### The Case for ICT Accessibility and Web Accessibility Tips, Tools and Strategies

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Georgia's State ADA Coordinator's Office | University System of Georgia • AMAC Accessibility Solutions

## **Session Goals**



- Case for Accessibility
- Web Accessibility Tips, Tools and Strategies
- Accessibility Resources



# Making the Case For Accessibility

- Economics accessibility benefits everyone
- Legal reasons mandates and liabilities
- Technological reasons accessibility is becoming more readily available
- Social reasons unlocking opportunity
- All interconnected reasons make a compelling case for accessibility

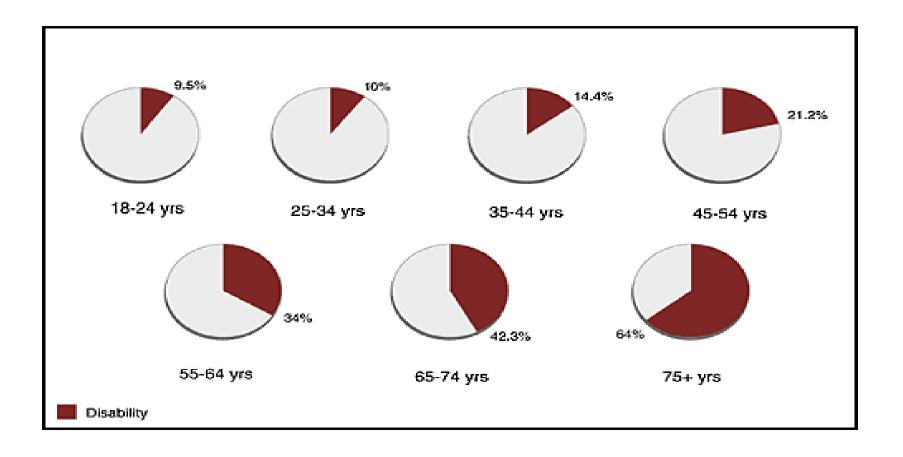


# Who Benefits from Accessibility?

- 60 million Americans with disabilities
- 1 out of every 2 Americans directly affected or indirectly impacted by disability
- Aging and working baby boomers
- Building accessibility from the start is better for everyone



### **Americans with Disabilities by Age Groups**





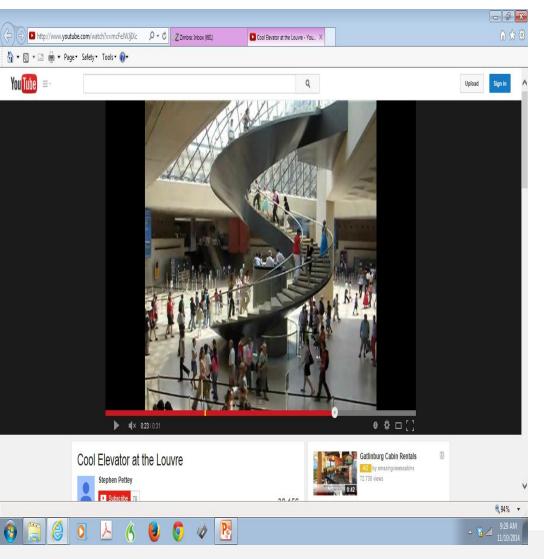
### **Business Case for Accessible Websites**



- Good accessibility is more usable by everyone
- Compliance with federal law
- Increase search engine optimization
- Improved interoperability (browsers, o/s, devices)
- Expands your audience



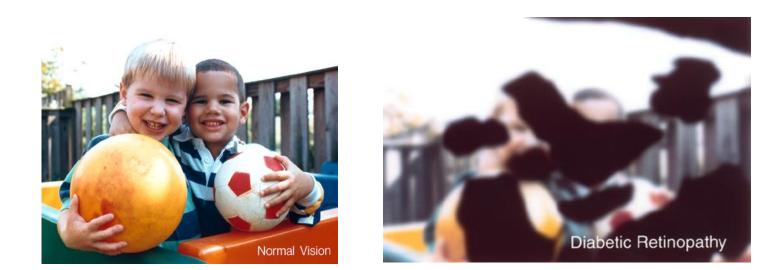
### **Accessible Websites Benefit Everyone**



- ✓ Older people
- People with disabilities
- English as second language
- Persons with lower literacy levels
- Staff & Customers



## **Diabetic Retinopathy**



This is the largest single cause of visual impairment among those of working age.

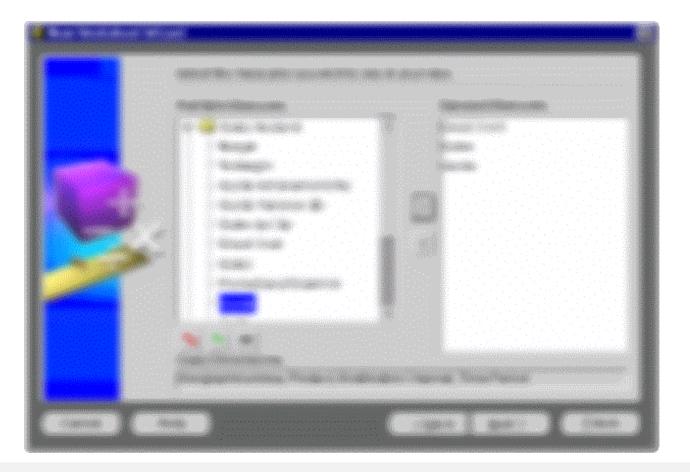


### **Aging/Cataract View Computer Screen**

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#### **20/200 Legally Blind View Computer Screen**





### The Changing Legal Landscape of Web Accessibility for State Government

- Title II of the Americans with Disabilities Act
  - Settlement Agreements between U.S Department of Justice (DOJ) and various public entities;
  - DOJ Advance Notice of Proposed Rulemaking for Web accessibility
- Section 504 of the Rehabilitation Act of 1973
- States receiving funding under the Assistive Technology Act were required in the 1990's to secure letters of agreement re: 508 compliance from each Governor.
  - The State of Georgia receives Assistive Technology Act funds through the U.S. Department of Education – <u>Tools for Life</u> – Under AMAC at GT.



## What Is Section 508?

- Section 508 of Rehabilitation Act Amendments of 1998: "Electronic information and data must be equally accessible to individuals with and without disabilities."
- Guide to Section 508 Standards



## What Does Section 508 Cover?

- 1194.21 Software Apps & Operating Systems
- 1194.22 Web-based Intranet and Internet
- 1194.23 Telecommunications Products
- 1194.24 Video and Multimedia Products
- 1194.25 Self-contained, Closed Products
- 1194.26 Desktop and Portable Computers



## **Section 508 for Website Developers**

- 1194.21 Software Apps & Operating Systems
- 1194.22 Web-based Intranet and Internet
- Separate in current Section 508
- Combined in the Section 508 Refresh, along with Section 255 Telecommunications Act



## **508 Refresh**

- The U.S. Access Board is updating its Section 508 Standards and Telecommunications Act Accessibility Guidelines together to ensure consistency in coverage of telecommunication technologies and products.
- The current <u>Section 508 Standards</u> and <u>Telecommunications Act</u> <u>Accessibility Guidelines</u> remain in effect until this rulemaking is complete.
- On February 23, 2014, the Board submitted a proposed rule to update Section 508 Standards and the Telecommunications Act Accessibility Guidelines to the Office of Management and Budget (OMB). Once cleared by OMB, the proposed rule will be published in the *Federal Register* and will be available for public comment for a specified period of time.



## **Section 255 of the Communications Act**

- Section 255 of the Communications Act, as amended by the Telecommunications Act of 1996, requires telecommunications products and services to be accessible to people with disabilities. Accessibility guidelines issued by the Board under Section 255 address the telecommunications products covered including:
- wired and wireless telecommunication devices, such as telephones (including pay phones and cellular phones), pagers, and fax machines
- other products that have a telecommunication service capability, such as computers with modems
- equipment that carriers use to provide services, such as a phone company's switching equipment.



## **Definition of "Accessible"**

- Accessible means compliance to a standard that specifies testable success criteria.
- Example: Web Content Accessibility Guidelines (WCAG 2.0) where success criteria includes up to 3 levels of compliance (A, AA, AAA).
   Global Alliance on Accessible ICT



# W3C WCAG 2.0

- International guidelines
- Worldwide Web Consortium (W3C), Web Content Accessibility Guidelines (WCAG 2.0)
- Some harmonization, but not the same
- Newcomers: Focus on existing Section 508 Standards
- Experienced with 508: Review WCAG 2.0



# What is Accessible Web Design?

Web accessibility means that people with disabilities can use the Web. More specifically, Web accessibility means that people with disabilities can perceive, understand, navigate, and interact with the Web, and that they can contribute to the Web. (W3C.org, 2013)

Types of Content:

- Services
- Resources including links to other sites
- Forms and Tables
- Pictures, Images and Videos



### **Voluntary Action Plan for Web Accessibility**

- Establish a policy that your web pages will be accessible
- Ensure that all new and modified pages and content are accessible
- Develop a plan with priorities for making content more accessible
- Ensure that staff and contractors for web and content are properly trained in accessible design
- Post a telephone number and email for users needing accessibility help to use your webpage
- Use AccessGA's web testers using assistive technology to periodically test your web site!



## **Plan Structure and Navigation**

- Plan logical structure (h1, h2, h3)
- Less is more. Keep content simple, organized.
- Reading order should match visual order
- Include a search feature on each page
- Include a "skip to main content" feature at top of pages
- To check navigation, pull out your mouse and use your tab keys



## **Use of Colors, Contrast and Fonts**

- Provide good color contrast avoid light gray, yellow, green, reds
- Avoid use of colors alone to convey information
  - Example: red asterisk for required information on form
- Use true text, not text images
- Use no smaller than 10 font size
- Avoid use of multiple caps on lines.



# **Creating Descriptive Hyperlinks**

- Provide Descriptive Hyperlinks
  - Ensure link text makes sense on its own
    - Avoid words like "click here", "read more,"
  - Purpose of the link should be obvious from the link text alone
  - Design link focus indicators (Icons) to provide a visual cue for links



# **Use Video and Audio Carefully**

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- Video should be appropriately captioned
- Video should be appropriately audio described
- Videos should allow for pause/play features
- Avoid flashing content as it can result in seizures



### **Use Text Equivalents for Non-Text Elements**

- For images, charts, and graphs
  - Use Alt Text to describe succinct description of image
  - For Word, PDF, PowerPoint:
    - Right click image, select Format Image, select Web Tab
    - Use the minimum number of words to describe image
    - Use the <u>Web Accessibility Toolbar</u> to Select Images, List Images to review current alt text on a web page.



### **Use Row/Column Headers for Data Tables**

- Design tables to read from left to right and from top to bottom
- Use Row and Column Headers
- Keep table design simple
- Associate cells with proper headers
- Detailed instructions are available at WebAIM for Creating Accessible Tables



## **Create Accessible Web Content**

- For Rich Media Accessibility
- Adobe PDF
- Flash
- Open Office
- Word
- PowerPoint



## **Conduct 3-Step Web Accessibility Check**

- Use automated checkers like the <u>WAVE Web</u> <u>Accessibility Evaluation Tool</u> (for web pages and documents)
- Manual Checks & Keyboard Accessibility
- Find Trusted Testers: AT Users





## **Resource List**

- <u>AccessGA</u>
- Web Accessibility Group of USG
- WebAIM a premiere web accessibility site
- Web Accessibility Toolbar
- WAVE Accessibility Evaluation Tool
- WebAIM Section 508 Checklist
- Access Board detailed explanations of 1194.22
- WebAIM WCAG 2.0 Checklist
- W3C Web Accessibility Initiative
- <u>Colour Contrast Analyzer</u> by the Paciello Group



### **Centralized Web Evaluation Center**

#### Evaluation and Testing Protocol Includes

- Evaluation Team
  - Project Lead
  - Information Architect with Accessibility Expertise
  - Users with Disabilities | AT Tools and Expertise
- Evaluations Tools and Resources
  - HiSoftware <u>Compliance Sheriff</u>
  - <u>Firefox IBM Firebug Plug-in</u>
  - IBM ARIA XML Content Checker
  - <u>Wave</u> and the <u>Functional Accessibility Evaluator (FAE</u>)
  - Readability of Content (e.g. <u>Hemingway</u>) for MAC or Windows
  - WCAG Color Contrast Analyzer Tools
- Management Tools
  - <u>IBM Enterprise Compliance System (ECS)</u> Compliance Checker
  - <u>GOALS</u> Benchmarking and Planning Tool



# An Accessibility Mindset | Bake It In!



- Director's Office
- IT Department
- HR Department
- Procurement
- All Managers
- Customer Service Staff
- Policy Staff
- Training Staff
- Employees and Customers
- And third party suppliers!



# **ICT Services | Resources**

- International Association of Accessibility Professionals (IAAP)
- <u>Global Initiative for Inclusive Information and Communication</u> <u>Technologies (G3ICT)</u>
- <u>Georgia ICT Accessibility Massive Open Online Course</u>
- AccessGA <u>Services and Resources</u>
- joy.kniskern@amac.gatech.edu (presenter)



### AccessGA

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## Thank YOU!!!

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