Your Customers
Why make technology accessible?

Technology offers unprecedented opportunities and independence for all people.
The Internet Provides Access

- News
- Information
- Commerce
- Work
- Education
- Entertainment
- Job Search
- Government Services
- Civic Participation
Think about what **YOU** do Online?

- Work
- Social Media
- Email
- Shop
- Pay Bills
- Information/Research
Who does your audience consist of?

- Citizens
- Consumers
- Contractors
- Investors
- Employees
- Management
- Community
- World

EVERYONE
Who Benefits?

• All users

• Especially
  – People with disabilities
  – Aging population
Aging and Disability

• Our population is aging, baby boomers make up about 35% of the population.
• The work force over 55 is estimated to grow by 4% per year
• Many people develop disabilities as they age...whether or not they call it a disability.
<table>
<thead>
<tr>
<th>AGE RANGE</th>
<th>TOTAL</th>
<th>DISABILITY COUNT</th>
<th>DISABILITY %</th>
<th>US disability ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>age under 5 yr.</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>age 5 to 17 yr.</td>
<td>279,788</td>
<td>20,562</td>
<td>7.3</td>
<td>3</td>
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<tr>
<td>age 18 to 64 yr.</td>
<td>1,118,678</td>
<td>199,707</td>
<td>17.9</td>
<td>1</td>
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<tr>
<td>65 yr. and older</td>
<td>319,933</td>
<td>141,807</td>
<td>44.3</td>
<td>2</td>
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<tr>
<td>total WV population</td>
<td>1,820,836</td>
<td>362,447</td>
<td>19.9</td>
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<tr>
<td><strong>DISABILITY</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>HEARING</strong></td>
<td></td>
<td></td>
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<tr>
<td>5y-17y</td>
<td>2,939</td>
<td>1.1</td>
<td>14.3</td>
<td></td>
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<tr>
<td>18yr-64yr</td>
<td>47,265</td>
<td>4.2</td>
<td>23.7</td>
<td></td>
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<tr>
<td>65&lt;</td>
<td>68,142</td>
<td>21.3</td>
<td>48.1</td>
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<td><strong>VISION</strong></td>
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<tr>
<td>5y-17y</td>
<td>3,740</td>
<td>1.3</td>
<td>18.2</td>
<td></td>
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<tr>
<td>18yr-64yr</td>
<td>44,017</td>
<td>3.9</td>
<td>22</td>
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<tr>
<td>65&lt;</td>
<td>32,544</td>
<td>10.2</td>
<td>22.9</td>
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<tr>
<td><strong>COGNATIVE</strong></td>
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<tr>
<td>5y-17y</td>
<td>17,036</td>
<td>6.1</td>
<td>82.9</td>
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<tr>
<td>18yr-64yr</td>
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<td>7.6</td>
<td>42.5</td>
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<tr>
<td>65&lt;</td>
<td>35,602</td>
<td>11.1</td>
<td>25.1</td>
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</tr>
</tbody>
</table>
Computer-related Assistive Technology

• Adaptive keyboard
• Screen-reader software
• Screen magnification software
• Pointing device
People with Mobility Impairments

• May use only the keyboard for navigation

• May tire quickly

• May not have fine motor control when using a mouse

✓ All content must be accessible from the keyboard

✓ Lengthy navigation may cause fatigue

✓ Small or moving links are difficult to select
People who are Blind

- Do not use a mouse
- May use a screen reader to listen to the content

✓ All content must be accessible from the keyboard only
✓ Images, photos and graphics are unusable
✓ Colors are unusable
✓ Navigation may be difficult / confusing
People with Low Vision

• May use screen magnification software

• Only a small portion of the screen is seen at a time

✓ Images, photos and graphics may become unusable when enlarged

✓ Navigation may be difficult / confusing if it occurs in multiple locations along the outer edges of the web page
People who are Deaf or Hard of Hearing

Access Considerations

✔ Video clips that include audio are unusable
✔ Audio clips are unusable
People with Cognitive Impairments

- May be easily distracted
- Complex layouts may lead to confusion
- Text-only content may be limiting

- Animated images may be distracting
- May be difficult to identify important content on a busy page
- Use graphics when they support content
Let’s Look at Legal Precedence - Government

• 1973 Rehabilitation Act, Section 504 and 508 (Federal Government)
  – Federal Fund recipients (Section 504 and 508)

• 1990 Americans with Disabilities Act, Title II (State & Local Government)
  – DOJ settlements – Project Civic Access
  – Access Board Drafts Guidelines
DOJ Project Civic Access

9/7/2016

“The Justice Department announced today that it filed a complaint and consent decree resolving claims that Humboldt County, California violated Title II of the Americans with Disabilities Act (ADA) after failing to comply with the ADA under a Project Civic Access (PCA) Settlement Agreement. Under the consent decree, the county will, among other things, bring all county facilities, programs, services and activities into compliance with the ADA within three and a half years; ensure that the county website conforms with the Website Content Accessibility Guidelines 2.0AA; provide curb ramps at all county intersections; ensure that emergency management procedures, policies and shelters are accessible to individuals with disabilities; hire an ADA coordinator, independent licensed architect, web accessibility coordinator and website accessibility consultant; and pay $275,000 to compensate individuals with disabilities who faced barriers to facilities, programs, services or activities. The agreement has a term of three and a half years.”
DOJ Settlement Policies may include:

- **Web pages/apps** must conform with WCAG 2.0 AA
- Notice on homepage which:
  - States policy
  - Solicits user feedback
  - Provides contact person/information
- **Designated Web Accessibility Coordinator**
- Annual Training
- Annual Assessment & Review
- Regular Testing
Web Accessibility Coordinator:

• Responsible for Accessibility Best Practices
• Knowledgeable about:
  – Title II
  – WCAG 2.0 AA
• Coordinates web compliance
• Contact person for web based complaints
Who defines Web Accessibility?

The Rehabilitation Act of 1973

Section 504

Section 504 declares civil rights for individuals with disabilities. Section 508 sets requirements for accessible technology.

Section 508
Americans with Disabilities Act and Section 504

- **Americans with Disabilities Act (ADA) and Section 504 of Rehabilitation Act of 1973**
  - Prohibit discriminating against individuals with disabilities
  - Ensure “effective communication” for people with disabilities

- **Office for Civil Rights (OCR)**
  - Institutions that use the internet for communication regarding programs, goods and services must make that information accessible;
  - must “effectively communicate” with individuals with disabilities including students, faculty, staff and the wider community

- **Department of Justice (DOJ)**
  - Must provide “equal access to their programs”, services or activities unless doing so would fundamentally alter the nature” of the programs, etc. or “would impose an undue burden
Section 508 and WCAG 2.0: Brief History

- **1999** - WCAG 1.0 released a set of Guidelines from **W3C**, an International Standards organization (ISO).
- **2008** WCAG was updated to address changing technologies. In 2008 WCAG 2.0 was finalized.
- **2012** WCAG 2.0 became an ISO standard.
- Many countries have decided not to create their own standards, instead their disability laws require compliance with WCAG 2.0.
- When it came time to update the **508 Standards**, the U.S. proposed the same approach.
Web Content Accessibility Guidelines (WCAG 2.0)

Defines how to make web content more accessible

www.w3.org
Agency: Civil Rights Division, DOJ
Action: Supplemental Advance Notice of Proposed Rulemaking (SANPRM)

Nondiscrimination on the Basis of disability; Accessibility of Web Information and Services of State and Local Government Entities (Title II).

The comment period has been extended until October 7, 2016
Standards for Accessibility

Standards for the Built Environment

Standards for the Pedestrian Access Route

ADA HEIGHT STANDARDS
SCALE: NO SCALE

Objects above headroom clearance cannot protrude any amount

Protruding objects cannot reduce the minimum width of accessible routes

Objects with leading edges within cane sweep can protrude any amount

Area of Cane Detection
• Direct Reference to WCAG 2.0 (p. 41)
  – Consistent with international standards organizations dealing with the issue.
  – Incorporation of WCAG 2.0 directly serves the best interests of Americans with Disabilities in helping to accelerate the spread of Web accessibility.
  – WCAG 2.0 was written to be technology neutral, the language and phrasing of the Success Criteria can be applied to any technology found on the Web.
WCAG 2.0 Overview
WCAG 2.0
How the Standard is Structured

• 4 Principles

• 12 Guidelines

• 38 Success Criteria (Requirements)
  – 25 SC at Level A
  – 13 SC at Level AA
  – 24 SC at Level AAA (Not Required for Section 508)

• Links to Techniques
WCAG 2.0
POUR Concept

• The 4 Principles

  • **Perceivable**
    Content is made available to the senses - sight, hearing, and/or touch
  
  • **Operable**
    Interface forms, controls, and navigation are operable
  
  • **Understandable**
    Content and interfaces are understandable
  
  • **Robust**
    Content can be used reliably by a wide variety of user agents, including assistive technologies

POUR’s Overlapping Tenets
WCAG 2.0 Success Criteria

• **A** – Priority 1 checkpoints (*Must*)
• **AA** – Priority 1 and 2 checkpoints (*Should*)
• **AAA** – Priority 1, 2, and 3 checkpoints (*May*)

*Trend*: settlements require Level AA minimum
Success Criteria

- **A**
  - Audio-only and video-only
  - Captions
  - Alternative audio description or media alternative

- **AA**
  - Captions (Live)
  - Audio Description (prerecorded)

- **AAA**
  - Sign Language (prerecorded)
  - Extended Audio Description (prerecorded)
Why Have Accessible Web Sites?

- Right thing to do
- Increased social reliance on online service
- Cleaner code
- Demonstrates social responsibility
- Easier to use for **ALL** people
- Protect from liability
What To Do Now?

• Agencies should be proactive and thinking ahead of when the Final Rule is issued.
• Agencies should become familiar with what will be the new Section 508 Standards:
  – Web Content Accessibility Guidelines (WCAG) 2.0 Level AA
Want to test your site?

• WAVE (Web Accessibility Evaluation Tool) by WebAIM

• WAVE indicates errors
  – green means an element is accessible, red is inaccessible, yellow indicates a warning

• Results are meant to be reviewed by a human...a computer cannot test accessibility
WCAG 2.0: W3C Links

- Web Content Accessibility Guidelines (WCAG) 2.0: Short URL: [w3.org/tr/wcag](http://w3.org/tr/wcag)
- Understanding WCAG 2.0: URL: [http://www.w3.org/TR/UNDERSTANDING-WCAG20/](http://www.w3.org/TR/UNDERSTANDING-WCAG20/)
- How to Meet WCAG 2.0: URL: [http://www.w3.org/WAI/WCAG20/quickref/](http://www.w3.org/WAI/WCAG20/quickref/)
- Techniques for WCAG 2.0: URL: [http://www.w3.org/TR/WCAG20-TECHS/](http://www.w3.org/TR/WCAG20-TECHS/)
- Guidance on Applying WCAG 2.0 to Non-Web Information and Communications Technologies (WCAG2ICT) URL: [http://www.w3.org/tr/wcag2ict/](http://www.w3.org/tr/wcag2ict/)
More Links for WCAG 2.0

- W3C Web Accessibility Initiative
  URL: http://www.w3.org/WAI

- WebAIM’s Introduction to Web Accessibility
  URL: http://webaim.org/intro/

- WebAIM’s WCAG 2.0 Checklist (for HTML documents)
  URL: http://webaim.org/standards/wcag/checklist

- Accessible Digital Office Document (ADOD) Project
  URL: http://adod.idrc.ocad.ca/

- Color Advice for Maps
  URL: http://colorbrewer2.org/