Creating Accessible Documents

Hello.
We are
Ablr.

Agenda

8:05 – 8:50: Know Audience to Create Accessible Content

9:00 – 9:50: Source Files and Best Practices (MS Word & PPT)

9:50 – 10:00: Questions

10:10 – 11:00: Generating PDF Files, Tagging, Determining Best Remediation Path

11:10 – 11:50: Checking for and Remediating Issues

11:50 – 12:00: Questions

Understanding your Audience

Tip 1: Think Accessibility

1. **Early – Understand your audience.** Create personas for the people that will be reading your content.

2. **Often – Make accessibility top of mind.** If possible, get feedback from people who use assistive technology. Simply asking "*Is this accessible?*" starts the process.

3. **And again, just to be safe!** Best to create a checklist.

Access by Disability Type

Visual – screen readers, invert colors, magnification

Auditory – captions, transcripts, tactile output

Mobility – alternative keyboard and input devices

Cognitive – simple, intuitive, text reading software

Other / Hidden – make accessibility opt out

Keyboard Access

Have you ever had the experience of navigating using a computer without a mouse?

There are various types of keyboards:

- QWERTY
- Dvorak
- Alphabetical Touchscreen Layout
- Mouthstick / Single Finger
- Sip and Puff Device

Magnification – A Different View

User-friendly design

- Provides the same or equivalent experience regardless of the device (computer, mobile, or tablet).

- Allows user to adjust text size

- Check text overlap

Introduction to Screen Readers

A screen reader will read EVERYTHING on the page that isn't hidden, which can be both a blessing and a challenge.

Things to keep in mind to make your content more digestible. Screen readers:

- Pause for things like periods, semi-colons, and commas.
- Try to pronounce acronyms but otherwise will spell out the letters.
- Announce the page title when loading a page or email.
- Announce headings and the heading level. e.g. "heading level 2."

Screen Reader Super Powers

Screen readers don't just read what is on the screen, they can focus on different types of content. A screen reader can read by:

- **Headings** – to give a quick snapshot of content outline

- **Links** – to highlight the actionable items on a page

- **Line, word, or character** – to verify the content

They can even read things that are **invisible**!

Accessible Content

First steps to making more accessible content:

Make sure you give yourself enough time.

It starts with your content (source document):

- Be intentional with your message

- Structure your content

- Try to see your content from another perspective

- Ask questions – involve people with disabilities

- Start with the most common accessibility issues

Examples of Most Common Accessibility Issues

1. Images

2. Links

3. Structuring Content

4. Font Choice

5. Using Color

6. Tables

Practice of Sorting Images

Now that you know the different types of images, when you are designing, sort images according to their type. This will help you:

1. Determine the "**Why**" or the purpose of each image

2. Create a process to be followed by all content creators

Sorting Images Examples

Discussion

1. What questions do you ask to determine what kind of image?

2. What if it isn't clear?

Best Practice

1. Develop a pattern so that images are labeled consistently

2. Make sure team all know agreed upon guidelines

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Got your REAL ID yet?

Beginning May 7, 2025, a REAL ID, U.S. passport or another federally approved identification will be required to board commercial flights and enter secure federal buildings.

Do not handwrite any information

Do not use commas when entering amounts

Enter Whole U.S. Dollars Only
► 1.   99,999.00

Enter Whole U.S. Dollars Only
► 1.   99999.00

Use the print icon on the form to ensure you have completed all required fields

PRINT

Before printing, select "actual size"

Do not mix form types

NCDOR
Web-Fill
11-17

D-4
Indi
Tax

NCDOR
Web
11-17

D
In
Ta

IMPORTANT: Do not send a photo

Do not submit

How to write good alt text

Alt text is the text encountered by a screen reader to describe what an image is trying to convey.

- Short and clear, no more than 15 words. Some screen readers or platforms have limits and will truncate the alt text when the limit is reached.

- Provide quick overview of image's **essential** content

- Alt Text Decision Tree

- American Foundation for the Blind's Alt text tips

Informative Links - Example

Practice:

How would you reword this link to make it something that a screen reader would read well?

Discussion:

For print materials, the rule is different. Best practice is to link both.

systems and programs. This data is entered into a Homeless Management Information System (HMIS). In North Carolina, three CoCs use the same system called HMIS@NCCEH that pulls anonymous, de-duplicated reports for insights into homelessness in our community. HMIS@NCCEH is governed by an Advisory Board. More information can be found here.

If your agency wants to join HMIS for the Durham, NC Balance of State, or Orange CoCs, check out our Guide for New Agencies and use this New Agency Form!

Already have access? Login here: hmisncceh.servicept.com/

Links Practice

1) More information on related events

2) Applications are due by August 12th. Apply Now!

3) Visit Artsy's Website

4) Learn more about Sally's work

Structuring Content - Example

PDF Structure

- Tag structure

- Understanding limitations converting from other programs

Choosing Fonts: Serif vs. Sans Serif

Sample Serif fonts

New Times Roman

Georgia

Garamond

Book Antiqua

Sample Sans Serif fonts

Arial

Century Gothic

Calibri

Futura

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Font Styling Considerations

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Learn more about this cool event! – Normal text

Learn more about this cool event! – Condensed text

Learn more about this cool event! – Bold text

Learn more about this cool event! – Small text

Learn more about this cool event! – Italicized text

LEARN MORE ABOUT THIS COOL EVENT! – ALL CAPS

Aligning Font

Left Align

Ablr is a full-service disability inclusion organization, and our mission is to remove barriers for all people with disabilities. We do this by eliminating the digital divide, changing the mindsets of people and organizations, and creating pathways to employment.

Justified

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Color Contrast Tools

1. Create an accessible color palette at the beginning of the project

2. Use Color Contrast Analyser to spot check

3. Use Tanaguru contrast finder to adjust colors

Accessible color palette builder

| White #FFFFFF | Red #BC2442 | Light Blue #348AD7 | Med Blue #1E79C8 | Navy #092940 | Black #000000 |

Edit palette
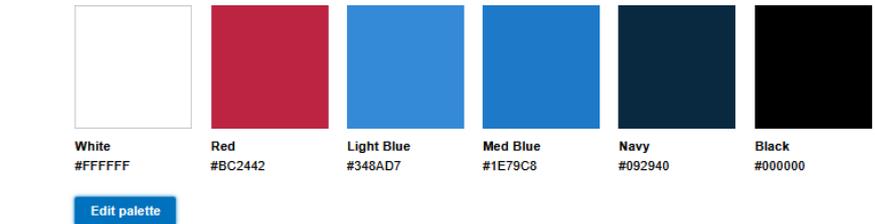
Accessible color combinations

Please don't use these color combinations; they do not meet a color contrast ratio of 4.5:1, so they do not conform with the standards of Section 508 for body text. This means that some people would have difficulty reading the text. Employing accessibility best practices improves the user experience for all users.

	White text #FFFFFF Aa	Red text #BC2442 Aa	Light blue text #348AD7 Aa	Med blue text #1E79C8 Aa	Navy text #092940 Aa	Black text #000000 Aa
Black background #000000	Aa		Aa	Aa		
Navy background #092940	Aa					
Med blue background #1E79C8	Aa					Aa
Light blue background #348AD7						Aa
Red background #BC2442	Aa					
White background #FFFFFF		Aa		Aa	Aa	Aa

Use of Color

Color cannot be the only source of information.

Traded vs. Local Clusters

43%

57%

■ Traded
■ Local

Traded vs. Local Clusters

43%

57%

■ Traded
■ Local

Playing with Color

Compliance Rules

Large text = 3 to 1

ablr.
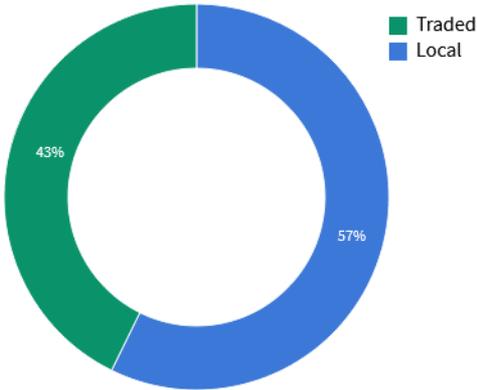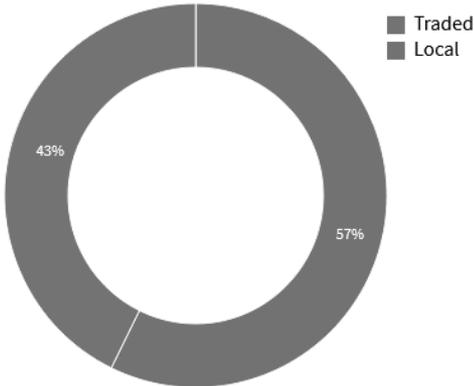
Playing with Color - Continued

Compliance Rules

Regular text = 4.5 to 1

Colour Contrast Analyser (CCA)

Colour Contrast Analyser (CCA)   Edit   View   Development

Foreground colour

HEX ⌄   #14A7E3

Background colour

HEX ⌄   #B4DAF4

▼ Sample preview

example text showing contrast

WCAG 2.1 results   Contrast ratio 1.9:1

▶ 1.4.3 Contrast (Minimum) (AA)

❌ Fail (regular text)   ❌ Fail (large text)

▶ 1.4.6 Contrast (Enhanced) (AAA)

❌ Fail (regular text)   ❌ Fail (large text)

▶ 1.4.11 Non-text Contrast (AA)

❌ Fail (UI components and graphical objects)

Color as Information?

Carolina Beach State Park trail map. Trails legend:

Flytrap Trail — easy — 0.5 mile — ◇ orange
This wheelchair-accessible trail loops through pocosin wetlands, longleaf pine, and wiregrass savanna communities. Venus flytraps can be seen along the edges of the pocosins. Wildflowers bloom along the trail. Parts of the trail travel along wooden boardwalks.

Sugarloaf Trail — easy — 3.0 miles — ○ orange
This trail begins at the marina parking area and offers great birding opportunities. Journey through a coastal evergreen forest, coastal fringe sandhill forest, tidal cypress-gum swamp, and longleaf pine savanna on your way to the Sugarloaf Dune, a prominent pre-colonial geological feature.

Campground Trail — easy — 1.0 mile — ● blue
This trail begins and ends at the visitor center and briefly joins the Sugarloaf Trail. Much of this trail winds through a coastal fringe sandhill forest, dominated by longleaf pines and live oaks.

Sand Live Oak Trail — easy — 1.5 miles — ◇ yellow-green
This trail takes you along the river and through a sand dune forest, looping around the southern end of the park before connecting back to Sugarloaf Trail. Part of this trail is on U.S. Federal property.

Snow's Cut Trail — easy — 0.75 mile — ◆ red
This trail begins at the picnic area and follows along Snow's Cut through a pine-hardwood forest. Towering trees and scenic views of the Intracoastal Waterway are seen along this trail.

TRACK Trail — easy — 0.25 mile — ◆ red
This section of the Snow's Cut Trail is designated as a self-guided trail for kids. Activity brochures

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Quick Break 1

See you back here at 9:10AM…..

Types of Tables

There are three types of tables:

1. **Layout** – used to arrange content and do not have header cells

2. **Simple Data** – communicate relational information and have header cells

3. **Complex Data** – communicate relational information and have merged or more than one header cells.

Individual Discussion Item (Attachment B)

Unit Name	Vote Needed
Pilot Mountain	Yes

UAL Units (Attachment C)

Unit Name	Debt Type	Project Title	Amount	Page #
Norwood	FA	Enterprise Fleet Management Lease-UAL Compliance	$360,000	
Stanley	IP	Fire Truck	$637,519	
Wilkesboro	FA	Enterprise Fleet Management Lease	$594,703	
Wilkesboro	FA	Enterprise Fleet Management Lease 2024 – UAL Compliance	$578,409	

Weekdays					Weekend	
Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
1	2	3	4	5	6	7
8	9	10	11	12	13	14

Data Tables

Tables can be tricky, but essential to conveying large amounts of data. A couple of tips include:

1. Establish header cells

2. Keep information simple

3. Avoid blank cells

4. Avoid merged cells

Consent Agenda (Attachment D)

Unit Name	Debt Type	Project Title	Amount	Page #
Charlotte	REV	Airport Revenue Bonds, Series 2025	$330,000,000	D-1
Duke University Health System (NCMMC)	CON REV	NCMCC Series 2025 Bonds	$540,000,000	D-3
Eden	SRF	Phase 2-North Aeration Basin Replacement	$9,002,409	D-5
Forsyth County	GO	Two-Thirds Bonds	$33,635,000	D-7
Greenville Utilities Commission	REV	Revenue Bonds 2025	$70,000,000	D-9
Hendersonville	SRF	Ashe Street Neighborhood and 4th Ave Water and Sewer Replacement (2 loans)	$4,514,929	D-11
Maryfield, Inc. (NCMMC)	CON REV	NCMCC Series 2025 Bonds	$50,000,000	D-13
Oak Island	REV REFUNDING	2025 Revenue Bond Refinancing	$29,500,000	D-15
Pasquotank County	FA	Truck Lease	$1,011,000	D-17
Raleigh Housing Authority	CON REV	Tryon Flats	$43,000,000	D-19
Miscellaneous Action Items				
Aldersgate United Methodist Retirement Community, Inc	CON REV	Master Trust Indenture Amendment	0	D-21
Camden County	BAN	Private Placement	$31,000,000	D-22
Lumberton	SRF	Lead Service Line Inventory	$100,000	D-23
End Consent Agenda				

Determining Tables

1. Understand the main purpose of the information.

2. If you had to summarize what would you include/omit?

3. Consider alternative ways of presenting the same information

Note: tables require a considerable amount of remediation in Adobe Pro

Individual Discussion Item (Attachment B)

Unit Name	Vote Needed
Pilot Mountain	Yes

Consent Agenda (Attachment D)

| Unit Name	Debt Type	Project Title	Amount	Page #
Charlotte	REV	Airport Revenue Bonds, Series 2025	$330,000,000	D-1
Duke University Health System (NCMMC)	CON REV	NCMCC Series 2025 Bonds	$540,000,000	D-3
Eden	SRF	Phase 2-North Aeration Basin Replacement	$9,002,409	D-5
Forsyth County	GO	Two-Thirds Bonds	$33,635,000	D-7
Greenville Utilities Commission	REV	Revenue Bonds 2025	$70,000,000	D-9
Hendersonville	SRF	Ashe Street Neighborhood and 4th Ave Water and Sewer Replacement (2 loans)	$4,514,929	D-11
Maryfield, Inc. (NCMMC)	CON REV	NCMCC Series 2025 Bonds	$50,000,000	D-13
Oak Island	REV REFUNDING	2025 Revenue Bond Refinancing	$29,500,000	D-15
Pasquotank County	FA	Truck Lease	$1,011,000	D-17
Raleigh Housing Authority	CON REV	Tryon Flats	$43,000,000	D-19
Miscellaneous Action Items				
Aldersgate United Methodist Retirement Community, Inc	CON REV	Master Trust Indenture Amendment	0	D-21
Camden County	BAN	Private Placement	$31,000,000	D-22
Lumberton	SRF	Lead Service Line Inventory	$100,000	D-23
End Consent Agenda				

Accessible Source Files

Tip 2: Consider making a Template

Start clean! If accessibility settings are pre-set = less clean up at the end.

Use built in formatting! Styles are applied consistently and formatting means that the properties convert.

Make it repeatable! It is much easier to complete a project efficiently and well when you just need to make small changes.
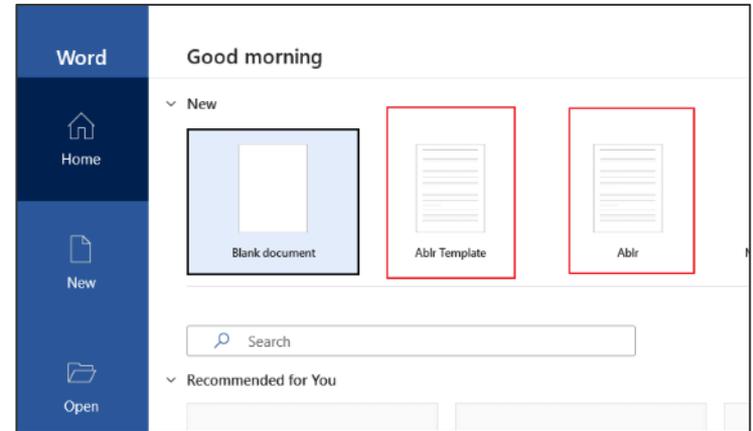
Source Document is Key

Set up for Success:

1. Font Choice

2. Using Color

3. Structuring Content

4. Images

5. Links

Demo – Set up Documents in Word

1. **Create a Template** – Make your own or choose a theme

2. **Establish Outline** – logical heading order

3. **Use Styles** – Modify Headings, Normal text and hyperlinks

4. **Avoid Manual Formatting** – for structured items and spacing or page breaks. Screen reader will not announce bold, different color, size, italic, etc.
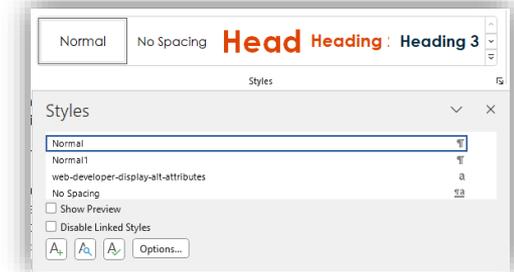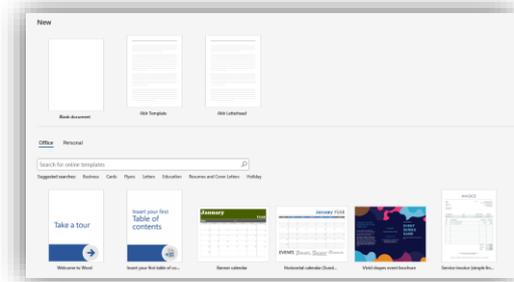
SmartArt, Charts and Graphs

Does not convert to PDF well (known bug), workaround:

- Create graphic

- Combine and save – Cut the item, then paste as image

- Create alt text


Accessibility + Usability → Awesome
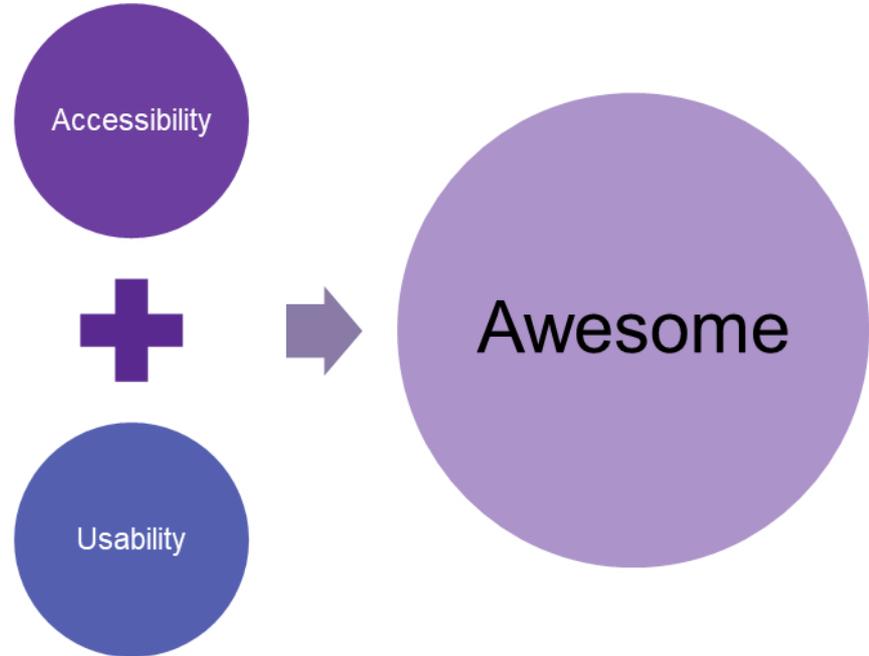
MS Word Checklist

✓ Ensure the file name is descriptive and identifies the document or its purpose

✓ Headings are formatted with Styles - Navigation pane (Ctrl+F)" and select the "Headings" tab.

✓ Lists, Columns, Indenting, Line spacing, and Page Breaks created with the Built-in Paragraph Formatting

✓ Check alt text for all images – sort decorative vs needs alt text

✓ Check text color for minimum contrast requirement and that color isn't the only source of information

MS Word Checklist (Continued)

✓ Links are descriptive and describe the destination, function and purpose of the link.

✓ No essential information is contained in the header, footer or watermark

✓ No pictures of data tables and tables are in line with text

✓ Images, objects, and text boxes are in line with text

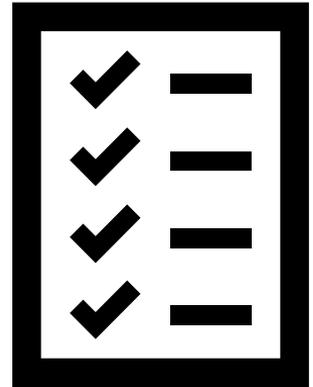✓ Support for multimedia files (if applicable)

✓ Run Accessibility Checker

Demo – Set up Presentations in PowerPoint

1. **Create Template** – use Slide Master to edit and mark decorative items

2. **Use Styles** – Slide Title, lists

3. **Alt text** – right click item

4. **Check Order** – go to Home tab, select Arrange drop down, Selection Pane
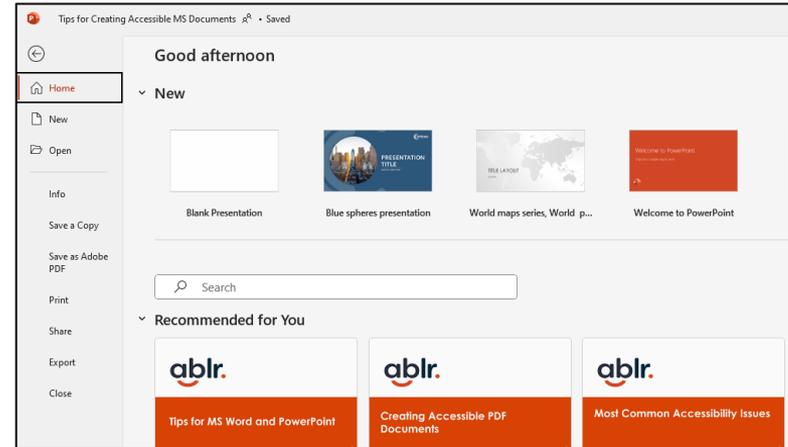
MS PowerPoint Checklist

✓ Ensure the file name is descriptive and identifies the document or its purpose

✓ Check Reading Order of all slides

✓ Check alt text for all images – sort decorative vs needs alt text

✓ Check text color for minimum contrast requirement and that color isn't the only source of information

MS PowerPoint Checklist (Continued)

✓ Links are descriptive and describe the destination, function and purpose of the link.

✓ No pictures of data tables and tables are in line with text

✓ Support for multimedia files (if applicable)

✓ Run Accessibility Checker
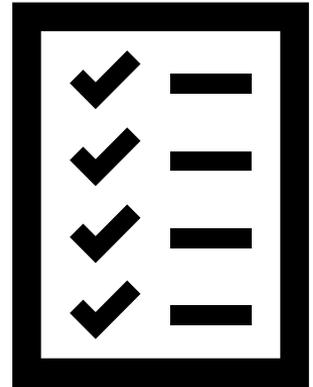
Tip 3: Check Accessibility

1. Use built in Accessibility Checkers

2. Create a checklist for most common issues

3. Check your work with a keyboard

4. Check with a screen reader (Advanced)

Checking Existing Documents

1. Use the [Microsoft Accessibility Checker](#)

2. Create checklist to check for most obvious issues

3. Check with keyboard only

4. Check with a screen reader (advanced)

Resources

Below is a list of websites for guidance on creating accessible documents:

[How to meet WCAG (Quick Reference)](#)

[Microsoft Resource: Make Your Word Documents Accessible](#)

[Microsoft Resource: Create Slides with an Accessible reading order](#)

[Section508.gov: Create Accessible Documents](#)

[NV Access screen reader](#) (for PCs only)

Questions…
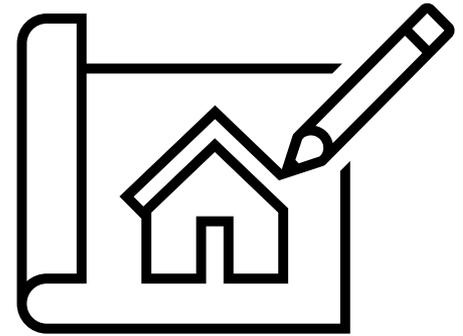# then Quick Break

See you back here in 10 minutes…..

Generating PDF Files

# Step 1: Start with an Accessible Source File!

Working on Accessibility from the start will save you a lot of time in this step.

There will always be some work, but try to minimize.

Converting to PDF: Microsoft Suite

1. Ensure that the original Word or PowerPoint document is accessible.

2. From the File menu, select "Save a Copy" and choose where you want the file to be saved.

3. Select PDF from the Save as type list.
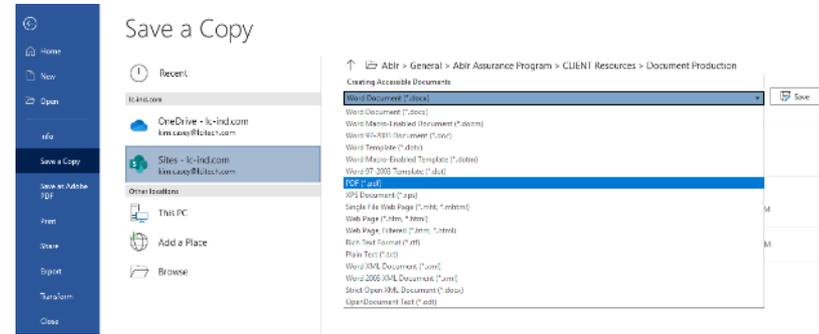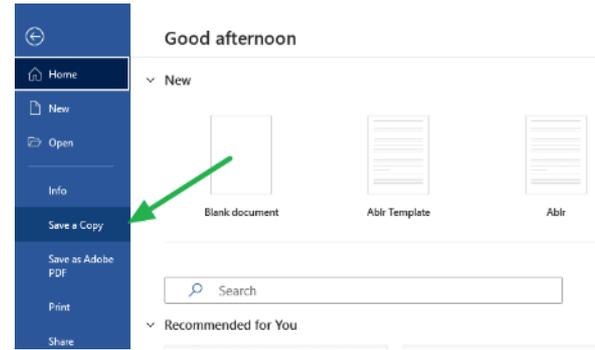
# Step 2: Determine the Best Course of Action

What are your options:

1. Go back to the source file
2. Auto-tag or Manually Tag
3. Use the Make Accessible tool
4. Convert to Webpage
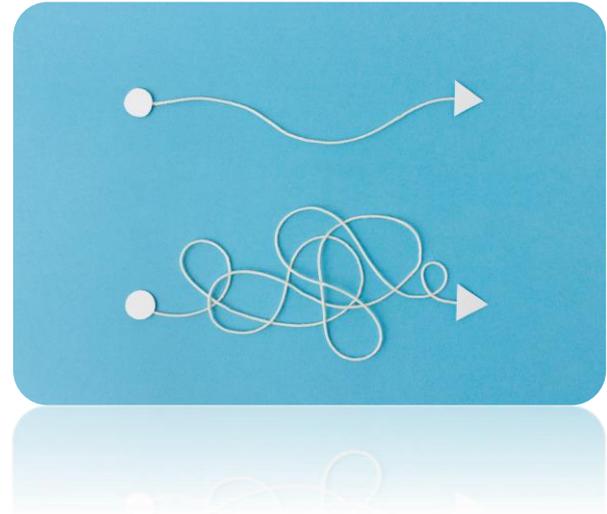
Tagging PDFs

1. PDF tags are essential for assistive technologies – identifies type and structure

2. Tag tree forms the logical structure or the document (reading order)

3. Most common tags are Paragraph, Headings, Lists, Tables, Figures, etc.

4. Does not change the visual appearance, invisible layer for screen readers
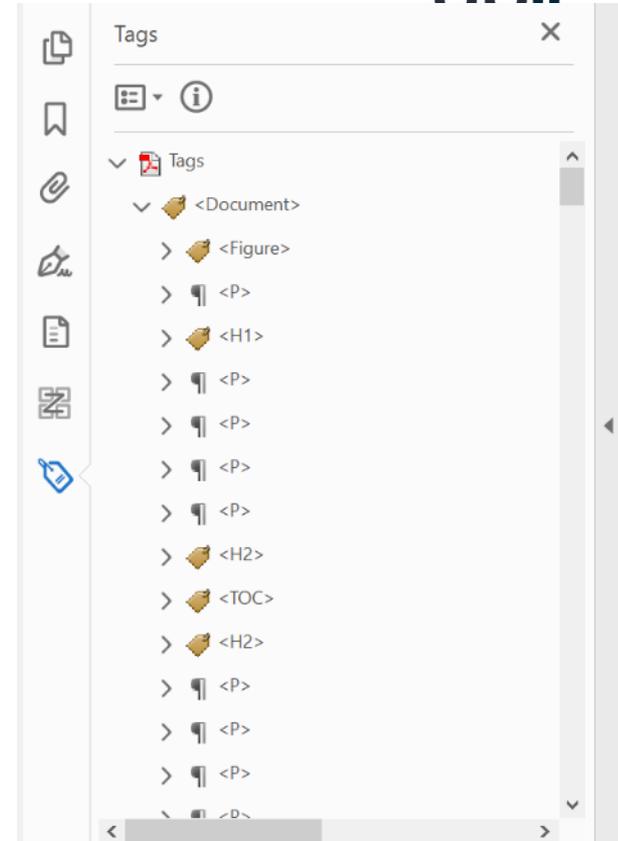
Running the Make Accessible Wizard

This process will walk through the most common accessibility issues and in the process auto-tag the document. Some tips include:

- The title should reflect the main topic of the document

- As you go through the detect Figures step, only mark as decorative if you are sure.
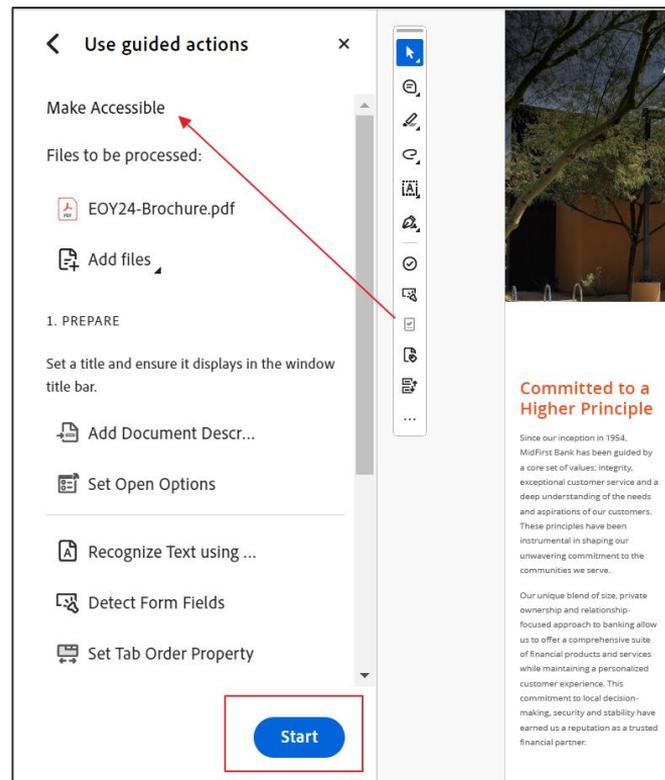
Auto-tagging only a start

If you have an untagged document, it can give the user some access. Unfortunately, it is likely to result in less-than-ideal page structure.
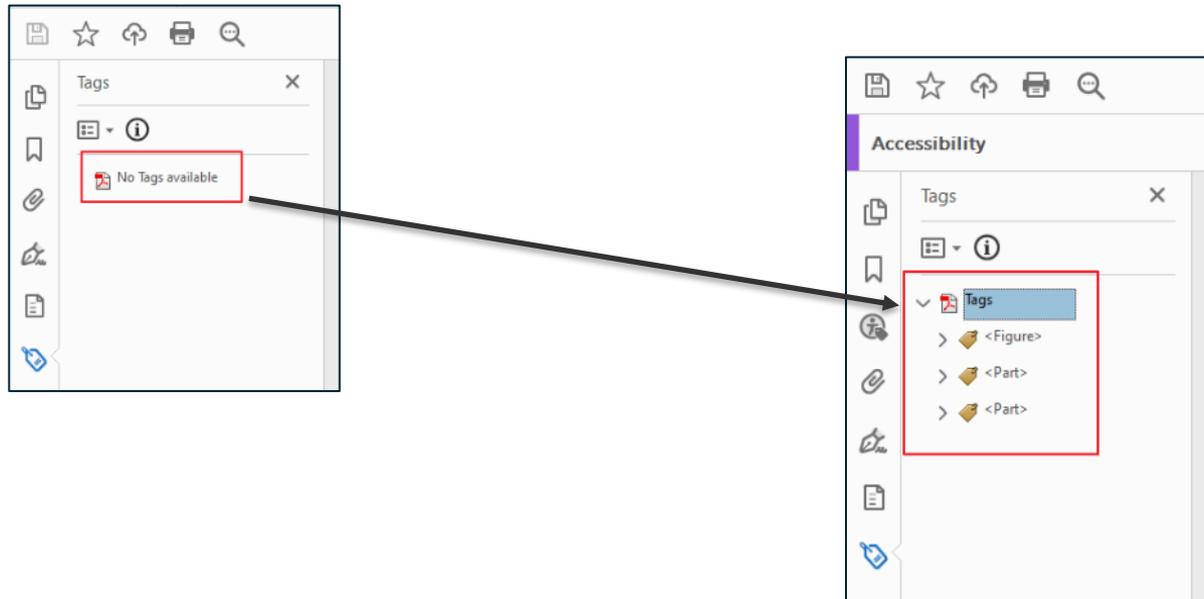
To PDF or not to PDF

- Is this information meant to be read online?

- Is this an application, survey, or form?

- Will the information be updated frequently?

- Can this information be printed just as easily from a webpage?

If all else fails…. Make it a webpage!

If you anticipate most of your audience will access your content electronically, it makes sense to re-create your document as a web document. The benefits include:

1. HTML has a lot of accessibility features built in.

2. Document behavior with assistive technologies is more predictable.

3. In-page links help people access content efficiently.

Step 3: Review the document, then tags

Inspect the file to make sure nothing is lost or displaying incorrectly.

As you go through the list of tags, check for obvious areas to correct. Make tags as neat as possible.

Some examples include:

- Empty P tags – you will want to artifact, then delete tag

- Headings tagged as P (Paragraph) tags

- Lists tagged as P tags

- Check Figure tags to ensure they convey the correct alt text

- Pull actual tags out of <Part> and <Sect> tags

Quick Break 3

See you back here in 10 minutes…..

Step 4: Checking PDFs for Accessibility

1. Use the Adobe Accessibility Checker

2. Manually check Reading order

3. Manually check color contrast

4. Check with a screen reader (advanced)
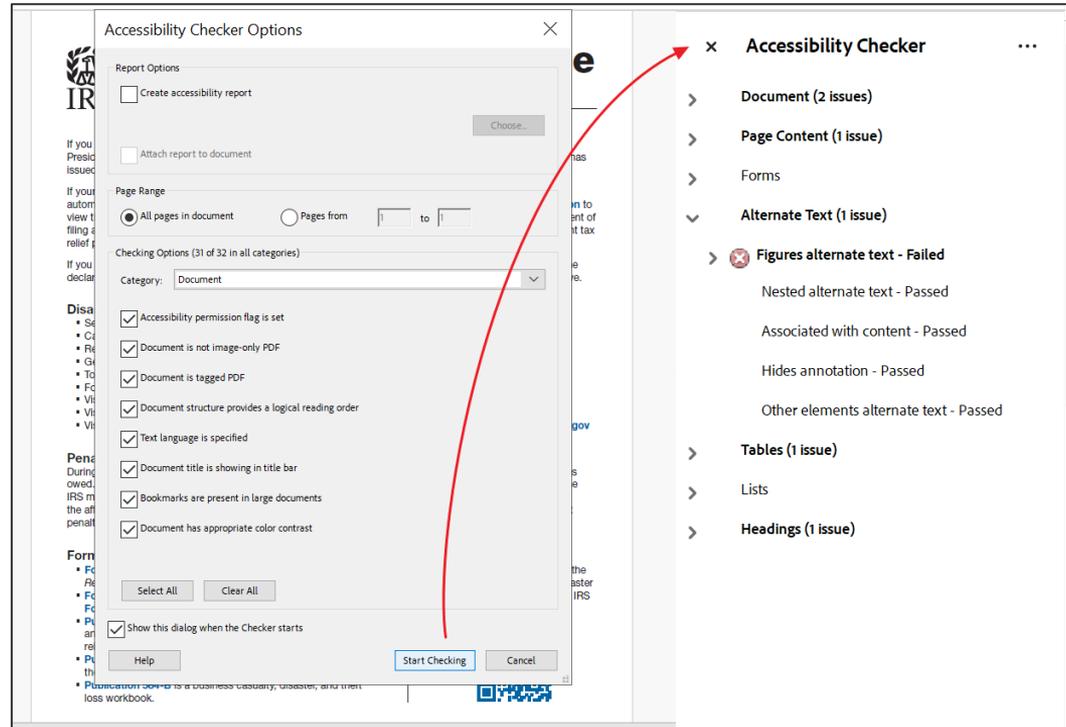
Most Common PDF Accessibility Issues

1. Untagged or Incorrectly Tagged PDFs

2. Incorrect Logical Reading Order

3. Missing or Incorrect Image Tagging

4. Incorrect Heading Structure

5. Incorrect Table Tagging

6. Use of color – contrast and for information

Step 5: Resolve issues and check tags again

Ideally if you have completed the previous steps, these should be minimal. To resolve the issues:

1. Expand the issue listing.

2. Right click and select Fix if available.

3. If not, you can select Explain.

4. To locate the element, select Show in Tags panel (or Show in Content Panel if not in Tags)
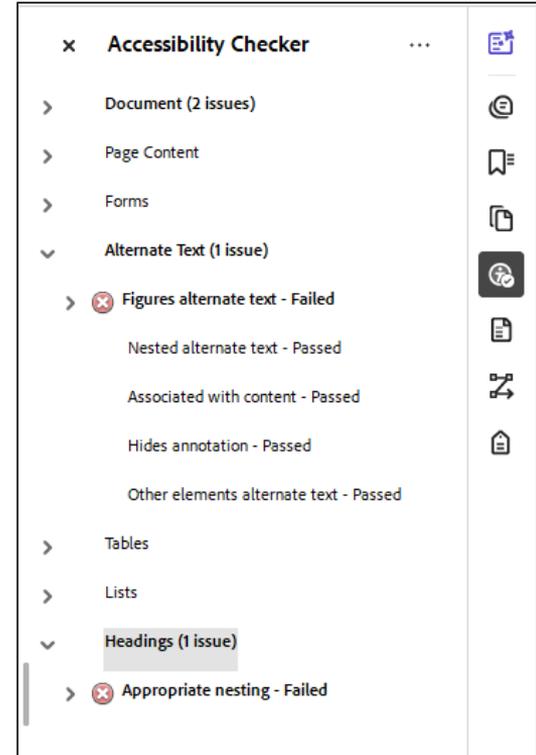
Get in touch

Thank You!

Ablr

Web: www.ablr360.com

Call: 833-294-2257

Email: kim.casey@ablr360.com