

CREATING ACCESSIBLE WORD/ POWERPOINT FILES TO PDF

AMERICAN RIVER COLLEGE • 8/17/2016

Corrine Haverinen • Assistive Technology Specialist
Santa Rosa Junior College

What Makes a Document Accessible?

- Can be accessed without purchase of software
- Can be read by assistive technology
- Searchable for Headings
- Will be read in correct order
- Non-text elements such as images have text descriptions
- Complex data such as tables and forms have extra features for accessibility

Accessibility of Document Formats

- HTML
 - Most accessible and easiest to make accessible
 - Only need a browser to access
- PDF
 - Can be made very accessible
 - Complicated documents can be challenging to make fully accessible
 - Free, ubiquitous Adobe Reader ensures widespread access
- Word
 - Can be made very accessible
 - Provide link to either Open Office or Office Libre
- PowerPoint
 - Screen readers work better with them than in the past, but not the best format

Overview of Process: Word to PDF

- Create an accessible document in MS Word
- Save an accessible MS Word document as a PDF document
- Use Acrobat Pro to enhance a PDF document for accessibility
 - Confirm accessibility features followed to PDF
 - Accessibility Tools to test document and fix
 - Accessibility Checker
 - Make sure the documents is Tagged
 - Assess reading order with Touch Up Reading Order Tool
 - Reading Order Panel to fix reading order

Terms and Technology

- **Acrobat Pro** is the name of a software application made by **Adobe**
 - Must have Pro version to work on accessibility
- **PDF** stands for Portable Document Format, it is a type of digital document
- **Tags or Tagged**
 - Documents need to be tagged in order to be read by assistive technology
 - Scanned PDFs are not tagged and cannot be until **OCR** is applied (Acrobat Pro has OCR function)
- **Semantics or Document Structure**
 - Documents need to have good semantic structure, meaning proper tags used in proper way for best results with machine readers such as screen readers
- **Assistive Technology**
 - Screen Readers: JAWS, [NVDA](#) (Free)

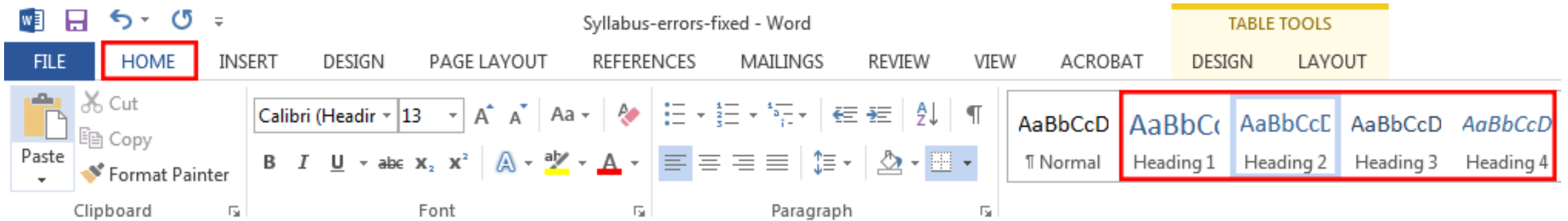
Mac Issues

- **Mac OS users be warned: The Mac OS version of MS Office does not support exporting to accessible PDF**
- You must have Acrobat Pro in order to create an accessible PDF from a MS Word document on Mac OS
- All accessibility fixes will need to be performed in Acrobat Pro
- Disadvantage if you want to re-edit source document and generate new PDF
- Sometimes fixes in Acrobat are difficult to achieve

Main Issues

- **Headings** provide semantic structure
 - Provide headings throughout document so screen reader user can sort and jump to specific headings
 - Order headings to provide good outline of content
 - Use built-in styles to create headings
- **Images** including screen shots, charts, graphs
 - Provide alternative text
 - Use separate document or page to describe complex images
- All **Tabular Data** should either be in tables or columns
- **Tables**
 - Header cells specified
 - Header rows repeat across pages

Headings



- Use the built-in styles to apply heading tags
- You can modify the styles, but do not create your own

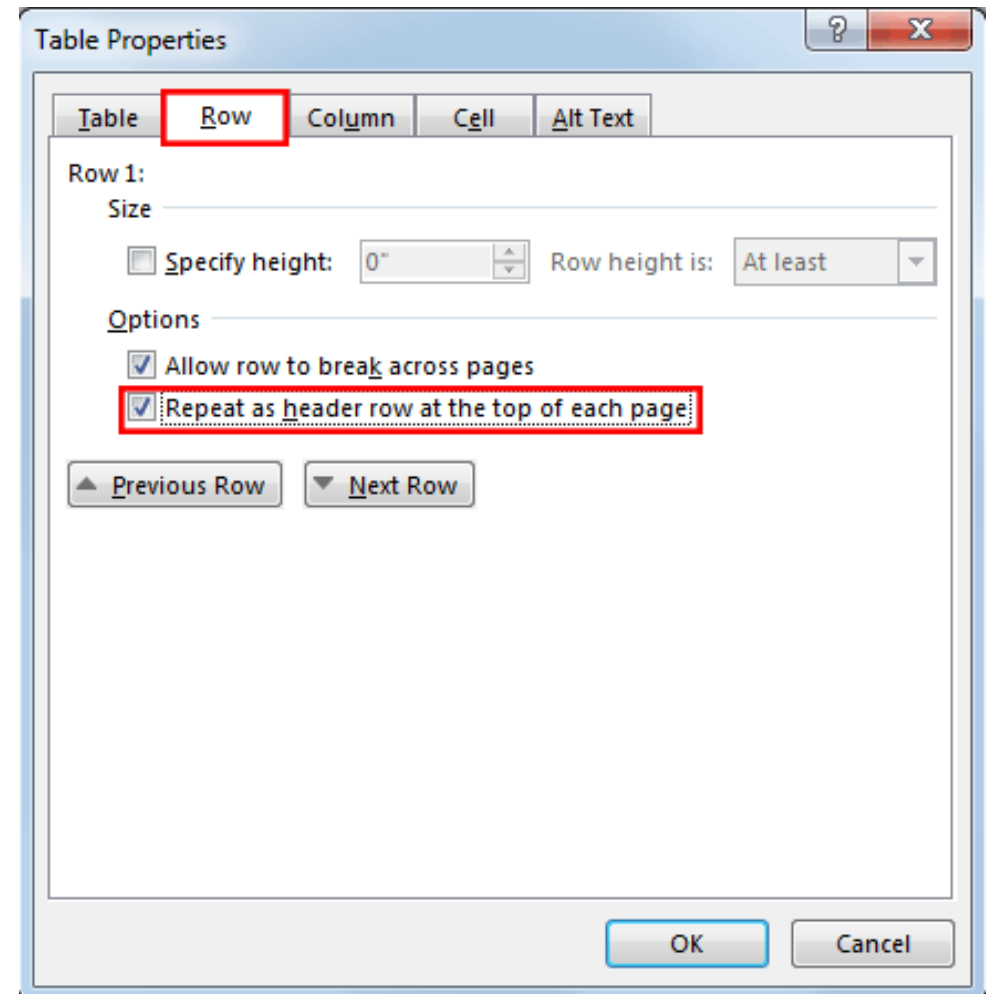
Add ALT Text to Images

- Right-click on image
- Choose Format Picture
- Format Picture Pane opens on right side interface
- Click on third icon
- Expand ALT TEXT
- Put ALT TEXT in Description box
- DO NOT put text in Title – description will not be read by screen reader if Title is filled in



Table Header Cells

- Set table Header Row in Design Tab of Table Tools
- Also set the Header Row to repeat across pages
- Right-click on table > choose Table Properties > Row tab
- Click on Repeat as header row



Other Issues

- **Lists**

- Do not create fake lists
- Nest lists properly using indent tool

- **Hyperlinks**

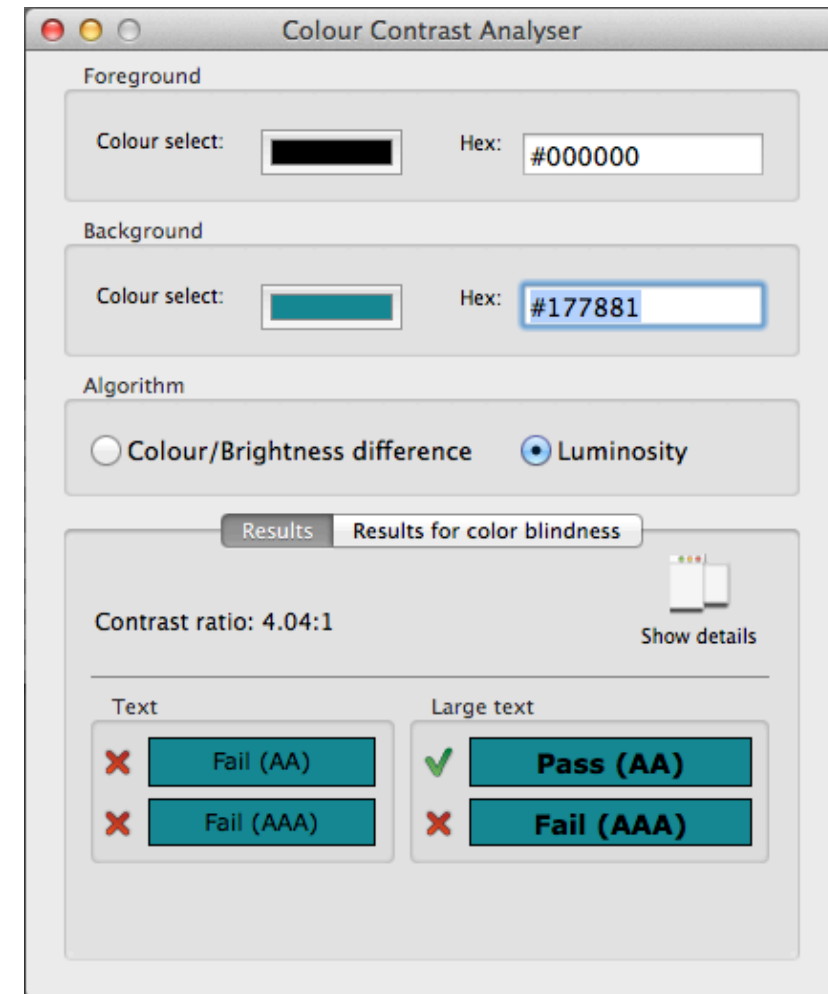
- Use descriptive text for hyperlink text
- Avoid using URLs as hyperlink text

- **Color**

- Ensure colors have proper contrast
- Download Free [Colour Contrast Analyser](#) to test contrast
- Do not use Color solely to convey information or indicate an action

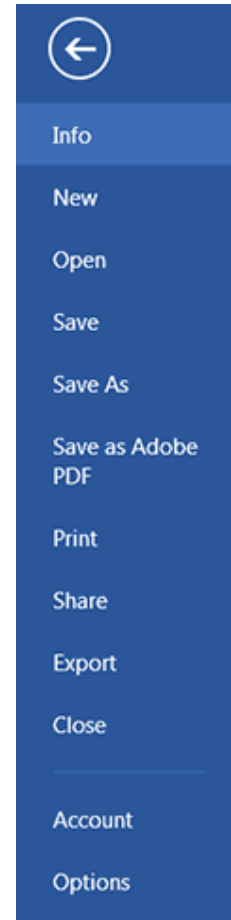
Colour Contrast Analyser

- [Download Colour Contrast Analyser](#)
- Check against WCAG 2.0 standards
- Tests for body text size and large text
- PC version has sampler tool to sample colors
- Mac people, use ColorZilla Firefox add-on to sample colors



Word Accessibility Checker

- **File > Info menu option > Inspect Document > Check Accessibility**
 - Right side column interface
 - Provides Errors, Warnings, Tips
 - Once you touch an item, expects that you fixed it, so will be removed from list - need to run checker again if you are unsure
- If document passes Accessibility in Word, still needs to be checked in Acrobat



Info



Protect Document
Control what types of changes people can make to this document.



Inspect Document
Before publishing this file, be aware that it contains:

- Document properties, template name and author's name
- Custom XML data



Inspect Document
Check the document for hidden properties or personal information. es are unable to read



Check Accessibility
Check the document for content that people with disabilities might find difficult to read. this file.



Check Compatibility
Check for features not supported by earlier versions of Word.

Word Accessibility Inspection Results

Accessibility Checker ▾ ✕

Inspection Results

ERRORS

- Missing Alt Text
 - Picture 1
 - Table
 - Table
- No Header Row Specified
 - Table
 - Table

WARNINGS

- Blank Table Rows or Columns
 - Table Row
- Objects not Inline
 - Picture 1

TIPS

- Check Reading Order
 - Table

Additional Information ▾

Why Fix:
Alternate text helps readers understand information presented in pictures and other objects.

How To Fix:
Select and fix each issue listed above to make this document accessible for people with disabilities.

[Read more about making documents accessible](#)

Going to Acrobat Pro

After you have enhanced a Word document for accessibility by:

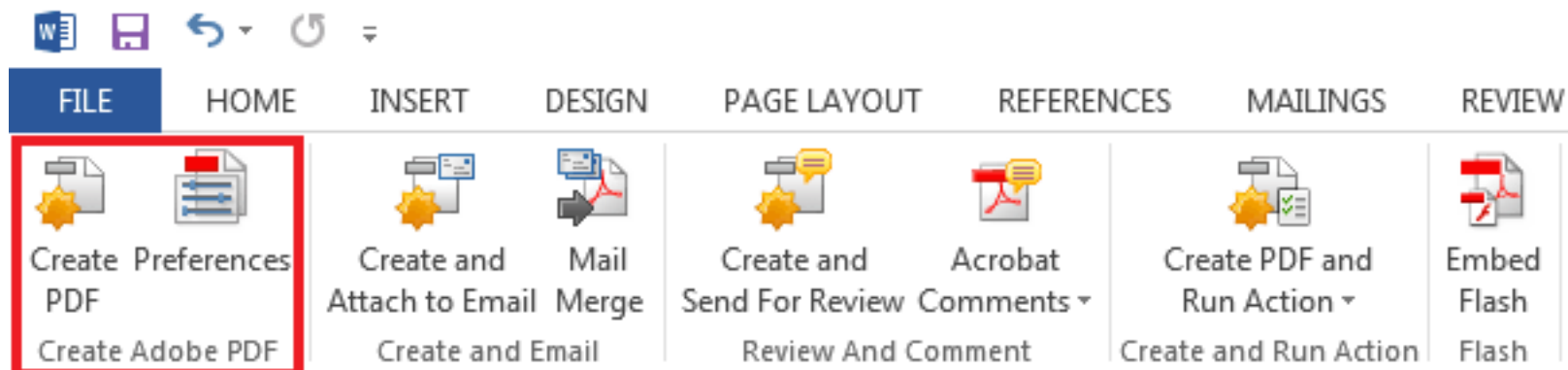
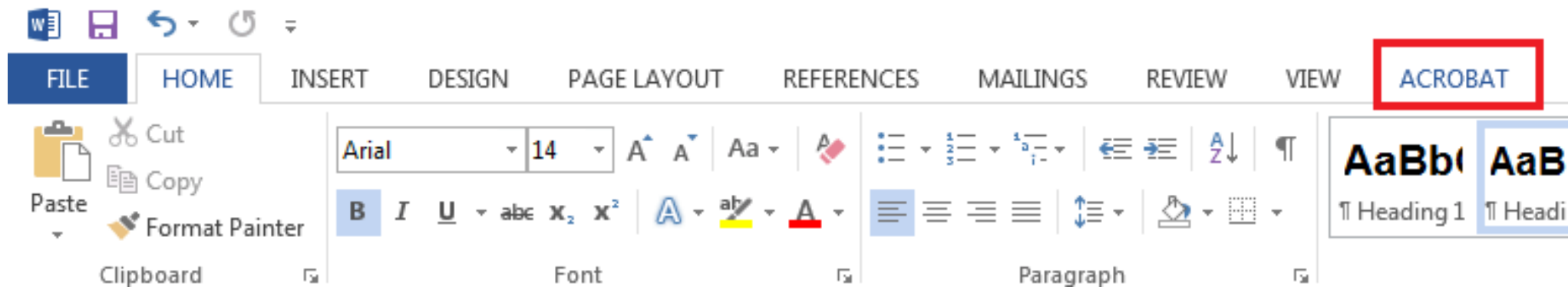
- Adding heading styles
- Providing descriptions for the images
- Providing headers for table columns

Create a PDF

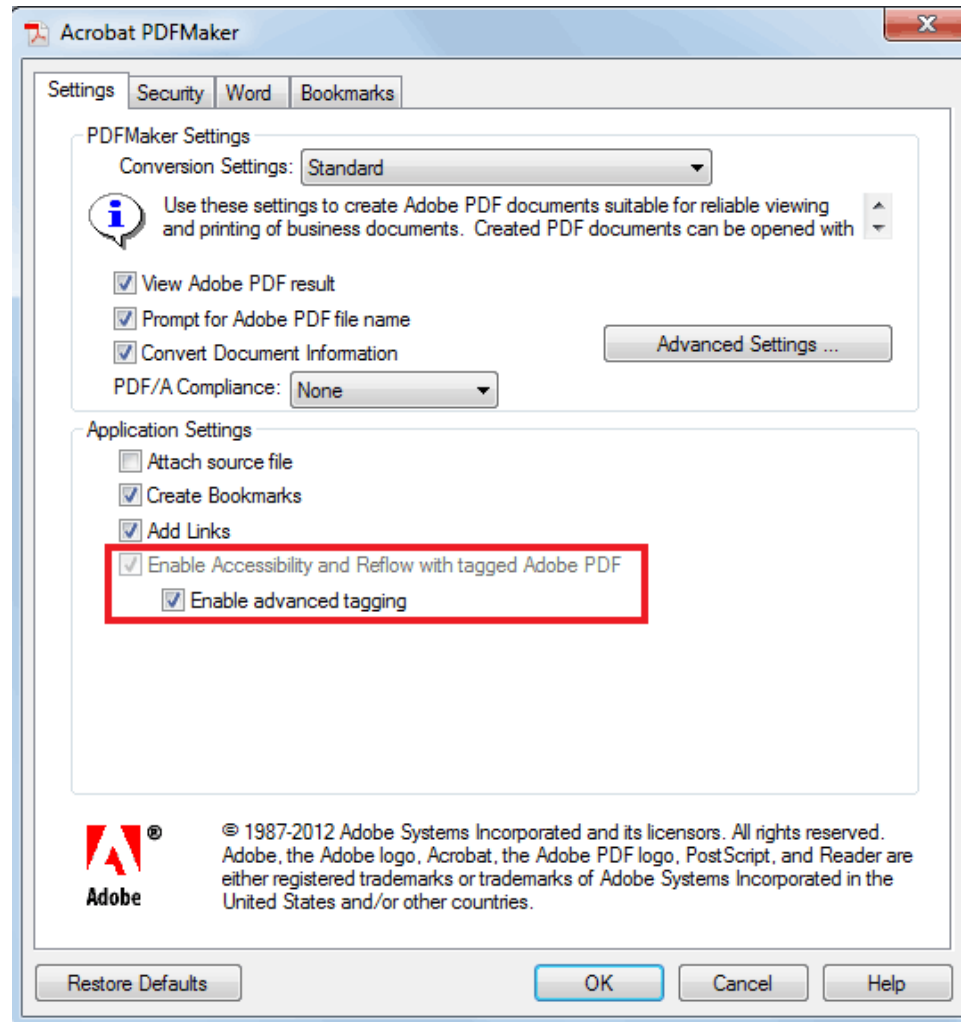
- Method 1: File > **Save as Adobe PDF** or Acrobat menu in Word = Acrobat PDF Maker
- Method 2: File > **Save As** > set **Save as Type** drop down to **PDF**

Open the PDF in Acrobat Pro and test/enhance

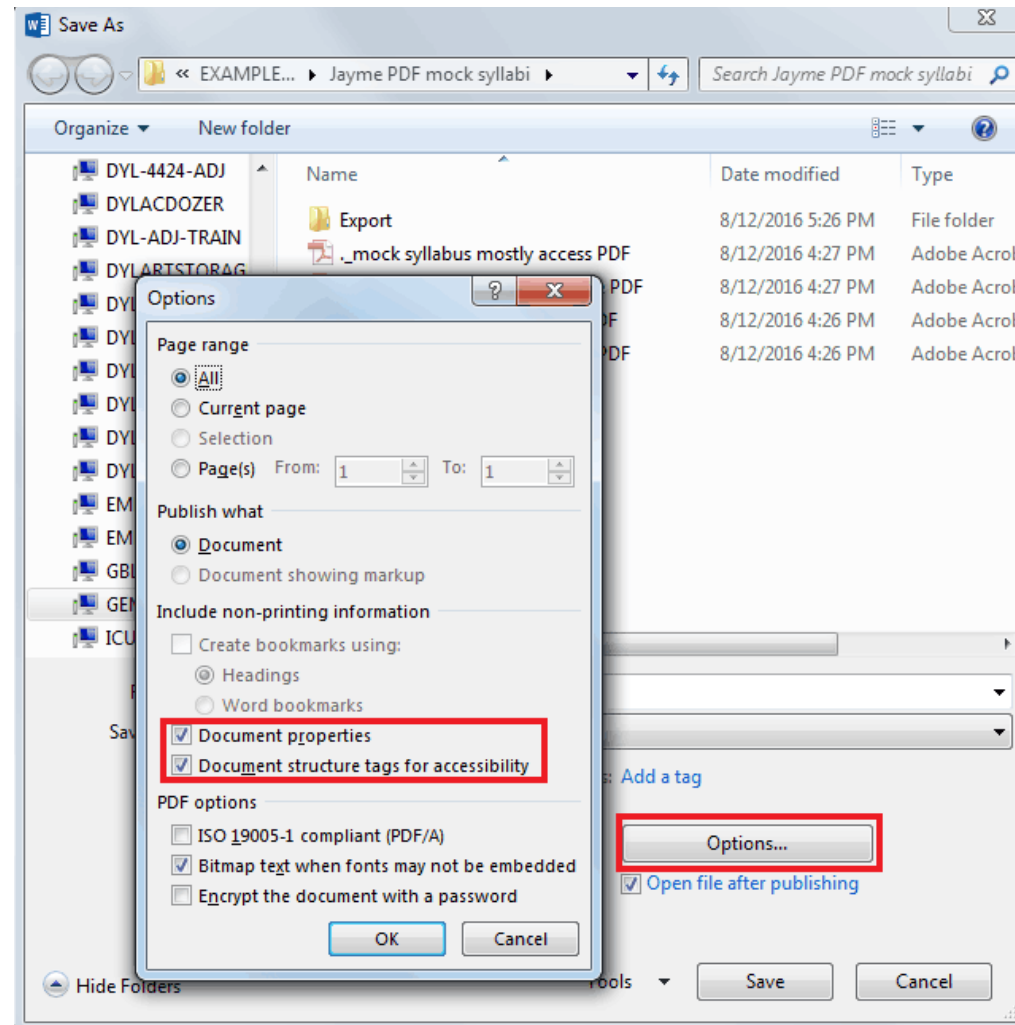
Create Adobe PDF with Acrobat Pro inside Word



Set Acrobat PDF Maker Preferences



Set Save As Acrobat PDF Preferences



Resources

Sample files to download and practice on

Go to: <http://tinyurl.com/OEIaccessibility>

Find [Webinar Files for Accessible PDFs with Word & Acrobat Pros](#)

Provided by Jayme Johnson at OEI

- **Mock Syllabus.docx** accessible and non-accessible
- **Mock Syllabus PDF** accessible and non-accessible
- Step-by-step breakdown of the basic process:
 - Creating Accessible PDF Document Resources.docx

Additional files to practice on at SRJC DE site:

[Creating Accessible Word & PowerPoint Files](#)

ADOBE ACROBAT PRO

ACCESSIBILITY TOOLS

Make Accessible Action Wizard

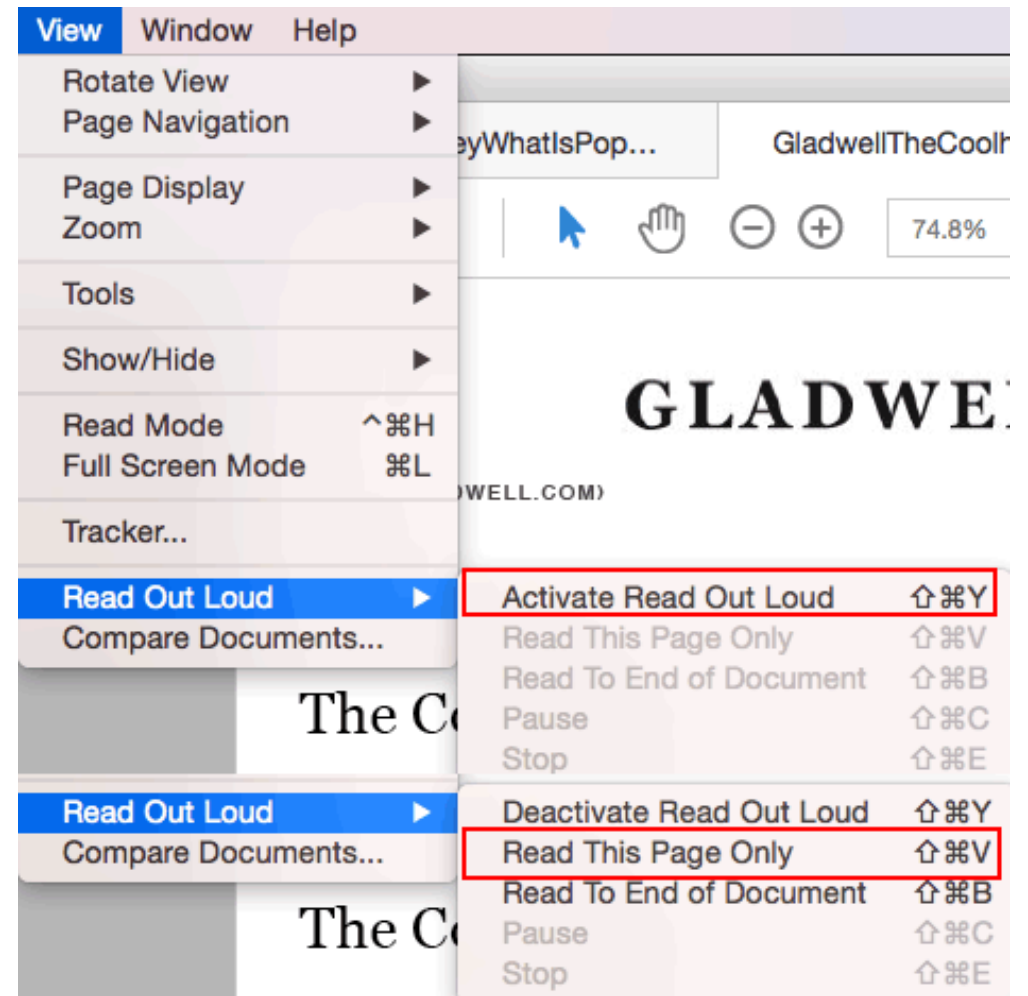
- Tools Tab
- Action Wizard
 - If Action Wizard does not show, use the View menu > Tools or do a Search
- Make Accessible
 - Hit Start button – Wizard will guide you through
 - Runs Accessibility Check – Report opens up at end
 - Click Close

The screenshot displays the Adobe Acrobat Action Wizard interface, divided into three main sections:

- Search for Action Wizard:** A list of actions is shown, with 'Action Wizard' highlighted in a red box. Other actions include Create PDF, Edit PDF, Export PDF, Comment, Organize Pages, Enhance Scans, Protect, Fill & Sign, Prepare Form, Send for Signature, and Send & Track.
- Choose Make Accessible:** An 'ACTIONS LIST' is shown with several actions checked, including 'Make Accessible' (highlighted in a red box), Archive Documents, Publish Sensitive Inform., Optimize for Web and..., Optimize Scanned Docu., and Prepare for Distribution.
- Make Accessible Wizard:** The wizard is titled 'Make Accessible' and shows 'Files to be processed:' with 'Creating Accessible PDF D...'. A 'Start' button is highlighted in a red box. The wizard steps are:
 - 1. Prepare:** Includes 'Set a title and ensure it displays in the window title bar.', 'Add Document Description', and 'Set Open Options'.
 - 2. Set Language & Tags:** Includes 'Recognize Text using OCR', 'Detect Form Fields', and 'Set Tab Order Property'.
 - 3. Run Accessibility Check:** Includes 'Run Accessibility Full Check'.

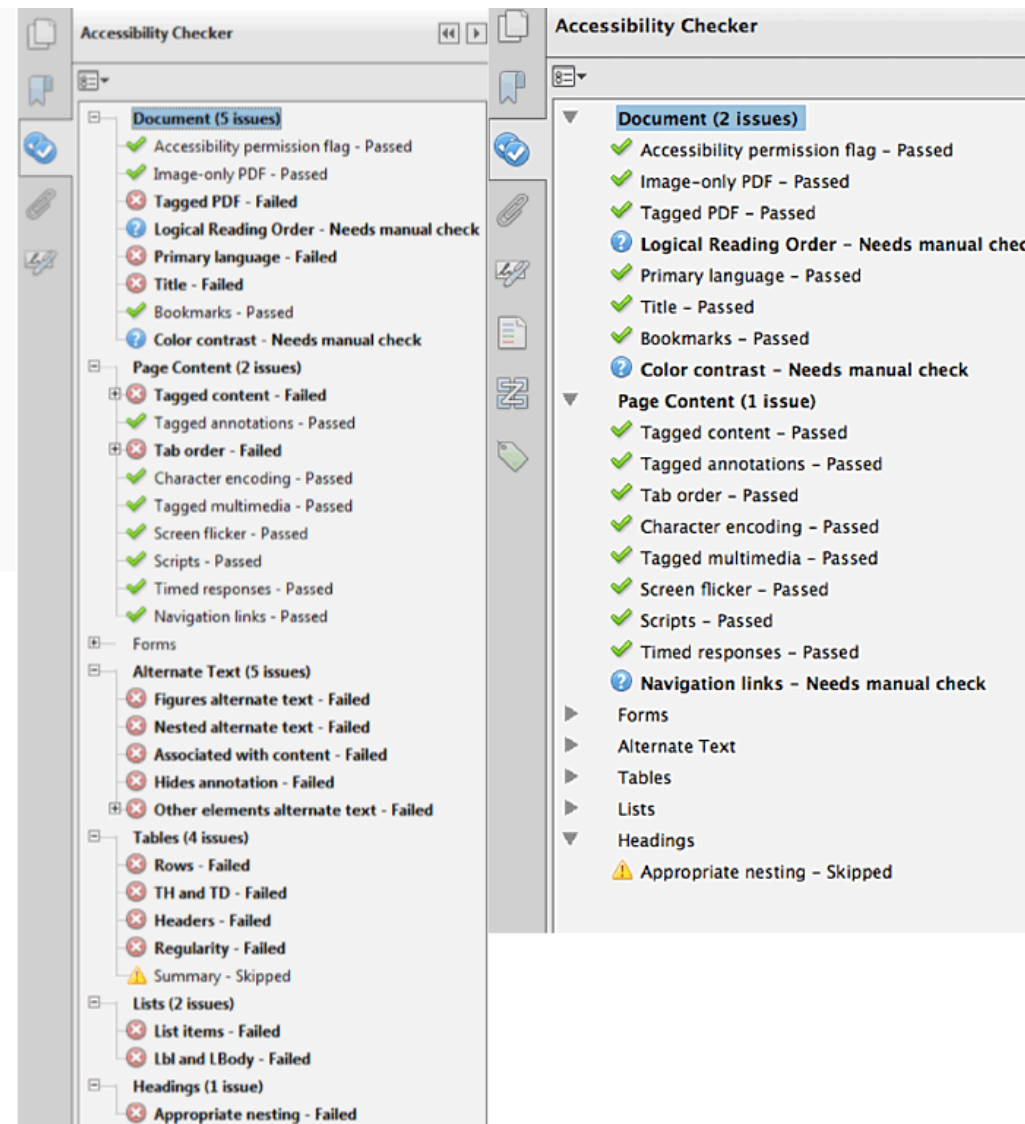
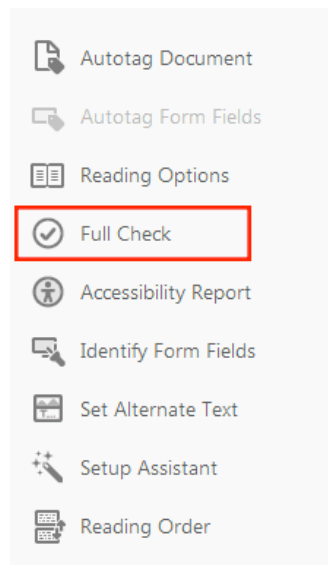
Scanned Documents

- OCR (Optical Character Recognition) will happen automatically when running the Make Accessible Wizard
- Should check to make sure text was recognized well by running Read Out Loud

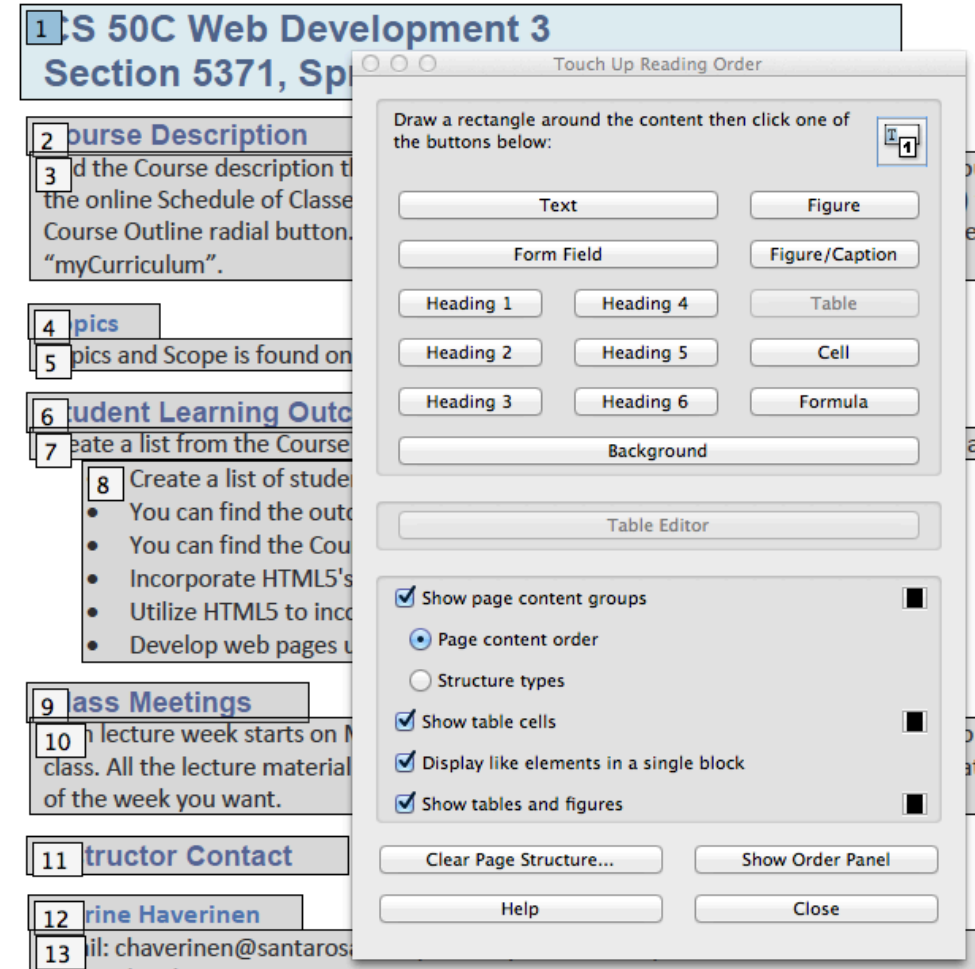
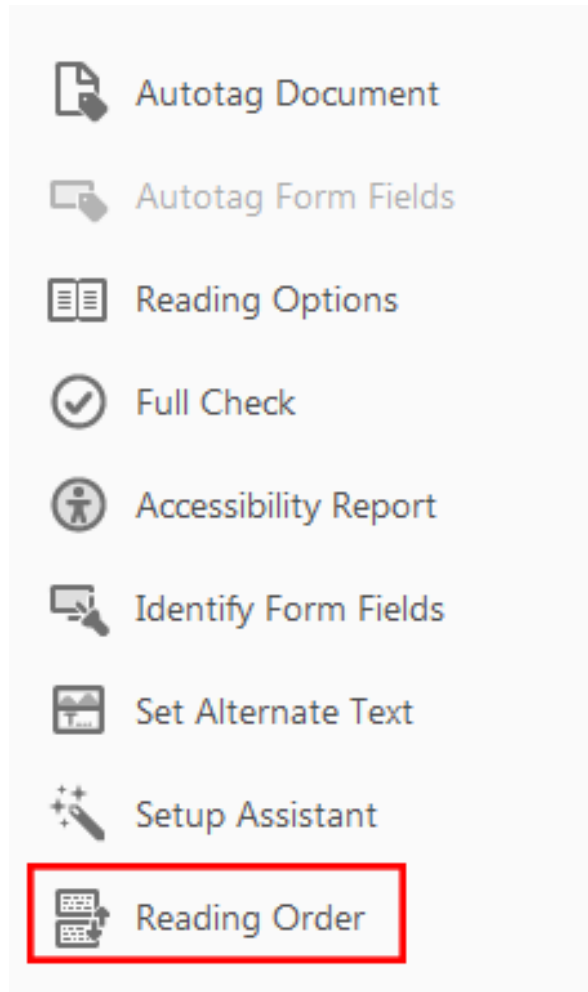


Accessibility Check Results

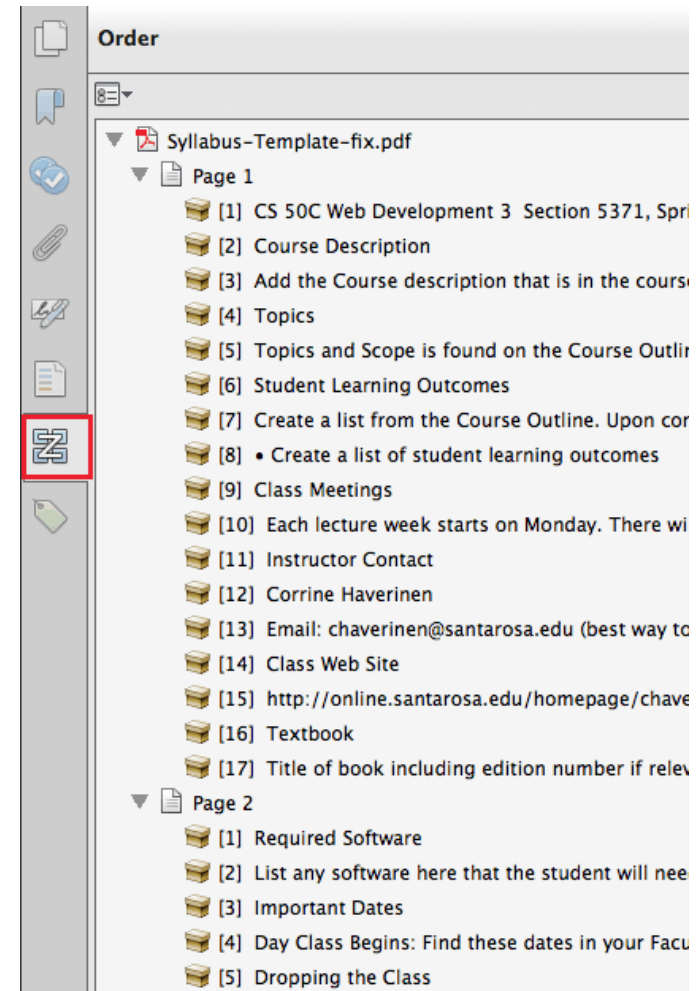
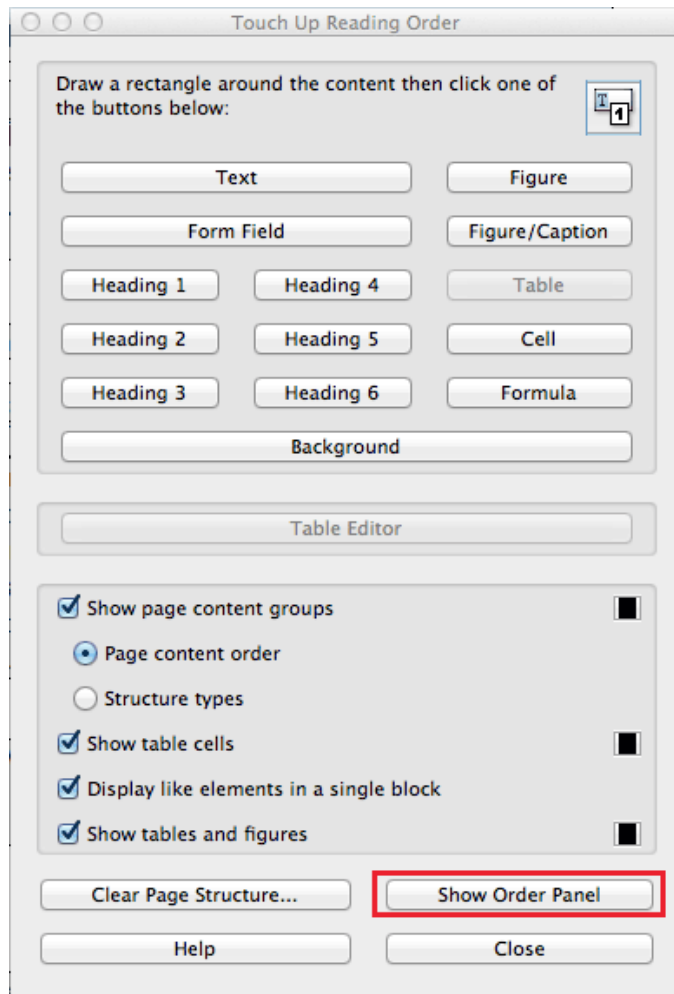
- At end of Make Accessible Wizard, will get a Full Check
- Or use Accessibility Tool panel to run Full Check



Accessibility Toolbar/Touch Up Reading Order Tool



Order Panel



Summary

- To create an accessible PDF document, best to start with an accessible document from another program, such as MS Word.
- Adding heading styles, image descriptions, and table headers greatly enhances the accessibility of any digital document.
- Acrobat Pro features the tools necessary to create an accessible PDF document, even on the Mac OS.
- A PDF document must be tagged in order to be 100% accessible.
- Use the “Make Accessible” Action Wizard in Acrobat Pro XI.
- Visit <http://tinyurl.com/OEIaccessibility> for step-by-step instructions and resources. Provided by Jayme Johnson at OEI.

CREATING ACCESSIBLE ONLINE PRESENTATIONS

POWERPOINT AND OTHER OPTIONS

Overview

- Consider the purpose of a presentation
- Maximizing the accessibility of PPT
- Alternative formats for distribution
- Alternatives to PowerPoint

Let your intentions determine your methods, and not the other way around...

What's the Point of the Presentation?

- Review of Lecture?
- Self-guided learning object?
- Interactive components?
- Notes or links to other study data?

Would be Better as:

- Web Page lecture material?
- Video with voice over to explain slides?

Exporting PowerPoint

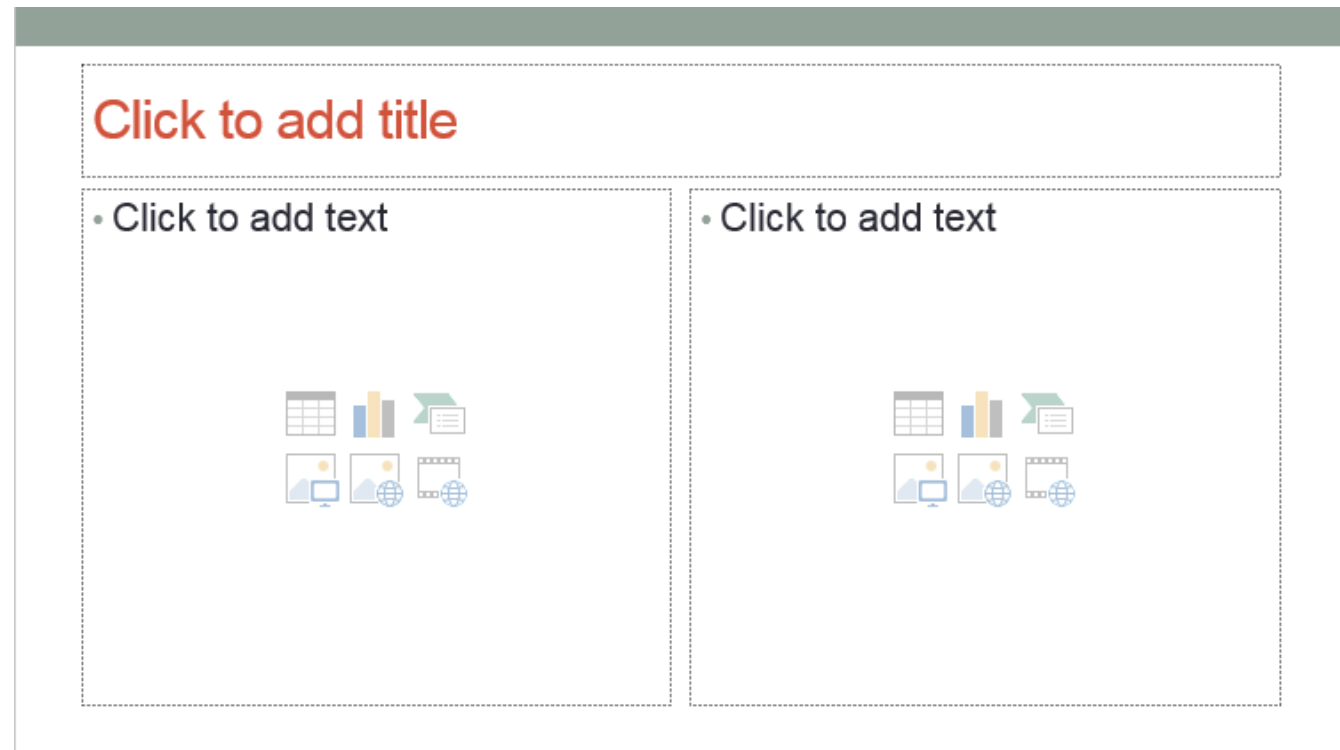
- PowerPoint files are not always the best distribution format
 - Easier for a blind person to create a PowerPoint than read a PowerPoint
- Best option is to convert your PowerPoint to another file, such as:
 - HTML – more work to convert to, but most accessible
 - DO NOT save as HTML from Word
 - PDF – may be more work to make accessible
 - RTF – strips out the images

Maximizing Accessibility in PPT

- Use the built-in templates
- Check the Outline View
- Include related access components (i.e. captions, transcripts, etc.)
- Use Accessibility Checker in PPT
- Export to RTF or PDF, unless going to HTML

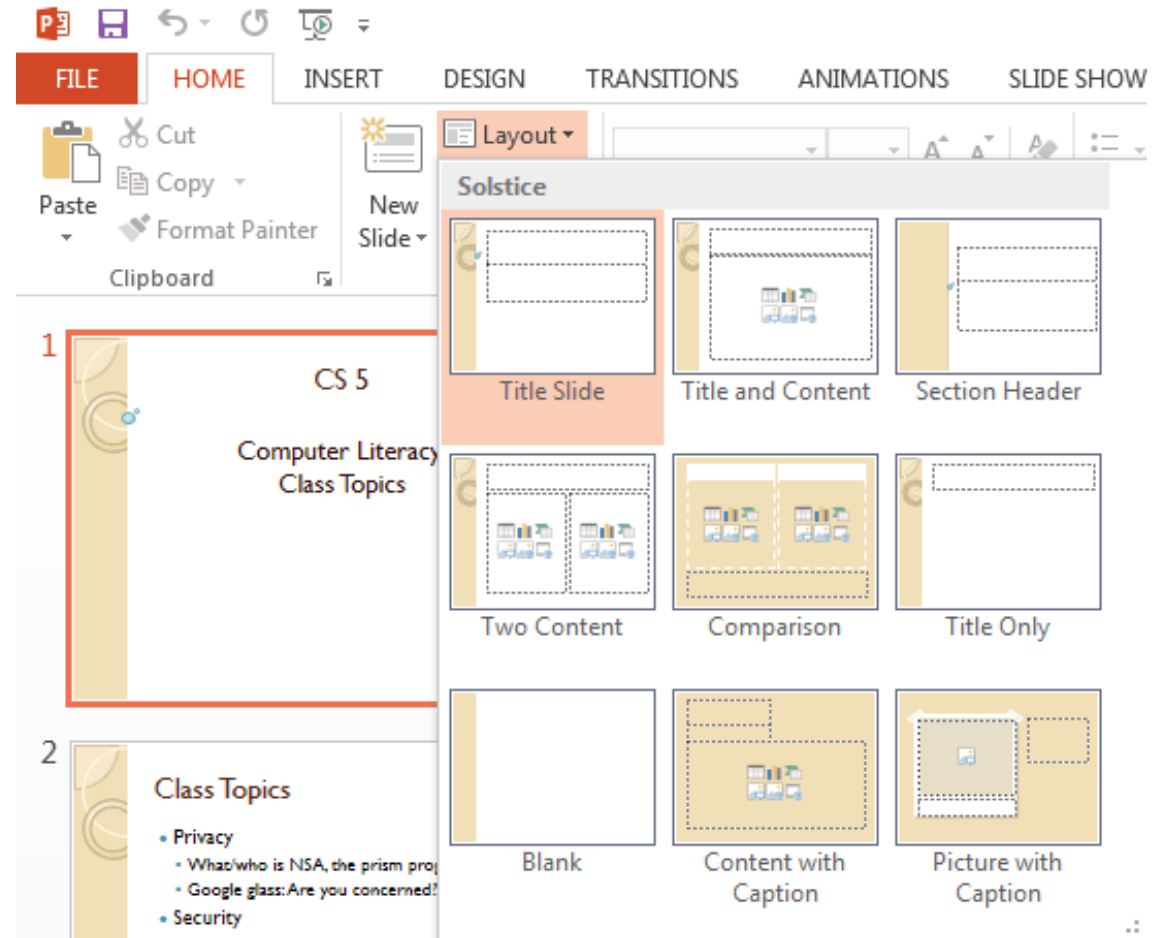
Predefined Templates

- Use them!
- You want template boxes for Click to add title and Click to add text
- Creating a new text box will result in the text not added to the Outline, and may not be read by a screen reader



Change a Slide's Layout

- In the Home Tab
- Click on Layout
- Choose from Layout options to get the boxes you need



Outline View

- Whatever content that is in your slides should also appear in the Outline View.

Family-Work_jw-ST [Compatibility Mode] - PowerPoint

VIEW ACROBAT

Normal Outline View Slide Sorter Notes Page Reading View Presentation Views

Slide Master Handout Master Notes Master Master Views

Ruler Gridlines Guides Show

Notes Zoom Fit to Window Zoom

Color Grayscale Black and White Color/Grayscale

Arrange All Cascade Move Split Window

Switch Windows Macros

1 **WORK-FAMILY PROBLEMS**

- "The Second Shift" by Arlie Hochschild. London: Penguin (pp. xi-33)
- "Parental Leave Policies in 21 Countries: Assessing Generosity and Gender Equality" by Rebecca Ray, Janet C. Gornick and John Schmitt. Washington DC: Center for Economic and Policy Research, 2009. (both available on Moodle)

2 **Recent Trends in Work-Family**

- Today, only ___% of U.S. households fit the old "breadwinner father and stay-at-home mother" model.
- In ___% of all married couple households with children under age 18, both parents are employed. [DOL facts](#)
- 13% of all family households are headed by single mothers.
- ___% of all family households are headed by single fathers.

3 **Inadequate Work-Family Benefits**

4

5

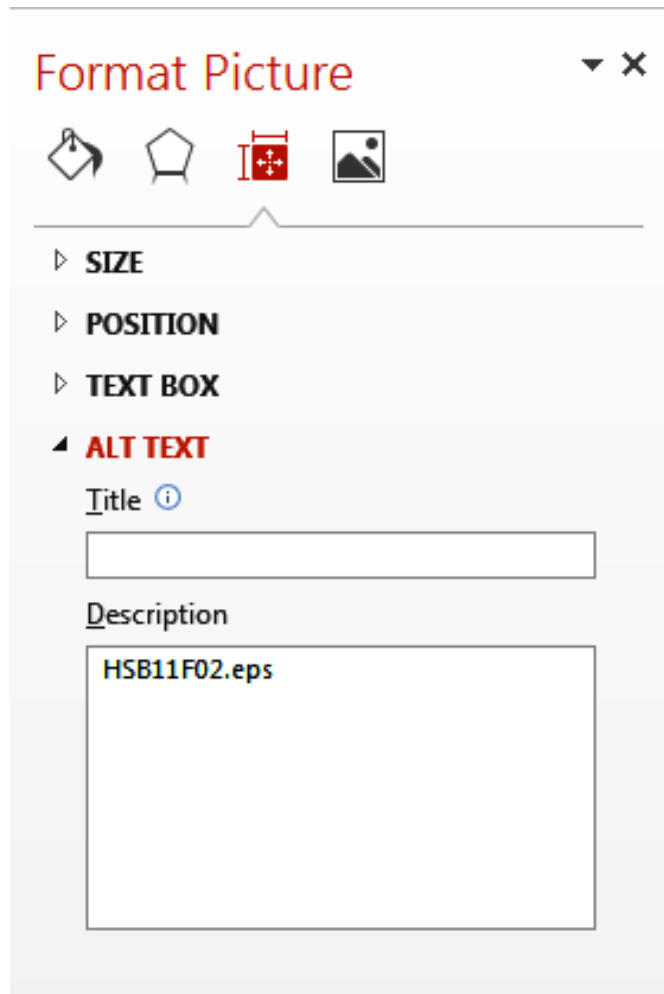
3

Women's and Men's Proportion of the U.S. Labor Force

Year	Men (%)	Women (%)
1890	82	18
1900	80	20
1910	78	22
1920	76	24
1930	74	26
1940	72	28
1945	65	35
1950	70	30
1960	68	32
1970	62	38
1980	58	42
1990	54	46
2000	53	47
2010	52	48

Here I talk about how WWII sent women into the workforce. The baby boom (we talked about this at length). 1960s-1970s women More women are getting educations (next slide) impact of the v

Alt Text for Images



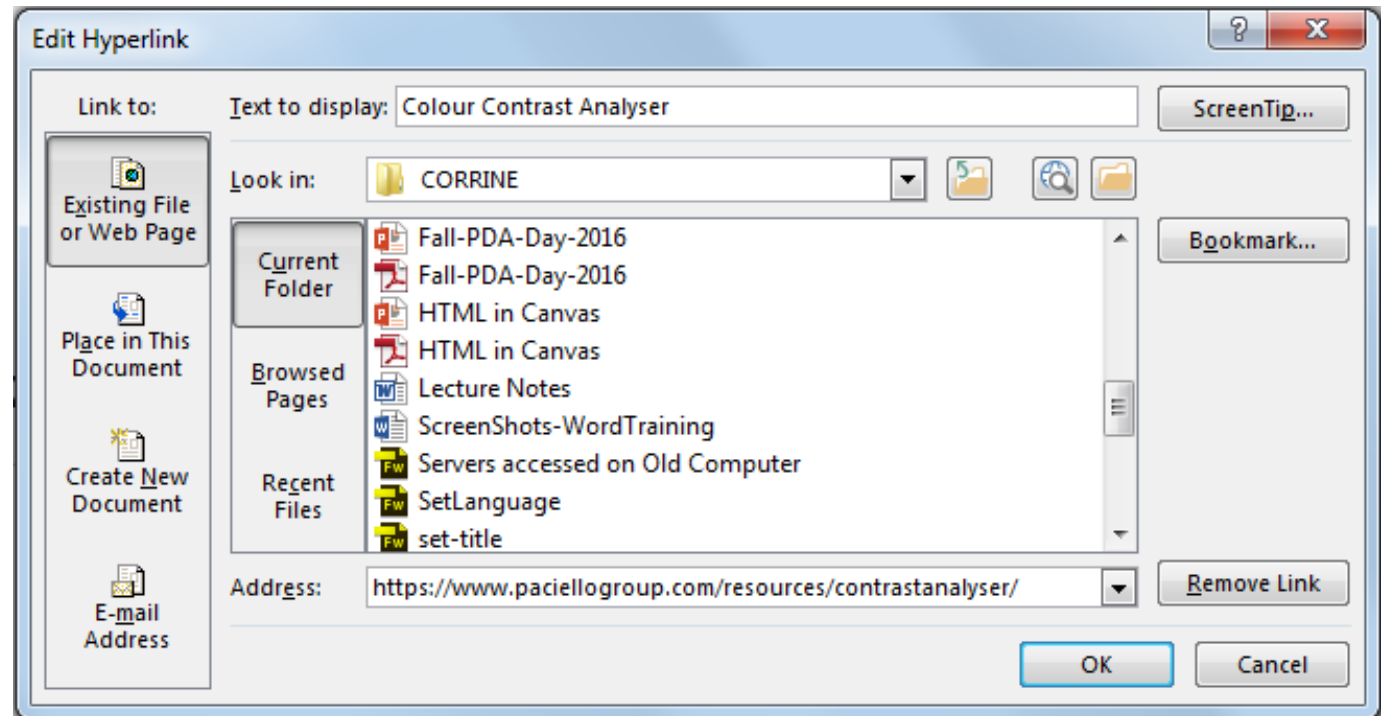
1. Right-Click image
2. Select “Format Picture”
3. Select “Alt Text”
4. Enter a description, but no title.

Unique Slide Titles

- Titles are useful for organization, searching, and studying
- Repetitive titles add cognitive load
- Clear and focused titles enhance communication and pedagogy
- Invisible titles can be used

Meaningful Links

- Ensure that hyperlink text is meaningful
- Use the “Display Text” field
- Use the “Screentip...” field

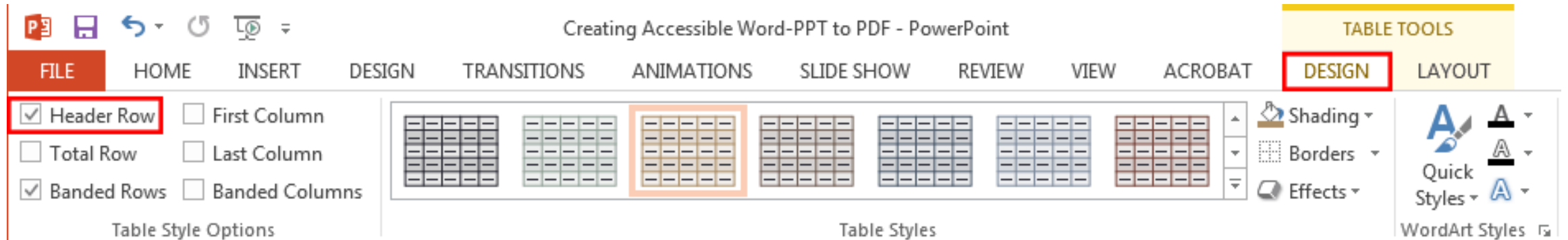


Simple Tables

- Always use simple tables.
- Use headers.
- No nesting.
- No spacing cells.
- No merged cells.

Heading 1	Heading 2	Heading 3
Data 1a	Data 2a	Data 3a
Data 1b	Data 2b	Data 3b
Data 1c	Data 2c	Data 3c
Data 1d	Data 2d	Data 3d

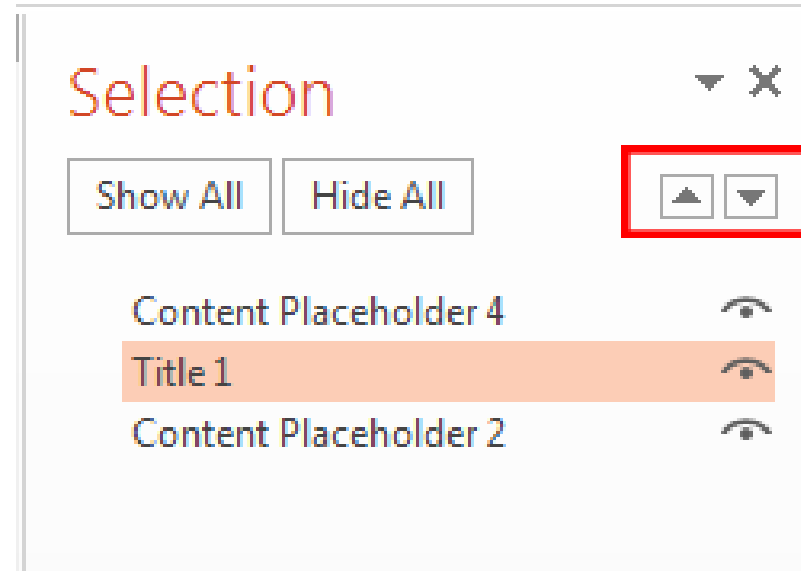
Table Header Rows



- Set table Header Row in Table Tools Design tab

Reading Order

- Home > Editing > Select > Selection Pane
- Content on slide highlights with active selection from pane.
- Use the “Re-order” arrows to change reading order.

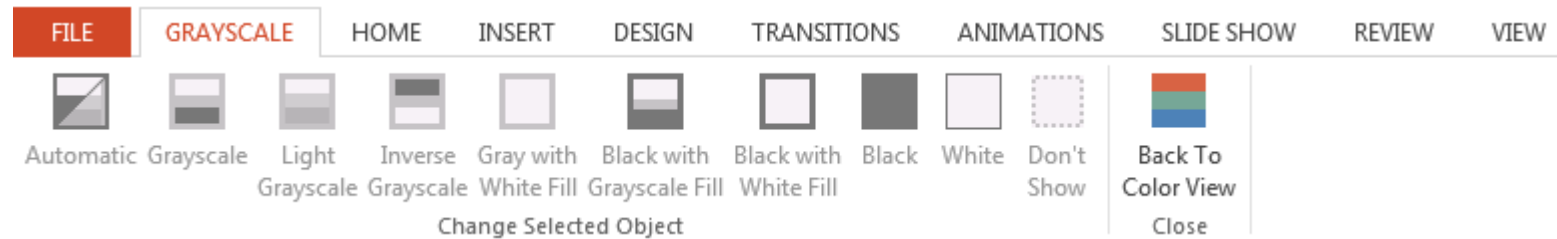
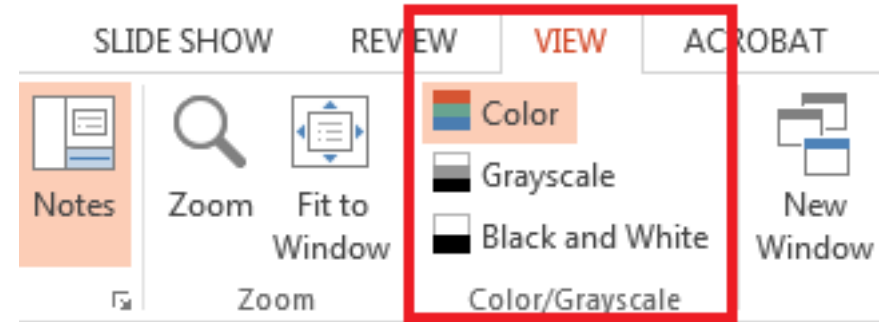


Issues of Color

- Colorblindness is common; avoid red, orange, and green in same template.
- Use texture in graphs as well as color.
- Use graphics and animation to highlight key points rather than just color
- Pick colors with high contrast
- See the [Color Contrast Ratio Calculator page](#) to view a table showing background colors with sufficient contrast to pass accessibility standards.
- Download Free [Colour Contrast Analyser](#) to test contrast of colors

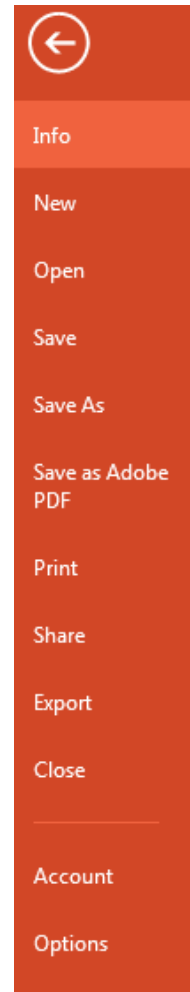
Color Checking

1. Select the “View” tab.
2. Find the “Color/Grayscale” group.
3. Select “Grayscale” or “Black and White”



Accessibility Checker

- File > Info > Check for Issues
 - Check for Accessibility



Info

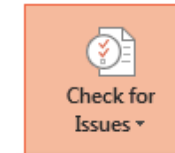
CS5ClassTopics

\\gemini » chaverinen » Destinations » accessibility » JON » C



Protect Presentation

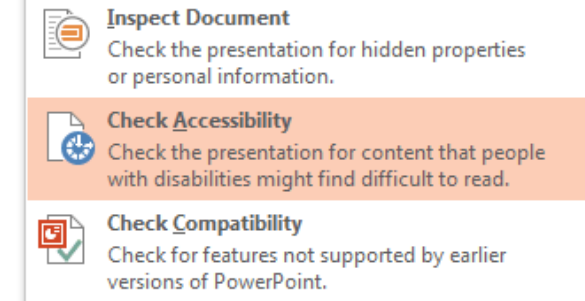
Control what types of changes people c



Inspect Presentation

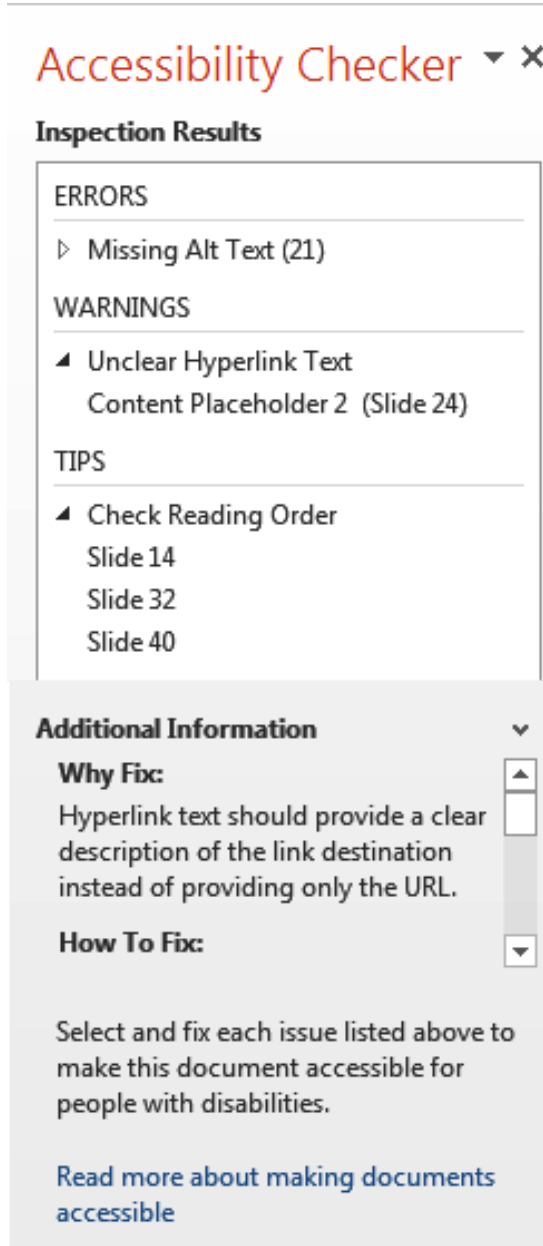
Before publishing this file, be aware that

- Document properties and author's
- Content that people with disability



Accessibility Rules

- Accessibility Checker provides:
 - Errors
 - Warnings
 - Tips
- Rules:
 - Alternate Text for all objects
 - Table Headers
 - Titles in place



Accessibility Checker ▾ ✕

Inspection Results

ERRORS

- ▶ Missing Alt Text (21)

WARNINGS

- ▲ Unclear Hyperlink Text
Content Placeholder 2 (Slide 24)

TIPS

- ▲ Check Reading Order
Slide 14
Slide 32
Slide 40

Additional Information ▾

Why Fix: ▲

Hyperlink text should provide a clear description of the link destination instead of providing only the URL.

How To Fix: ▾

Select and fix each issue listed above to make this document accessible for people with disabilities.

[Read more about making documents accessible](#)

Accessibility Warnings

- Issues that may impair accessibility or require a human:
 - Meaningful hyperlink text
 - Simple table structure
 - No blank cells for formatting

Accessibility Tips

- The MS Office Accessibility Checker also offers the following tips for enhanced accessibility:
 - Use closed captions for audio and video
 - Check your reading order
 - Unique slide titles

Best Practices for PowerPoint

- Utilize PowerPoint properly
- Include access strategies for base media types
- Use Accessibility Checker to verify accessibility
- Distribute accessibility-enhanced media rather than PowerPoint files

Saving Out as PDF

- Use Adobe PDF Maker (or Save as Adobe PDF) rather than Save As
- Without Adobe Acrobat Pro installed, you will likely encounter issues
 - No Bookmarks
 - Interface elements as images without alternative text

Resources

Visit Jayme Johnson's OEI site:

Online Accessibility Resource Documents

<http://tinyurl.com/OEIaccessibility>

Look for link to:

[**Creating Accessible Online Presentations Webinar \(4/29/2015\)**](#)

SRJC DE Site: de.santarosa.edu

[**Creating Accessible Word & PowerPoint Files**](#)

Web Accessibility site:

[Creating Accessible Word Documents](#)

[Download Accessible Word Template](#)

[Creating Accessible PDF Documents](#)

[Creating Accessible PowerPoint Presentations](#)