Accessibility for Document Creators & Providers

TLR Presentation
October 2018

Presented by:

Kevyn Barnes, Manager/Webmaster

TxDOT Research Library,

Operated by Center for Transportation Research Library

The University of Texas at Austin

Documents to Consider

- Public Internet Access *
- Behind a Login or Paywall **
- Intranet Access **
- Shared Folders
- Email
- Filed for Your Successors

What needs to be considered?

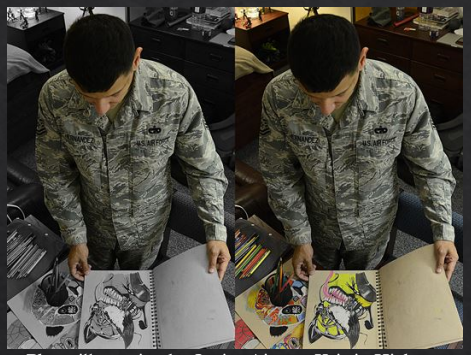


Photo illustration by Senior Airman Kristin High, U.S. Air Force

Colorblindness

CC-BY-SA-4.0L "ICT training for blind teachers by It@School Kollam" / Ivanjoseplavila

Vision Impairment

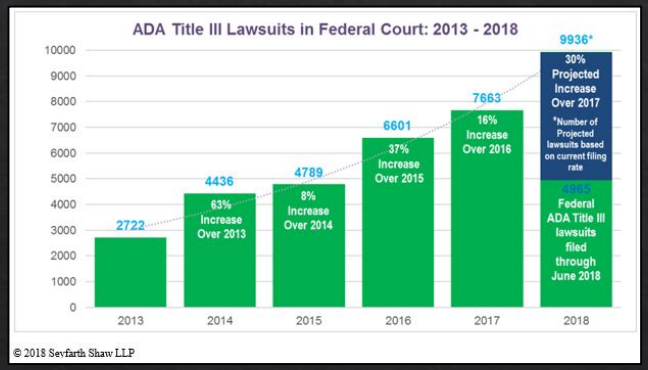
Photo by Kemberly Groue, U.S. Air Force

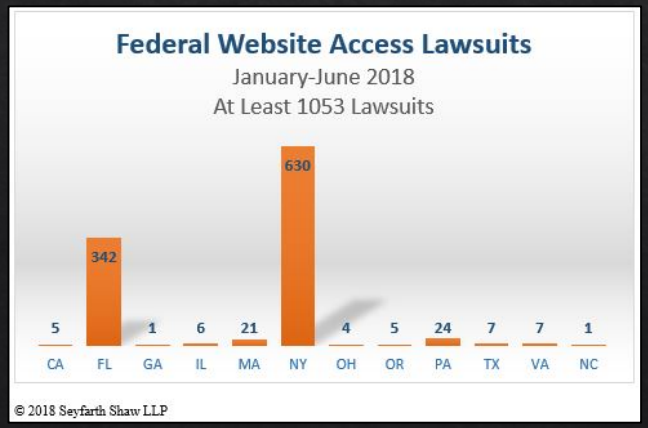
Physical Limitations

Perceivable

Operable

Why Else Should We Care?





"Plaintiffs filed 4965 federal ADA Title III lawsuits in just the first six months of 2018… If the filings continue at the same rate, there will be close to 10,000 ADA Title III lawsuits for all of 2018—a 30% increase over 2017."

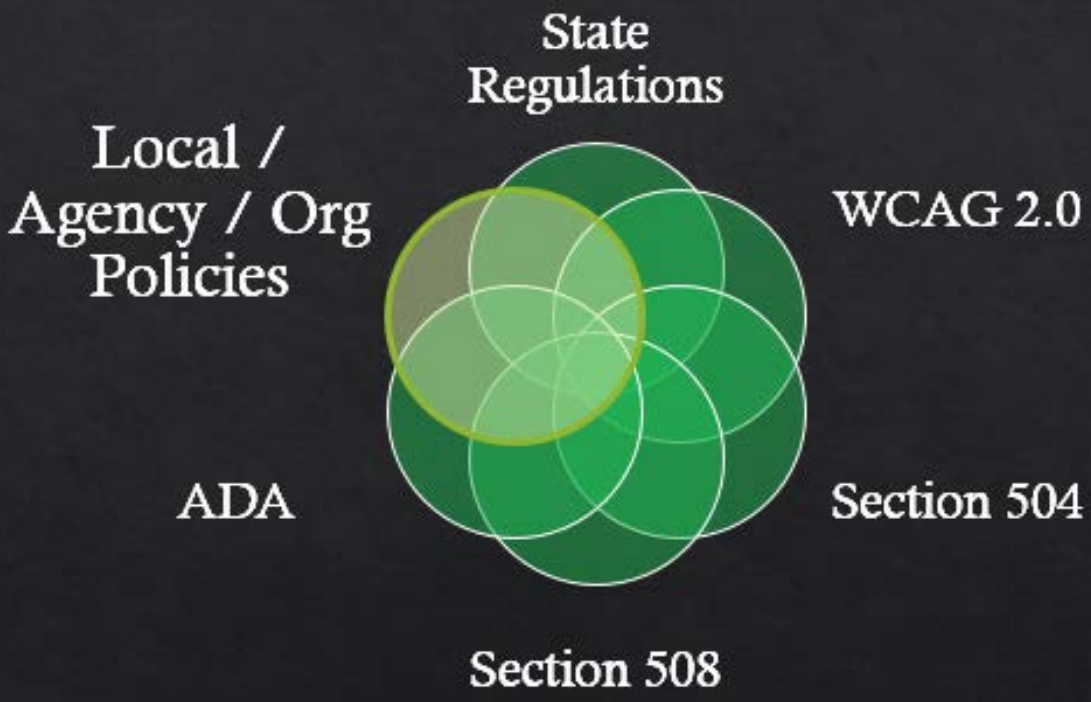
Source: Vu, M. N. (2018, July 19). Website Access and Other ADA Title III Lawsuits Hit Record Numbers. Retrieved August 16, 2018, from https://www.adatitleiii.com/2018/07/website-access-and-other-ada-title-iii-lawsuits-hit-record-numbers/

Why Else Should You Care?

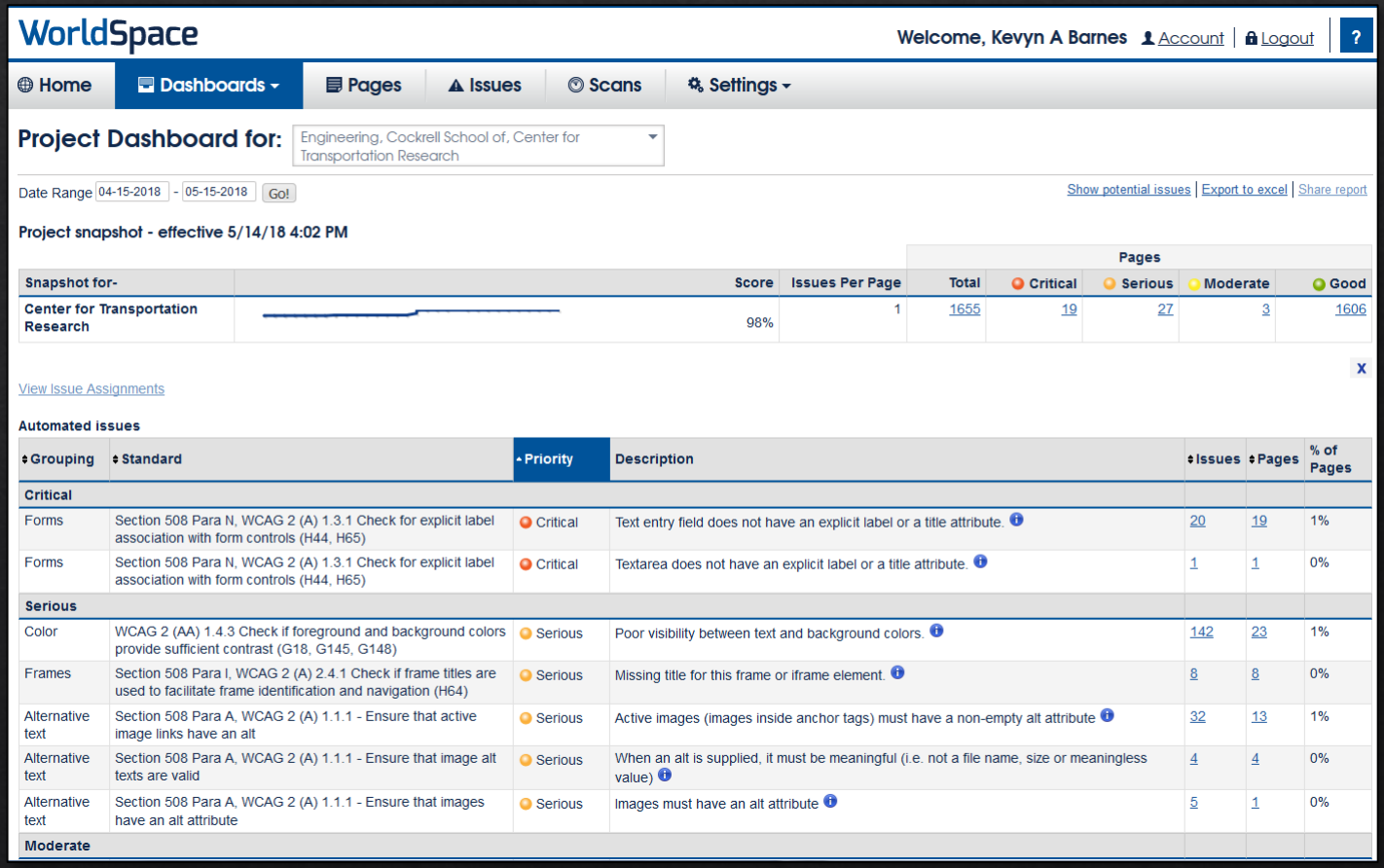
Industry	%	Lawsuits	Industry	%	Lawsuits
Retail	18.8%	397	Telecommunications Services	1.1%	23
Consumer Services	15.5%	327	Transportation	1.1%	23
Real Estate	11.1%	233	Cultural & Religious Institutions	0.8%	18
Restaurants	9.7%	204	Media	0.8%	18
Hotels	8.9%	187	Associations	0.6%	12
Consumer Products Manufacturers	8.6%	181	Business Services	0.6%	12
Hospitals and Healthcare Providers	5.5%	117	Colleges	0.6%	12
Food	3.0%	64	Computer Software	0.6%	12
Managed Care	2.5%	53	Education Services	0.6%	12
State and Local Government	2.2%	47	Utilities	0.6%	12
Banking	1.7%	35	Basic Materials and Chemicals	0.3%	6
Automotive & Transport	1.4%	29	Computer Services	0.3%	6
Brokerage and Asset Management	1.4%	29	Industrial Manufacturing/ Machinery	0.3%	6
Financial Services	1.1%	23	Insurance	0.3%	6
			Oil and Gas	0.3%	6
			Total	**100%**	**2,106**

Level Access presentation, September 13, 2018

Regulations & Best Practices



Regulation Compliance



WorldSpace

Welcome, Kevyn A Barnes | Account | Logout | ?

Home | Dashboards | Pages | Issues | Scans | Settings

Project Dashboard for: Engineering, Cockrell School of, Center for Transportation Research

Date Range 04-15-2018 - 05-15-2018 Go!

Show potential issues | Export to excel | Share report

Project snapshot - effective 5/14/18 4:02 PM

Snapshot for-	Score	Issues Per Page	Pages Total	Critical	Serious	Moderate	Good
Center for Transportation Research	98%	1	1655	19	27	3	1606

View Issue Assignments

Automated issues

Grouping	Standard	Priority	Description	Issues	Pages	% of Pages
Critical						
Forms	Section 508 Para N, WCAG 2 (A) 1.3.1 Check for explicit label association with form controls (H44, H65)	Critical	Text entry field does not have an explicit label or a title attribute.	20	19	1%
Forms	Section 508 Para N, WCAG 2 (A) 1.3.1 Check for explicit label association with form controls (H44, H65)	Critical	Textarea does not have an explicit label or a title attribute.	1	1	0%
Serious						
Color	WCAG 2 (AA) 1.4.3 Check if foreground and background colors provide sufficient contrast (G18, G145, G148)	Serious	Poor visibility between text and background colors.	142	23	1%
Frames	Section 508 Para I, WCAG 2 (A) 2.4.1 Check if frame titles are used to facilitate frame identification and navigation (H64)	Serious	Missing title for this frame or iframe element.	8	8	0%
Alternative text	Section 508 Para A, WCAG 2 (A) 1.1.1 - Ensure that active image links have an alt	Serious	Active images (images inside anchor tags) must have a non-empty alt attribute	32	13	1%
Alternative text	Section 508 Para A, WCAG 2 (A) 1.1.1 - Ensure that image alt texts are valid	Serious	When an alt is supplied, it must be meaningful (i.e. not a file name, size or meaningless value)	4	4	0%
Alternative text	Section 508 Para A, WCAG 2 (A) 1.1.1 - Ensure that images have an alt attribute	Serious	Images must have an alt attribute	5	1	0%
Moderate						

Regulation Compliance

Thank you for contacting the National Transportation Library about submitting your content for its repository to ROSA-P.

This document did not pass the Accessibility Tool in Adobe Acrobat Pro DC. I have partially remediated the attached document, but 74 figures are missing the alternate text and I'm unable to fix the 134 tagged annotations errors.

Would you please add alternate text to each image/figure and fix the tagged annotations and resubmit a fully accessible PDF?

As a reminder, new NTL Digital Submissions need to be as accessible as possible and this includes running the Adobe Acrobat Pro DC Accessibility Tool and making corrections, so that the publicly funded, public facing research is accessible to everyone.

This is **a final Federal rule effective March 23, 2018:** Federal Access Board: https://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-ict-refresh/corrections-to-the-ict-final-rule

Please see DOT Section 508: http://dotnet.dot.gov/section508/documents.html

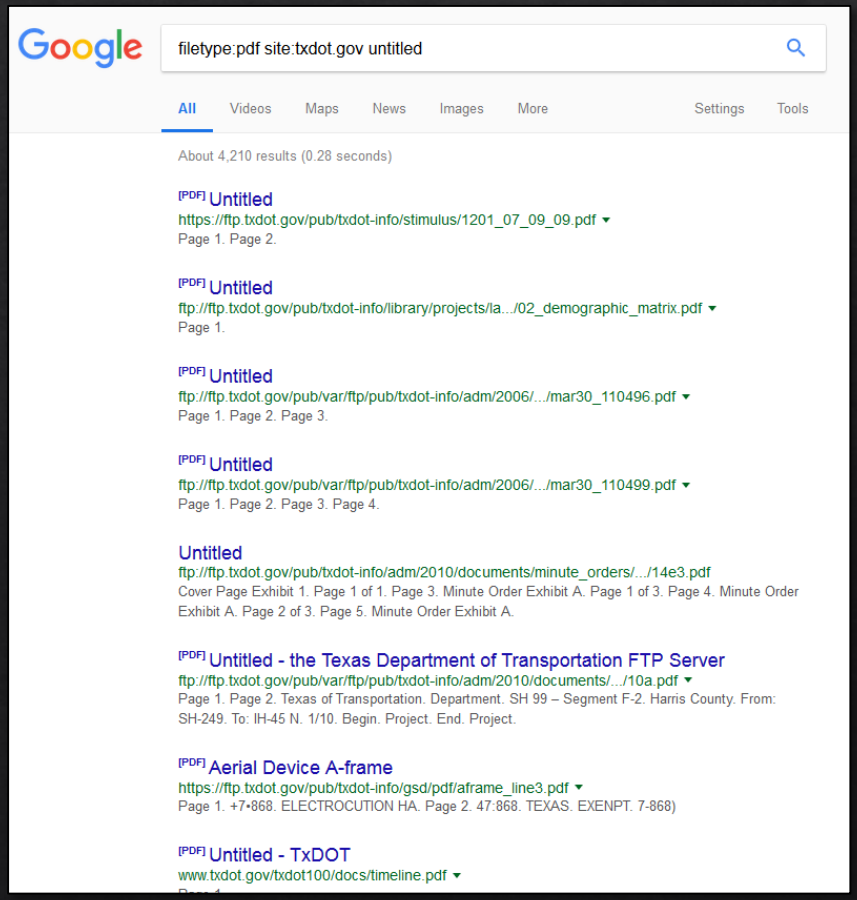
You may also contact the DOT Section 508 Program Coordinator: larry.slaughter@dot.gov

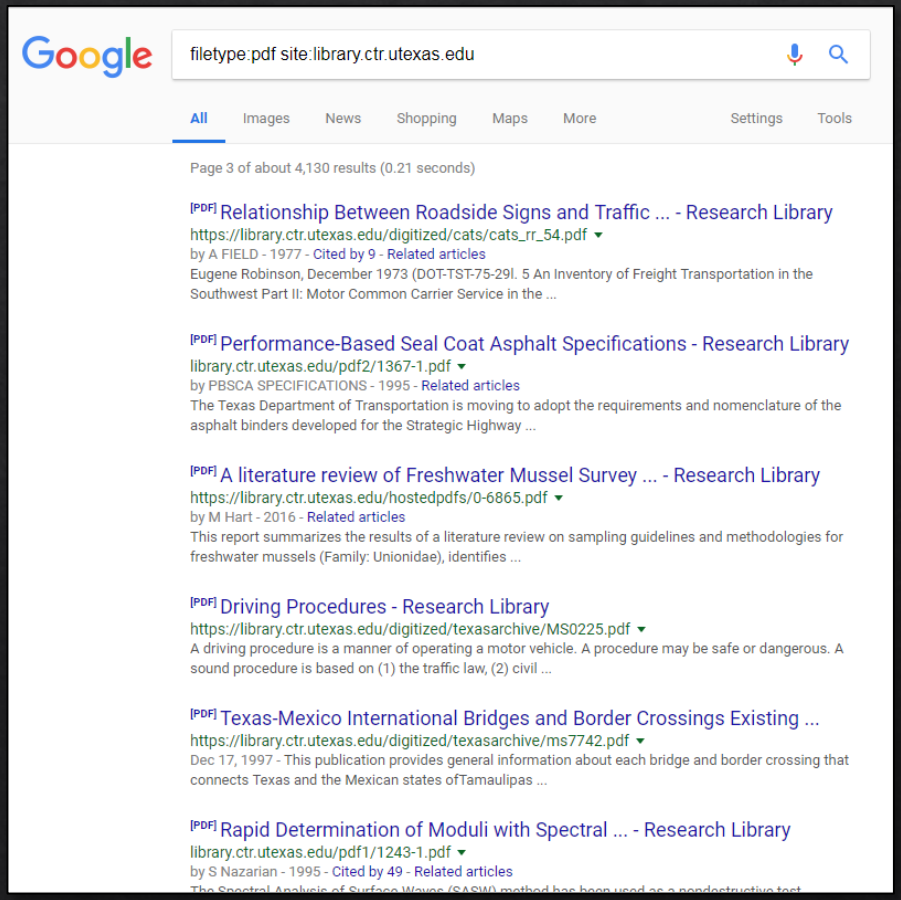
Sincerely,

Judith Salter
Metadata/Cataloging Librarian – Contractor
National Transportation Library
judith.salter.ctr@dot.gov

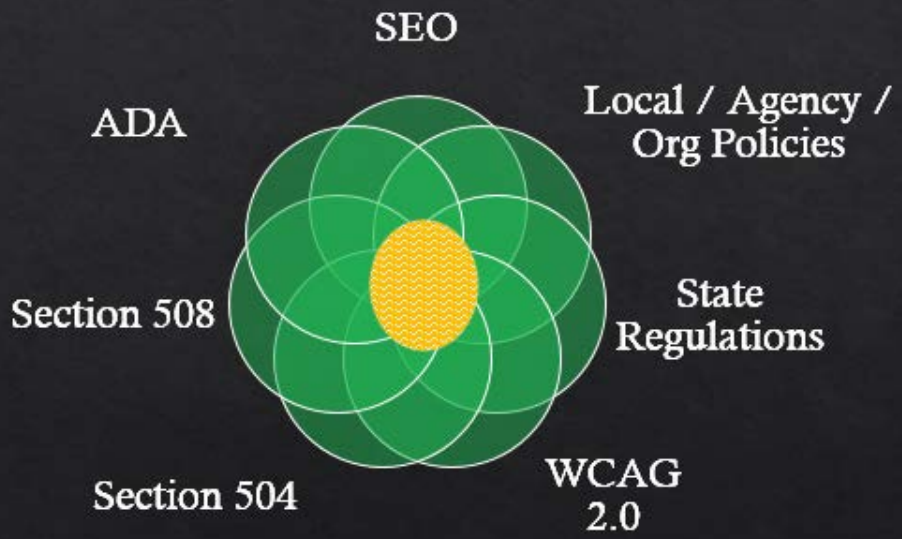
Regulations & Best Practice Sources

The SEO Factor





Regulations & Best Practice Sources



Your knowledge of a document consumer's needs.

Basic Checklist

1. Use filenames that are descriptive but use web-safe punctuation only.
2. Describe hyperlinks correctly.
3. Use built-in tools to check for accessibility errors.
4. Set metadata properties for the document.
5. Add bookmarks to PDFs.
6. Images: Add Alt Text descriptions, including all text that is part of image.
7. Check reading order—especially after inserting images, tables, etc.
8. Graphs: Check for color contrast & convey information by means other than color.
9. Ensure an acceptable color contrast between text and background.
10. Tables: Include column headers that repeat across pages.
11. Formatting: Avoid using tables & extra paragraph breaks solely for formatting.
12. Formatting: Use built-in tools for bullet lists.
13. Formatting: Use headers and properly nest tag elements.

Filenames: Pitfalls

2013&Improvement in Pavement Ride, Distress, and Condition Based on Different Pavement Types (Summary).pdf

1. Sharing in email / documents / web pages / library catalogs:

http://[...domain name...]/reports/1314/2013&Improvement in Pavement Ride, Distress, and Condition Based on Different Pavement Types (Summary).pdf

2. Encoded for web browsers:

http://[...domain name...]/reports/1314/2013%20Improvement%20in%20Pavement%20Ride%2C%20Distress%2C%20and%20Condition%20Based%20on%20Different%20Pavement%20Types%20(Summary).pdf

Filenames: Better Practice

2013-rr-0-6673-s.pdf

http://[*domain name*]/reports/1314/**2013-rr-0-6673-s.pdf**

2013-summary-improvements-different-pavement-types.pdf

http://[*domain name*]/reports/1314/**2013-summary-improvements-different-pavement-types.pdf**

Hyperlinks

Find the report here.

Links:

1. here.
2. Here.
3. Here.
4. Click here

Versus

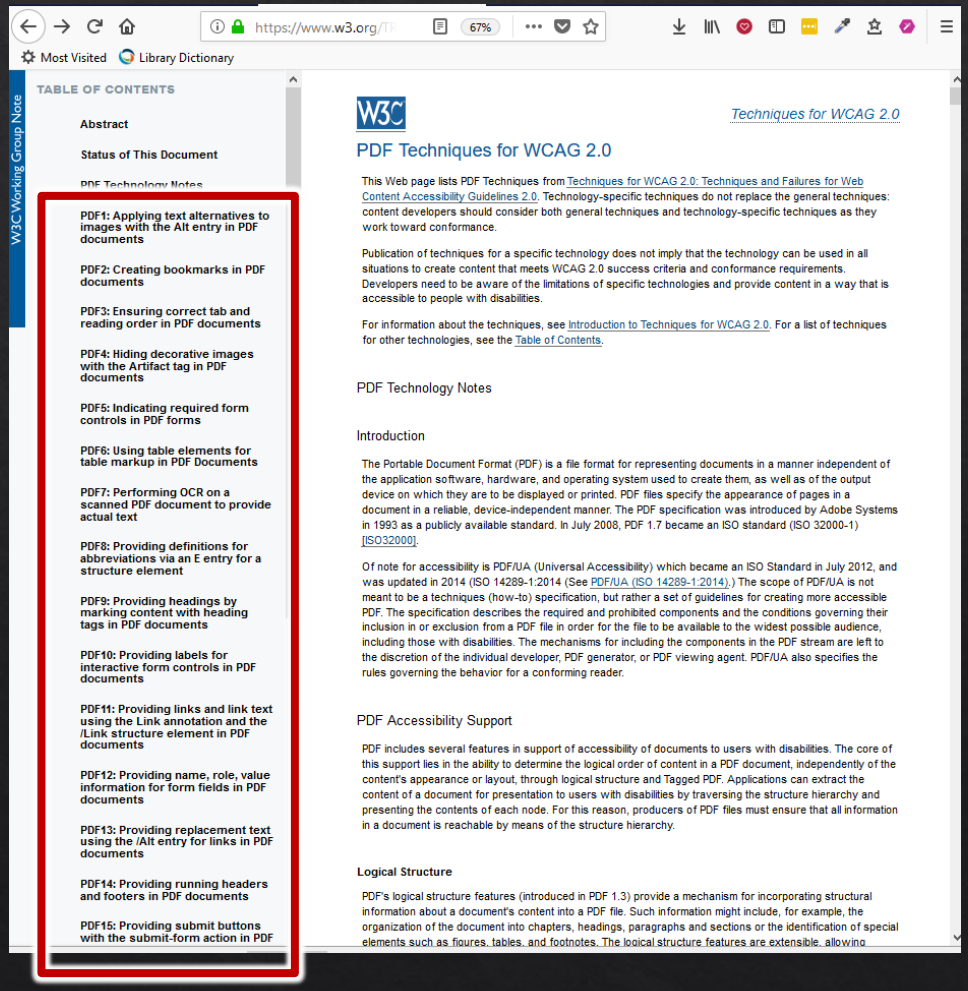
Download the summary report Improvement in Pavement Ride, Distress, and Condition Based on Different Pavement Types.

Find more information on the NCHRP 20-07(132) project page.

PDF Accessibility

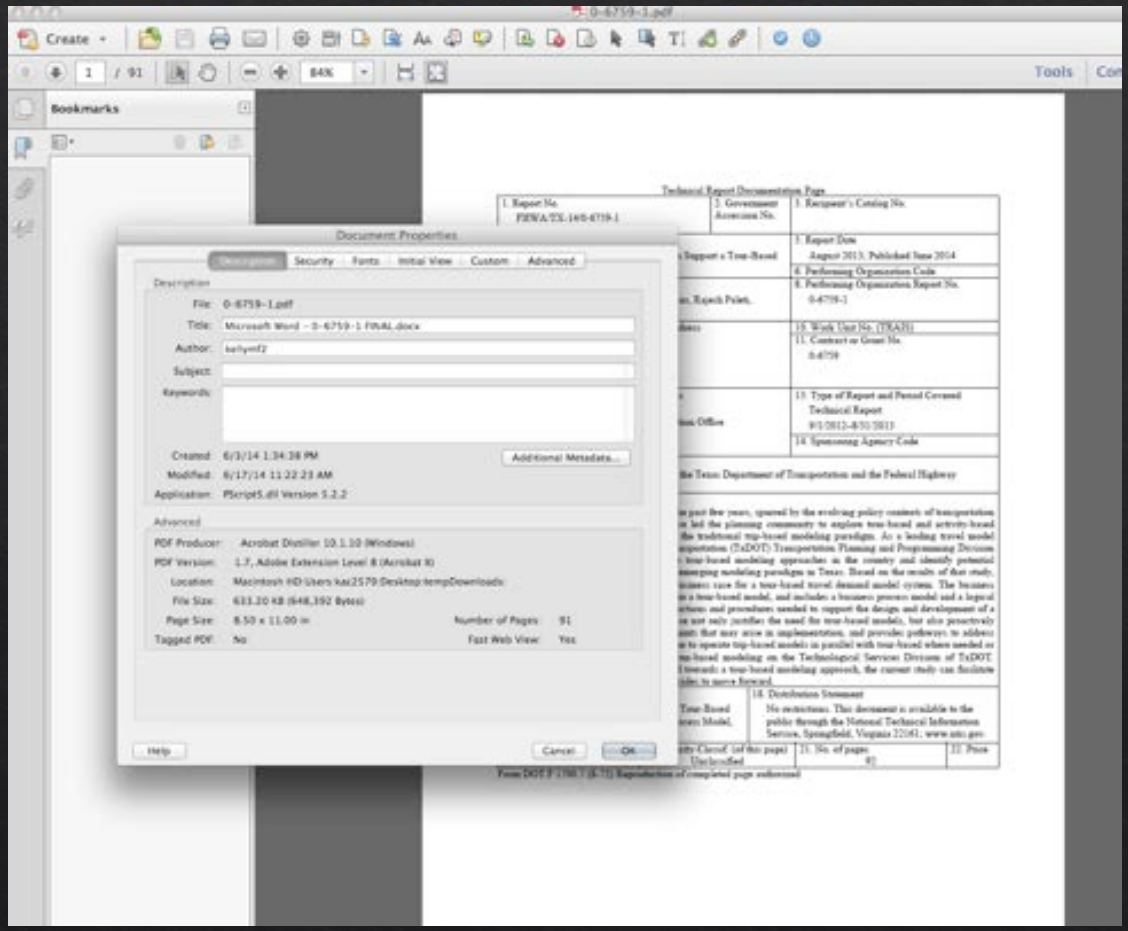
Remediating after the Fact

PDF Accessibility



PDF Techniques for WCAG 2.0: https://www.w3.org/TR/WCAG-TECHS/pdf.html

Basic PDF Metadata



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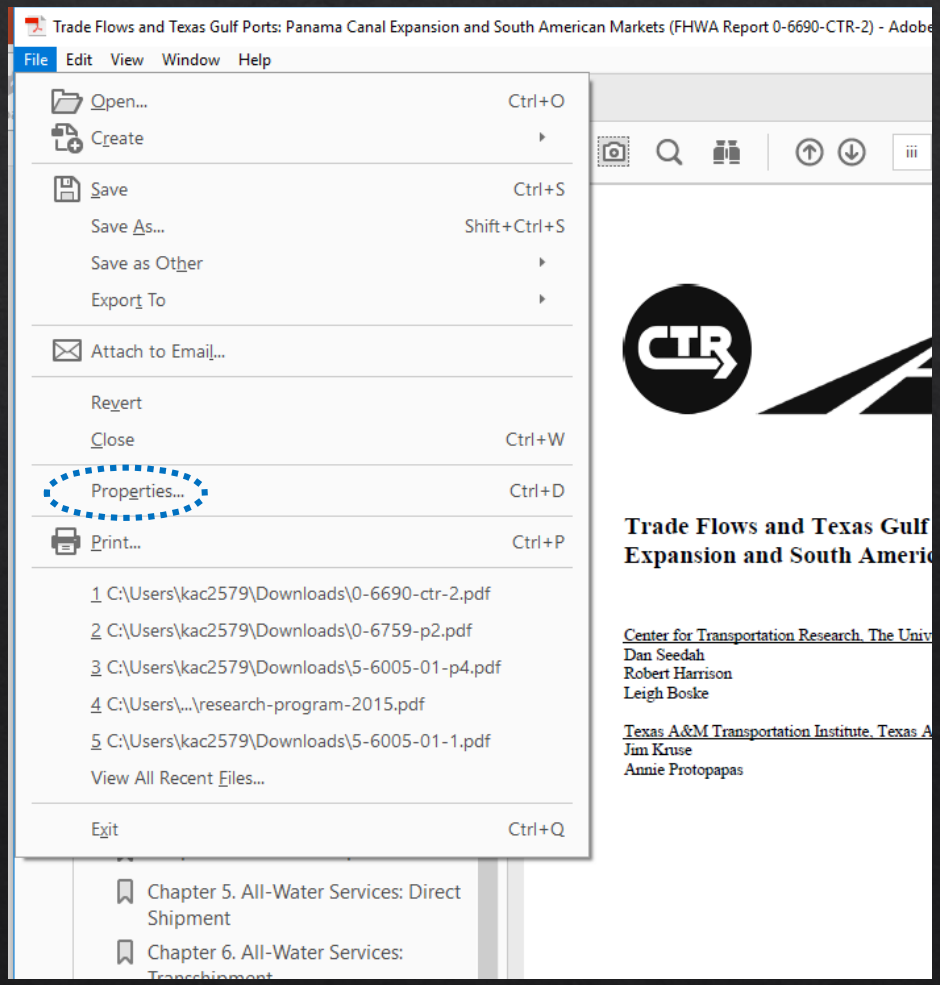

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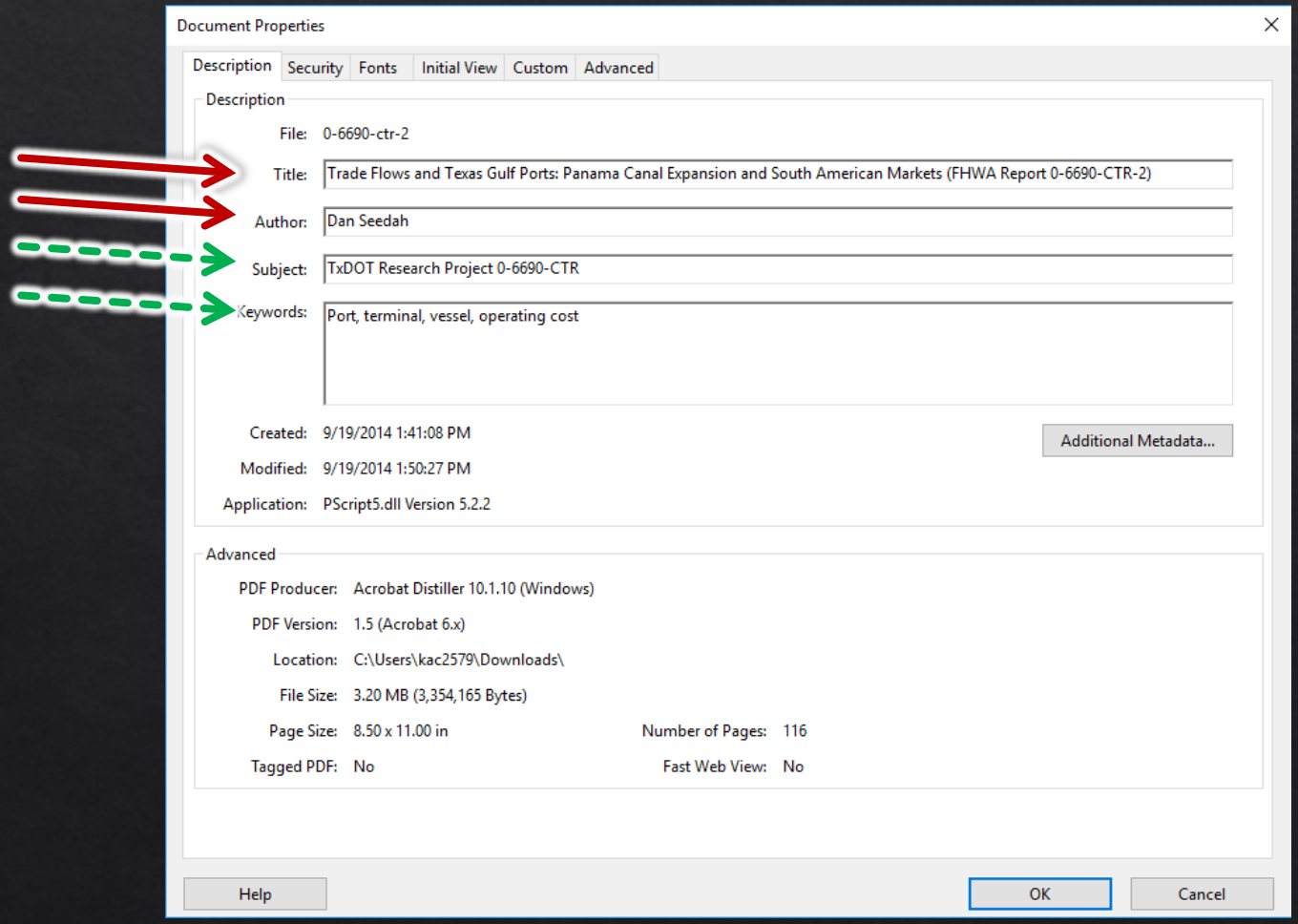

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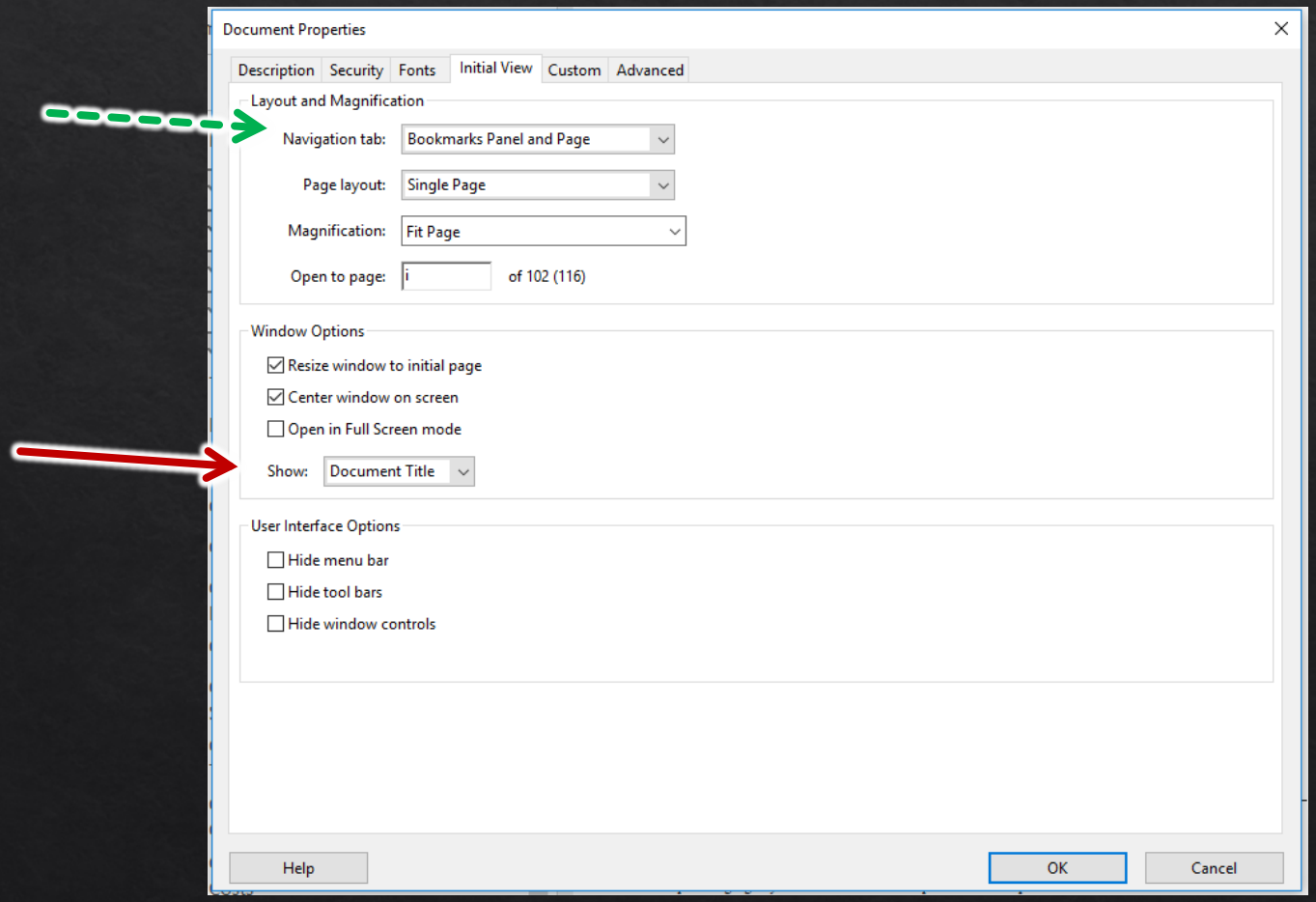

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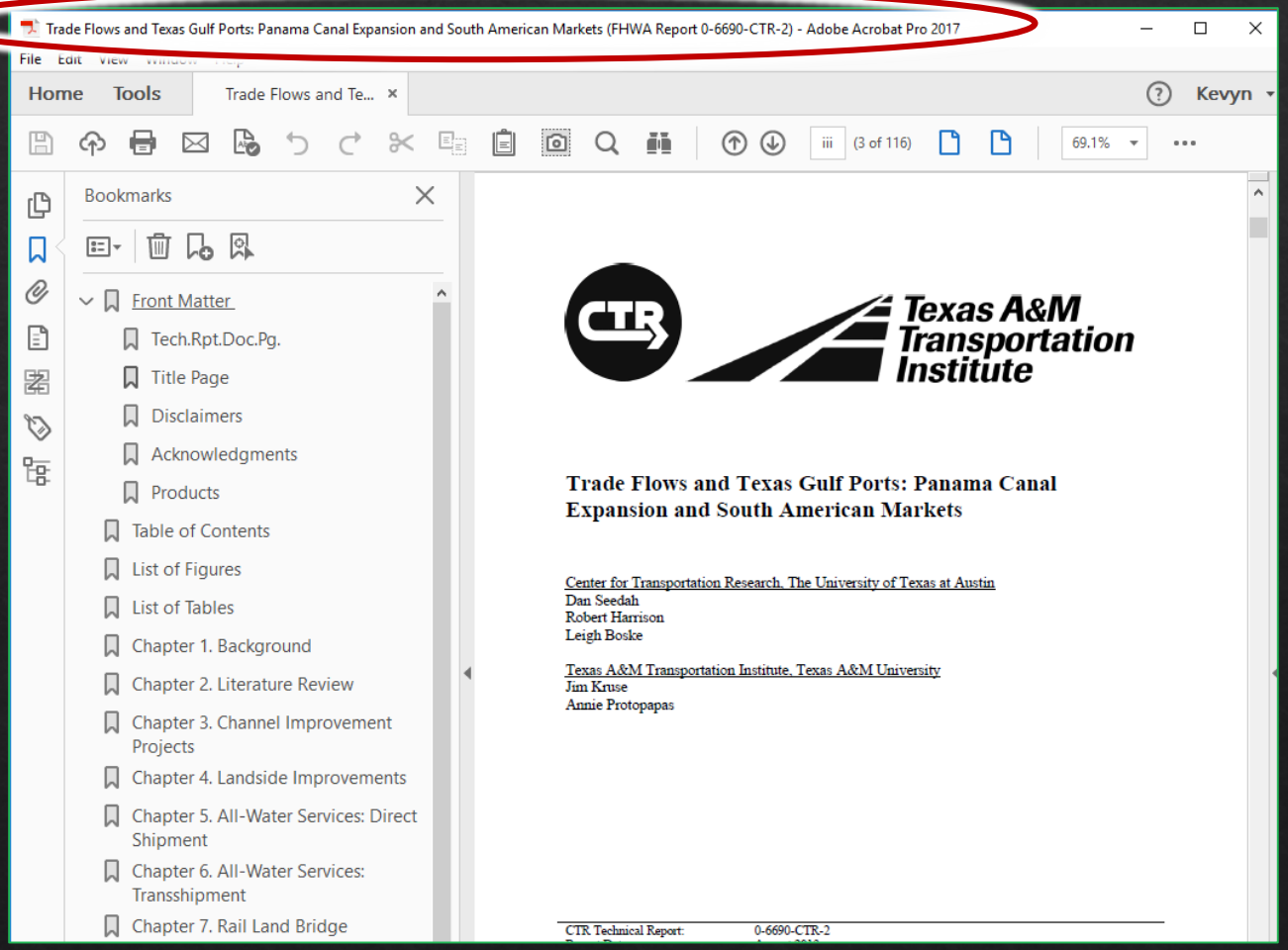

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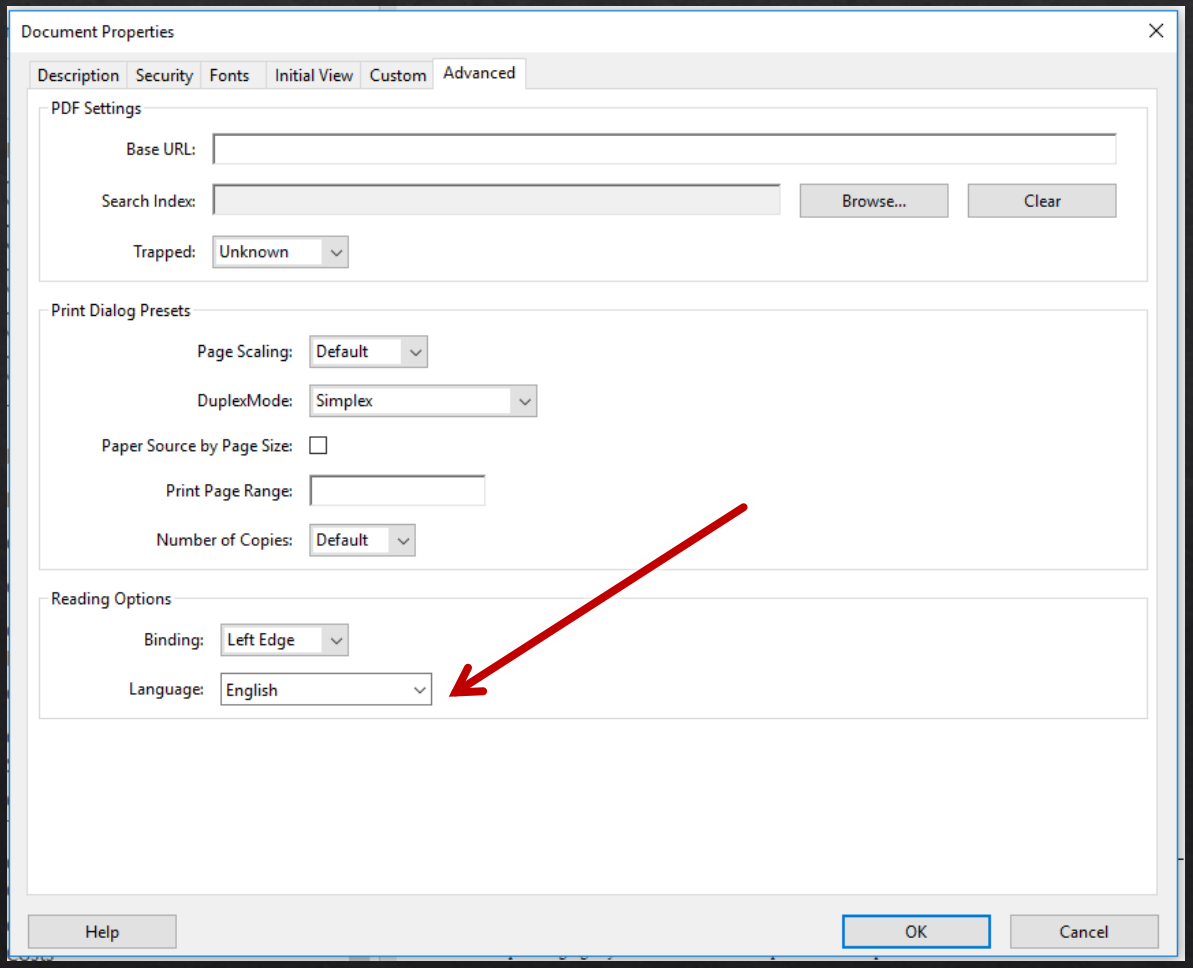

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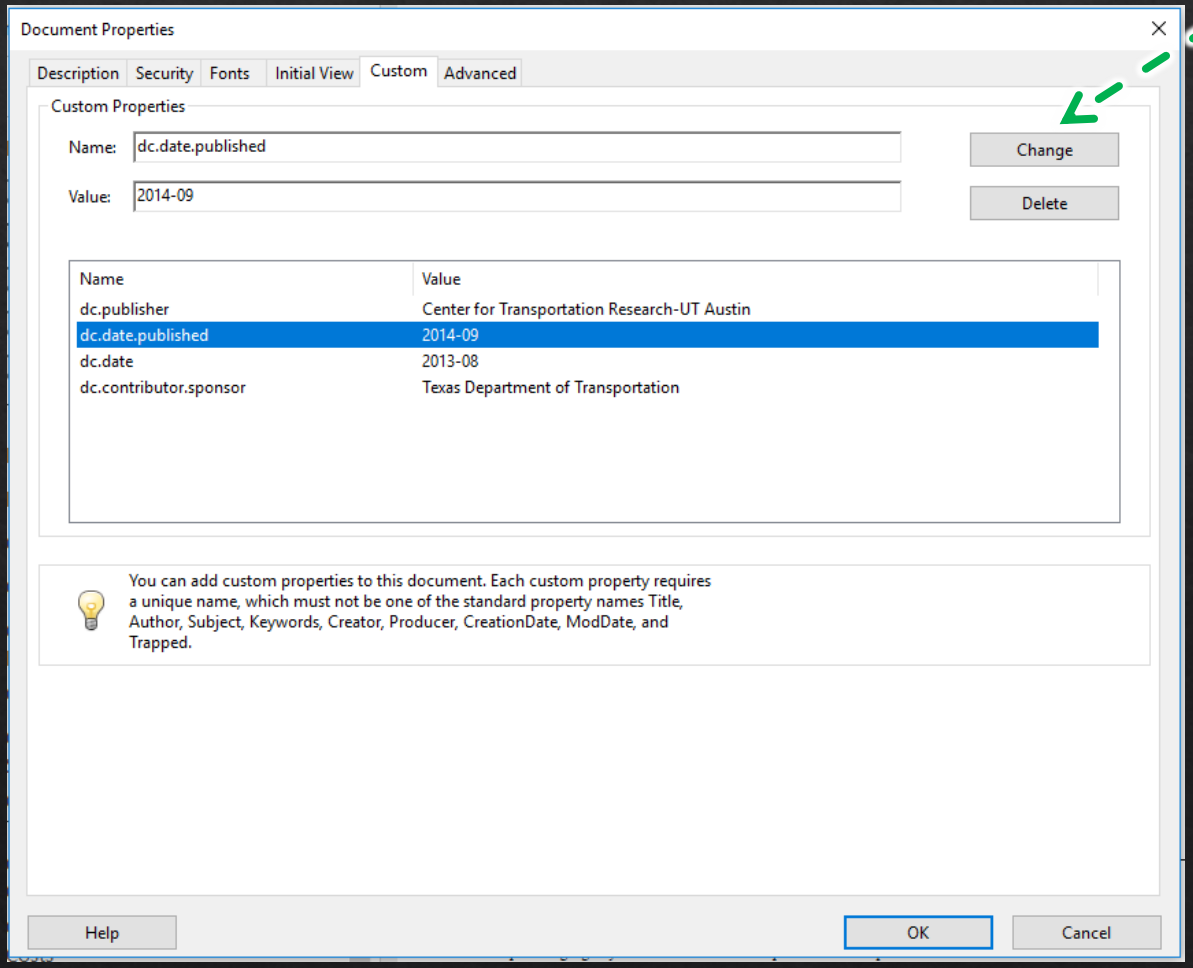

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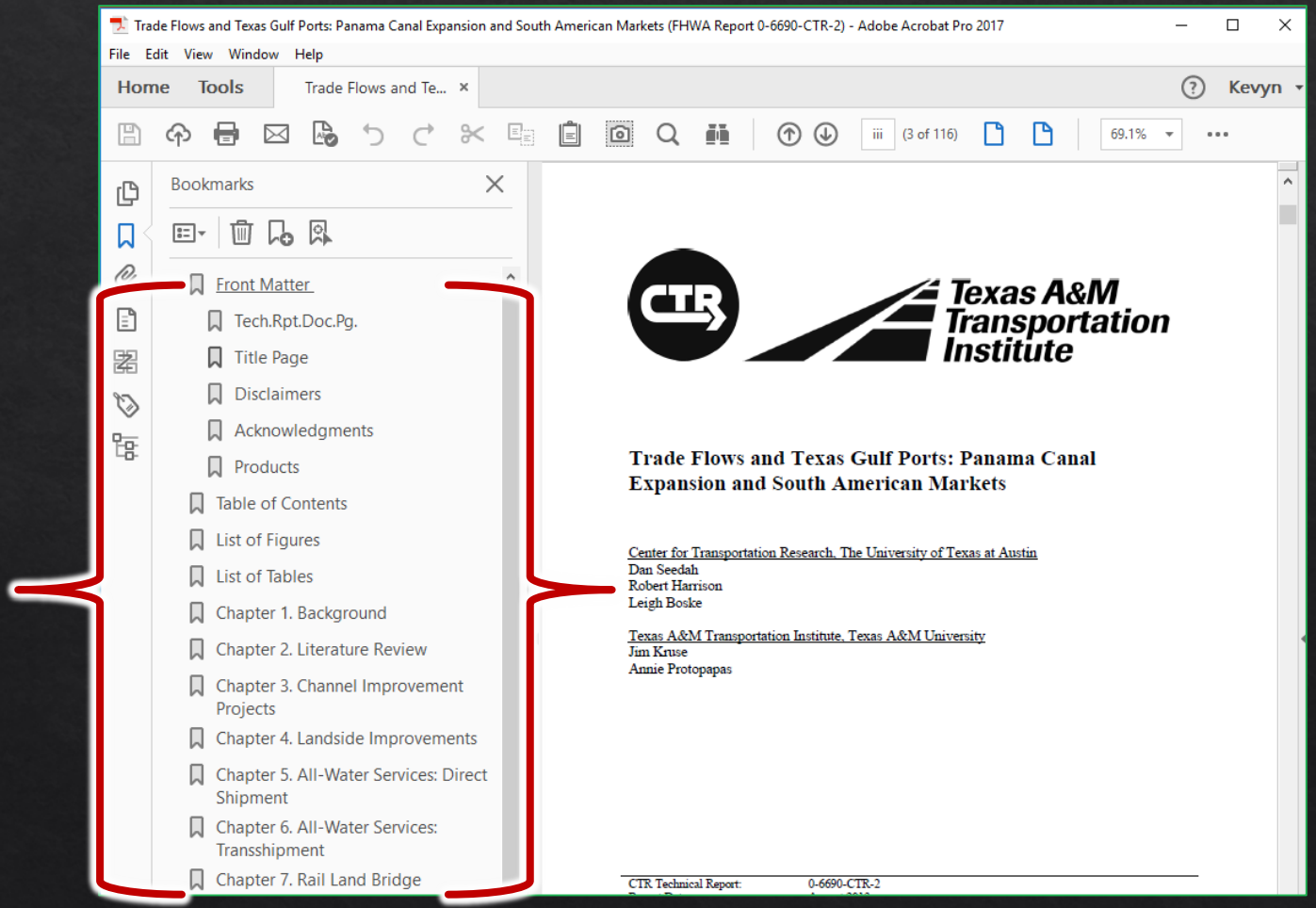
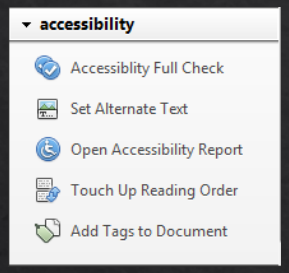
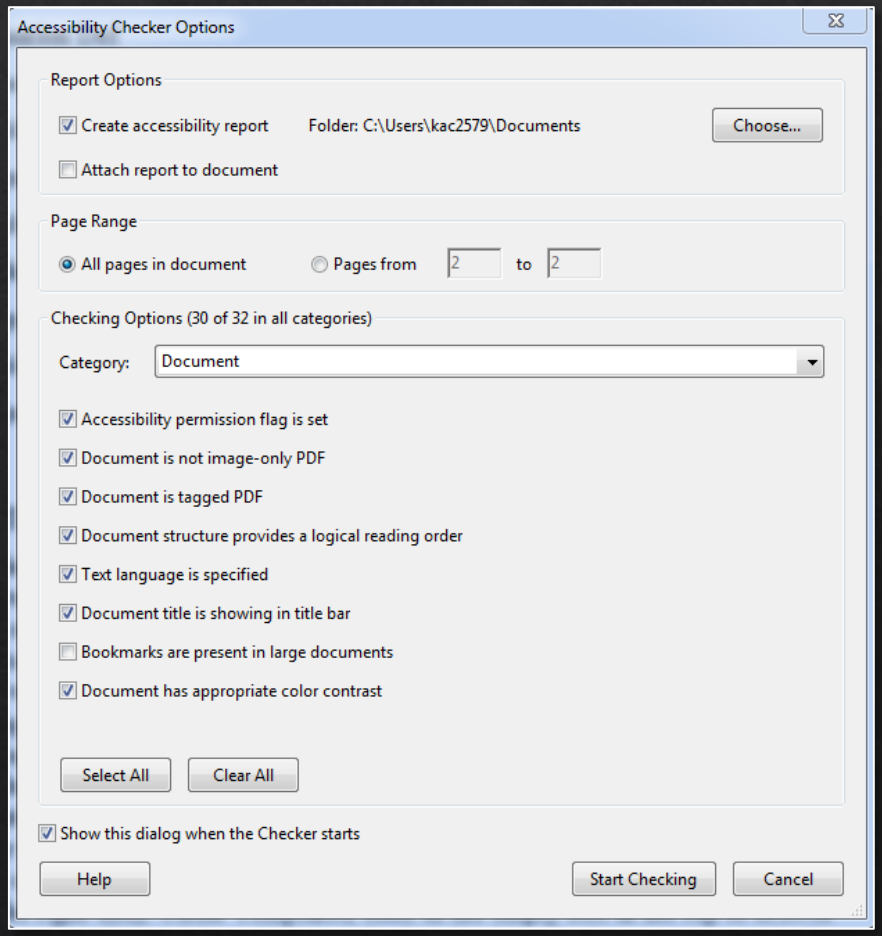


PDF Accessibility, pt. 2

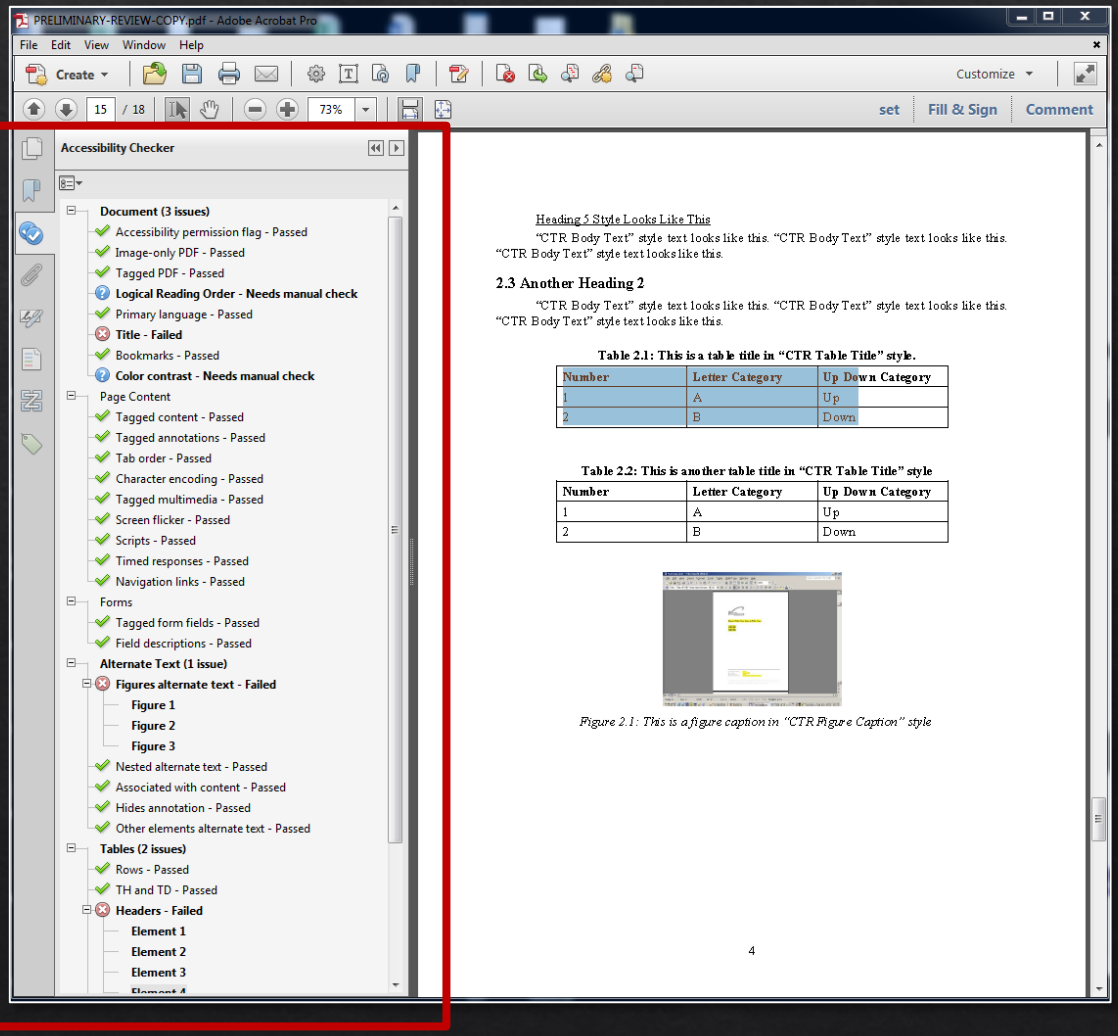
Built-in Accessibility Checker

PDF Accessibility Checker





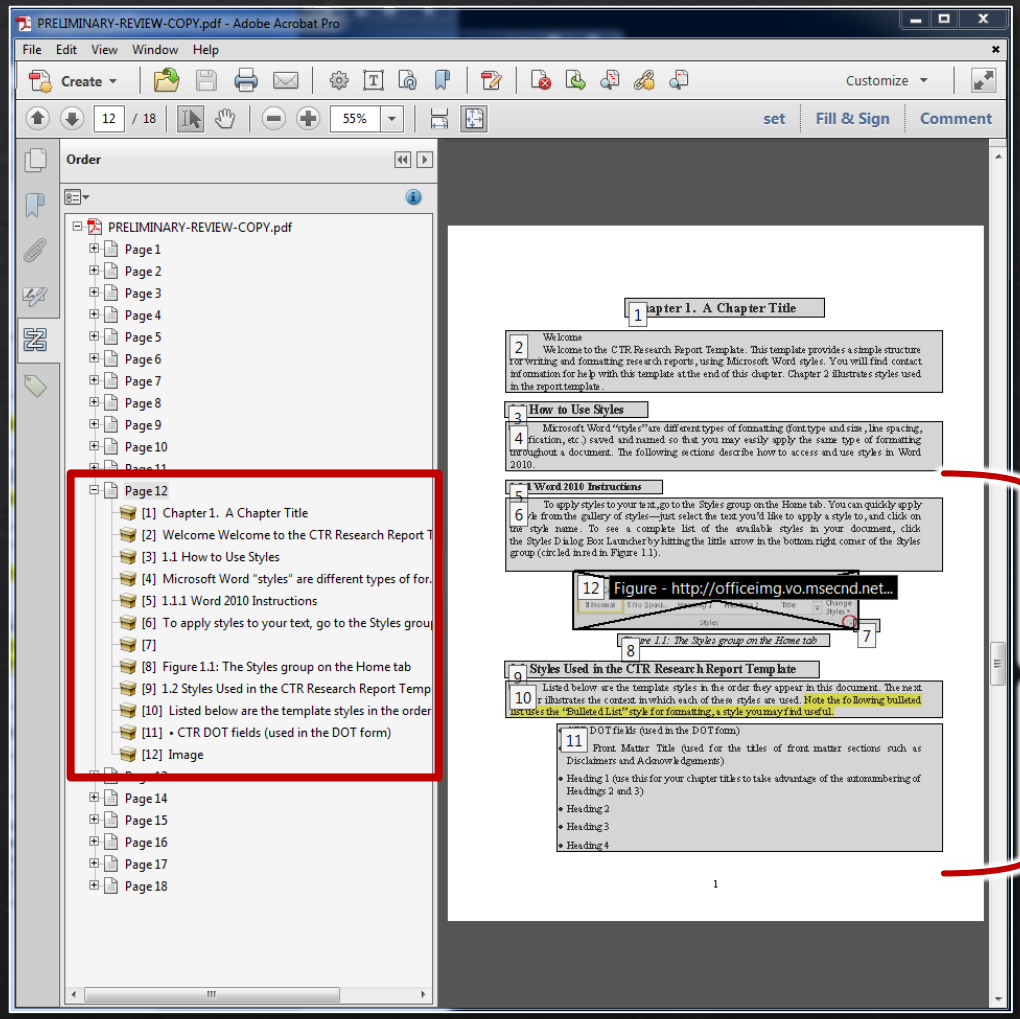
PDF Accessibility Checker



PDF Accessibility, pt. 3

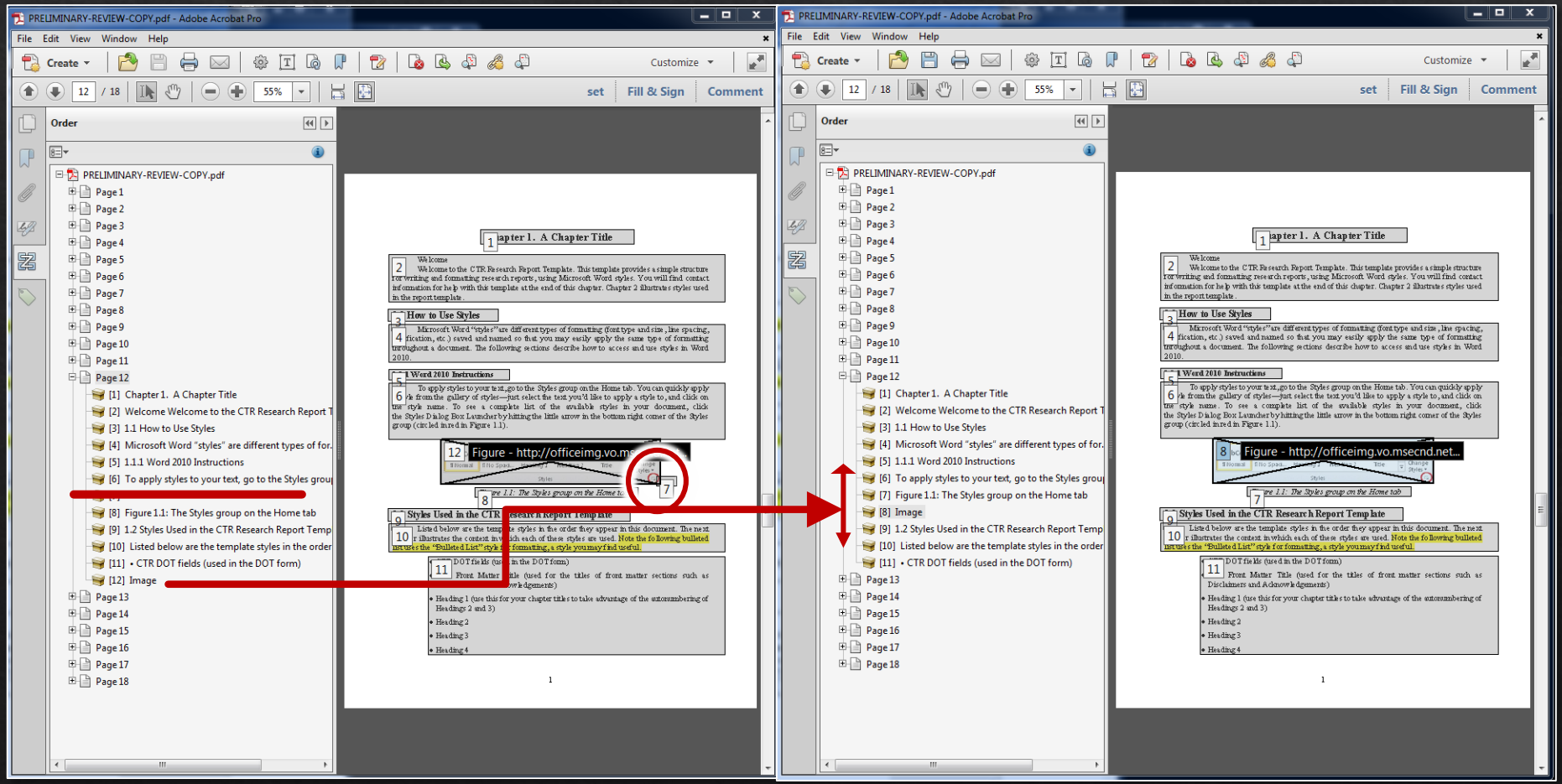
Reading Order

PDF Reading Order



- 6 (paragraph)
- 12 (image)
- 7 (blank spacing)
- 8 (image caption)
- 9 (heading)
- 10 (paragraph)
- 11 (list)

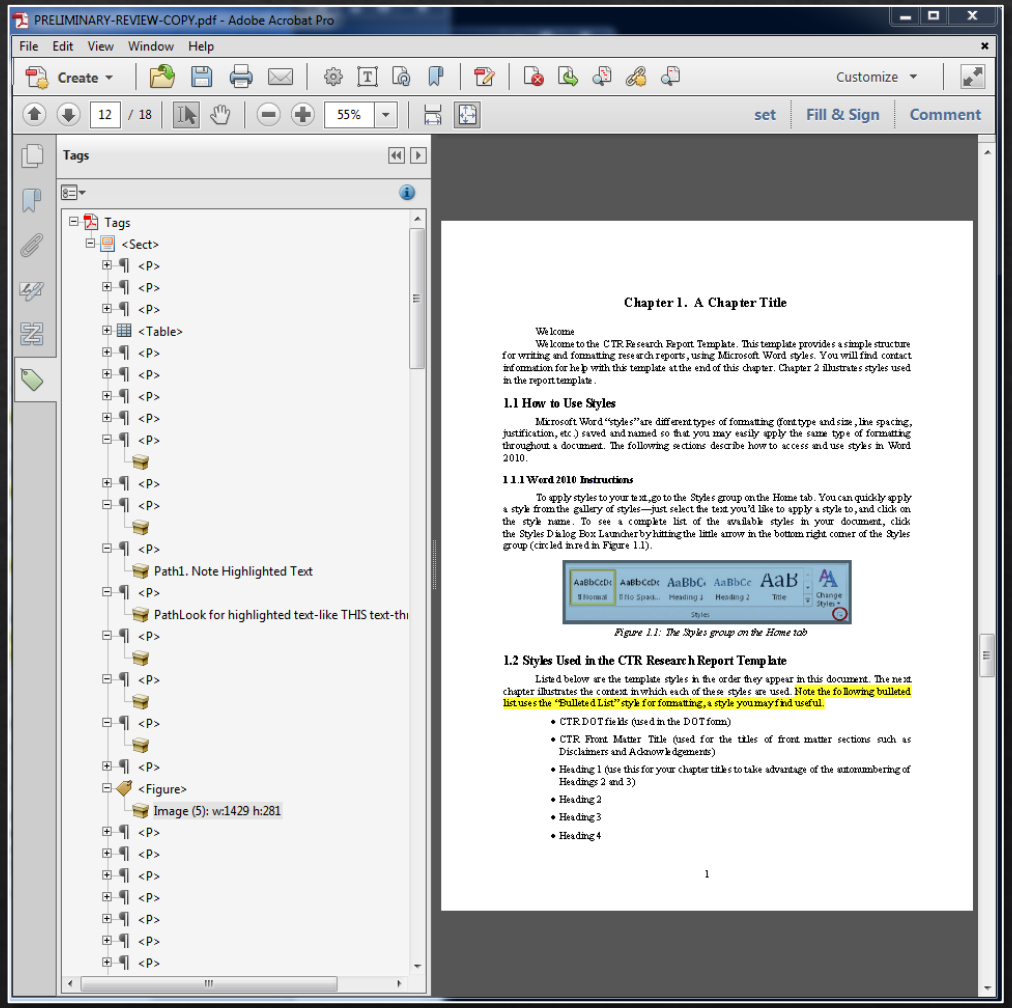
PDF Reading Order



PDF Accessibility, pt. 4

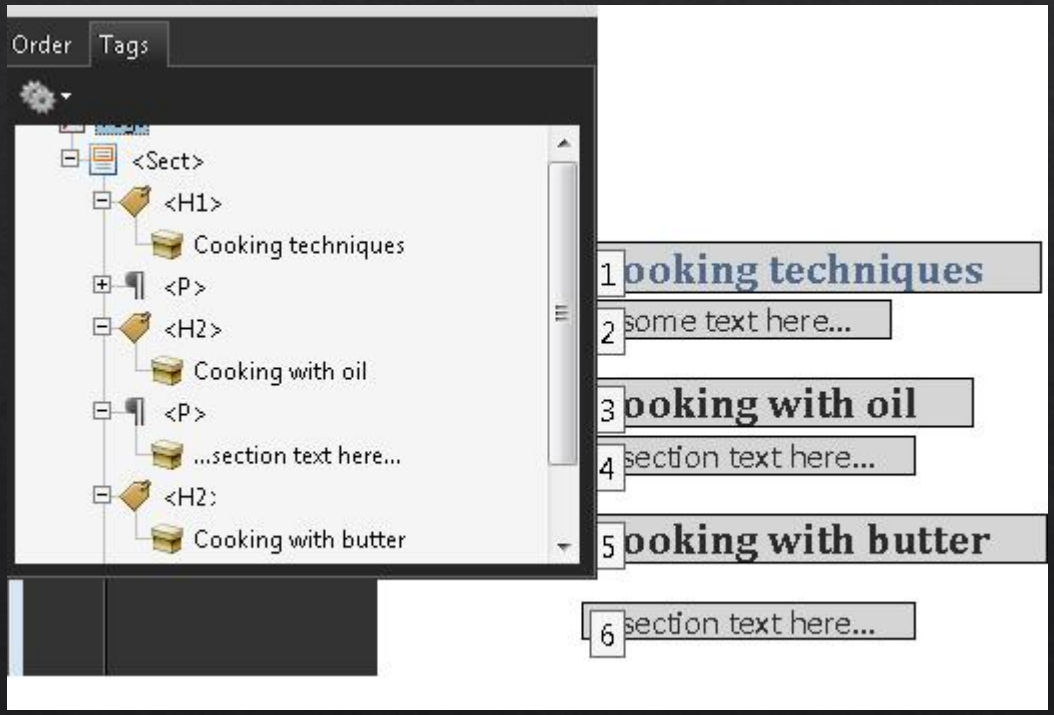
Tags – Advanced Remediation

PDF Tags



Manual check shows that none of the subheadings (section 1.1, subsection 1.1.1, etc.) are marked as nested headings.

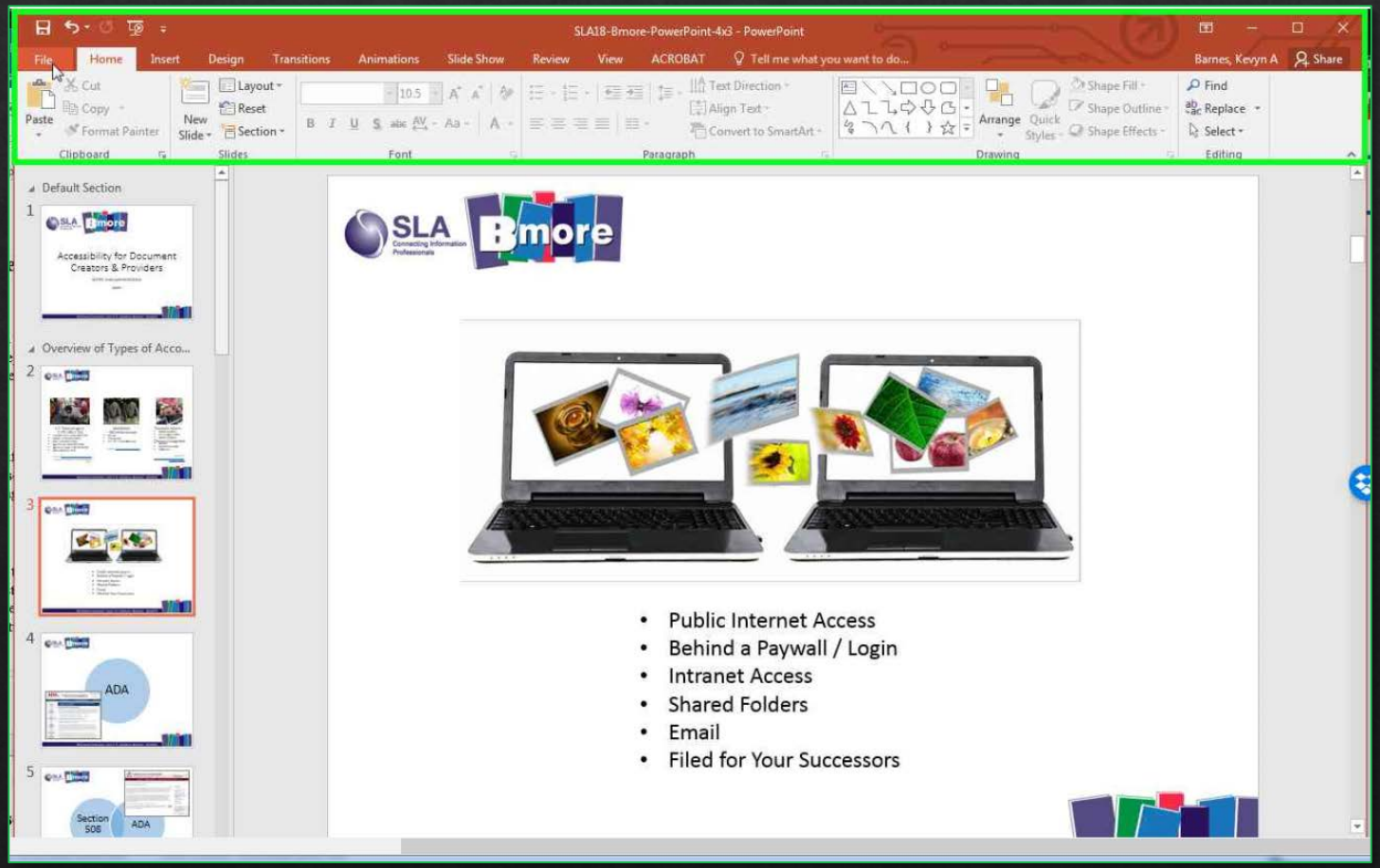
PDF Tags


Order
Tags
<Sect>
<H1>
Cooking techniques
<P>
<H2>
Cooking with oil
<P>
...section text here...
<H2>
Cooking with butter
1 ooking techniques
2 some text here...
3 ooking with oil
4 section text here...
5 ooking with butter
6 section text here...

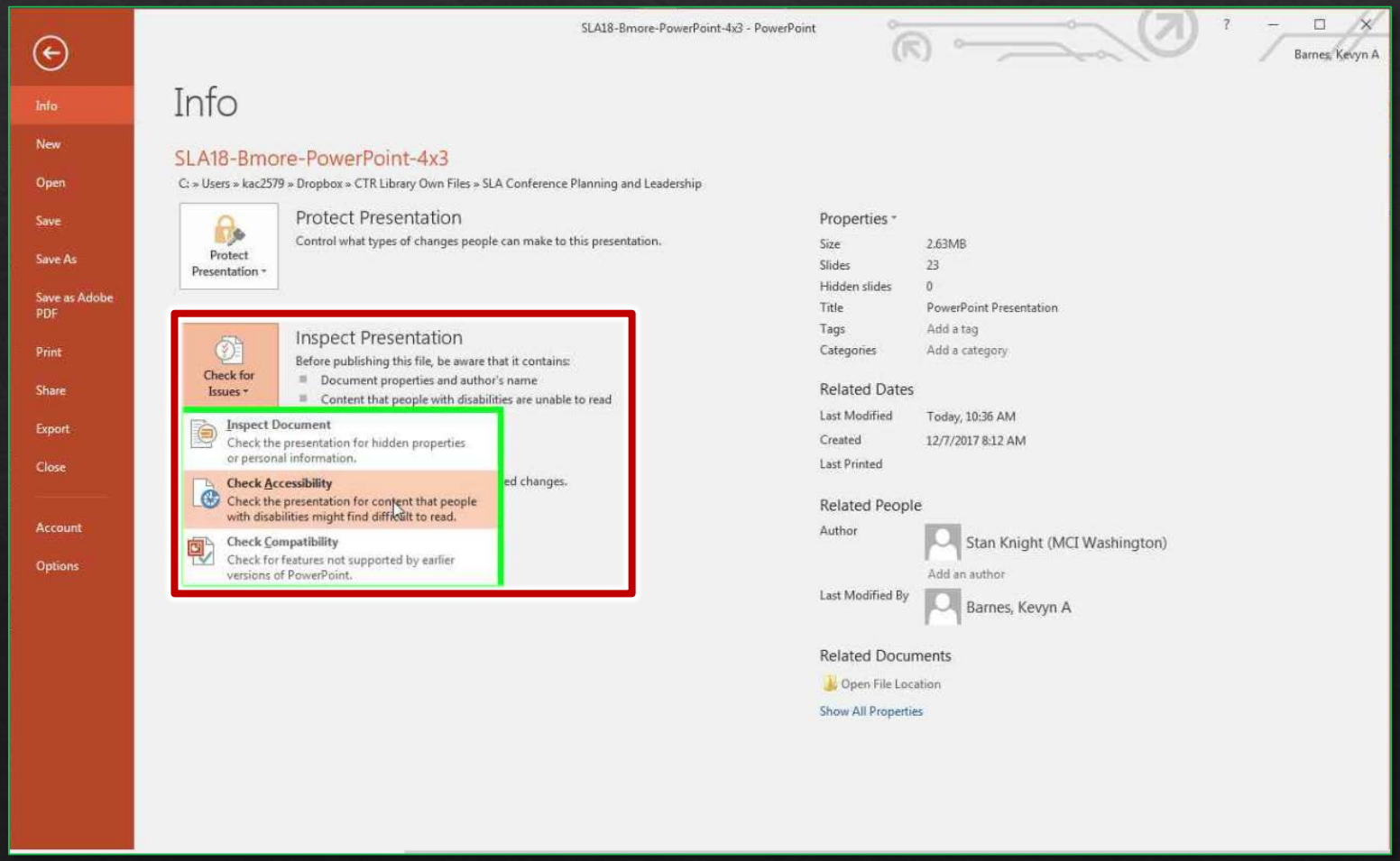
MS Office Accessibility

Built-in Accessibility Checker

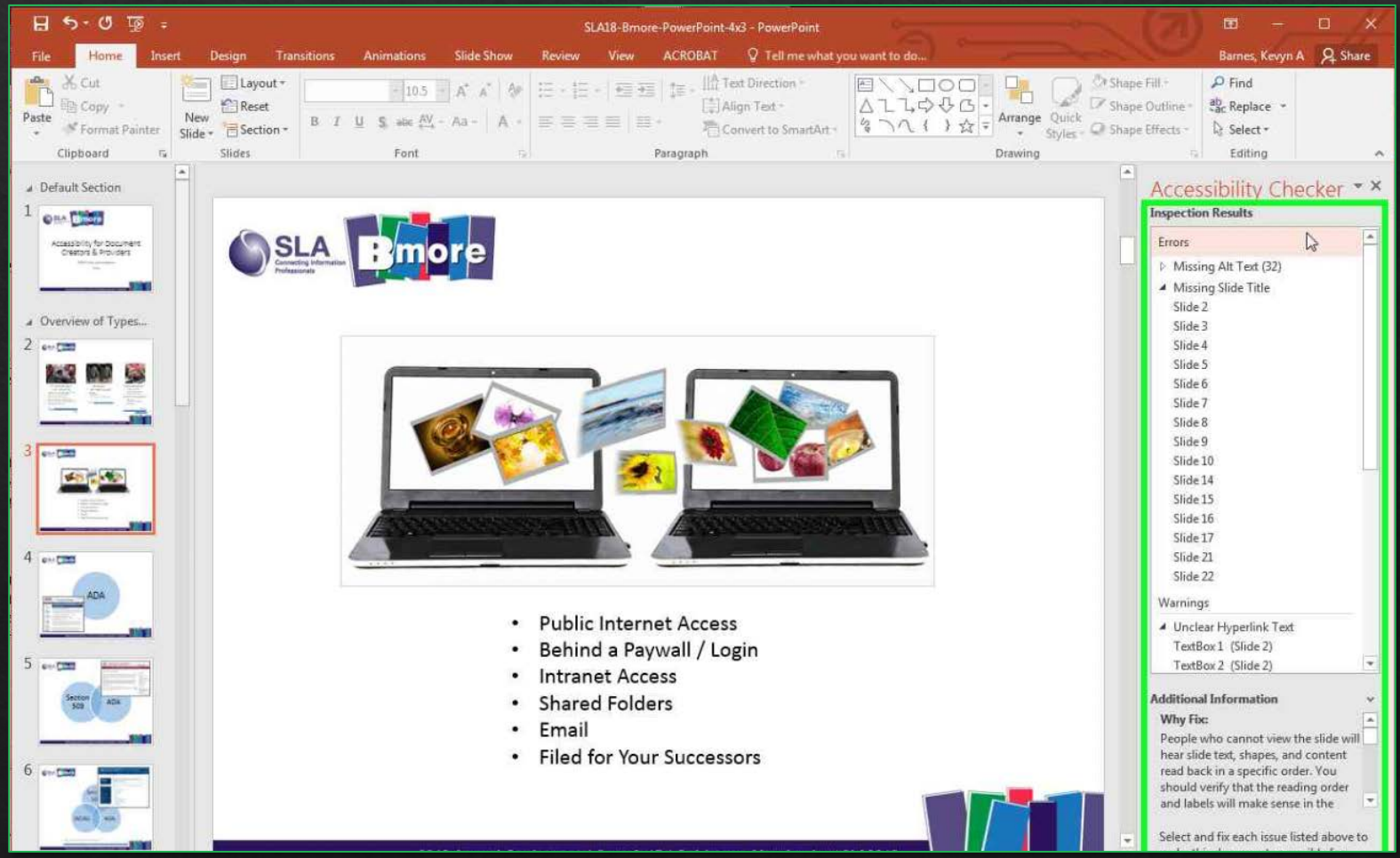
MS Office Accessibility Check



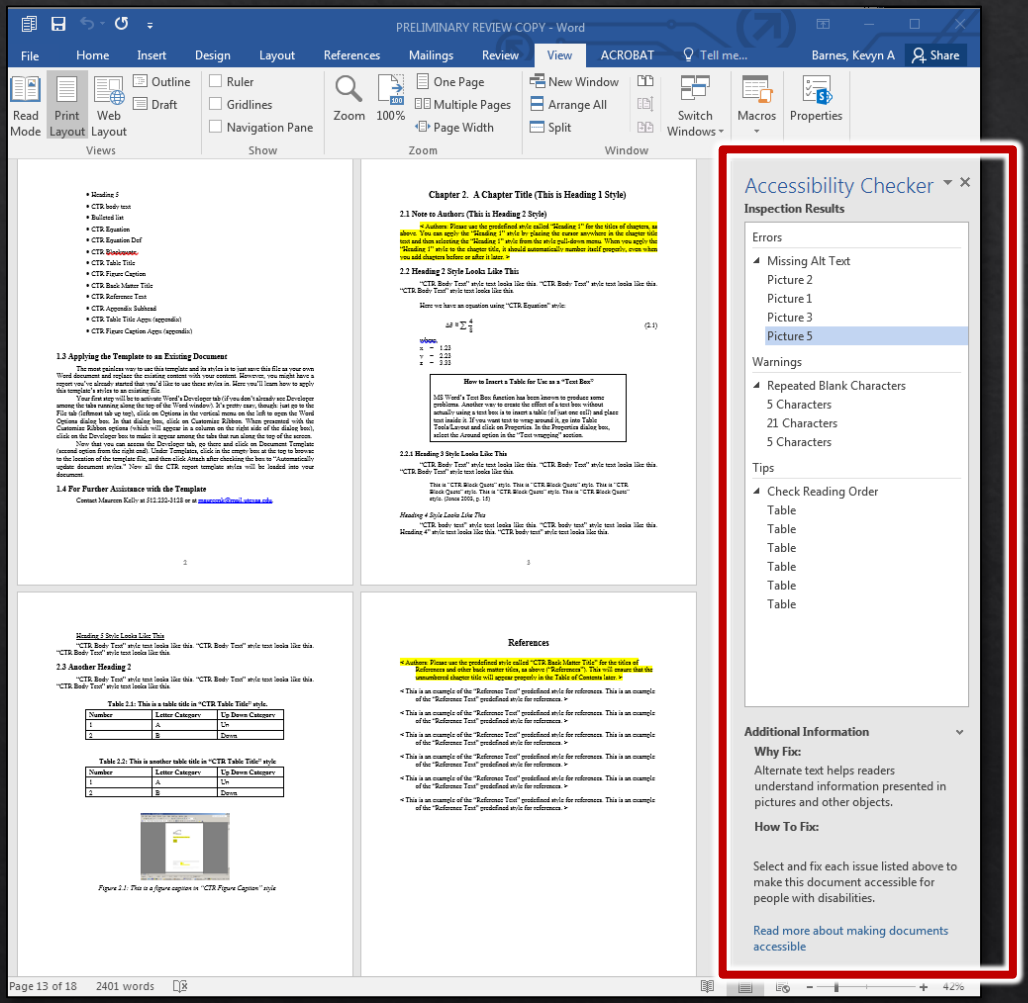
MS Office Accessibility Check



Accessibility Check Results: PPTX

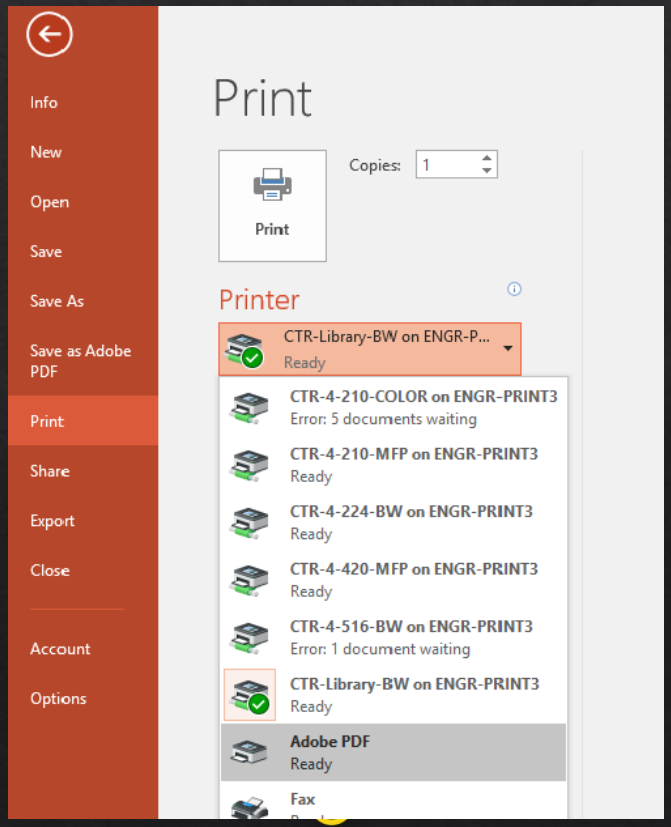


Accessibility Check Results: DOC

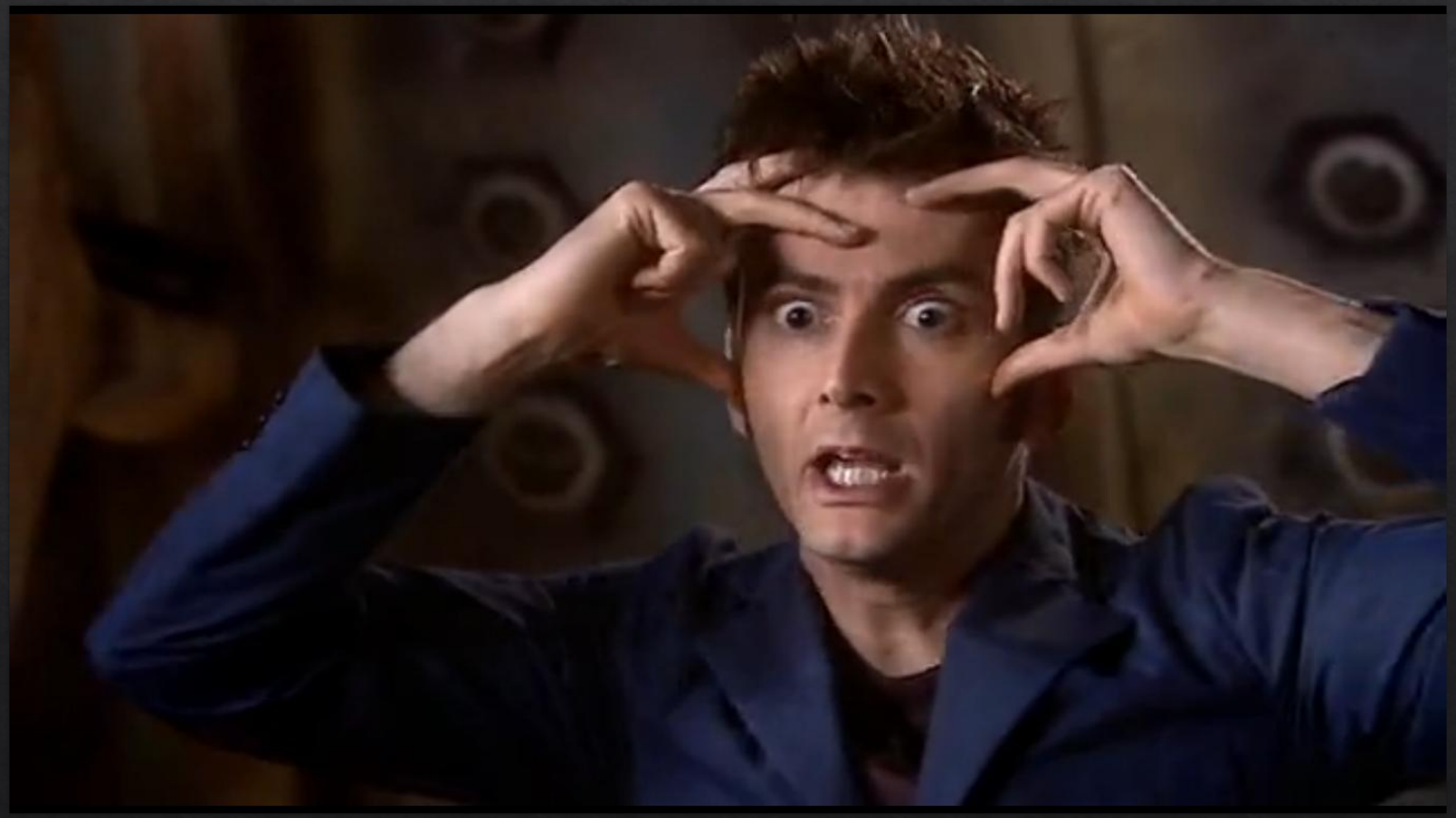


Warning

Here is How to Waste All Your Good Efforts



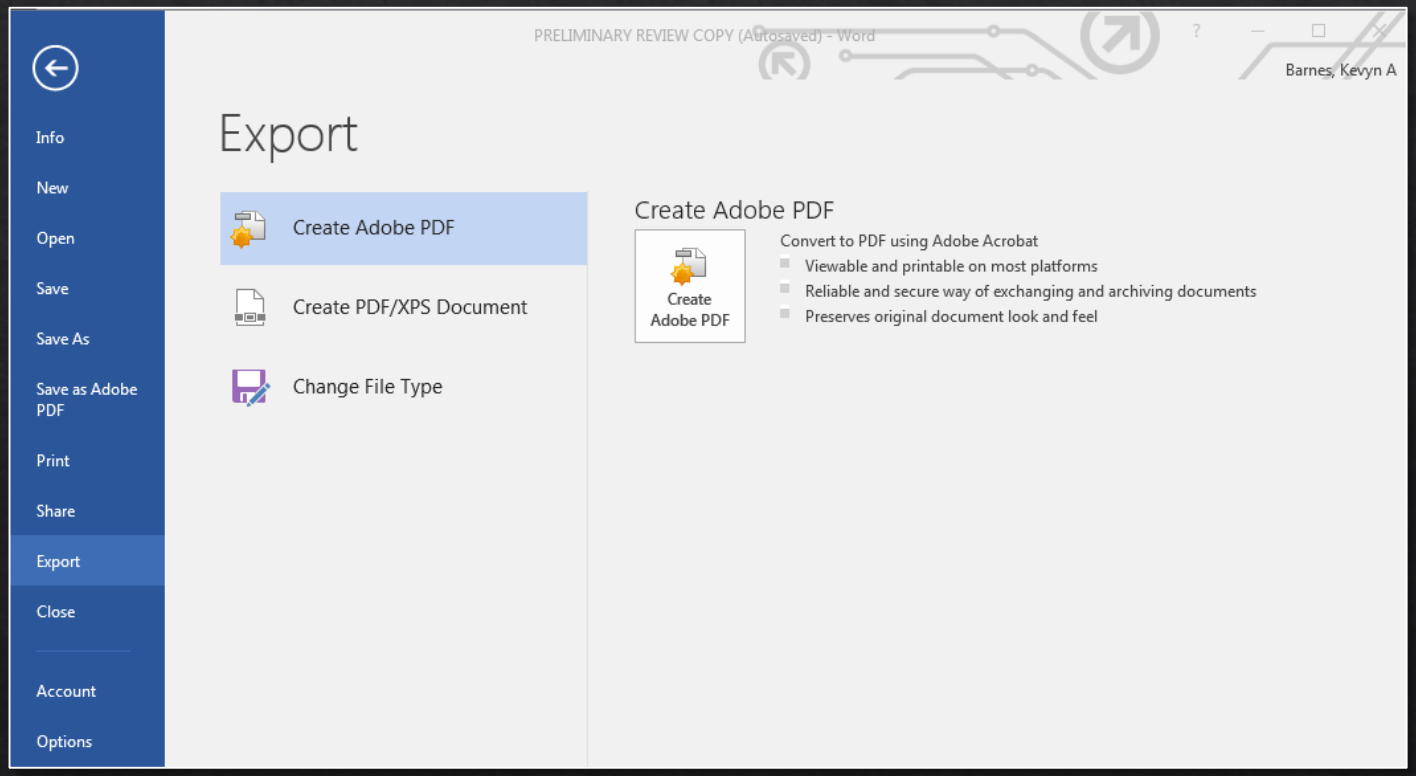
“Print” ≠ Accessible



Converting to PDF

Export

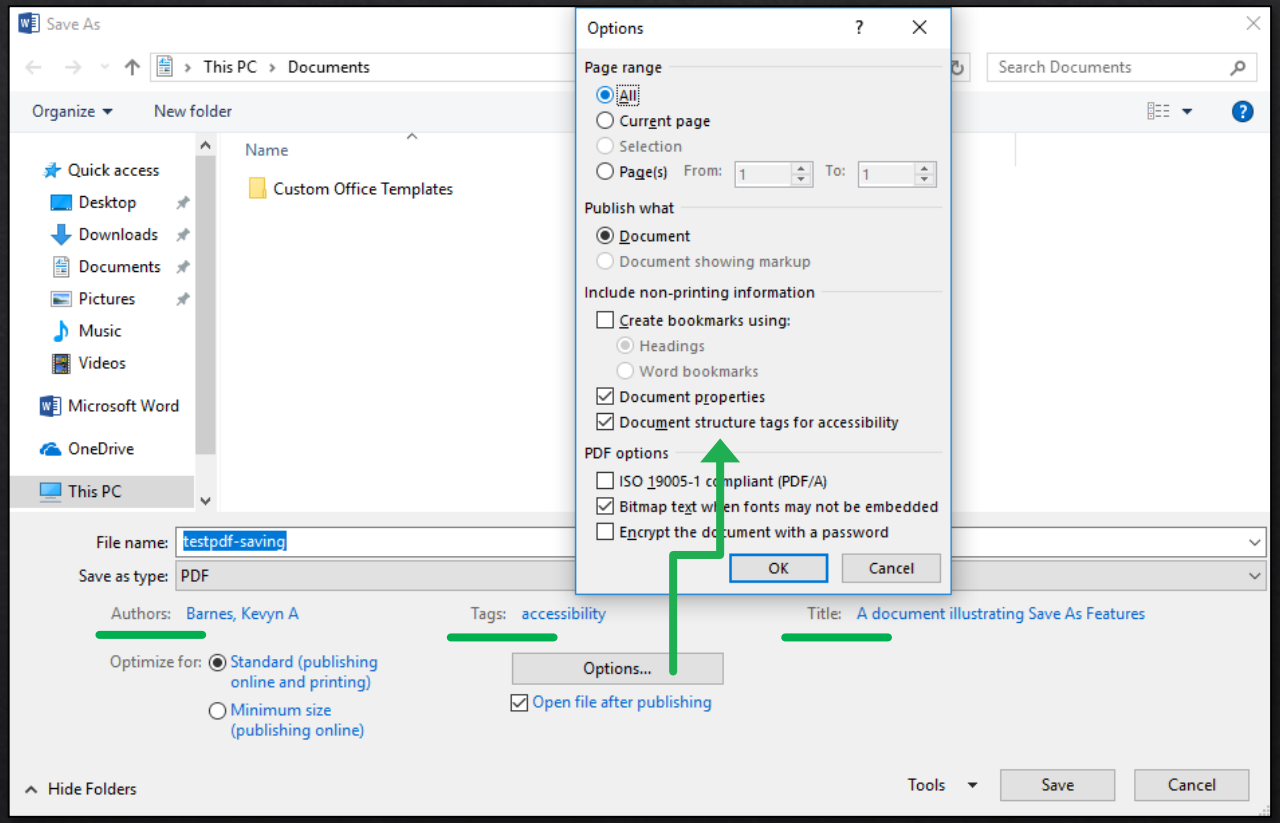
Save as Adobe PDF



Converting to PDF

Export

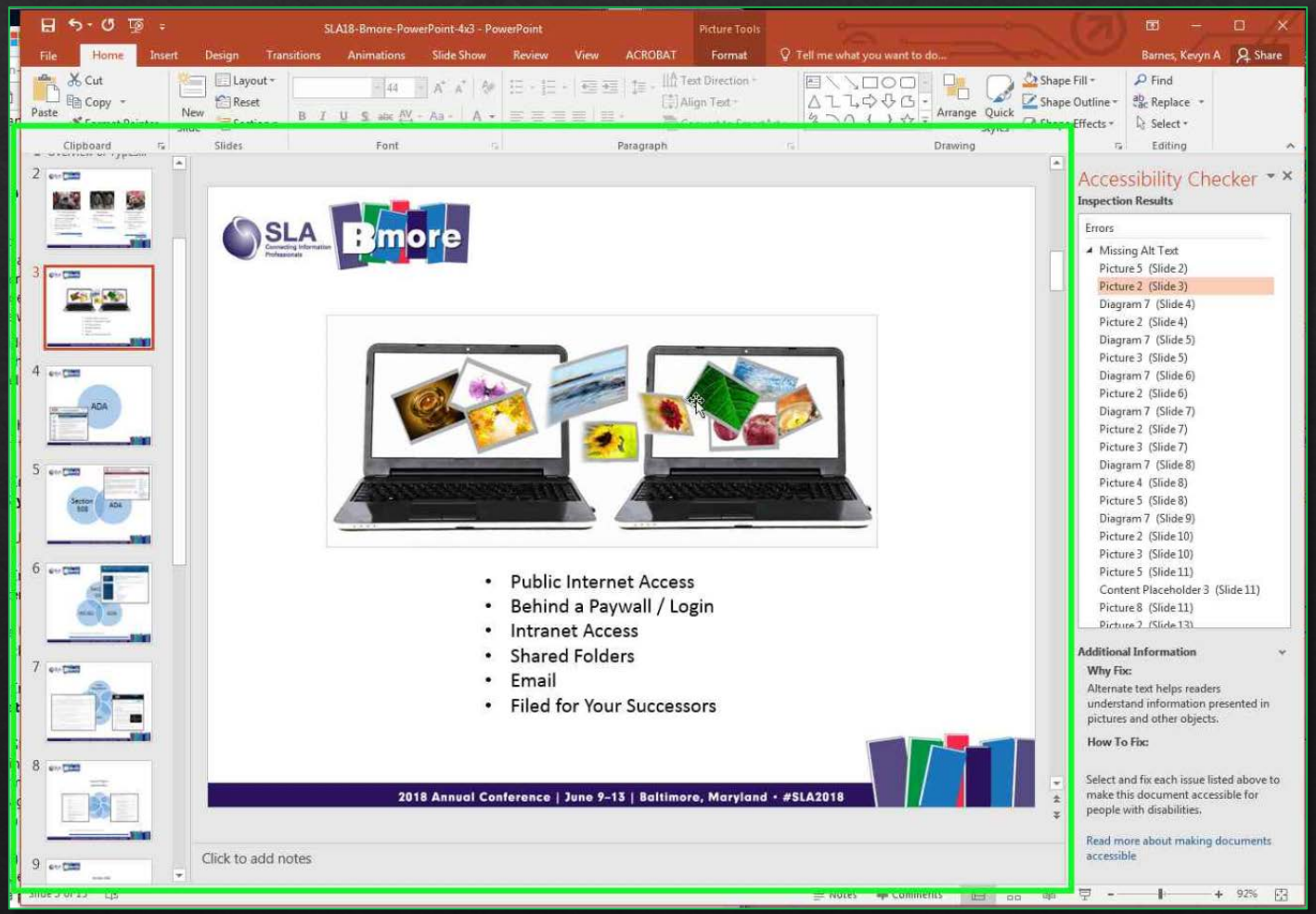
Save as Adobe PDF



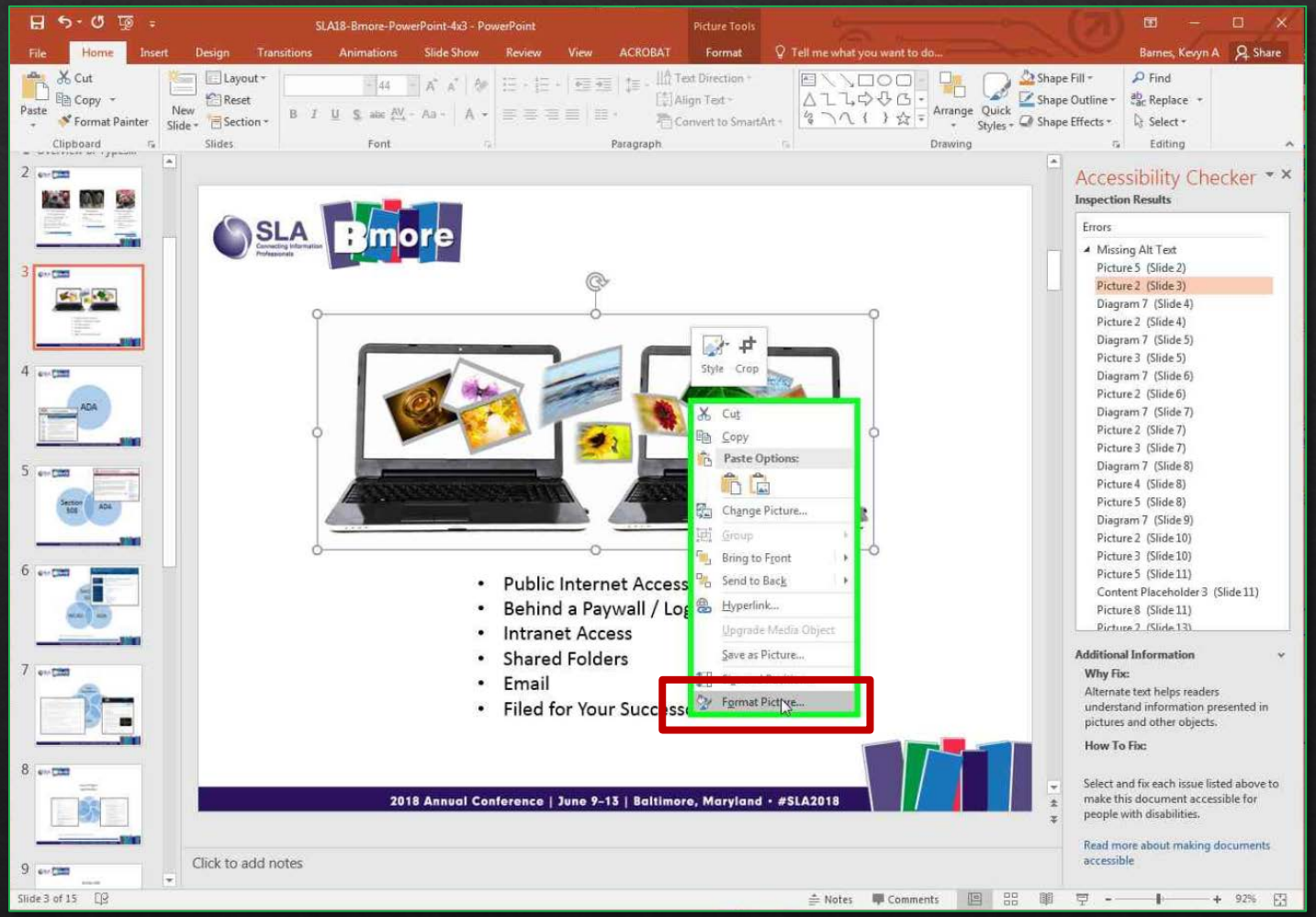
MS Office Accessibility

Making Images Perceivable

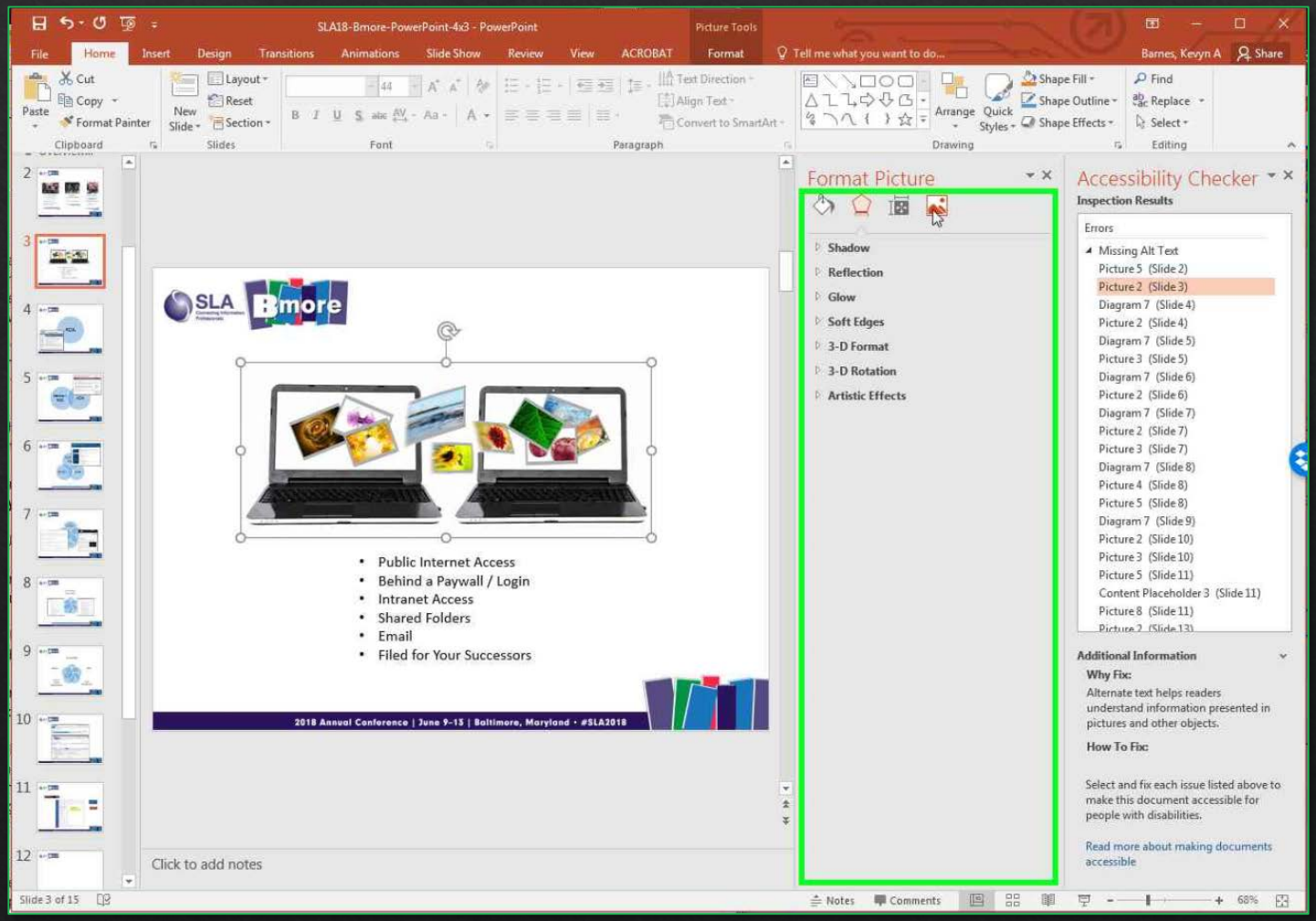
Making Images Perceivable



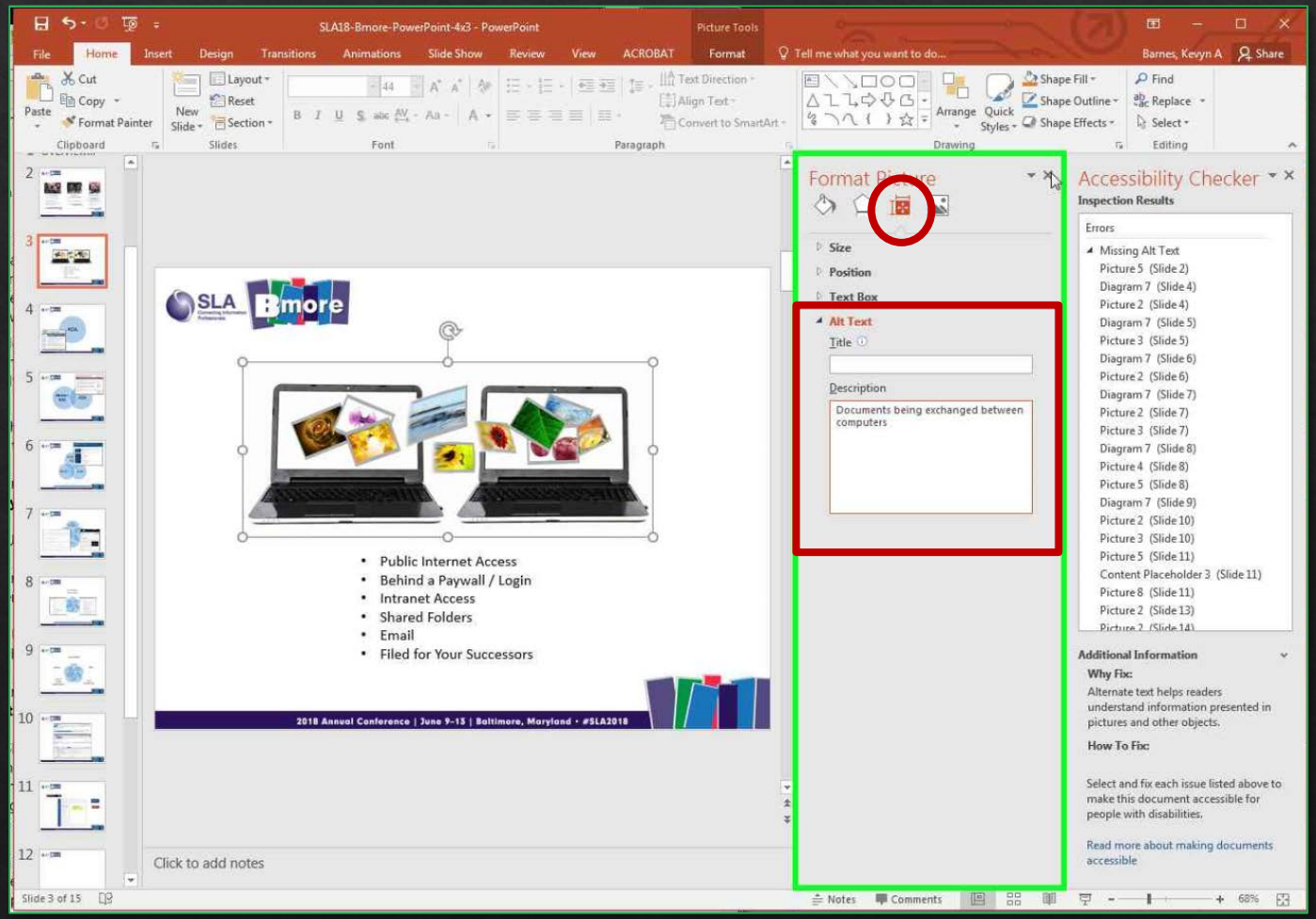
Making Images Perceivable



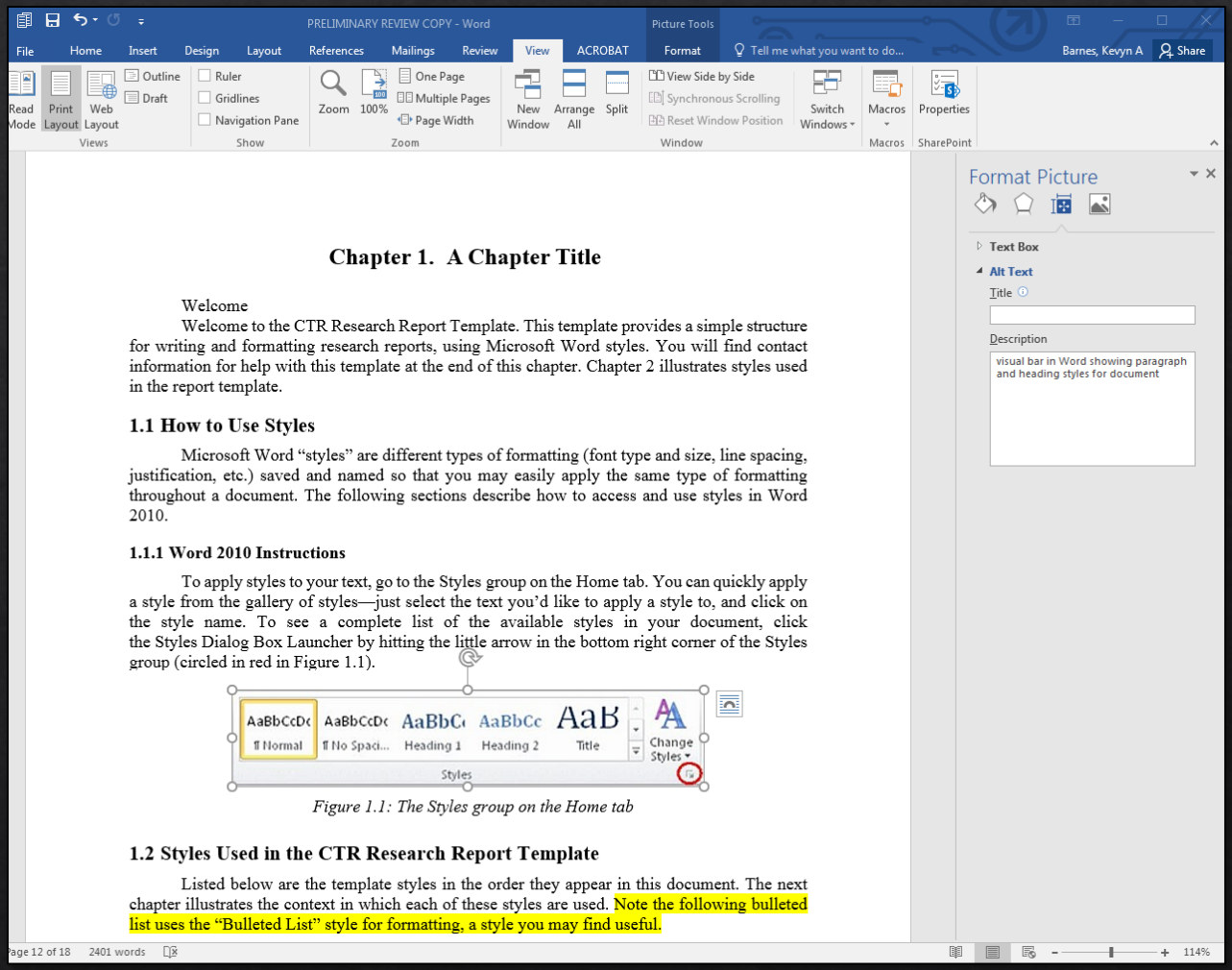
Making Images Perceivable



Making Images Perceivable



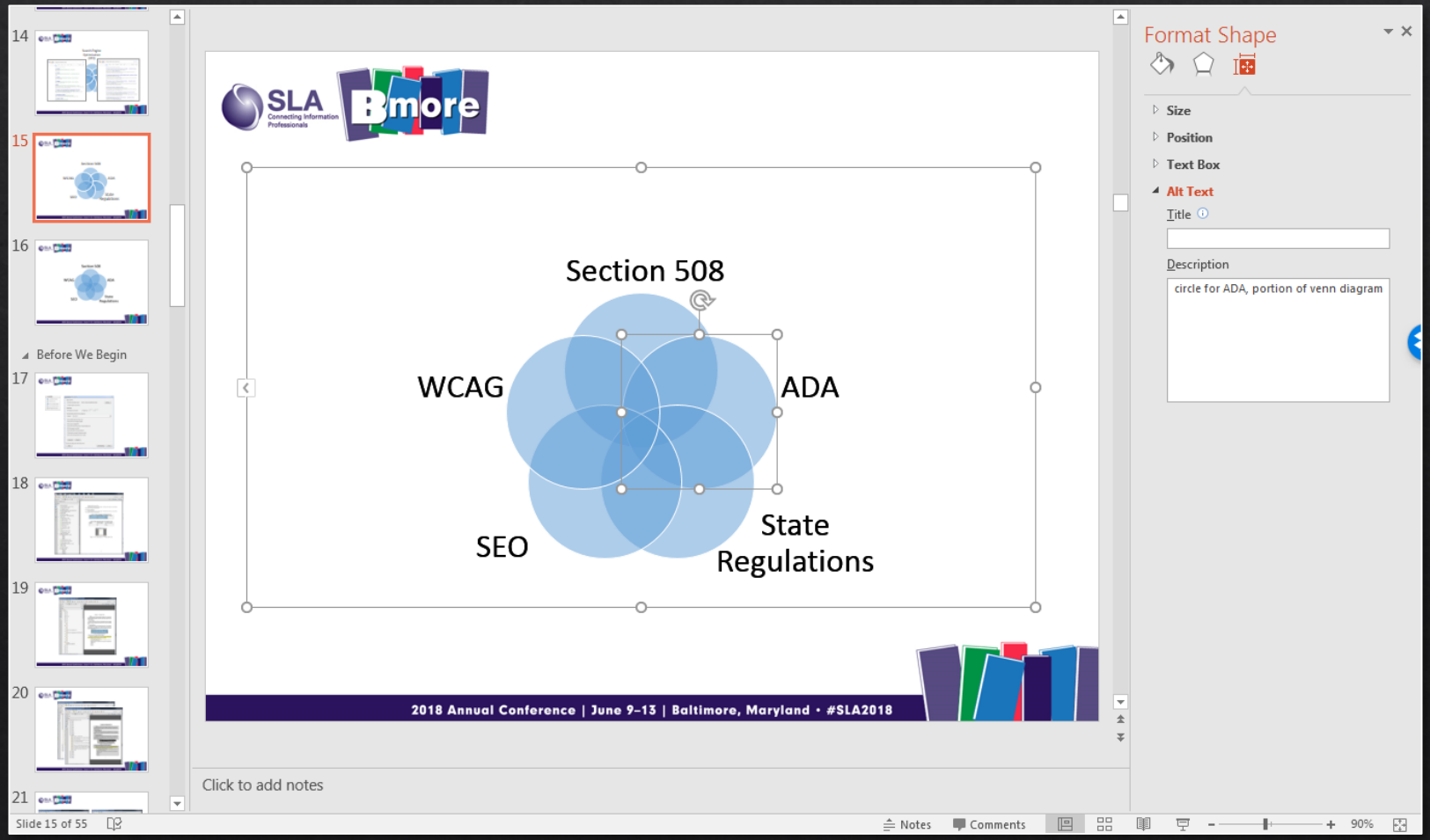
Making Images Perceivable



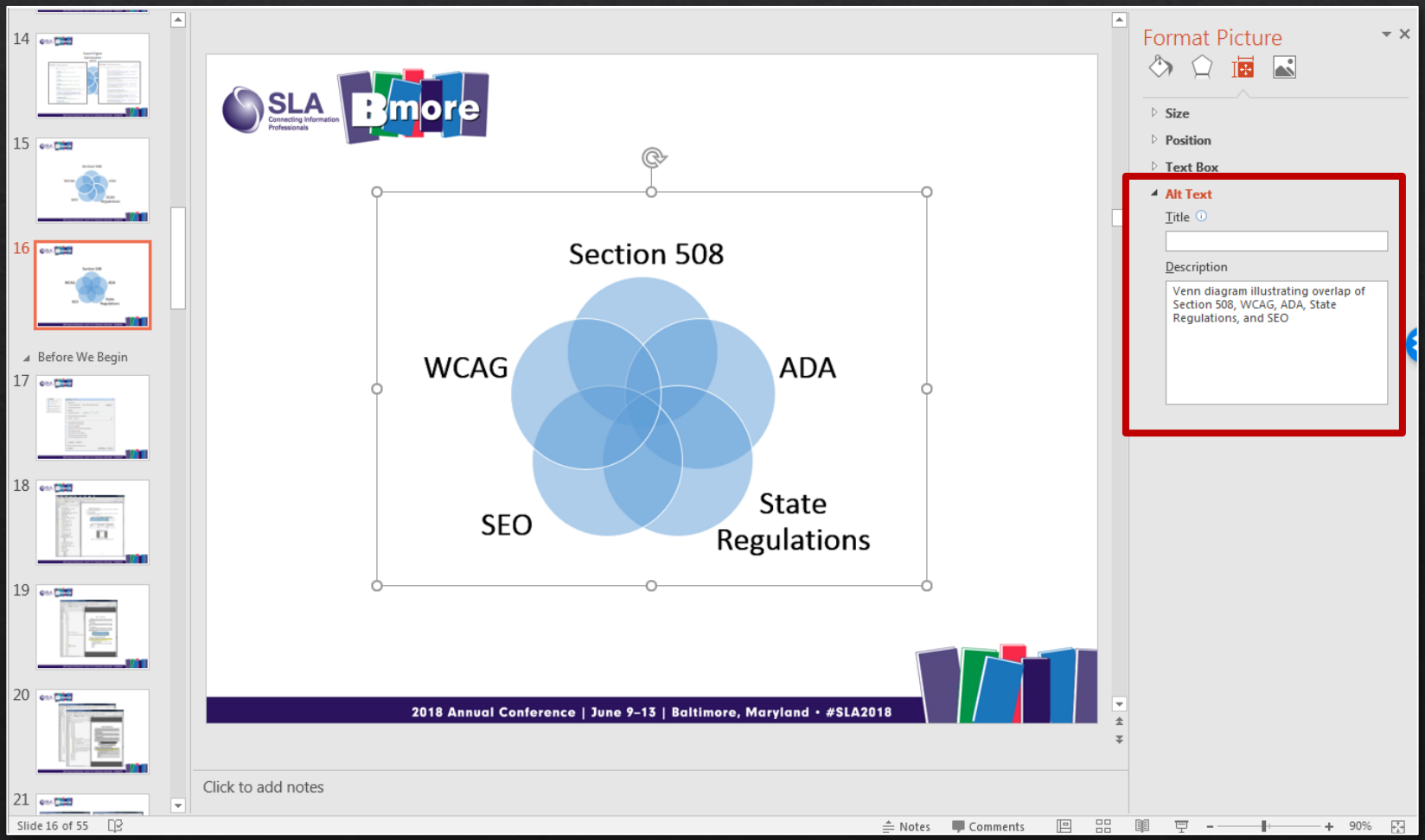
MS Office Accessibility

Making SmartArt Perceivable

Making Smart Art Perceivable



Making Smart Art Perceivable



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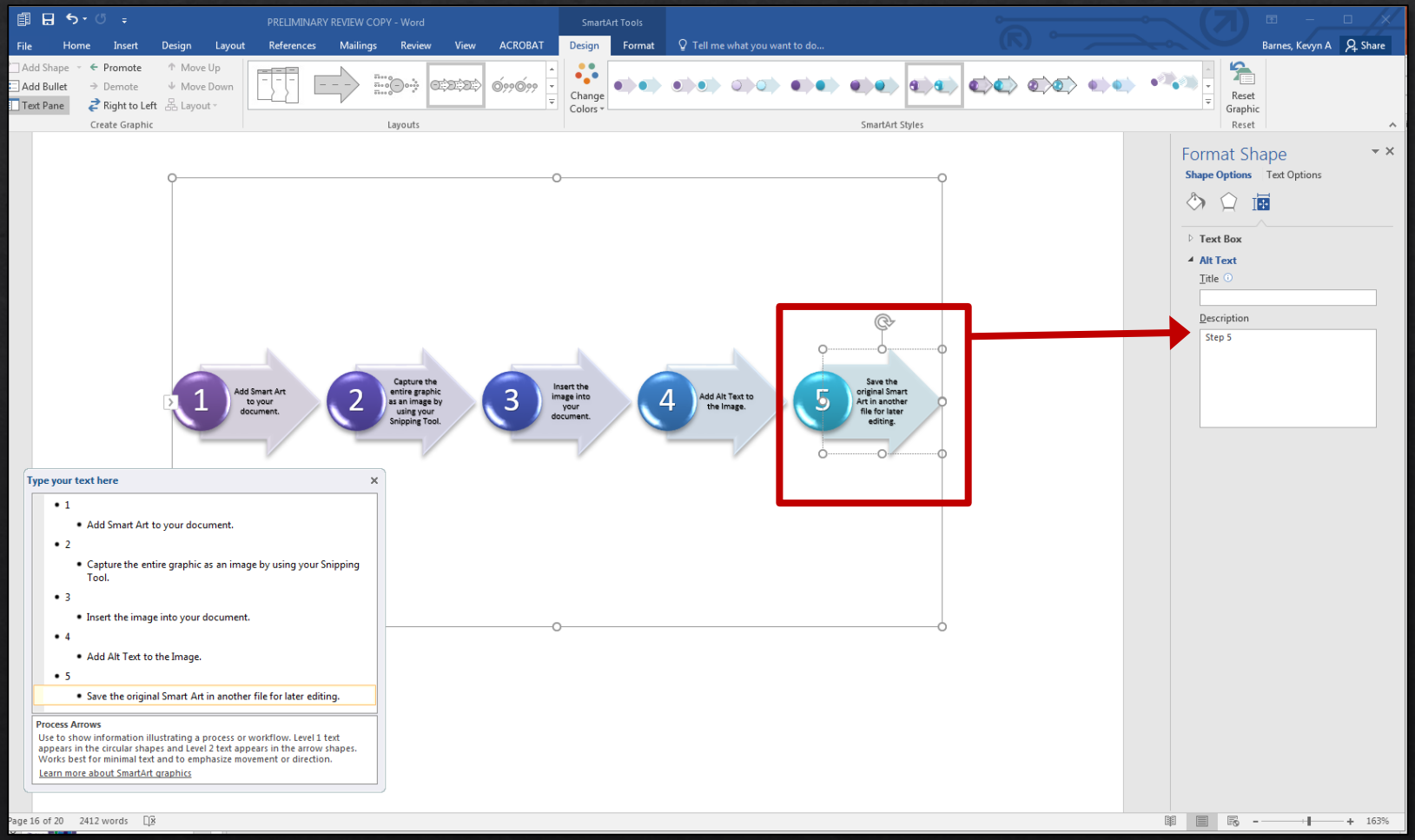

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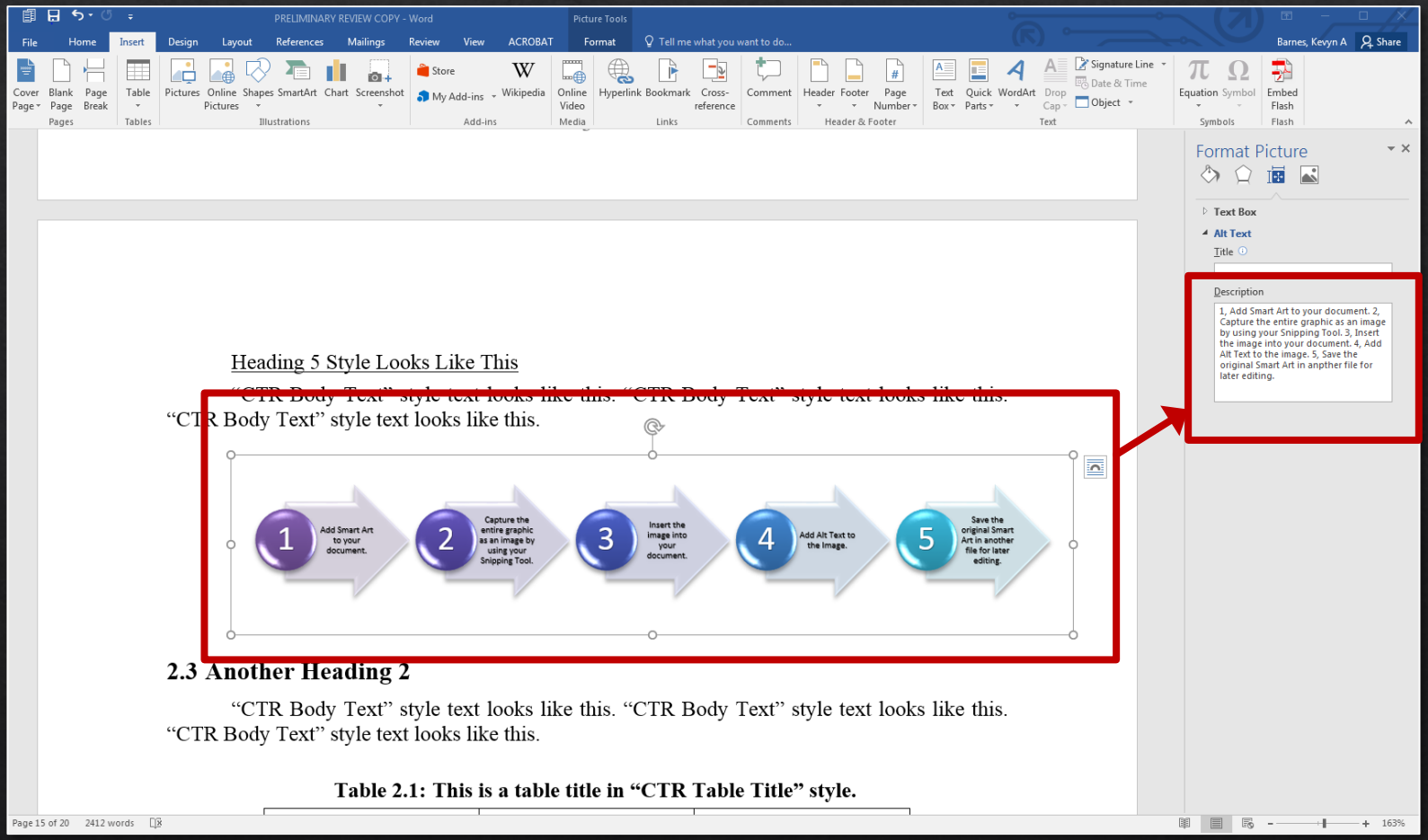
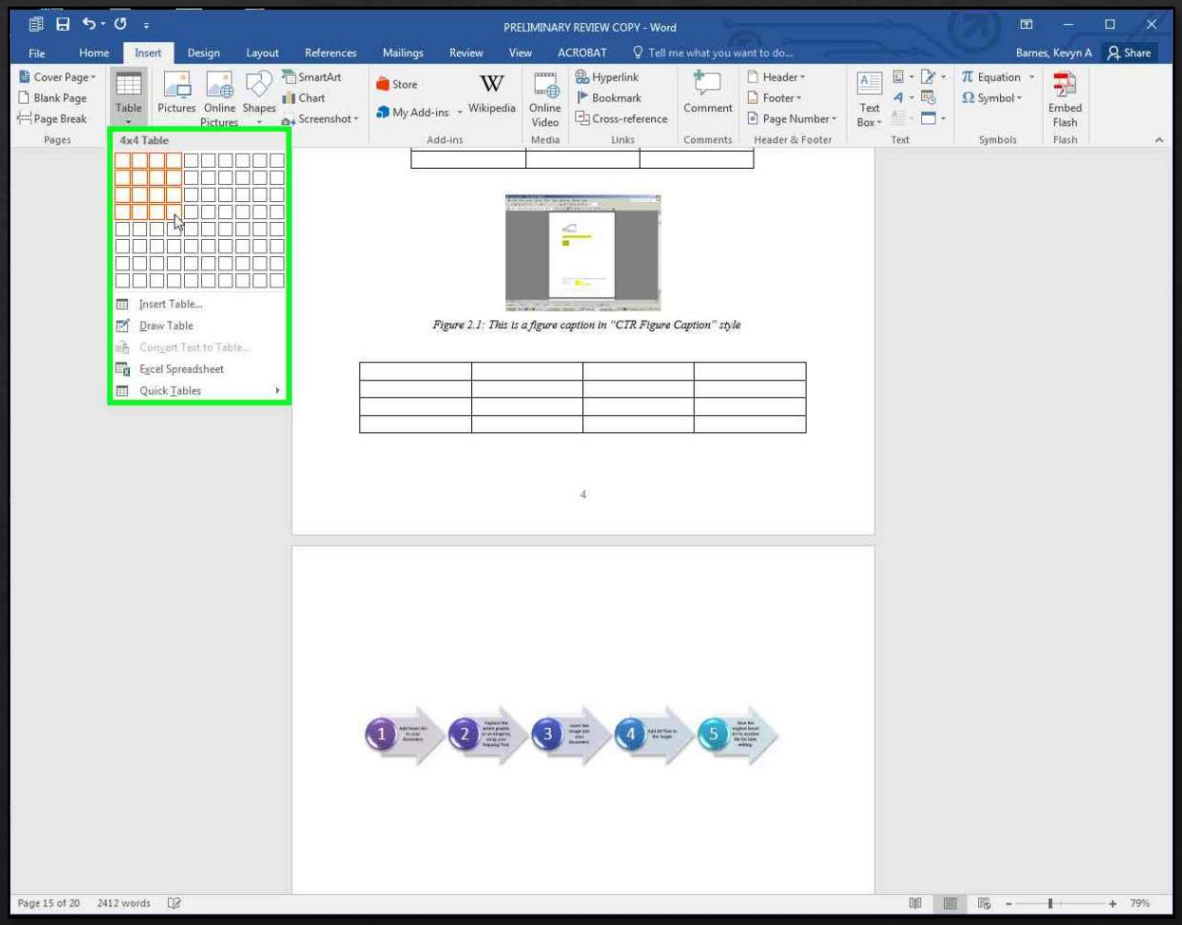


MS Office Accessibility

Making Tables Perceivable

Making Tables Perceivable: Caption



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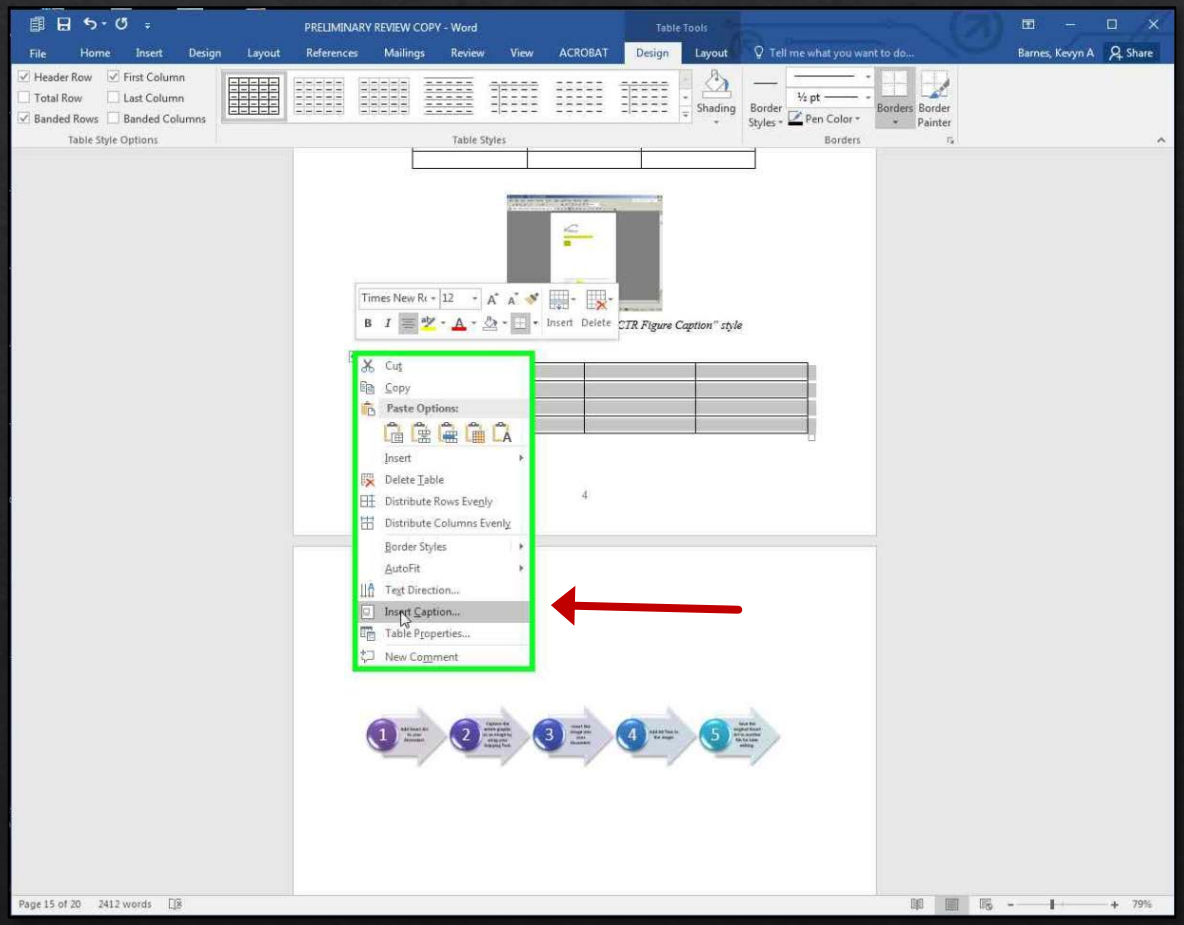
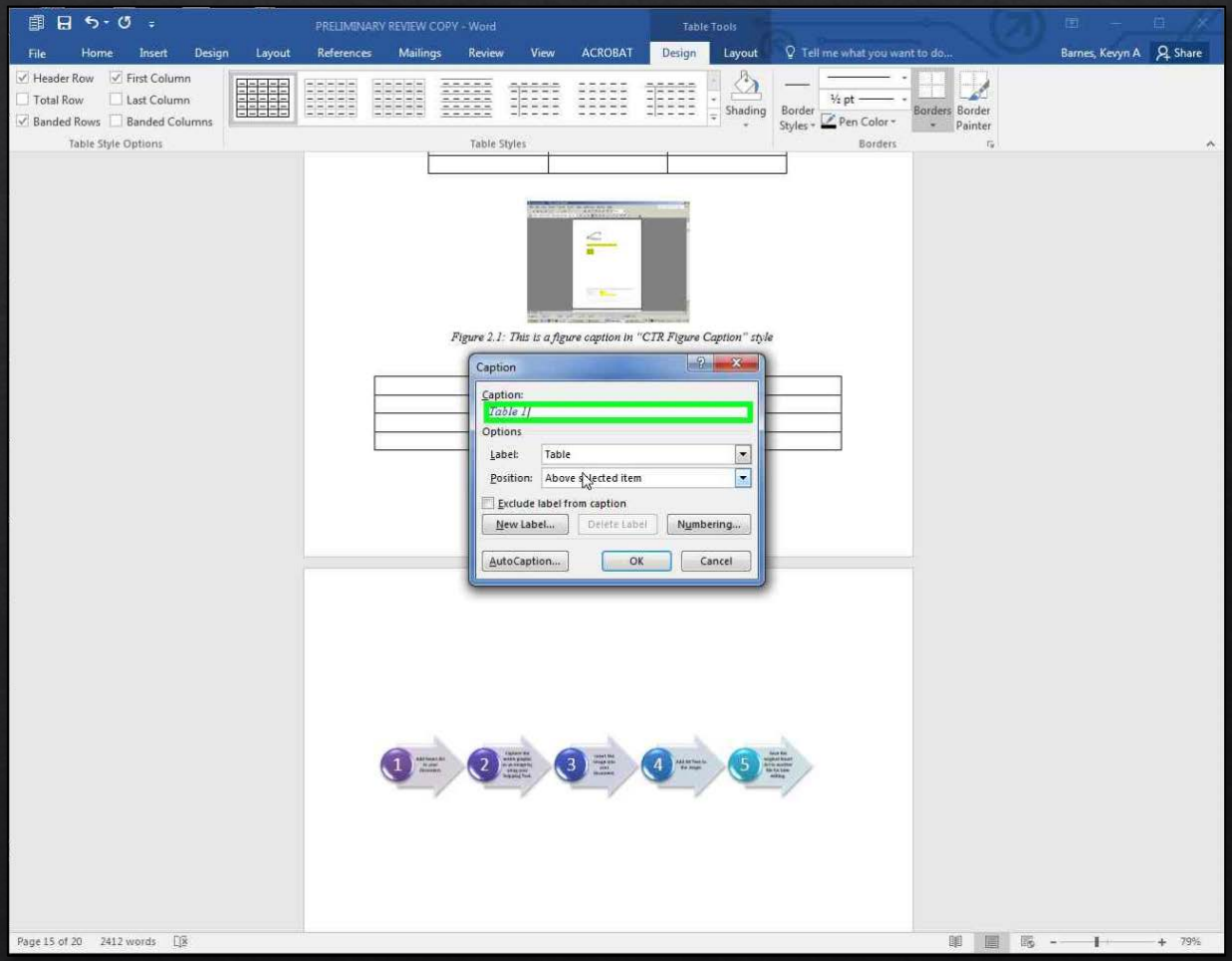


Making Tables Perceivable: Caption



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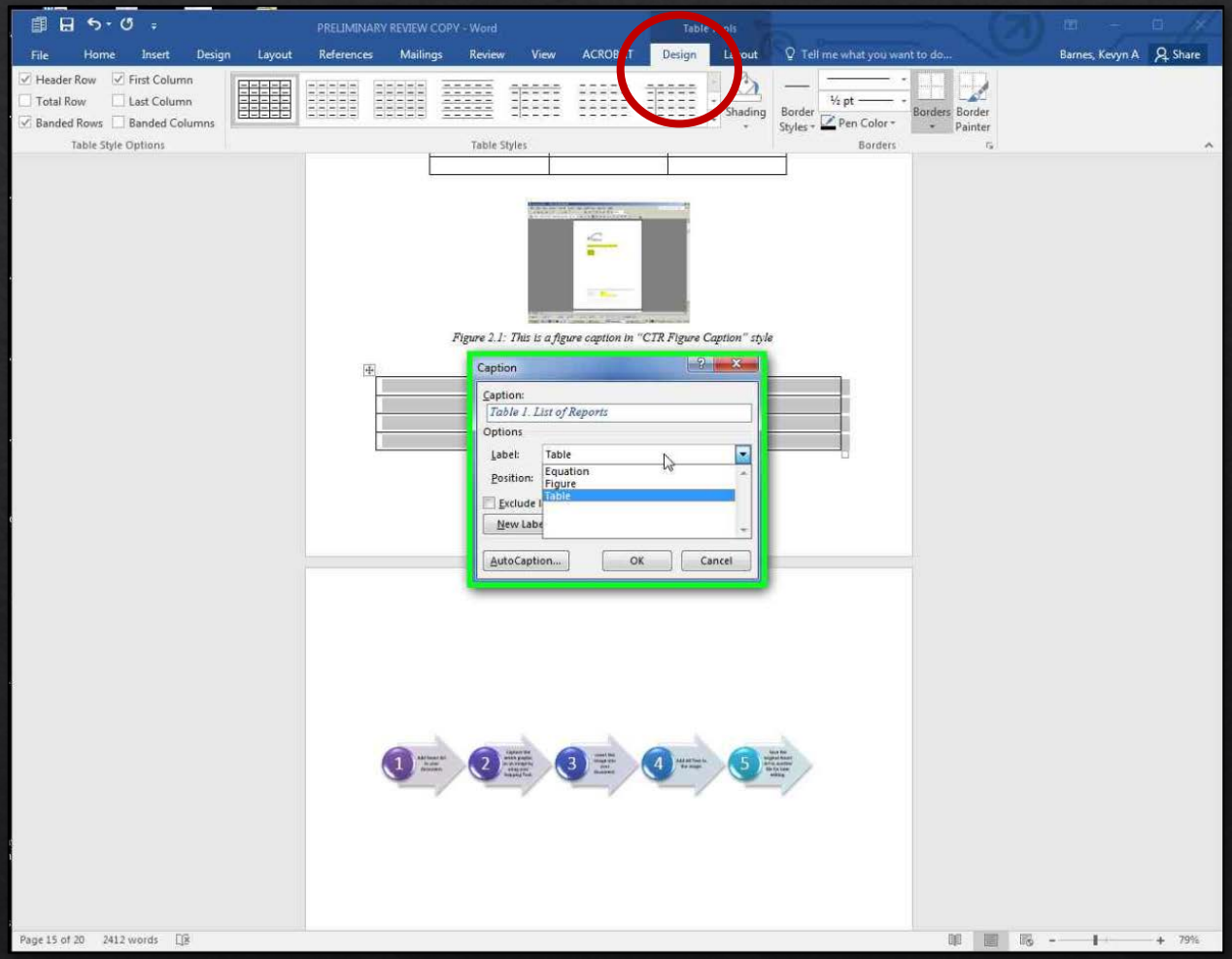

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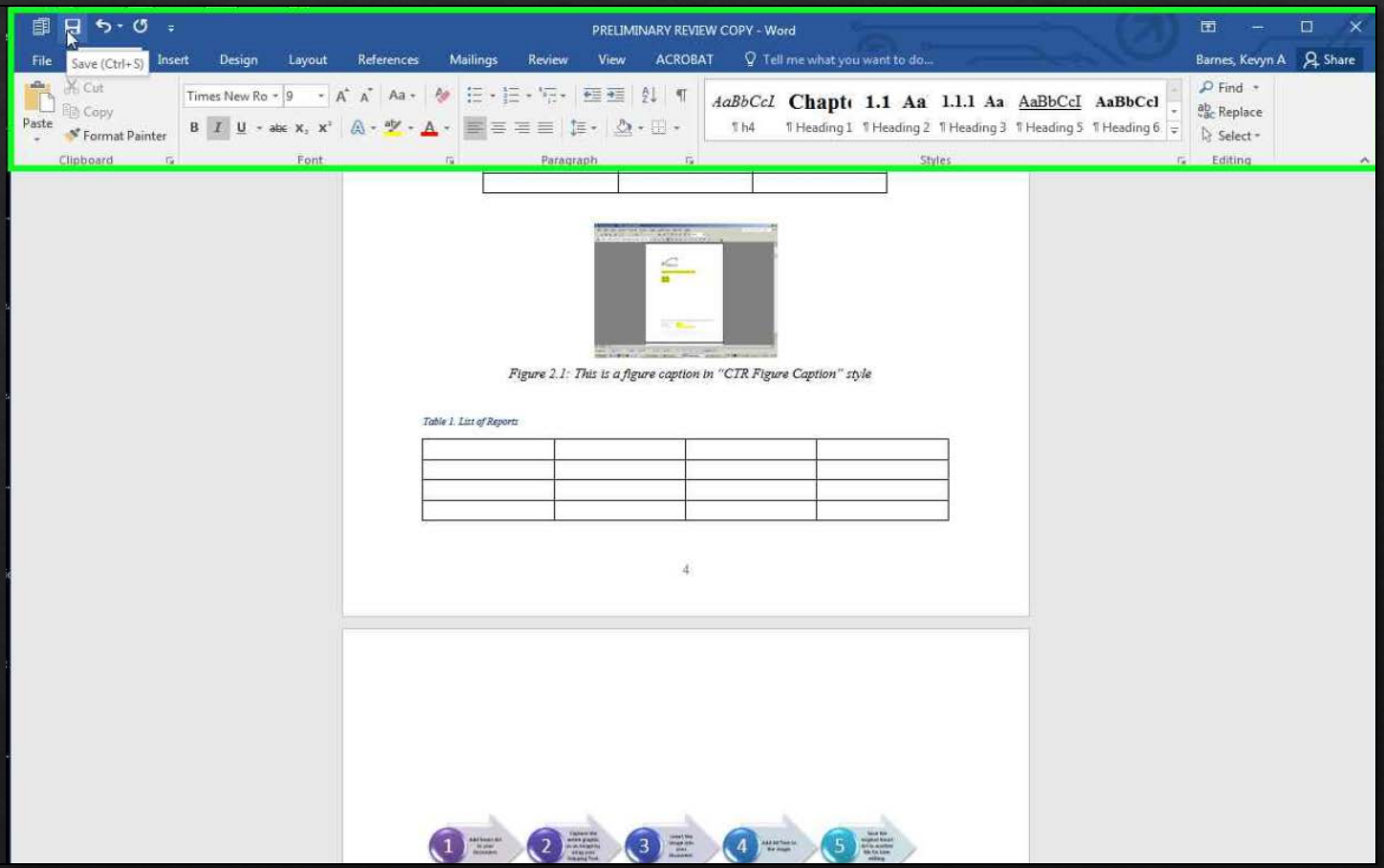
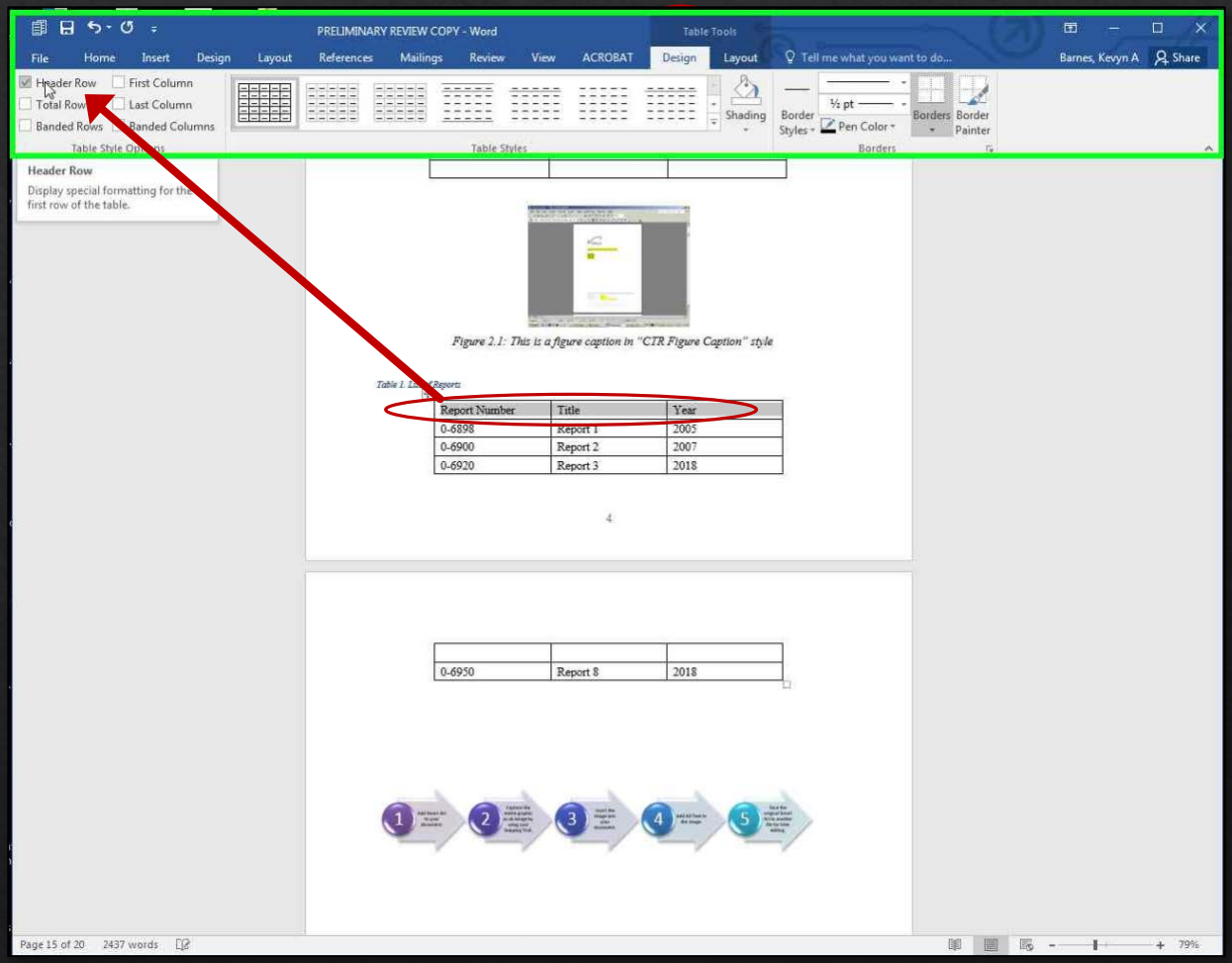
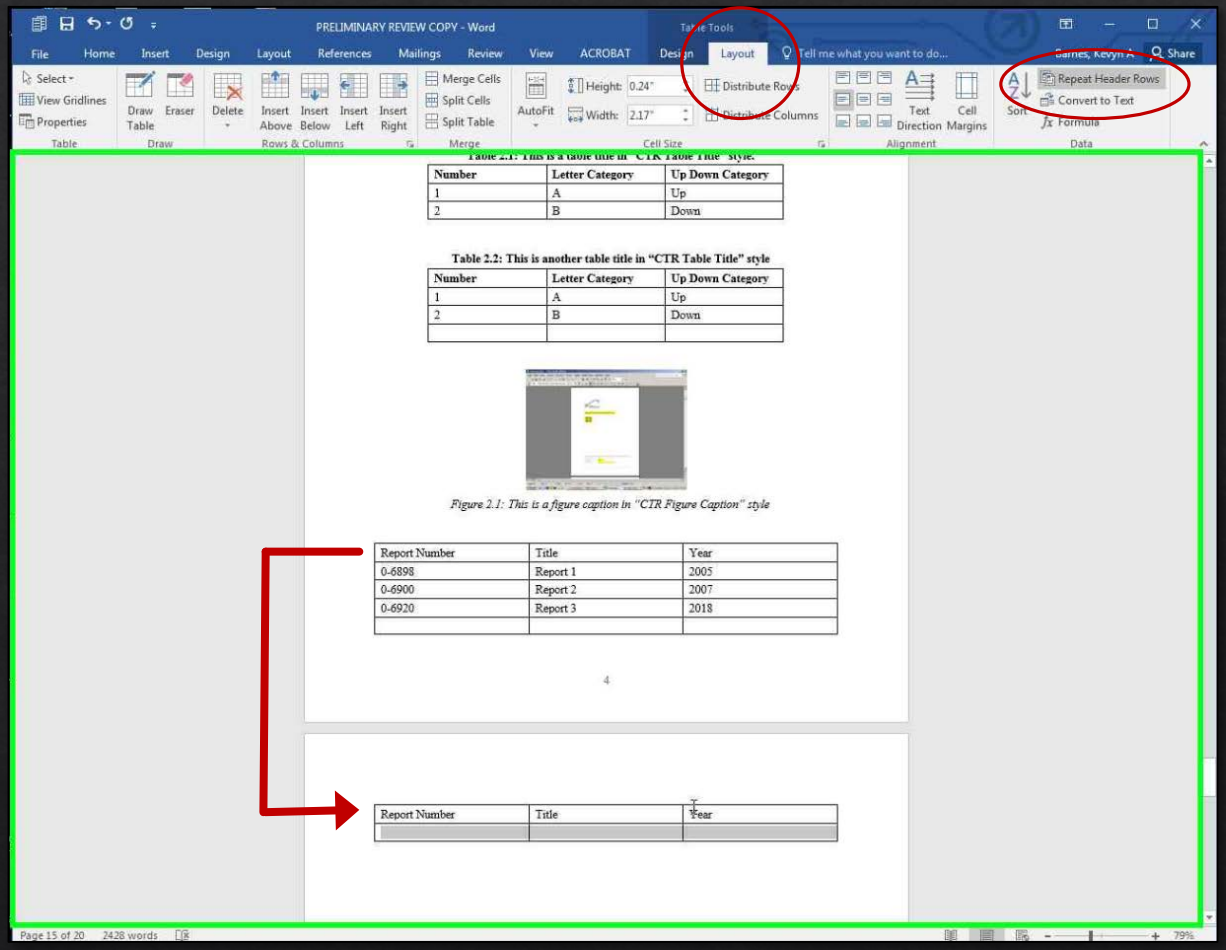


Making Tables Perceivable: Headers



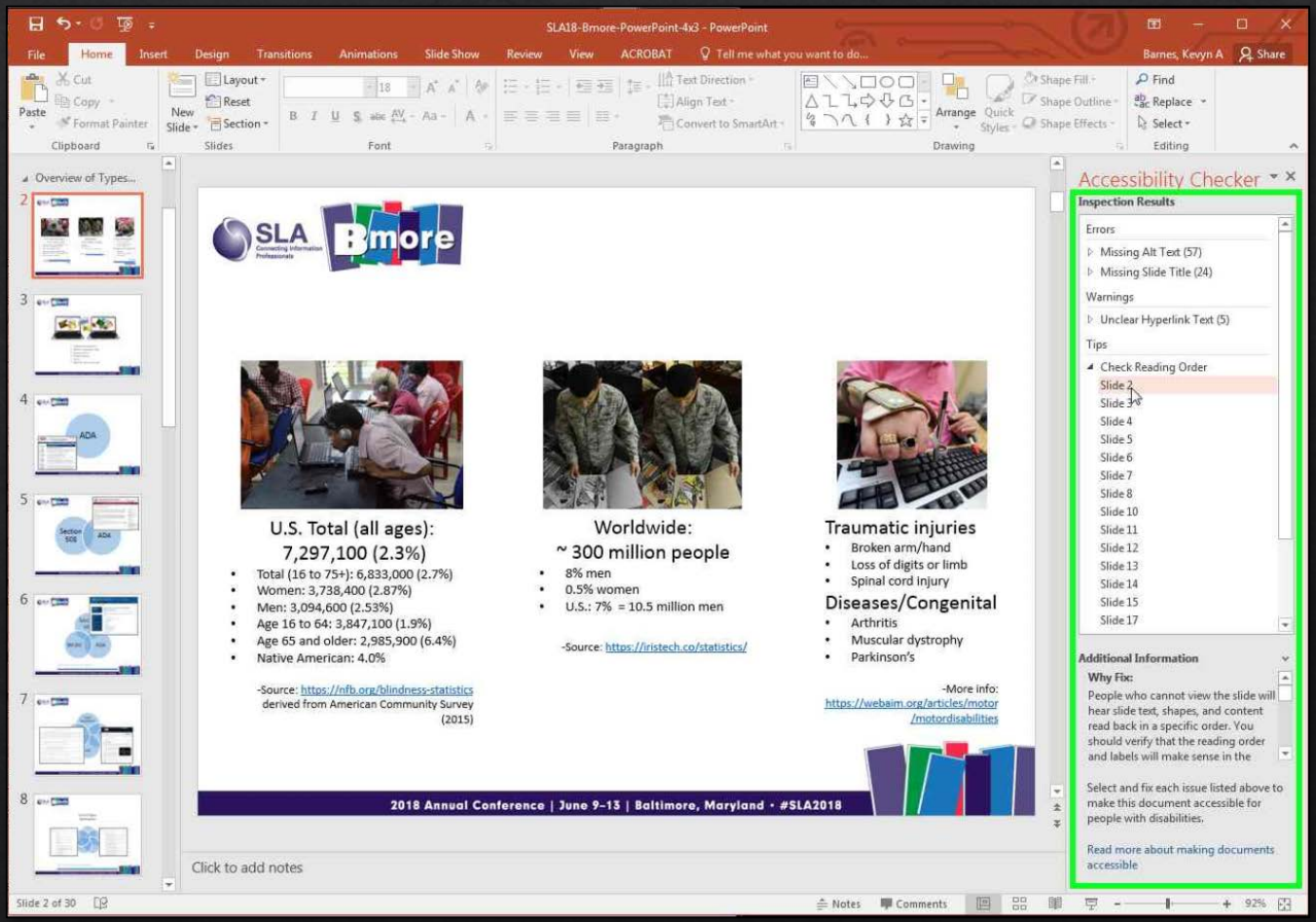
Making Tables Perceivable: Headers



MS Office Accessibility

Reading Order

Reading Order



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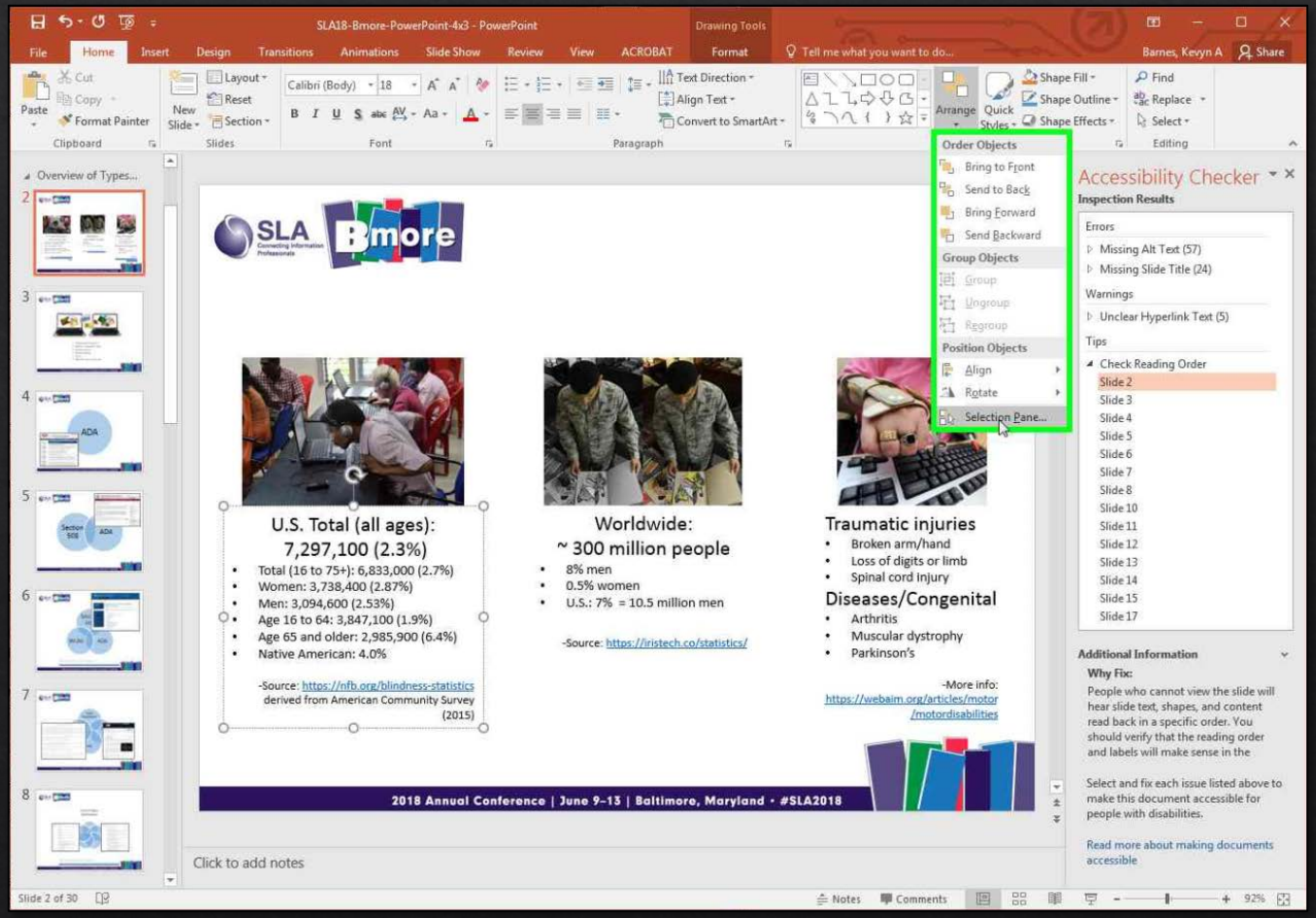
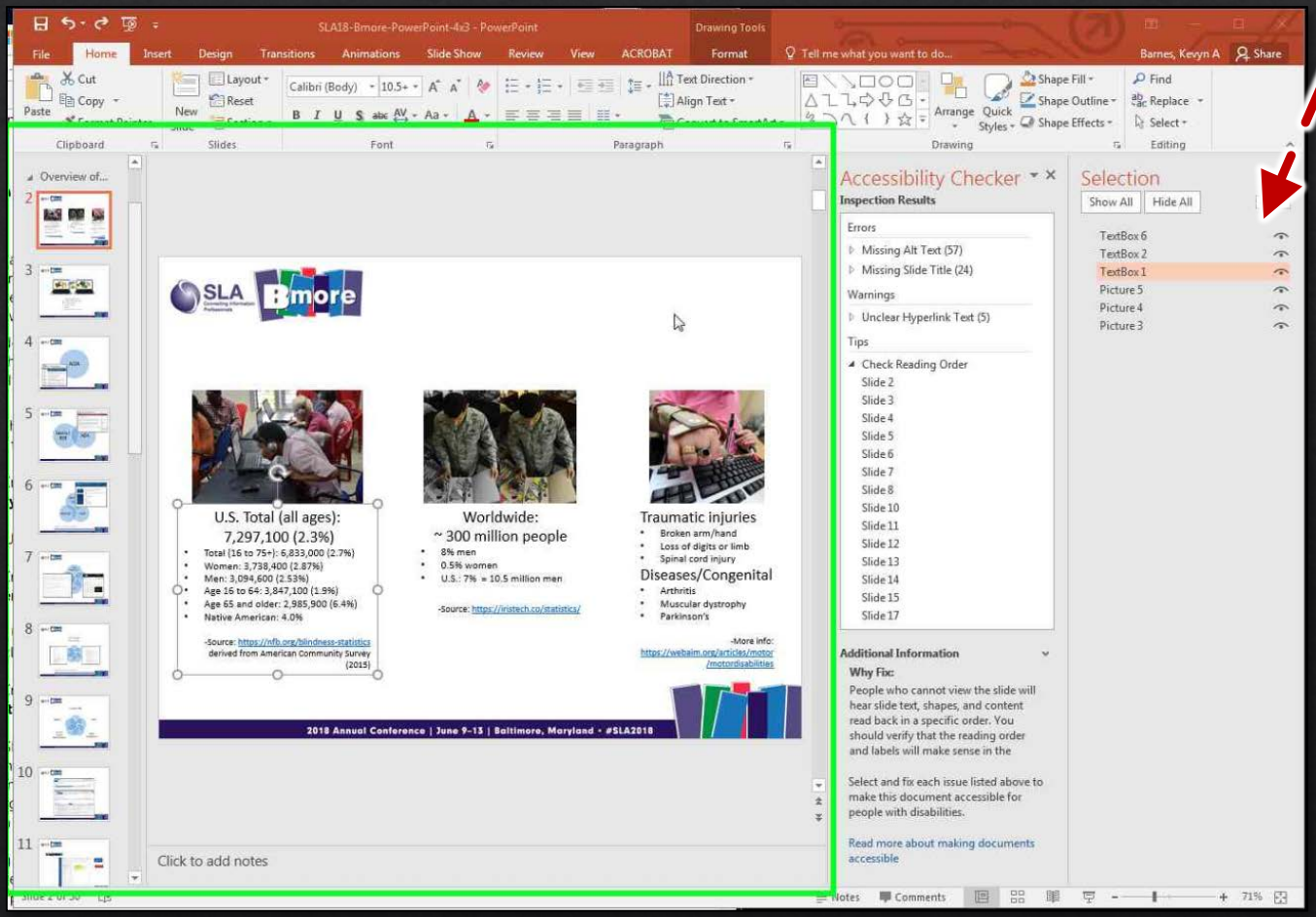


Reading Order

REVERSE order!



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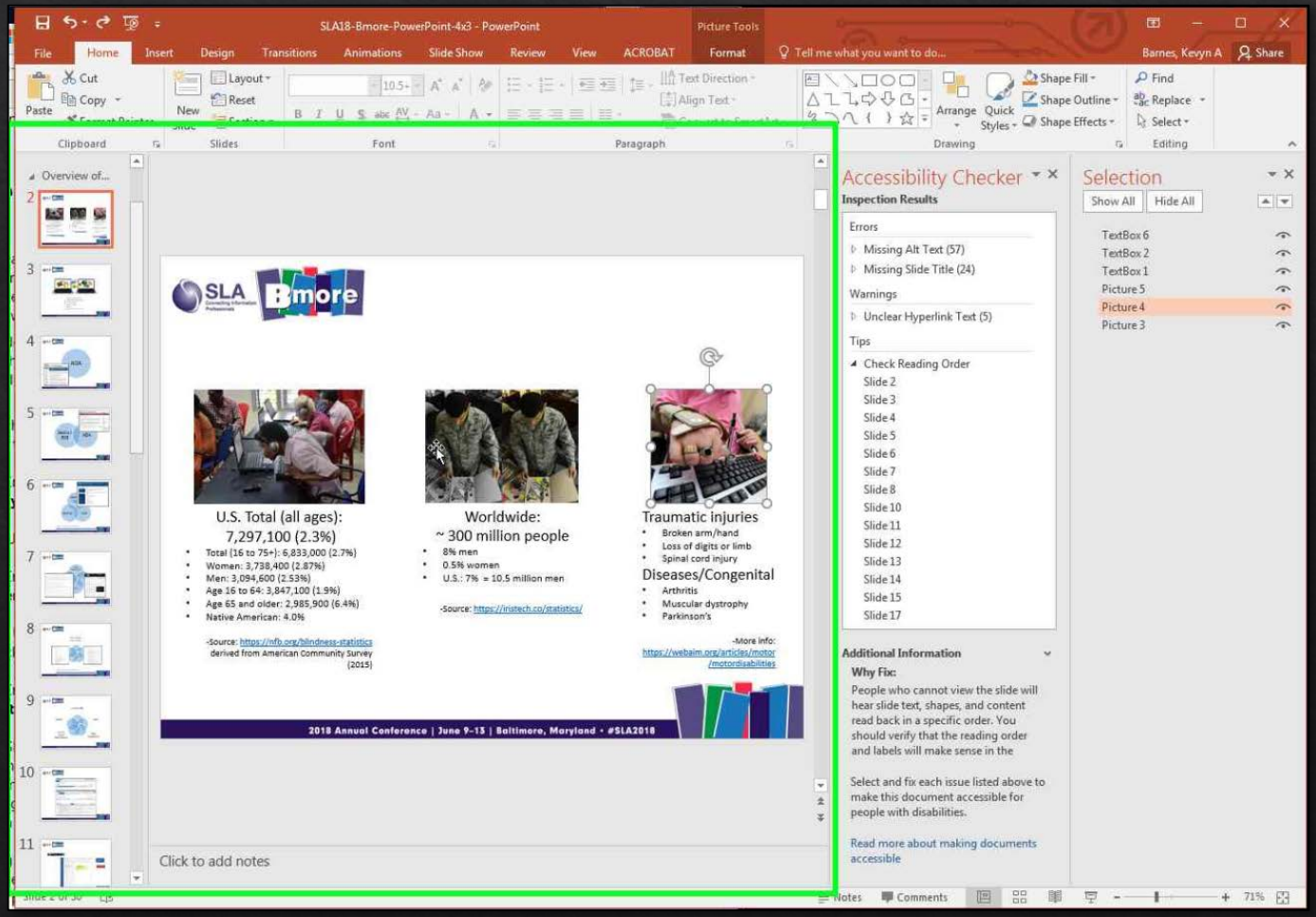

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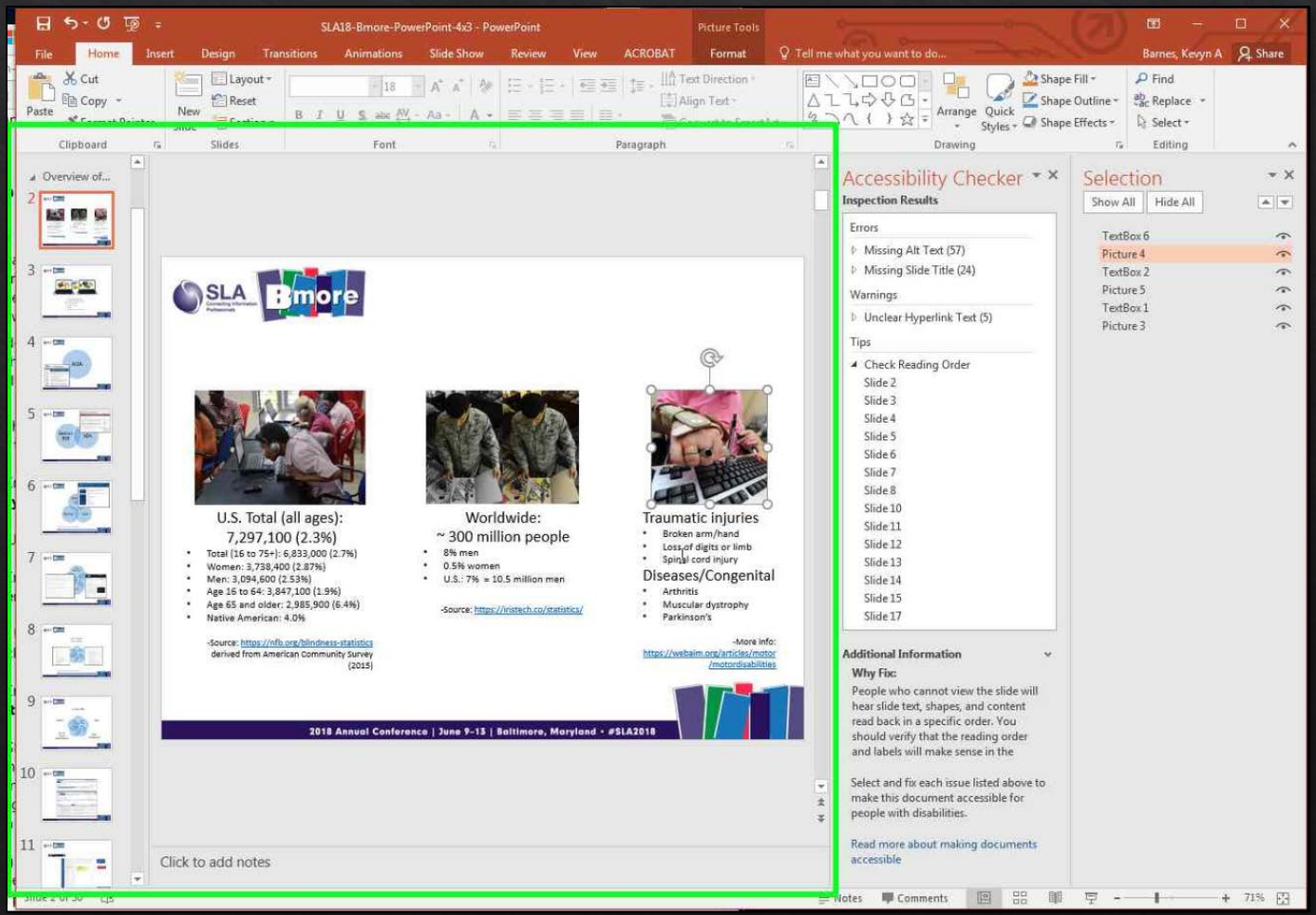

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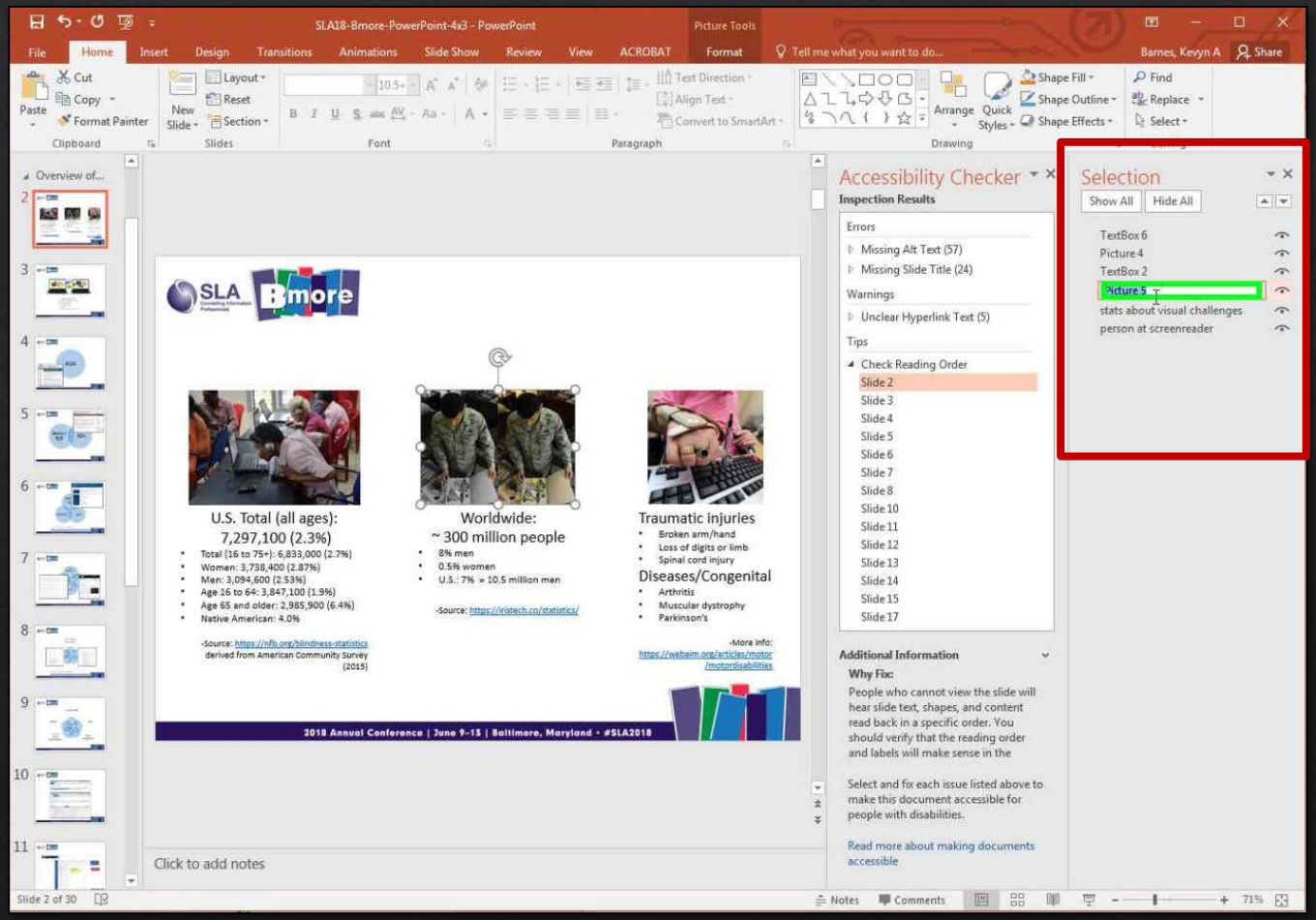
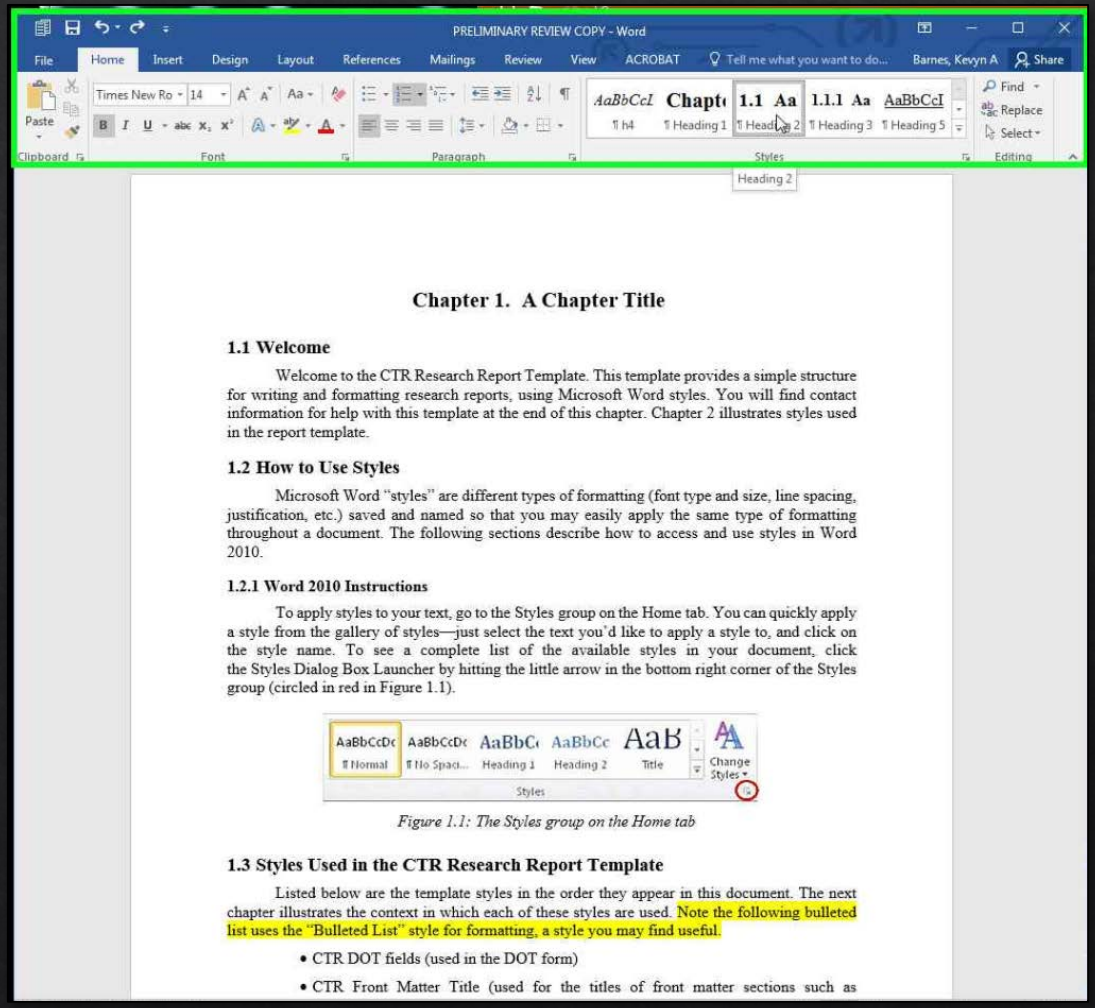


MS Office Accessibility

Headings / Tags

Headings / Tags



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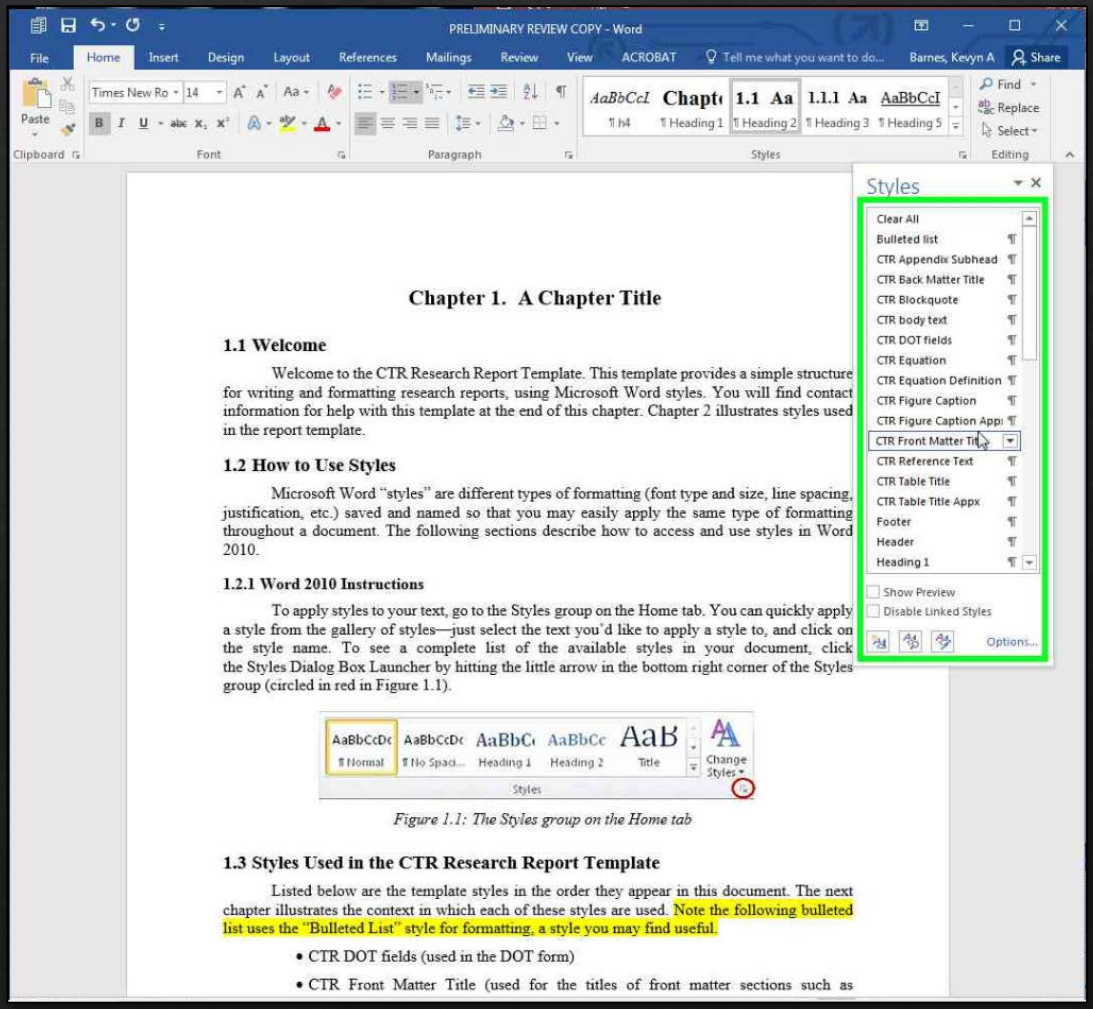

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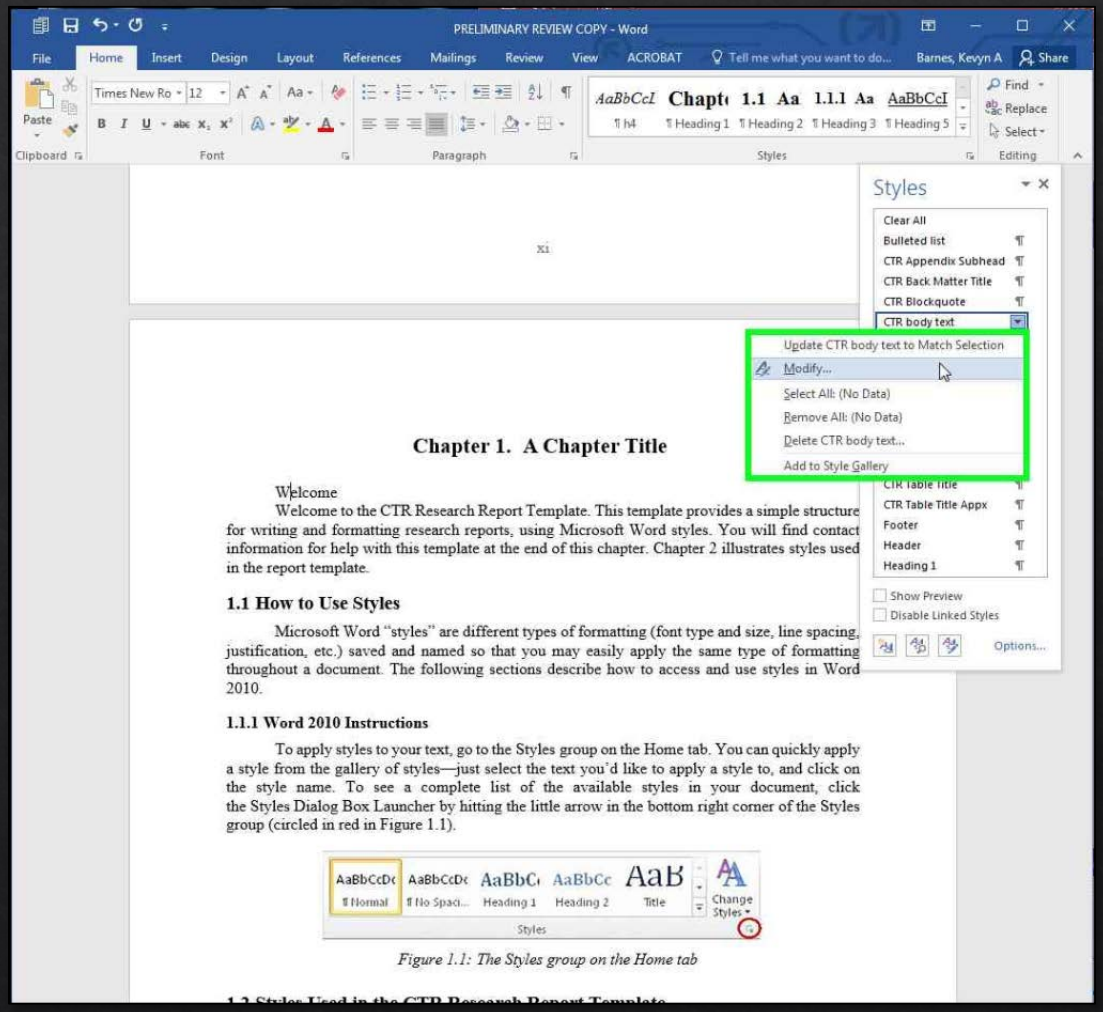

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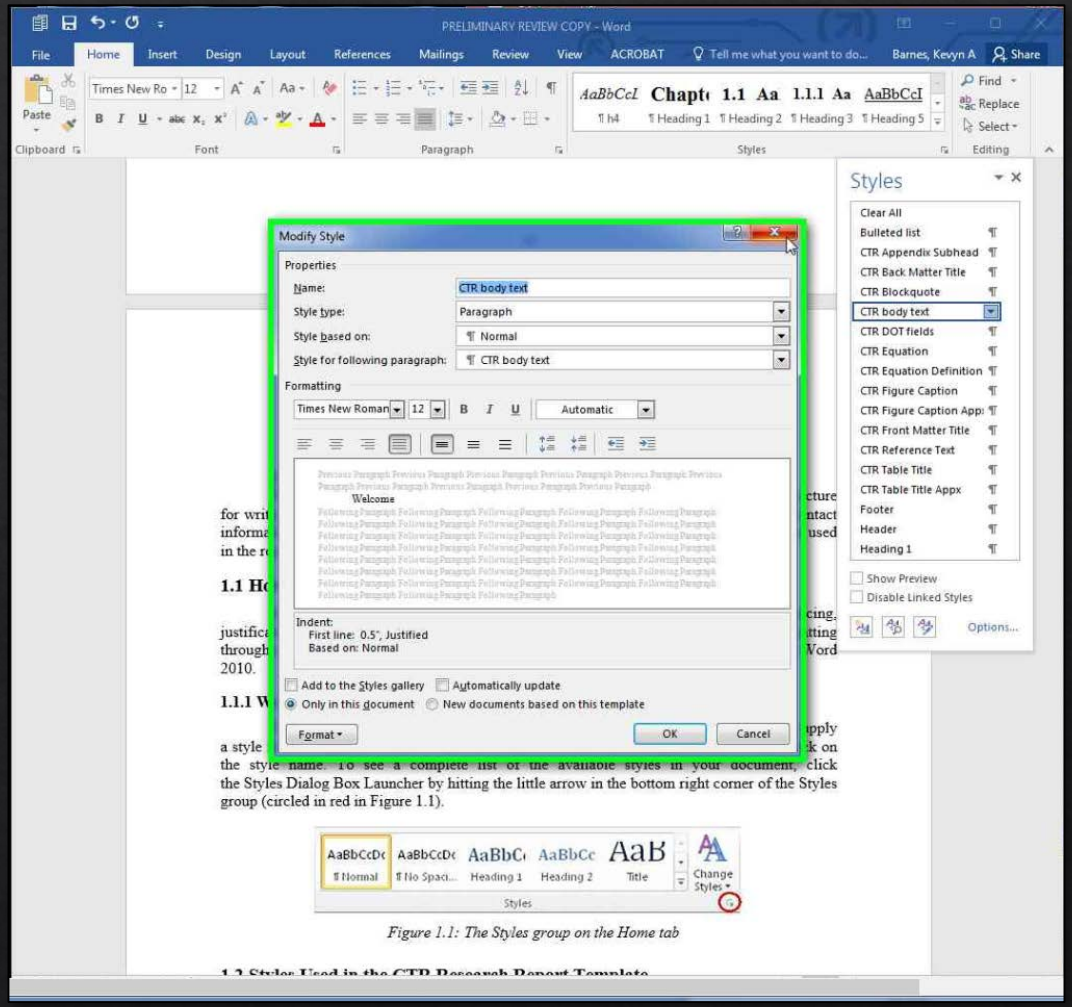

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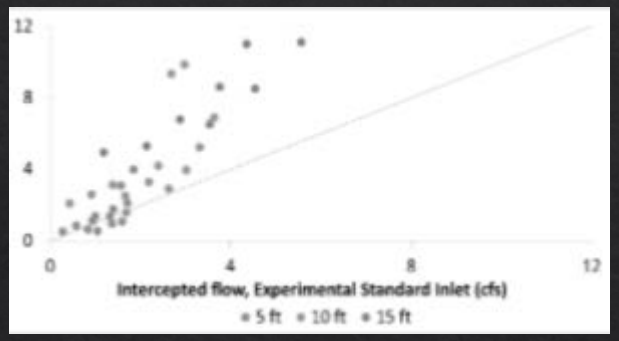
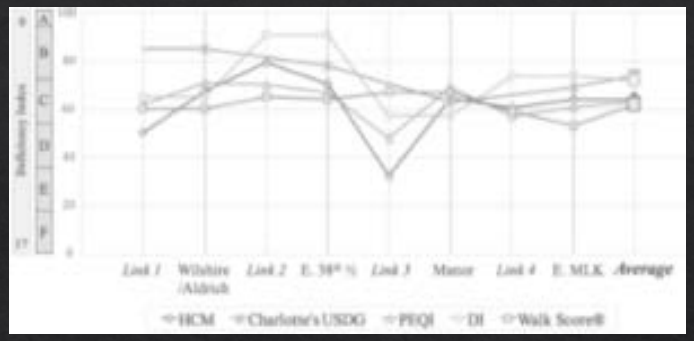
Color

Graphs

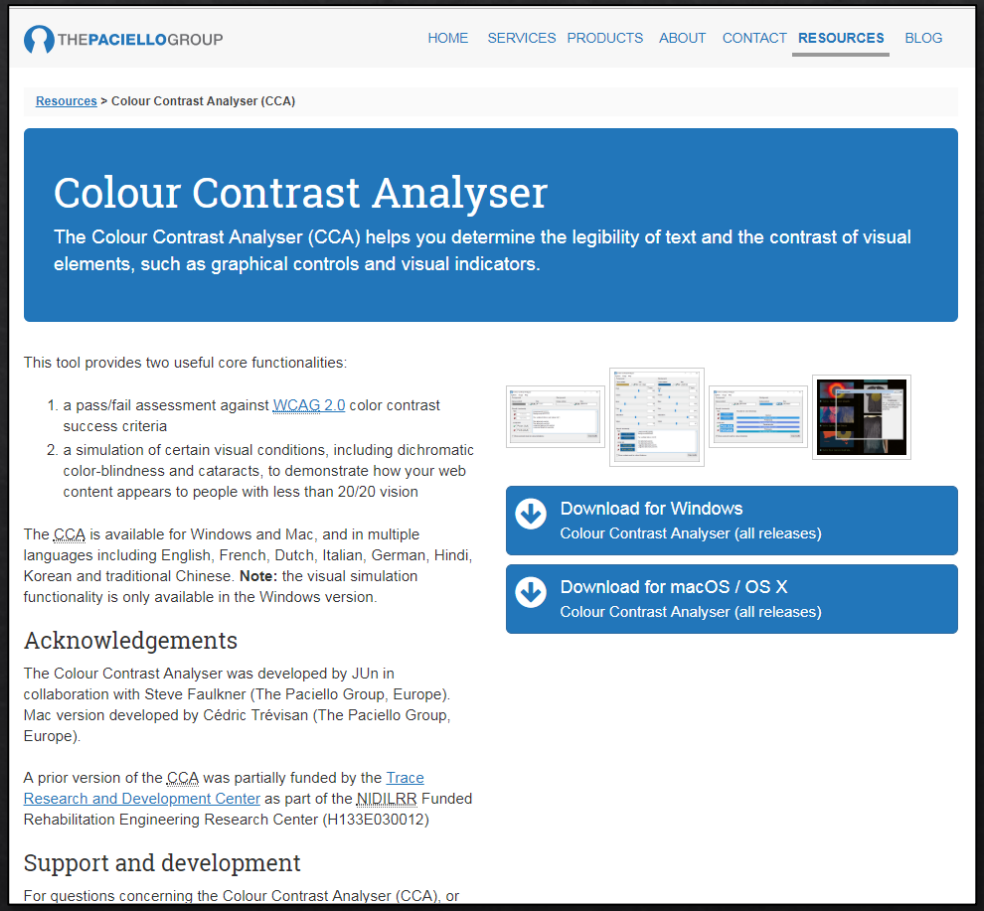


Graph 1 *cannot* be interpreted in grayscale nor by a person with Monochromacy or Achromatopsia colorblindness.



Graph 2 uses shapes in addition to color to convey the information. It *can* be interpreted in grayscale and by somebody with Monochromacy / Achromatopsia.

Colour Contrast Analyser Tool



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HOME SERVICES PRODUCTS ABOUT CONTACT RESOURCES BLOG

Resources > Colour Contrast Analyser (CCA)

Colour Contrast Analyser

The Colour Contrast Analyser (CCA) helps you determine the legibility of text and the contrast of visual elements, such as graphical controls and visual indicators.

This tool provides two useful core functionalities:

1. a pass/fail assessment against WCAG 2.0 color contrast success criteria
2. a simulation of certain visual conditions, including dichromatic color-blindness and cataracts, to demonstrate how your web content appears to people with less than 20/20 vision

The CCA is available for Windows and Mac, and in multiple languages including English, French, Dutch, Italian, German, Hindi, Korean and traditional Chinese. **Note:** the visual simulation functionality is only available in the Windows version.

Download for Windows
Colour Contrast Analyser (all releases)

Download for macOS / OS X
Colour Contrast Analyser (all releases)

Acknowledgements

The Colour Contrast Analyser was developed by JUn in collaboration with Steve Faulkner (The Paciello Group, Europe). Mac version developed by Cédric Trévisan (The Paciello Group, Europe).

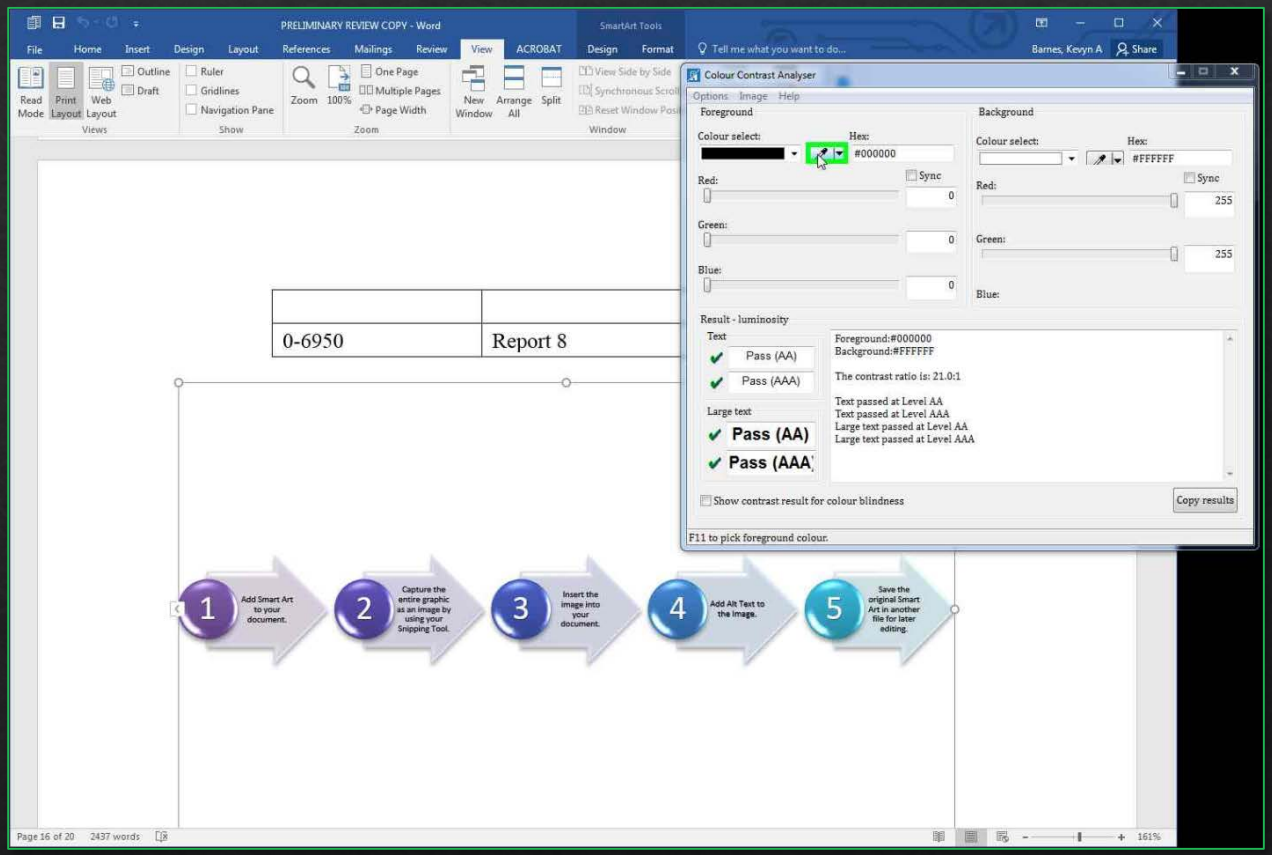
A prior version of the CCA was partially funded by the Trace Research and Development Center as part of the NIDILRR Funded Rehabilitation Engineering Research Center (H133E030012)

Support and development

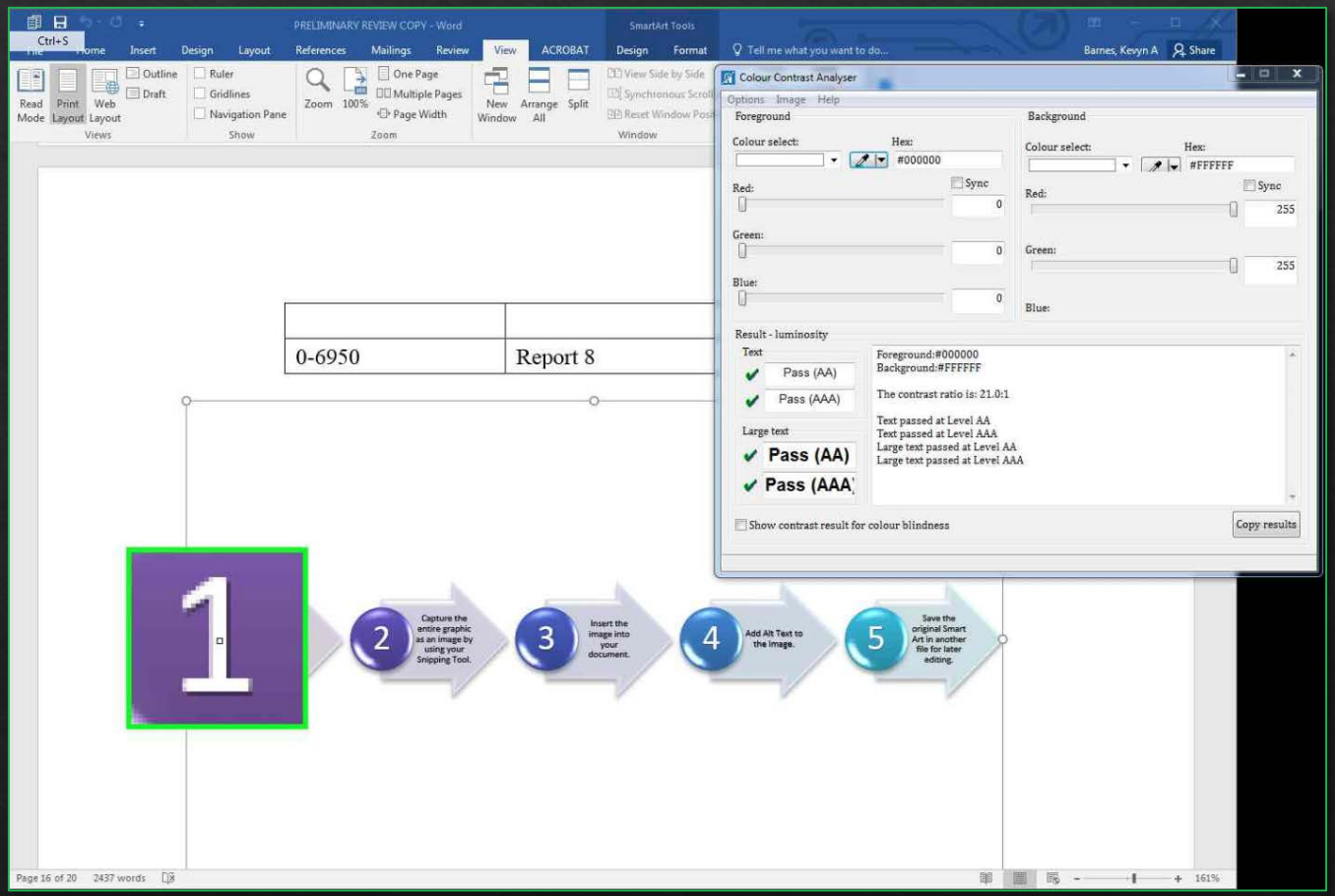
For questions concerning the Colour Contrast Analyser (CCA), or

Color Contrast

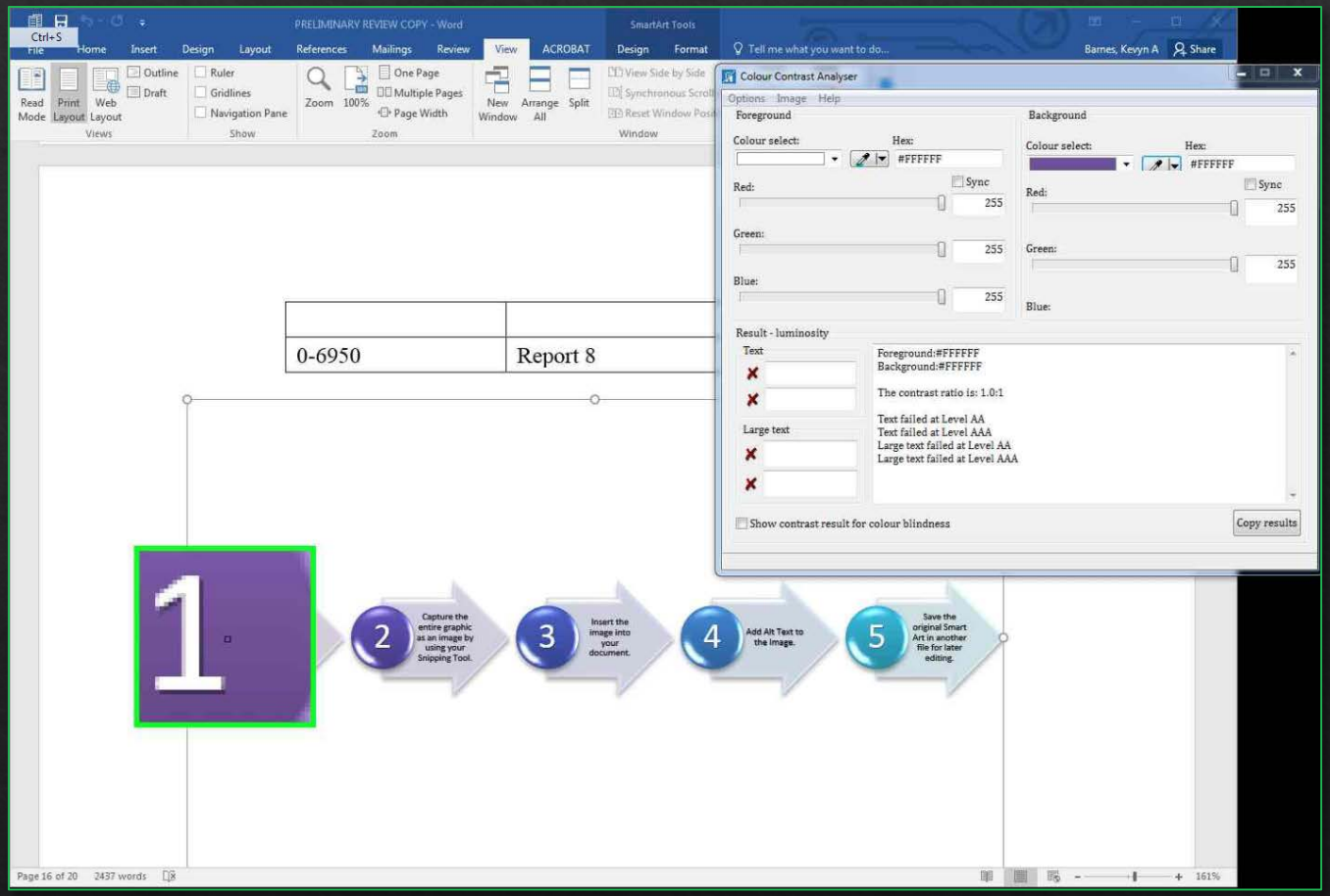
Color Contrast



Color Contrast



Color Contrast



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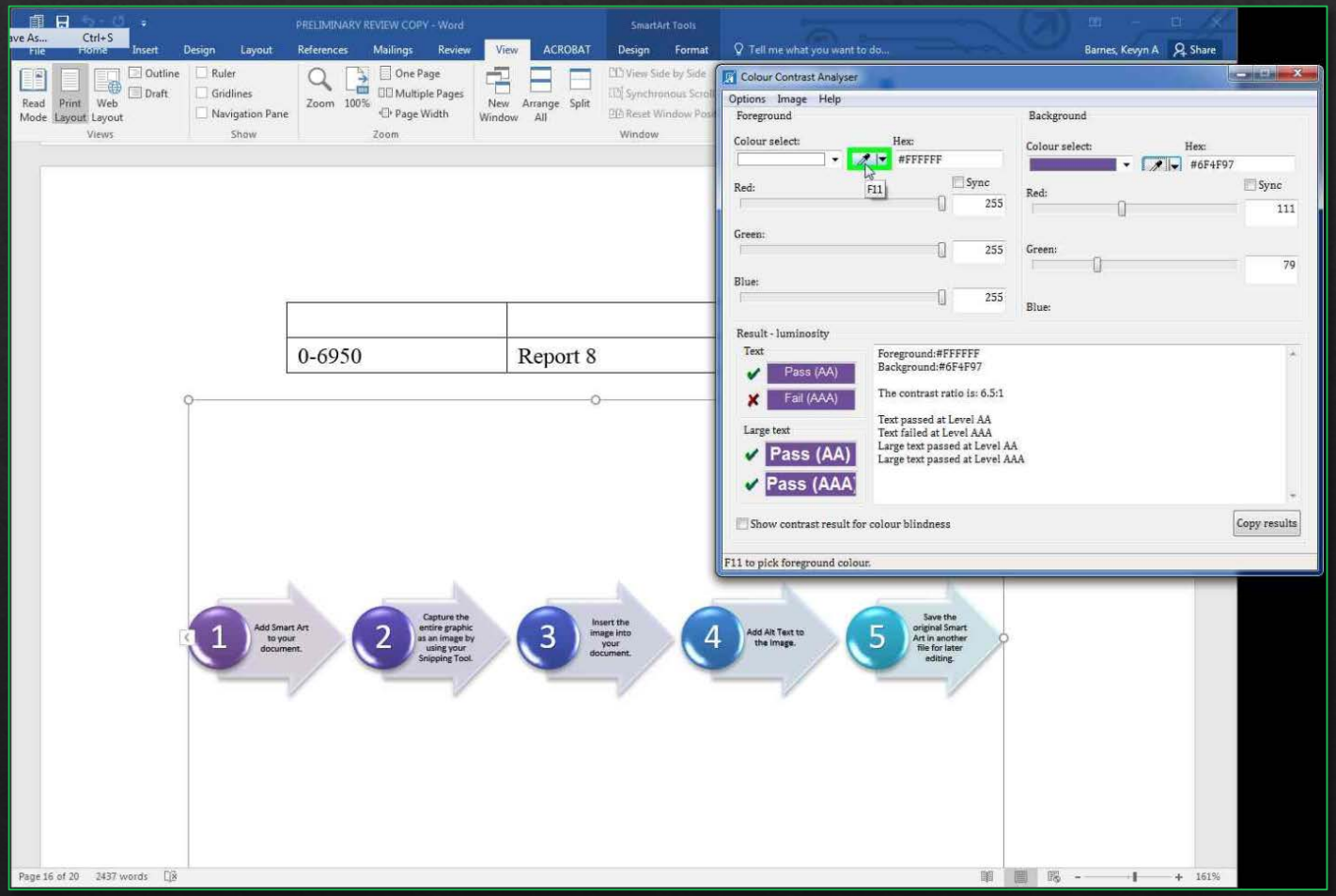

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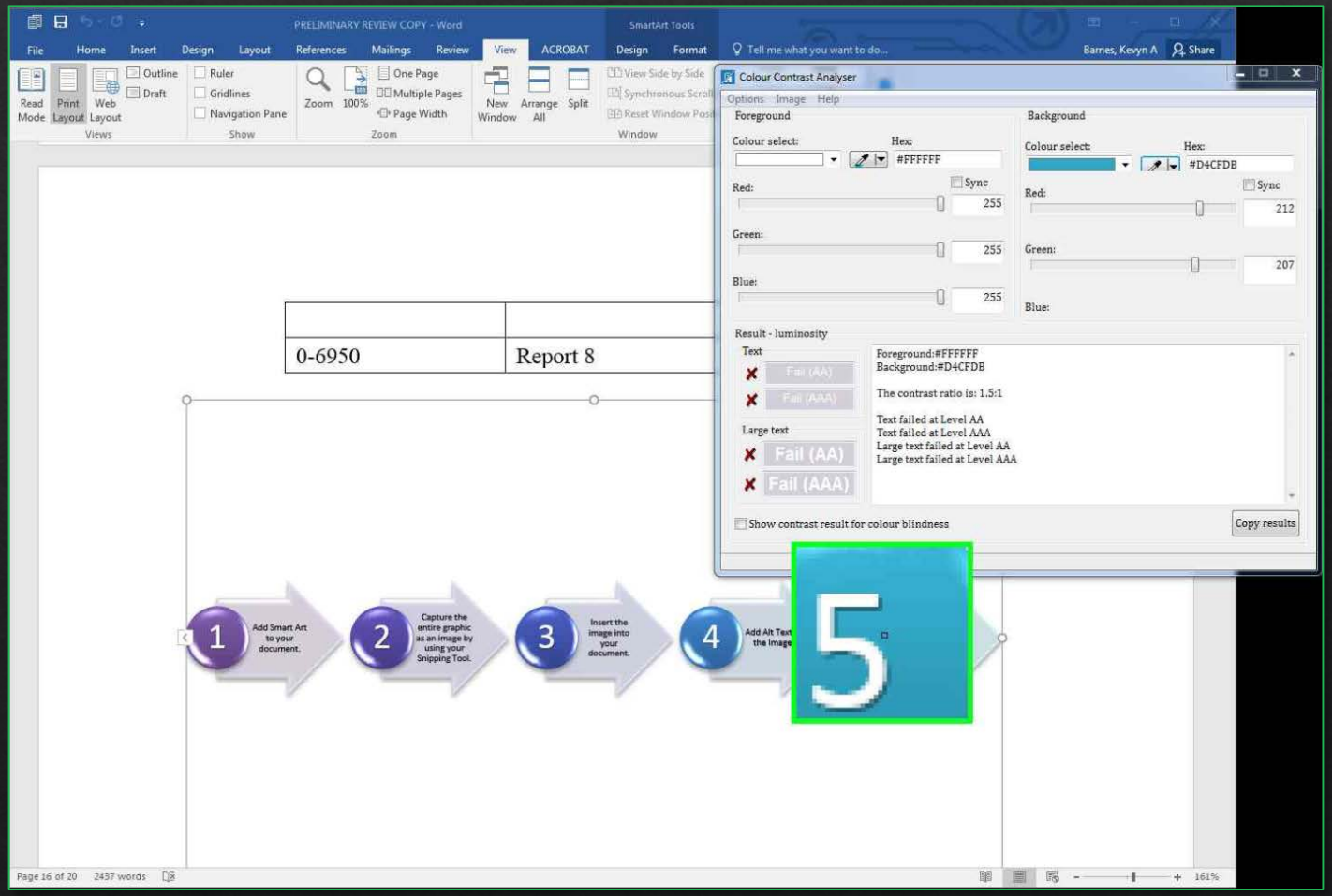

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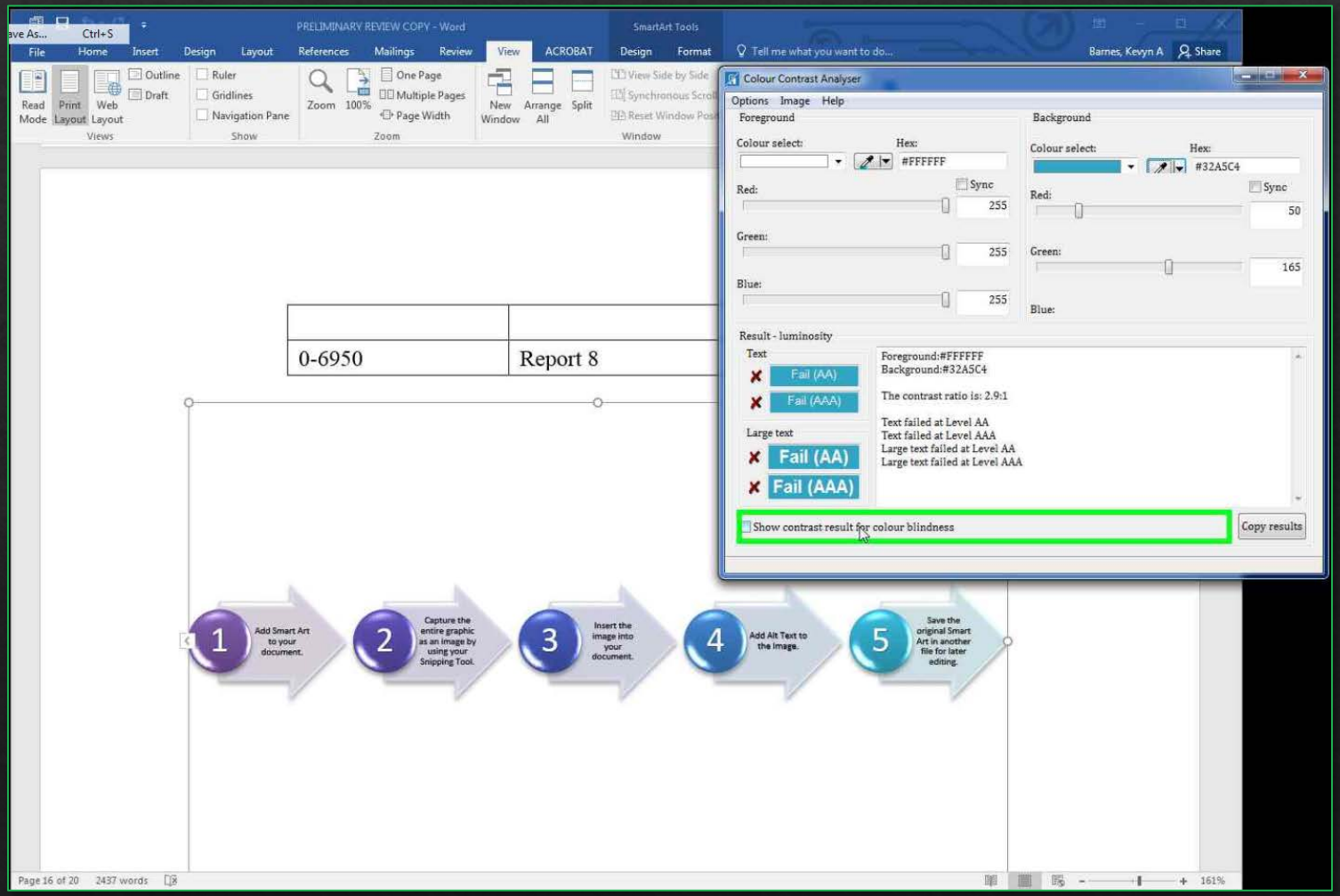

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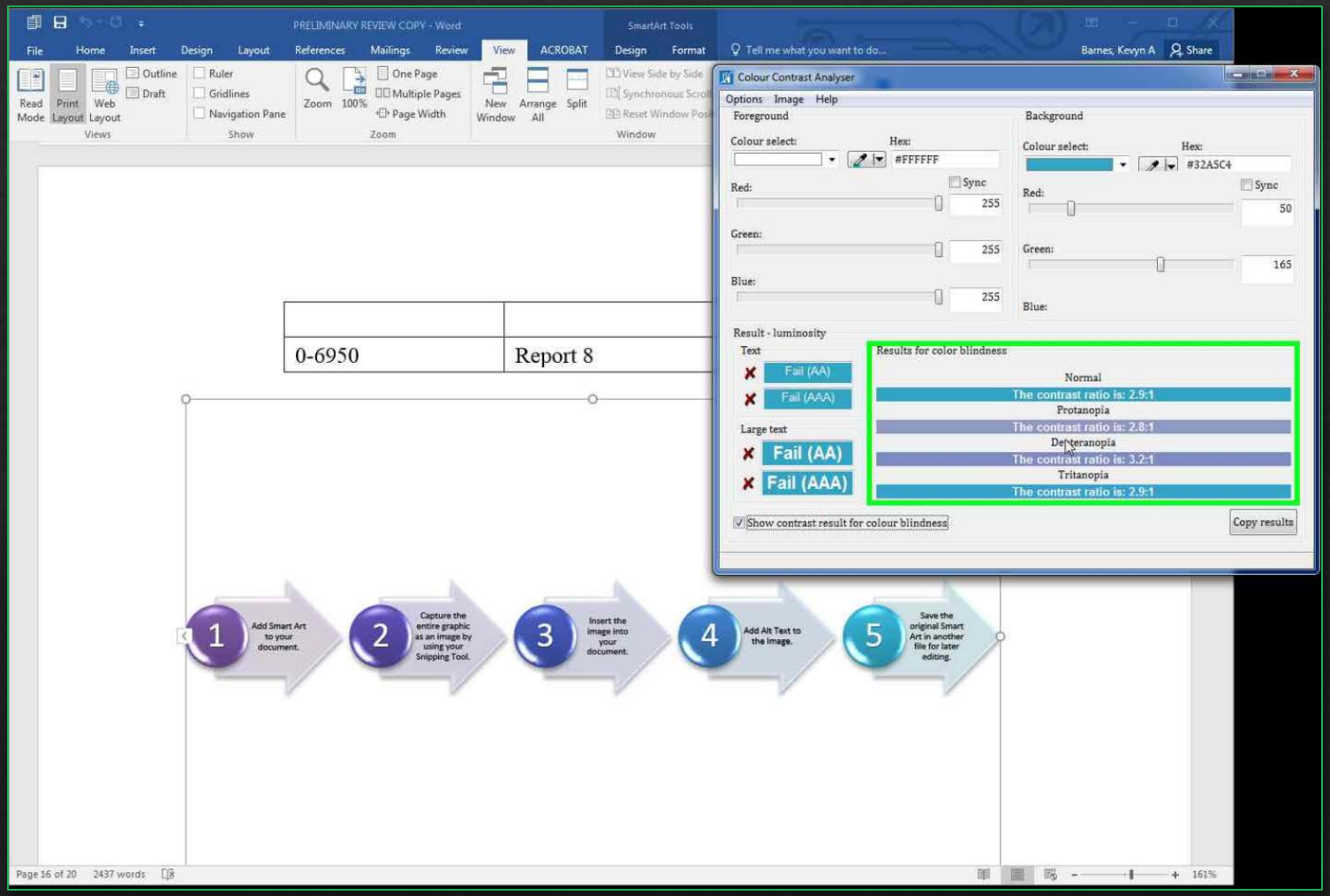
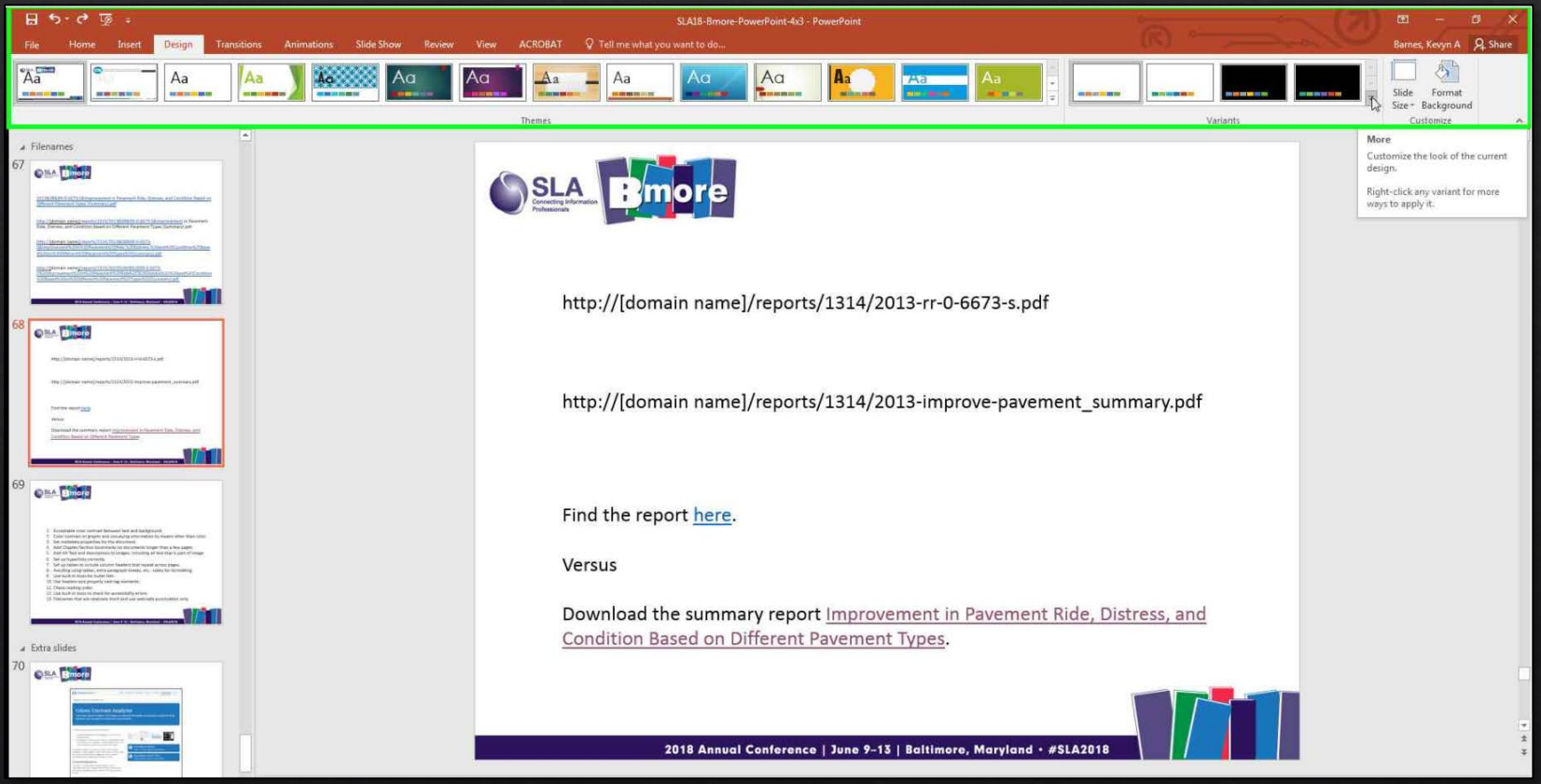


Changing Colors in Entire Doc



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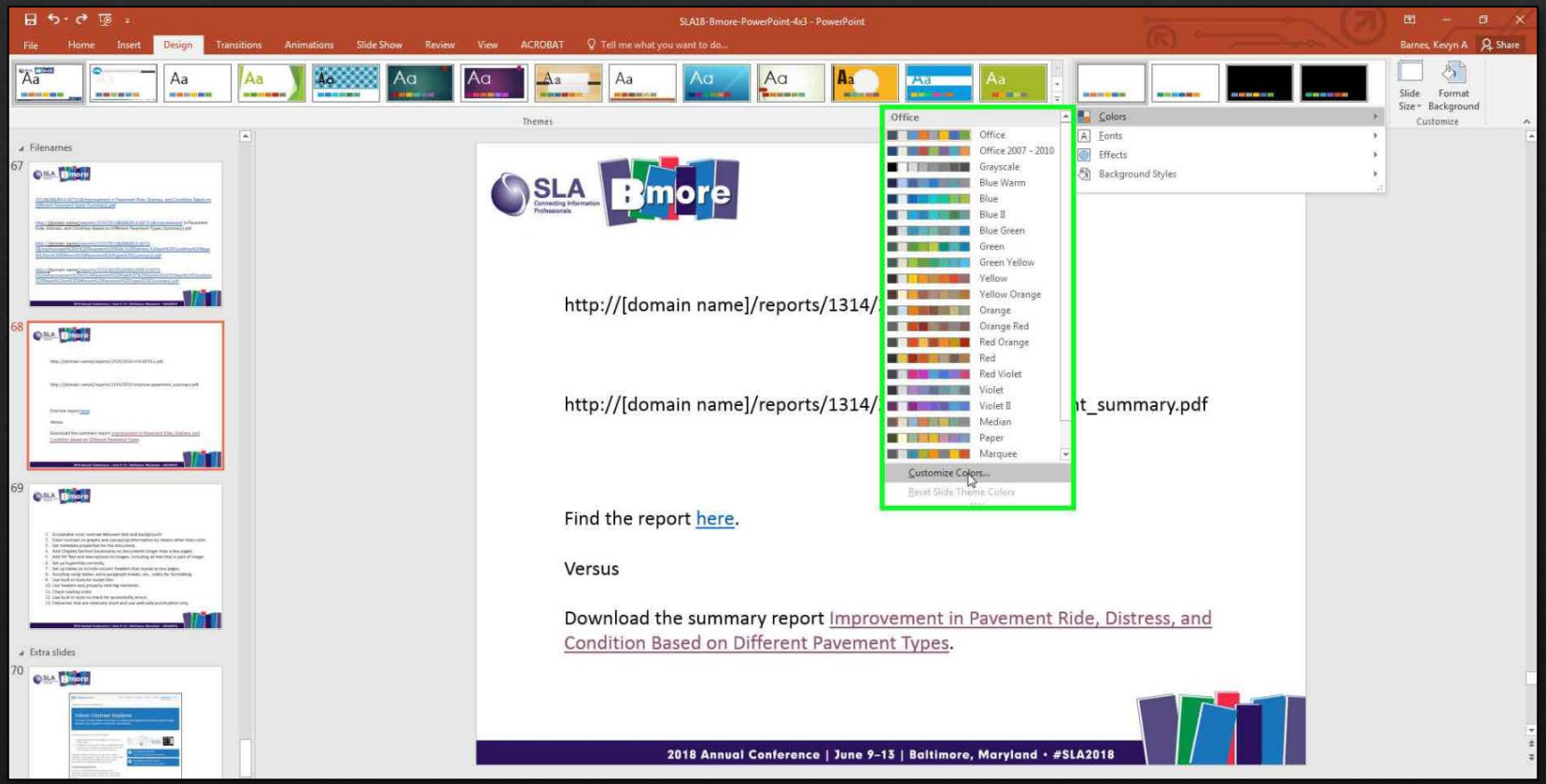

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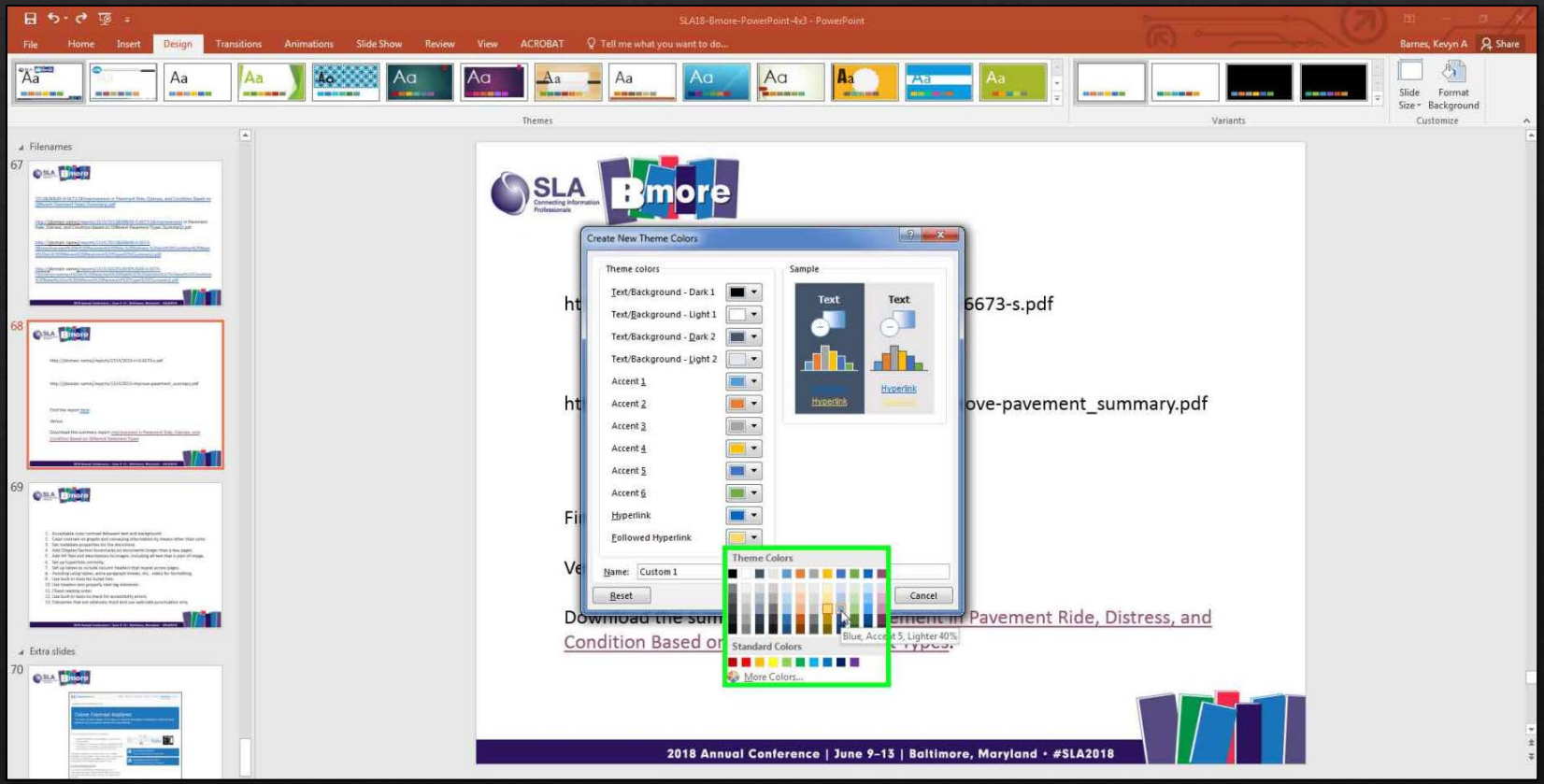
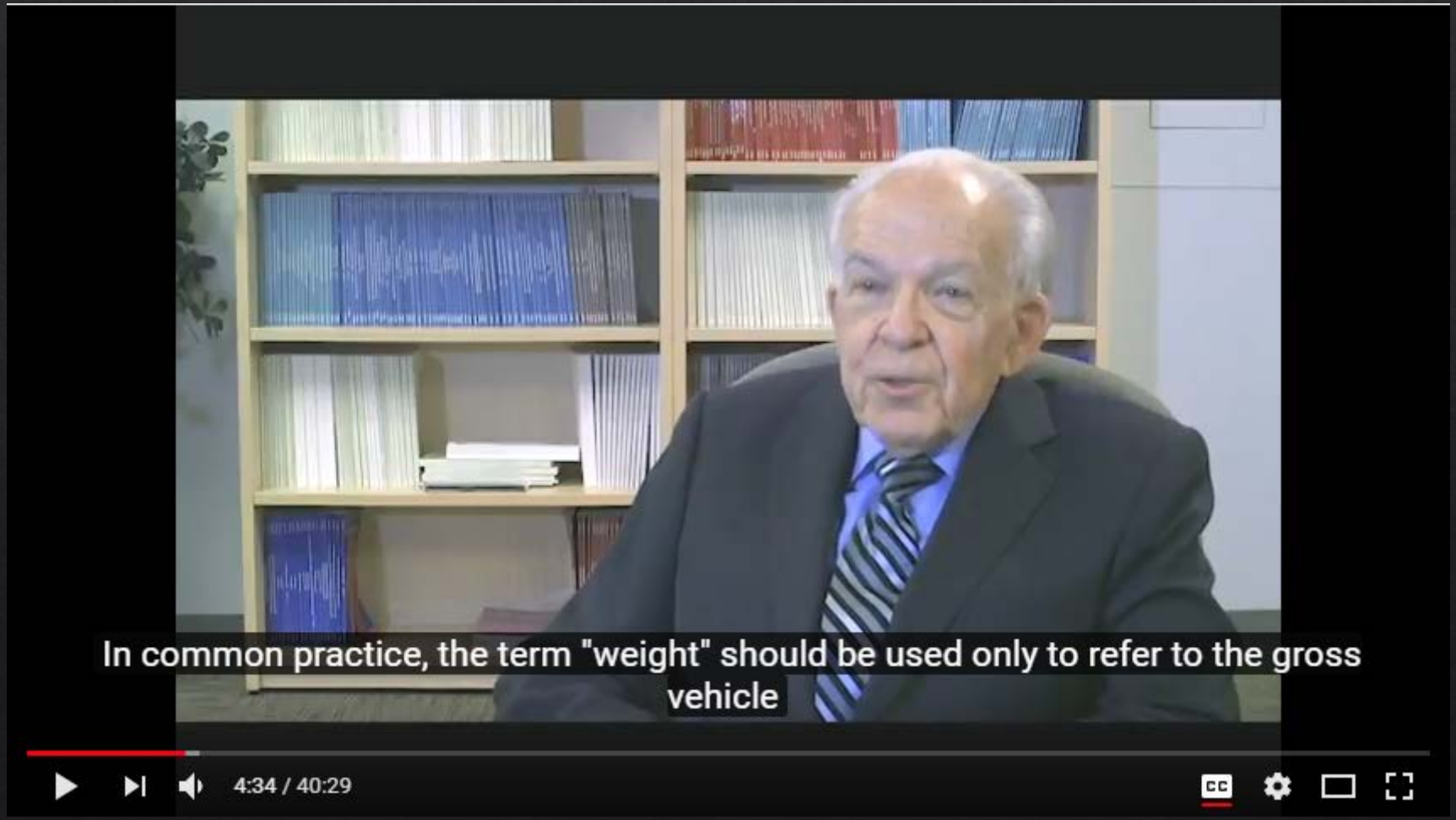
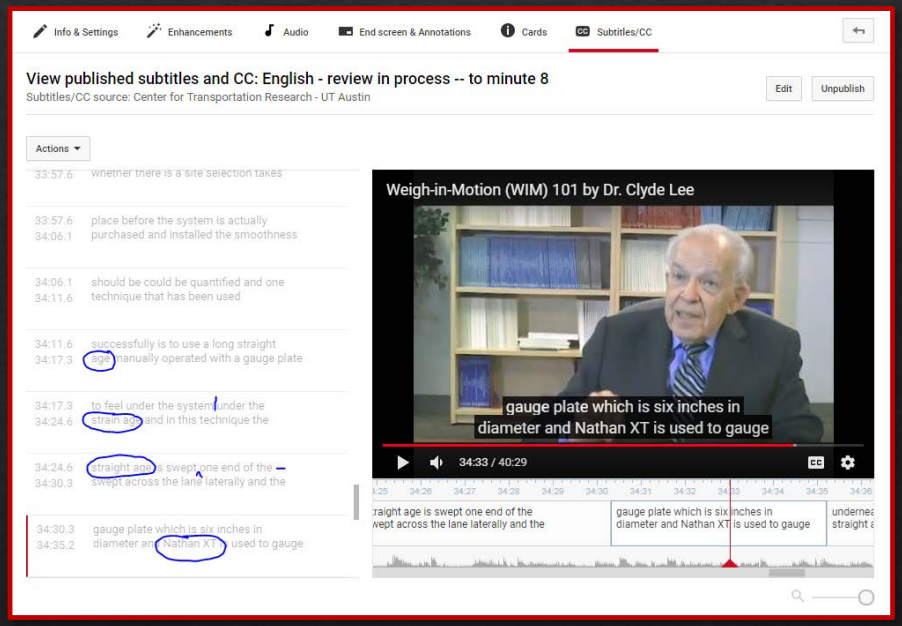
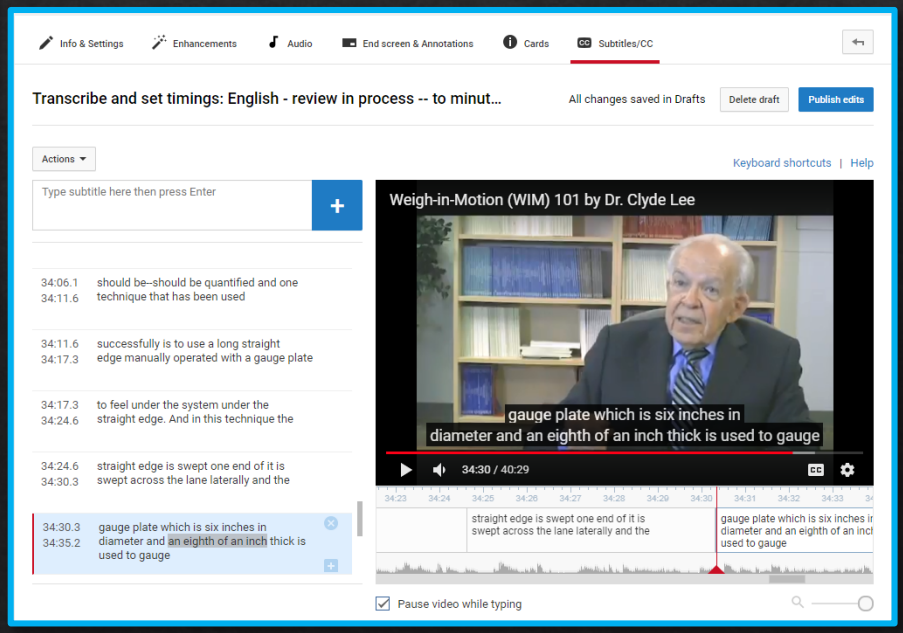


Suggest Tools and Works Cited

https://tinyurl.com/accessibility-ref

Video Captioning



Video Captioning