

Technology Accessibility for People with Disabilities August 2018

Presenters

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Presentation Overview

- ▶ Vision
- ▶ What is technology accessibility for people with disabilities?
- ▶ Why is technology accessibility important?
- ▶ Legal requirements for technology accessibility
- ▶ Ensuring technology accessibility
- ▶ What can we do to ensure technology accessibility in Colorado State Government?
- ▶ Conclusions
- ▶ References

Vision:

- ▶ Colorado will be a leader in ensuring that technology, services, and information are accessible to all users including people with disabilities.

What is technology accessibility for people with disabilities?

- ▶ Technology Accessibility means that systems, software, websites, communications, forms, and peripheral devices can be effectively used by individuals with disabilities who must interface with technology in non-standard ways such as blind people using screen readers.

Accessibility Examples

- ▶ Navigation and activation of applications can be performed with the keyboard, in addition to the mouse
- ▶ Information is not conveyed by color alone, e.g. incorrect information is highlighted in red
- ▶ Graphics are labeled with descriptive text
- ▶ Peripheral devices have physical buttons or accessible software controls

Why is Technology Accessibility Important?

- ▶ Technology accessibility is both a civil rights and a quality of life issue
- ▶ Technology has transformed the lives of people with disabilities
 - Blind individuals can independently read printed media, access websites, and maintain employment
 - Deaf individuals can communicate through email and text without interpreters or special equipment
 - Individuals with physical limitations can give voice commands and dictation in place of physical controls



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Why is Technology Accessibility Important, cont'd?

- ▶ If technology is not designed to be accessible, customers, clients, citizens, and employees may not be able to access information and services independently.
- ▶ Given current demographic trends, the number of people affected by accessibility considerations is growing.
- ▶ In the next 15 years, it is estimated that over 24 million Americans will have a serious visual disability.



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Why is Technology Accessibility Important, cont'd?

- ▶ Personal Experiences
 - Gmail conversion and emphasis on other Google applications which aren't fully accessible
 - State employment application and various government web sites
 - Multi-function printers and other devices using touch screen controls



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Legal Requirements

- ▶ Section 508, an amendment to the United States Workforce Rehabilitation Act of 1973, is a federal law mandating that all electronic and information technology developed, procured, maintained, or used by the federal government be accessible to people with disabilities.
- ▶ Title II of the Americans with Disabilities Act requires that state and local governments give people with disabilities an equal opportunity to benefit from all of their programs, services, and activities (e.g. public education, employment, transportation, recreation, health care, social services, courts, voting, and town meetings).
- ▶ The Help America Vote Act requires that voting equipment is accessible to people with disabilities.



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Ensuring Technology Accessibility

- ▶ Technology accessibility isn't difficult; there are existing standards, guidelines, and resources for creating accessible technology
- ▶ If accessibility is included in initial project design, it adds minimal costs to systems
- ▶ Like retrofitting a building with elevators, making an existing IT system accessible can be difficult and costly; so including accessibility as part of the initial specifications and design is critical



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Ensuring Technology Accessibility, Cont'd

- ▶ Accessibility needs to be verified by a combination of automated tools and human testing
- ▶ There are third party vendors with expertise in building and evaluating accessible technology



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What Can We do to Promote Technology Accessibility?

Build awareness

- ▶ Conduct analysis of technology accessibility when considering new systems, software, websites, and other communications, forms, and peripheral devices
- ▶ Educate program, communication, IT, procurement staff, and leadership on technology accessibility requirements when designing and selecting systems, software, websites, and other communications, forms, and peripheral devices



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What Can We do to Promote Technology Accessibility, Cont'd?

Take action

- ▶ Develop a technology accessibility policy and a technology accessibility plan
- ▶ Develop technology accessibility tools, resources, and expertise
- ▶ Engage a third party accessibility advisor and testing company to support staff



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What Can We do to Promote Technology Accessibility, Cont'd?

- ▶ Include technology accessibility requirements in all equipment and system solicitations including custom and off the shelf IT systems and office equipment such as copiers and telephones.
- ▶ Develop standard language for solicitation documents
- ▶ Develop criteria for evaluating bid responses such as existing staff knowledgeable about technology accessibility or existing relationship with a third party accessibility resource.
- ▶ Develop standard contract language with specific and verifiable technology accessibility deliverables including requirements for live human testing.



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Conclusion

- ▶ Ensuring technology accessibility requires awareness, planning, knowledge, expertise, and commitment.
- ▶ Accessible technology means all citizens, including those with disabilities, can fully participate in and benefit from the services and information provided by government.



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Examples of Third Party Accessibility Advisory and Evaluation Companies

The following list is not meant to be exhaustive; this is a brief list of companies familiar with the topic of computer and internet accessibility.

SSB BART Group
www.ssbbartgroup.com

Jim Thatcher Accessibility Consulting
<http://jimthatcher.com/index.htm>

Criterion508.com
www.criterion508.com

WebAIM
www.webaim.org

Usablenet
www.usablenet.com/

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Accessibility Resources

Multiple web sites and online documents

- ▶ Web Content Accessibility Guidelines, Version 2.0 <http://www.w3.org/TR/WCAG20/>
- ▶ WCAG - The Web Content Accessibility Guidelines
 - Part of a series published by the W3C's Web Accessibility Initiative consisting of a set of guidelines on making content accessible, primarily for disabled users, but also for all user agents, including highly limited devices, such as mobile phones. The current version is 2.0.
- ▶ WAVE - Web Accessibility Evaluation Tool <http://wave.webaim.org/>
- ▶ ATAG - Authoring Tool Accessibility Guidelines <http://www.w3.org/WAI/intro/ataq.php>
- ▶ Overview of Web Accessibility from Wikipedia: http://en.wikipedia.org/wiki/Web_accessibility#cite_note-3
- ▶ WEB AXE - Podcast and blog on practical web design accessibility: <http://webaxe.blogspot.com/>
- ▶ An aggregator of RSS feeds concerning Web accessibility: <http://moj-blog.org/web-access/>

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Accessibility Resources, cont'd

- ▶ Federal web sites on the ADA and section 508 compliance: www.ada.gov, www.section508.gov
- ▶ Basics of Section 508 Compliance: <https://www.ssbartgroup.com/blog/2010/09/15/basics-of-section-508-compliance/>
- ▶ Making Microsoft Word documents and forms accessible: <http://www.freedomscientific.com/Training/accessible-forms-in-word.asp#skip>
- ▶ <https://sctc.ims.mnscu.edu/shared/FacultyTutorials/TutorialVideos/MakingYourWordDocumentsAccessible.pdf>
- ▶ Information on other accessible document formats: <http://www.acb.org/accessible-formats.html#ag16>
- ▶ <http://wac.osu.edu/pdf/> <http://www.daisy.org/>