submission.
- Provide a mechanism that allows users to jump to errors

Basis: WCAG 3.3.1, 3.3.3, 3.3.4

PDF Files

Since most PDFs start as another file format, it is easier to make the original source document accessible prior to creating the PDF version. Apply the [General Document Standards](#) to source documents in Word, Excel, and PowerPoint.

The accessibility features that are built into the original file format will continue to exist in the PDF version.

Scanned PDF Documents

- Scanned PDF documents are not accessible because their content cannot be accessed by persons utilizing A T.
  - To make a scanned PDF document accessible, it must first be run through Optical Character Recognition (OCR) software. Beginning with version 9, Adobe Professional has OCR capabilities.
  - Once the text has been identified it must be checked for accuracy.
  - Accessible structure must then be added to the document. (Headings, Lists, Alternative Text, etc.).

Basis: WCAG 1.3.1, 1.4.5, 1.4.9

Bookmarks

- If this is not a document that is initially created as a PDF, it is always easier to apply structure to a document prior to converting to PDF.
- In Adobe Acrobat open Bookmarks and, minimally assign the Headings as Bookmarks. Other structures can also be made to be Bookmarks, such as lists, figures, paragraphs, links and Table of Contents.
  - If the PDF does not have a structure, open the Touch-Up Reading Order tool within the Accessibility tab and apply structure.

Basis: WCAG 2.4.5

Tabbing and Reading Order

- Ensure the PDF reads in the correct order to avoid confusion. It is usually easier to ensure this by utilizing a Screen Reader. The Tab order can also be viewed with Adobe Acrobat Professional software.
- If Tabbing/Reading Order needs to be adjusted, Adobe Acrobat Professional is required.

Basis: WCAG 1.3.2, 2.1.1, 2.1.3, 2.4.3

Link Annotations

- Ensure hyperlinks in PDF's can be recognized and activated using only the keyboard.
- If links work with a mouse, but are not functional with a keyboard, the Link Annotation needs to be adjusted. Adobe Acrobat Professional can be used for making the adjustment.

Basis: WCAG 1.3.1, 2.1.1

Document Title

- A descriptive Document Title must be included in the document properties.
- In PDF ensure Document Title is shown in Initial View rather than File Name.

Basis: WCAG 2.4.2

Set Default Language

- For PDF files, the default language must be set in the document properties.
- For PDF files, if the document contains a passage, phrase or word that is in another language the language must be specified for that content.

Basis: WCAG 3.1.1, 3.1.2

Accessible Document Resources

1. [How do I construct accessible content?](#)
   https://dor.ca.gov/Home/ConstructingAccessibleElectronicContent

2. [State Digital Accessibility Laws](#)
   https://dor.ca.gov/Home/Laws

3. [Assistive Technologies for Digital Access](#)
   https://dor.ca.gov/Home/AssistiveTechnologiesforDigitalAccess

Accessibility Testing Tools

Follow the [Document Accessibility Standards: Minimum Checklist](#) when creating documents. Always perform accessibility testing using the following built-in tools.

- Microsoft Office 2010 and later have a built-in Accessibility Checker
  - Click **File** in the ribbon, click on **Info**, click on **Check for Issues**, select **Check Accessibility**.
- Adobe Reader has a built-in Accessibility Checker.
  - Click **Edit**, click **Accessibility**, click **Setup Assistant**
- Adobe Pro has a built-in Accessibility Checker.
  - Click **Tools**, click **Accessibility**, click **Full Check**
- [Colour Contrast Analyser](#) will test for color contrast.
  - Check that color has been used appropriately.

CAUTION: Never depend on machine testing alone. Machines cannot test for font style and size, color or meaningful Alternative Text.

Use a Screen Reader to determine if a document follows a logical reading order that is navigable by persons using A T. Test with a screen reader any documents that include pictures, tables, columns, charts, images, text boxes, presentations, multimedia, and fillable forms. Designated persons within the unit or division can use free screen reading tools, such as, [NVDA](#), to review for the accessibility and usability of documents and forms.

DOR Document Accessibility Standards: Minimum Checklist

1. Font style and size meet DOR standards.
   - DOR Standard is Arial font at a 14 point size minimum.
2. Color has been used appropriately.
   - Never use color alone to convey meaning.
   - Ensure your minimum contrast level is 4.5:1.
     - Use color analyzers to ensure high contrast
     - Check contrast levels for color blindness
3. Alternative Text is present and descriptive.
   - Alternative Text that expresses descriptive context to any visual object (ie: table, chart, image, shape, etc.) must be added.
     - **Right Click** on object, go to; **Format** then **Alt Text**
     - Limit Alternative Text to 180 characters
4. A Heading Structure has been added to the document.
   - Headings are the number one way persons that use A T navigate documents.
   - Headings should be assigned based on the sections of your document, levels of importance, and relationships to one another.
     - Highlight text, choose Heading level from Styles section
     - **Right Click** on the Style type, choose **Modify** to adjust the style elements
5. Hyperlink text is meaningful.
   - The Hyperlink text itself should have enough meaning to describe where the hyperlink leads the reader.
     - Highlight the text, **Right Click**, choose **Hyperlink**
     - Enter text to display for the hyperlink
     - Enter the URL in the **Address** field
     - Include URL only for print purposes, hyperlink to URL is not necessary
     - Test hyperlinks to ensure the destination page is correct
     - Think how the hyperlink will look/read if seen without surrounding text
6. Header Rows in data tables have been identified.
   - Assigning a Header Row gives a navigational anchor for users of A T.
     - Highlight the Top row; **Right Click** and choose **Table Properties**
     - Select the **Row** tab and ensure both the **Options** boxes are checked
     - NOTE: Always create simple tables. Don't split cells, merge cells, or have more than one header row.
7. Logical Reading order.
   - Don't create Text Boxes as they will be read out of order by screen readers.
   - Ensure visual objects (ie: Tables, Charts, Images, Shapes, etc.) have a wrapping style set to, **In Line with Text**.
8. Accessibility Testing - Check the accessibility and usability of all documents and forms manually and with built-in tools.