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DBTAC  
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ADA Center



# The Why and How to Create Accessible PDFs

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*great lakes*  
ADA Center

# Training Overview and Objectives

- ▶ Introduction to the PDF File format
- ▶ What is an accessible PDF and why should we make PDFs accessible
- ▶ Organizational Issues and the PDF format
- ▶ Creating Accessible PDFs from Source Documents
- ▶ Simple Tips for Checking the Accessibility of PDFs and Developing Accessible PDFs without Acrobat Professional and/or Commonlook
- ▶ Developing, Testing and Repairing PDF files
- ▶ Resources and Questions

# PDF Documents

## ► What Is a PDF?

PDF Stands for **P**ortable **D**ocument **F**ormat

- Non-proprietary Format (can be freely read and distributed)
- Keeps True to Format / Layout of a Print Document
- Cross Platform compatibility

# Types of PDF Files

- ▶ Unstructured
- ▶ Structured
- ▶ Tagged
- ▶ Fully Accessible PDF



# What Makes a Accessible PDF File?

- ▶ Text available selectable
- ▶ Alternative Text defined for all images
- ▶ Logical Reading Order
- ▶ Document Language Specified
- ▶ Tables header rows defined
- ▶ Hyperlinks that are descriptive of destination
- ▶ Form fields with descriptions and in correct tab order
- ▶ Text can viewed without the need to scroll back and forth– Reflow enabled

# Why Make Accessible PDFs?

- ▶ Accessibility of tagged PDF files available since 2001
- ▶ Most current assistive technologies work with tagged pdf
- ▶ PDF file format is ubiquitous
- ▶ No need for duplication of effort
- ▶ Security of Accessible PDF files available
- ▶ Universal Design
- ▶ PDF may be the best format

# Problems with PDF Documents

- ▶ PDF files were designed to be printed–Static
- ▶ Accessibility not as defined as HTML
  - HTML allows for flexibility – Allows for customization
- ▶ Standards and tools still in development  
PDF Universal Accessibility Committee
- ▶ Some people who are Blind assume inaccessible and ask for alternative version
- ▶ Need special tools to correct accessibility of PDF documents (Acrobat Professional, etc.)
- ▶ Retrofitting can be difficult



# Setting a Organizational Strategy

- ▶ Many people are using the PDF file format
- ▶ Accessibility of PDF files has to be considered even it means providing alternative formatted document
- ▶ If no retrofitting, setting a date where newly developed PDF files will be accessible
- ▶ Support, tools, and advertising of approach towards PDF files
- ▶ Organizational approach/policy to when PDF files will be used

# Process of Creating Accessible PDFs

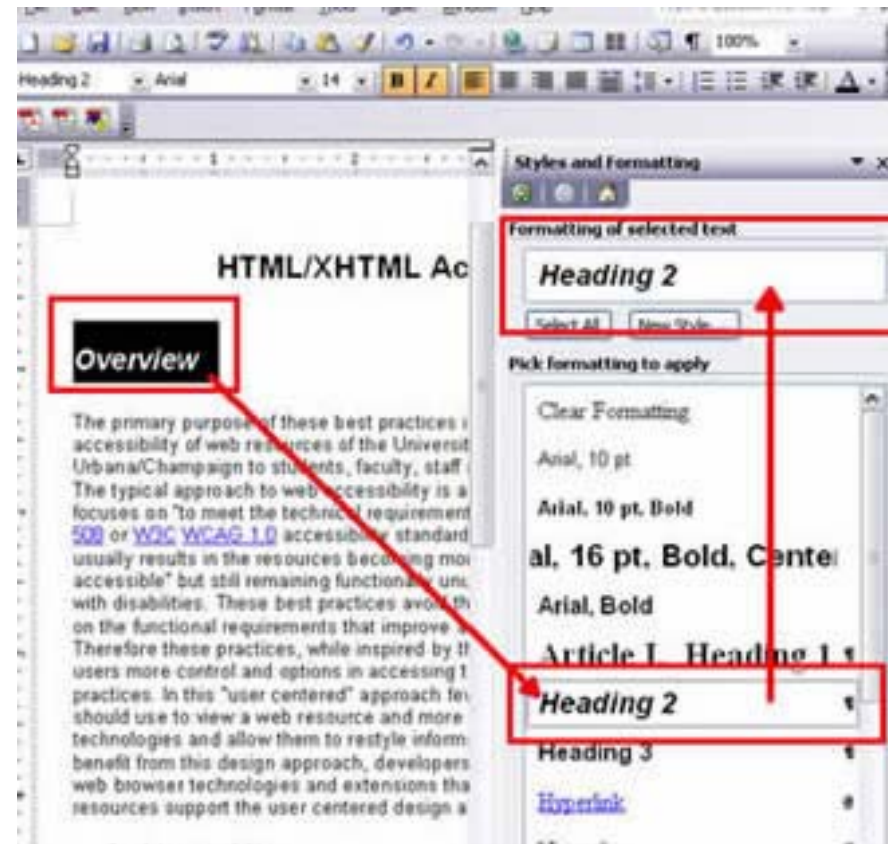
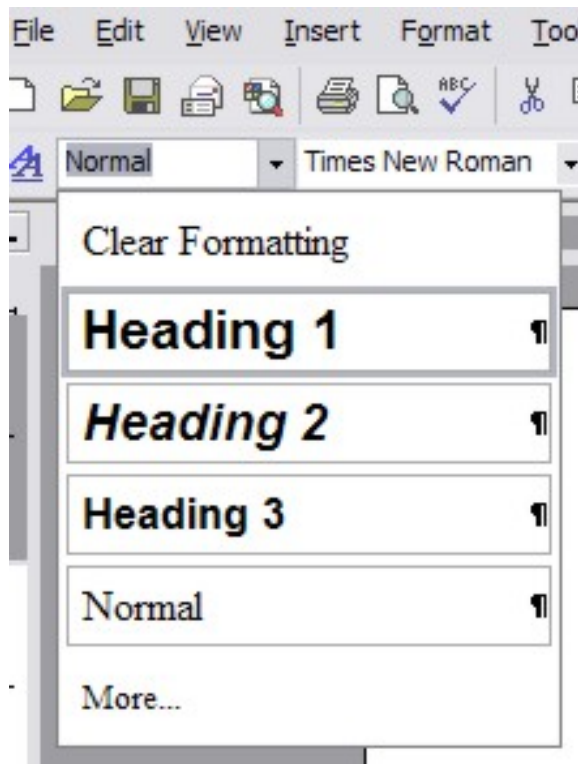
- ▶ Prepare your documents to create an accessible PDF
- ▶ Check your PDF for accessibility
- ▶ Correct accessibility problems with Adobe Professional
- ▶ Review page for accessibility



# Creating Accessible PDFs from Source Documents

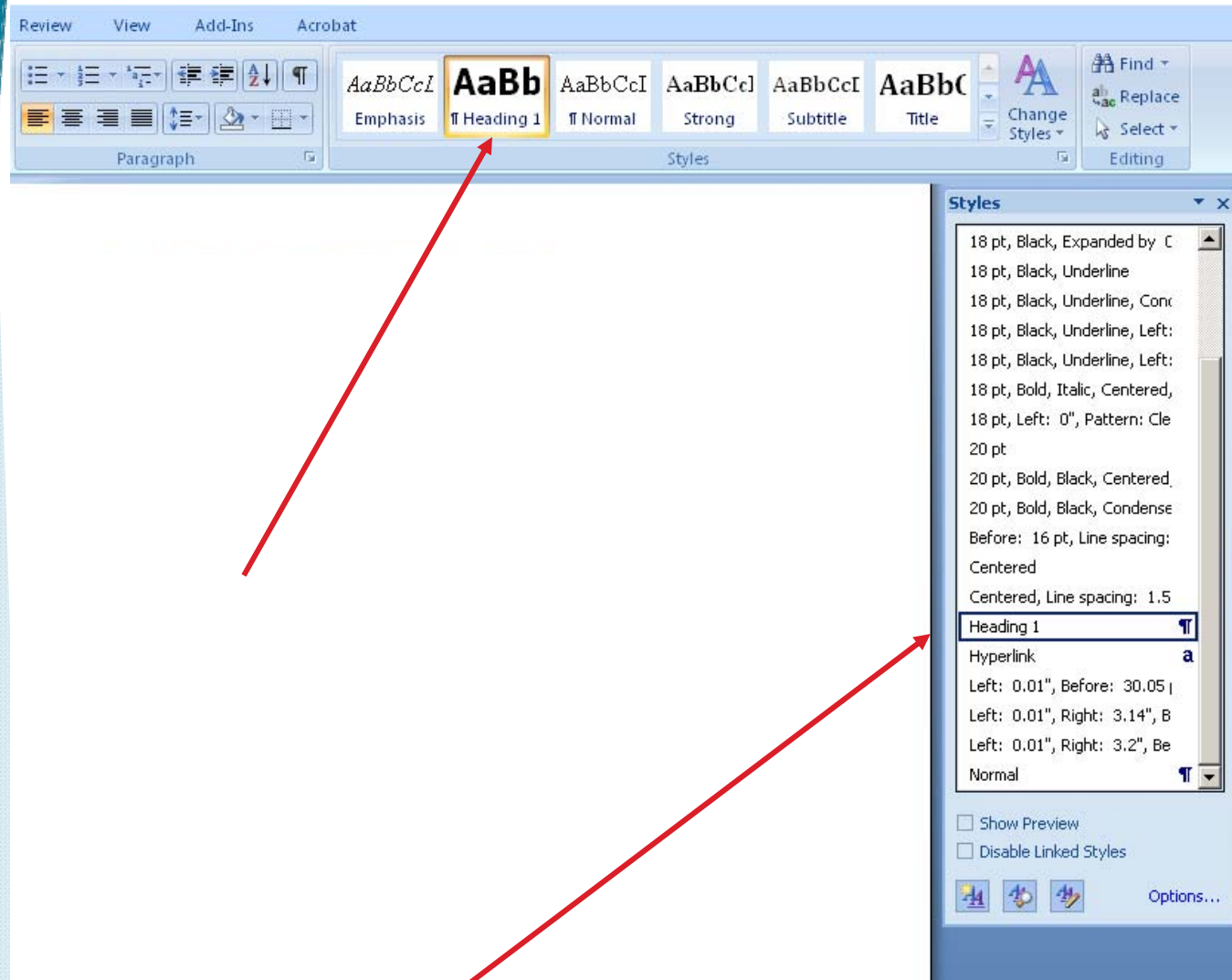
# Microsoft Word

## ► Create Structured Documents





# Microsoft Word



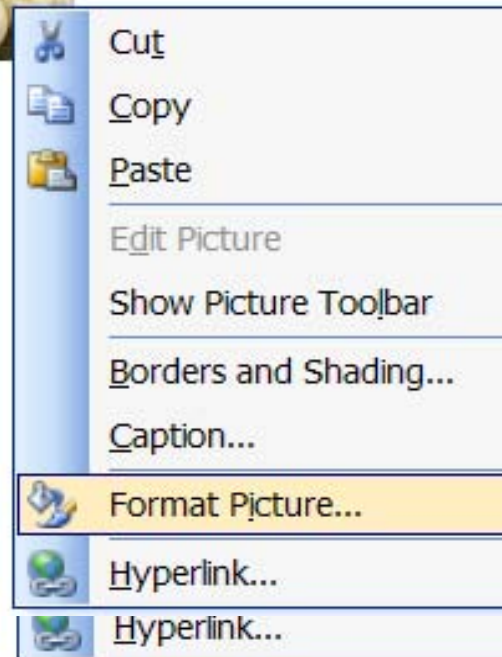


# Microsoft Word

- ▶ Create Structured Documents
  - Keyboard Shortcuts (other programs may intercept this keyboard shortcut)
    - Ctrl Alt 1 --- Heading 1
    - Ctrl Alt 2 --- Heading 2
    - Ctrl Alt 3 --- Heading 3

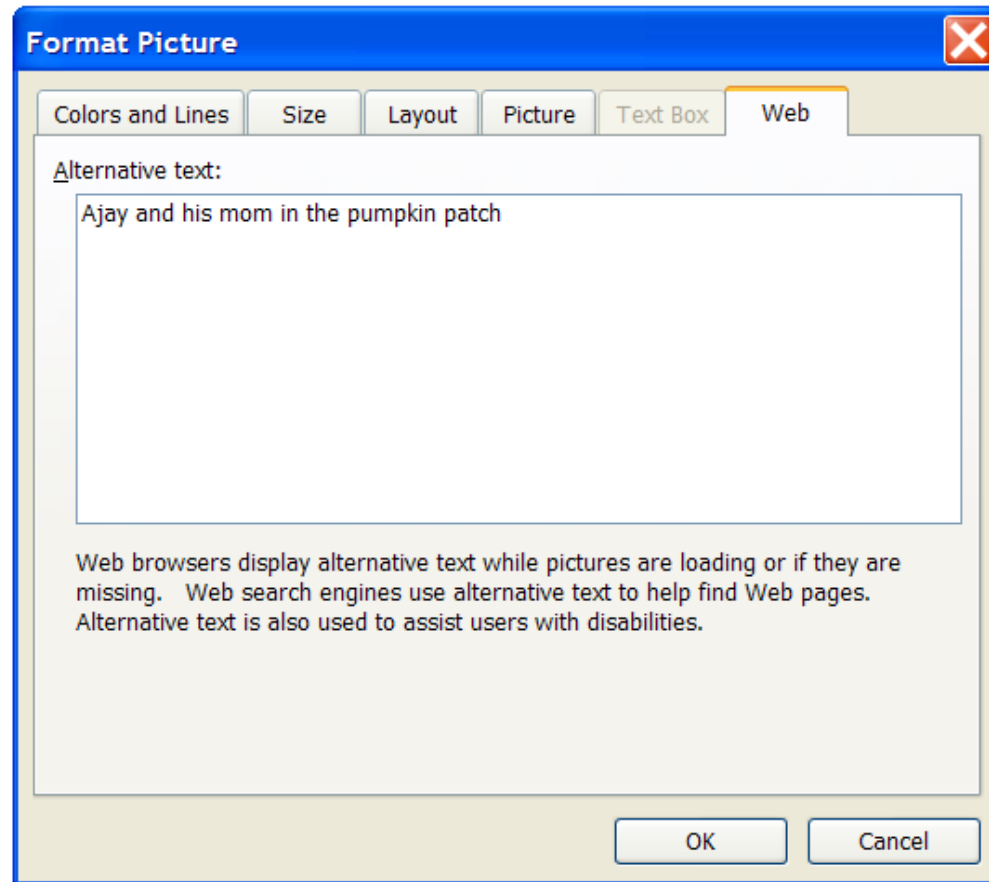
# Microsoft Word Documents

- ▶ Provide Alternative Text for Images



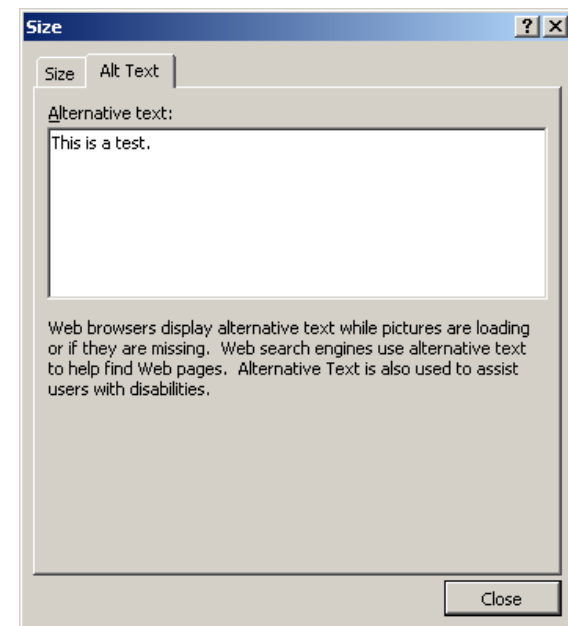
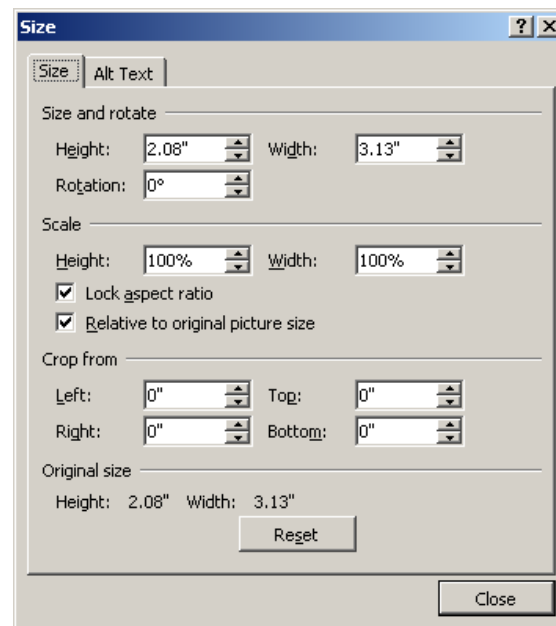
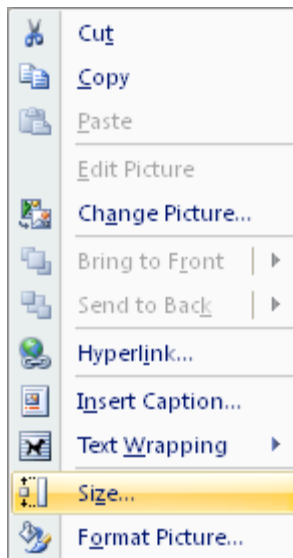
# Microsoft Word Documents

- ▶ Provide Alternative Text for Images



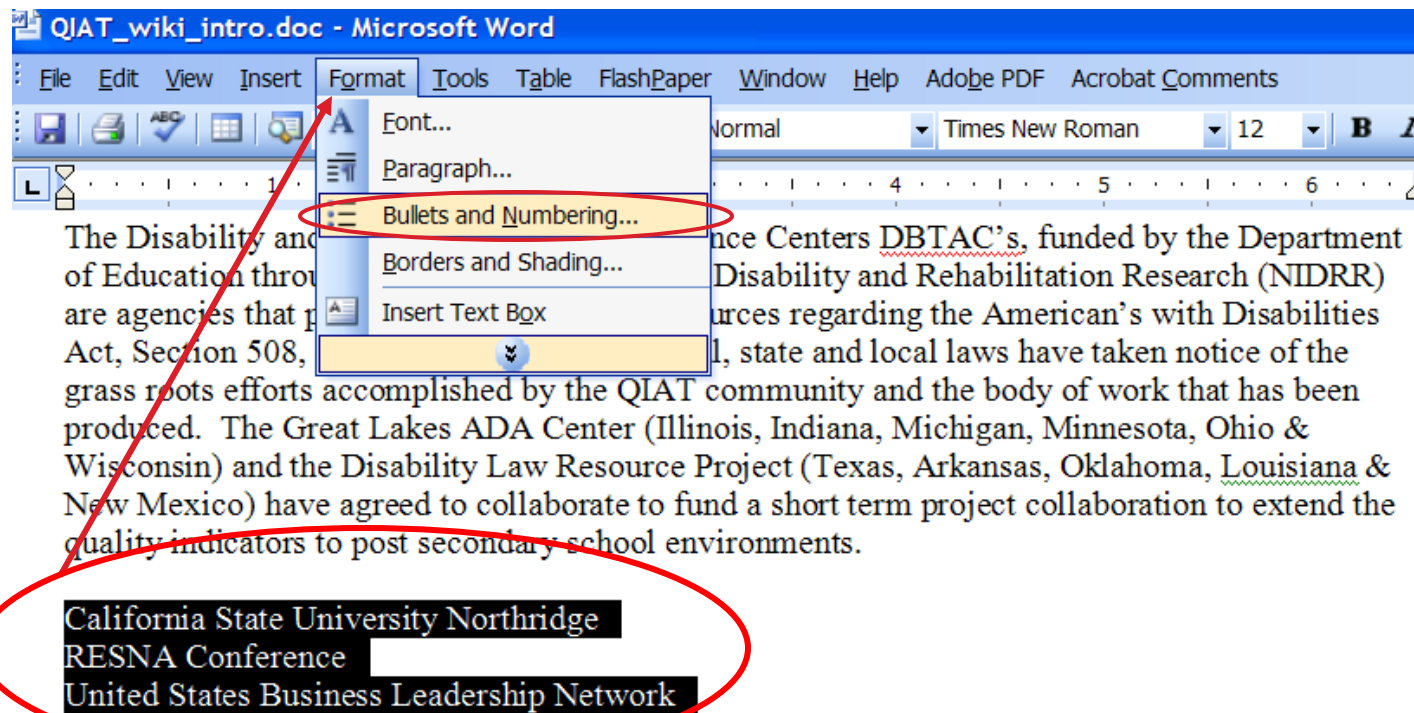
# Microsoft Word Documents

## ► Provide Alternative Text for Images



# Microsoft Word Documents

## ► Create Proper Lists





# Microsoft Word Documents

## ► Create Proper Lists



# Microsoft Word Documents

- ▶ Format Hyperlinks
  - Highlight information or URL to link
  - Right click on item, choose hyperlink
  - Fill “text to display” with a descriptive link

# How to Create an Accessible PDF

- ▶ Start with a Well Structured Document
  - Headings
  - Alt Text for Images
  - Proper Lists
  - Links
- ▶ Use PDF Maker available with Adobe Standard and Professional– Change Conversion Setting – Be Sure Accessibility is Checked
- ▶ DO NOT USE “File Print to PDF”

# Creating Accessible PDF's but no Adobe Professional?

- ▶ Word 2007– Save as PDF Add-in
  - [www.microsoft.com/downloads/details.aspx?FamilyID=f1fc413c-6d89-4f15-991b-63b07ba5f2e5&displaylang=en](http://www.microsoft.com/downloads/details.aspx?FamilyID=f1fc413c-6d89-4f15-991b-63b07ba5f2e5&displaylang=en)
- ▶ OpenOffice.org Writer
  - [download.openoffice.org/index.html](http://download.openoffice.org/index.html)
- ▶ IBM Lotus Symphony
  - [symphony.lotus.com](http://symphony.lotus.com)
- ▶ Will still need Adobe Professional for testing and modifying files for accessibility

# Tips for Checking PDFs for Accessibility with Acrobat Reader

- ▶ Drag cursor over text to see if it can be selected
- ▶ In Acrobat Reader, Save As Text (Accessible), open .txt file, check order and whether text makes sense
- ▶ Use Read Out Loud to listen to text.
- ▶ In a PDF Form, hover the mouse pointer over each form field and check that a label appears as tool tip. Tab to each field and confirm that all content is present and in the right order



# Tips for Checking PDFs for Accessibility with Acrobat Reader

- ▶ Check to see if the Document is “Tagged”  
Go to File – Properties– Check Reflow of document
- ▶ Hover cursor over each meaningful image and check out if graphic is labeled appropriately with text
- ▶ Insure in Document Properties under Security tab that “Content Copying For Accessibility” is “Allowed”
- ▶ Do an Accessibility Quick Check– Only checks whether file is tagged

# Accessibility Built in to Acrobat Reader

- ▶ Reflow
- ▶ Zoom To
- ▶ Read Out Loud
- ▶ Accessibility Setup Assistant
  - High Contrast
  - Set colors used to highlight form fields and required fields
  - Always display keyboard selection cursor
  - Disable Font smoothing
  - Reading Order
  - Display PDF Documents in the web browser
  - Auto-save disabled
  - Reopen documents to last viewed
  - Customize how AT accesses visible pages
  - Override Page Layout Style
  - Override Document Zoom

# Adobe Professional Accessibility (Accessible Source Document)

- ▶ Run accessibility test
- ▶ Change Reading Order
- ▶ Change items tagged inappropriately
- ▶ Make Image Null Description using Background Image
- ▶ Use Table Editor
- ▶ Set Security that Permits Accessibility
- ▶ Create PDF forms

# Adobe Professional Accessibility (Source document Inaccessible)

- ▶ Open a document to convert to PDF format
- ▶ Check for tags, and Tag a document that hasn't been tagged
- ▶ Add Language attribute
- ▶ Add Alternative text to an image
- ▶ OCR an “image only” scan of a document
- ▶ Create accessible links

# Accessibility and PDF Tables

- ▶ PDF Tables may not be accessible if created within source document
- ▶ Table Editor (Adobe Acrobat Pro 9) and Table Inspector (Adobe Acrobat Pro 8) can be used to improve accessibility of tables
- ▶ Table Editor (Pro 9) adds more features to associate header cells
- ▶ Can add a Table Summary



# Accessibility and PDF Forms

- ▶ Accessible forms issue same as with HTML in associating label with field
- ▶ Can Tag forms with Adobe Acrobat Professional to associate label with fields
- ▶ Life Cycle Designer has an accessibility panel to add accessibility to:
  - Text Fields
  - Radio buttons
  - Check Box
  - List or Combo Box
  - Button Controls
  - Tab Order

# Testing a Site for Accessibility

- ▶ Run a full Accessibility Text
- ▶ Assess Reading order
  - Check Order Panel
  - Screen Reader and/or Read aloud feature
  - Save as Text (accessible)

# Commonlook (Third Party Alternative)

- ▶ Requires Training
- ▶ Automates processes in correcting PDF errors
- ▶ Simple and Complex Tables
- ▶ Form Field tagging
- ▶ Tests for 508 Compliance and provides report

# PDF Accessibility Resources

- ▶ Adobe Accessibility Resource Center
  - [www.adobe.com/accessibility](http://www.adobe.com/accessibility)
- ▶ Adobe Accessibility Blog
  - [blogs.adobe.com/accessibility/](http://blogs.adobe.com/accessibility/)
- ▶ Reference Card for Accessible PDF Creation from Word
  - [blogs.adobe.com/accessibility/2008/03/reference\\_card\\_for\\_accessible.html](http://blogs.adobe.com/accessibility/2008/03/reference_card_for_accessible.html)
- ▶ Webaim PDF Accessibility Page
  - [www.webaim.org/techniques/acrobat/](http://www.webaim.org/techniques/acrobat/)
- ▶ PDF Universal Accessibility Committee
  - [pdf.editme.com/PDFUA](http://pdf.editme.com/PDFUA)

## PDF Accessibility Resources (cont.)

- ▶ Ten Tips for Creating Usable and Accessible PDFs
  - [refresh-detroit.org/2008/12/02/ten-tips-for-creating-usable-and-accessible-pdfs/](http://refresh-detroit.org/2008/12/02/ten-tips-for-creating-usable-and-accessible-pdfs/)
- ▶ PDF Forms & WCAG 2.0 Webinar
  - [www.paciellogroup.com/blog/?p=197](http://www.paciellogroup.com/blog/?p=197)
- ▶ PDF Accessibility Webinar–PDF & WCAG 2.0
  - [www.paciellogroup.com/blog/?p=404#more-404](http://www.paciellogroup.com/blog/?p=404#more-404)
- ▶ PDF Accessibility– California State University, Sacramento Training Document
  - [www.csus.edu/training/handouts/workshops/creating\\_accessible\\_pdfs.pdf](http://www.csus.edu/training/handouts/workshops/creating_accessible_pdfs.pdf)



## PDF Accessibility Resources (cont.)

- ▶ Ohio State University Web Accessibility Center's Accessibility and PDF
  - [www.wac.ohio-state.edu/pdf/](http://www.wac.ohio-state.edu/pdf/)
- ▶ Training Video on PDF Accessibility from AccessIT [video] by Terry Thompson (requires Windows Media Player)
  - [www.washington.edu/accessit/video/placeware040403.wvx](http://www.washington.edu/accessit/video/placeware040403.wvx)
- ▶ CommonLook® Section 508 for Adobe® Acrobat®
  - [www.net-centric.com/products/cl\\_s508\\_adobe.aspx](http://www.net-centric.com/products/cl_s508_adobe.aspx)



Thank You for Your Attention!

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Please complete the Evaluation at  
<http://tinyurl.com/l3cpdn>

