State ADA Coordinator’s Office:

2023 Virtual ADA Conference for State & Local Governments Session 1C

Georgia Finance and Investment Commission

03:00 PM – 04:30 PM Eastern Time

May 9, 2023

JOHAN: Good afternoon everyone this is Johan from CIDI at Georgia Tech. I am going to start by covering accessibility features and options for attendees. And take care of some additional housekeeping items.

First off, we are offering captioning live also known as CART services. If you attended this morning and this afternoon you have already seen it. There are 2 options for accessing captions. One is through the Streamtext link that has been dropped into the chat that opens up a third-party application for additional options also on the zoom toolbar the bright red arrow pointing to CC button on the toolbar. That can be tapped to through the keyboard or peripheral device of your choice.

The host and cohost can spotlight someone. Any participant can pin another participant's video at any time it only impacts the participants display. It is very straightforward how to spotlight or panic participant. Hover over the participant you want to spotlight or pin and select the… And from the menu you can choose spotlight for everyone or pin.

As mentioned with previous sessions, this is a new change to Zoom that has only been out for a few months. It is sign language interpretation view. It has made our life as host easier and provide the lot more of flexibility and versatility for the end-user who accesses sign language. Assigning interpreters in the meeting advanced section, the host must neglect sign language interpretation and toggle to enable.

The Zoom desktop version must be used by the host to manage and initiate interpretation. For participants, sign language interpreters are shown in the dedicated video channels. That can be resized or relatable relocated to whatever location and size the end user prefers. I have a bright red arrow pointing to the interpretation. This is available for anyone in the room who wants to stream the ASL interpreter.

You simply click on that or tab to it as well with your keyboard or peripheral device. Select the ASL option after selecting interpretation on that window. Some additional housekeeping. The Zoom chat feature is disabled for participants. We ask that you submit your questions using the Q&A feature found on the Zoom toolbar. There will be a brief Q&A session following the presentation.

All questions submitted by the registrants during the registration process, have been provided to the respective presenters ahead of time. The Virtual ADA Conference team will moderate the Q&A throughout the presentation.

As time allows they will address as many questions as possible. If the team is unable to get your questions during the session, they will make every effort to follow up after the conference. As a reminder do not place any private or confidential information in the Q&A.

All presentations are being recorded and we will start the recording in just a moment. These will be housed on the State ADA Coordinator office website in the weeks following the conference. For any technical issues experienced related to Zoom, you will have access to the Zoom support link in the chat in a moment. Presenters are invited to turn their cameras on during the introduction.

A big thank you to Rayianna Daniels whom I am co-presenting with today for being willing to turn on her camera. I will withhold because with my visual impairment you will be seeing my forehead because I get so close to the monitor. Forgive me for not having my camera on. It is just ergonomically not working extremely well. So I will forgo exposing my forehead to you all. With that, we will begin the recording and I will pass it on to Barbara Tucker.

MODERATOR: Thank you Johan and welcome back everyone to the final session of the day. Session 1C *Digital Accessibility Initiatives and the Legal Landscape*. The presenters for today are Johan Rempel whom you just heard and Rayianna Daniels. Mr. Rempel brings over 20 years of experience to the Center for Inclusive Design and Innovation. CIDI.

At Georgia Tech as the information and communication technology and user experience Quality Assurance Manager. With certifications and extensive experience as an assistive technology specialist, vision rehabilitation therapist and organization and mobility specialist for individuals with vision loss.

Rayianna Daniels serves as the Digital Accessibility Specialist and her duties with CIDI include performing web accessibility evaluations and providing training on a variety of applications and assistive technology solutions to higher education institutions across the country. You can read the complete bios in the registration email . Welcome Johan and Rayianna.

JOHAN: Thank you so much for the introduction Barbara. I will be covering a bit about what CIDI is and the work that we have been engaged with for over a decade with the ADA Coordinator's Office in Georgia. Very brief overview with CIDI.

We have combined decades of service and research, CIDI's mission is to improve the human condition through equal access to technology-based and research driven information services and products for people with disabilities. Essentially everything we do in touch is related to disability and accessibility.

We have about 65 employees at CIDI housed within the College of Design at Georgia Tech. We have large contracts with the national library service related to braille. Our braille department provides cutting edge technology related to output for braille that is physically embossed or in digital format as well.

We have the e-text department that provides high-quality e-text in many formats such as PDF, document, PowerPoint, DAISY and HTML. Captioning and Audio Description services makes classrooms in meetings and labs and other audio environments fully accessible 4:04 hard of hearing including remote captioning and captioned media.

We are very fortunate to have the Tools for Life team. They are under the umbrella of the AT Act in every state in the country have AT Act Assistive Technology Act housed within CIDI and offer acquisition of assistive technology for Georgians of all disability so they can live and learn and work and play independently in the communities of their choice.

We provide accessibility compliance best practice and user experience focused on individuals and organizations accessibility and usability needs through evaluation, testing, training, technical assistance and website/application accessibility. As a research Institute, we have a significant research arm with several research scientists focusing on disability awareness and accessibility.

We serve Georgia Tech across campus, University System of Georgia, higher education institutions across the country, state and federal governments, national international nonprofits and for-profit and Fortunate 500s as well. I have the privilege of now talking a bit about AccessGA.

We have worked very closely with the ADA Coordinator's Office over the years through access GA. It’s a joint project between the State of Georgia ADA Coordinator's Office CIDI in the Georgia Technology Authority GTA. A shout out to GTA. A few years back, they one in National Association of State CIO. We are proud to say we were involved with a lot of those Digital Accessibility Initiatives.

It was a pleasure partnering with both the ADA Coordinator's Office and GTA regarding a lot of those initiatives. The objective is to support Georgia State agencies that strive to provide equitable and timely access to their employees, students, and clients with a wide range of disabilities.

I must do the shout out. Mike Galifianakis is serving as one of the panelists today hoping is move forward. Access Georgia many years ago was the brainchild of Mike the previous ADA Coordinators Office . Very grateful for the groundwork that he laid passing the baton on to Stacey Valrie Peace who has done a fabulous job involving initiatives across the state.

Benefits of services include access to live webinars and archived. Technical assistance and hands-on training. Web accessibility evaluations and resources. Periodic newsletters. Up-to-date wiki of IT accessibility resources and information. Over the years we have worked with 35 state education agencies and there is a bit of alphabet soup here below.

A number of agencies we have worked with we could not fit all of them on the screen at once. It is pretty substantial all of the agencies we have worked with within the state. I am going to forgo the AccessGA video just because of newer information that has come up that I want to be sure I make time for as well. Agency specific deliverables, some of the deliverables include Georgia Technology Authority evaluation and remediation recommendations of more than a dozen Drupal templates .

The US Galileo application. Application accessibility evaluation and technical assistance of the Galileo portal that serves up to 7 million Georgians. Then the Georgia Library System. We have worked closely with the Georgia Library System to ensure that the patrons are getting materials and access as accessible as possible.

Disability Rights are human rights. This might sound obvious to some of you. But it is worth noting how the Disability Rights and Civil Rights Movement really paralleled in many ways. I have 2 photos on screen. One of them on the left is a number of individuals who are in wheelchairs. There is a sign over their heads reading: *Injustice anywhere is a threat to justice everywhere*. That is a direct quote from Martin Luther King Jr.

On the right is another photo . This took place the ADA in Philadelphia. This is a number of individuals with the in front of the bus system. This was a protest. Basically it sent a clear message that the buses are not accessible and there is a gentleman in a wheelchair with a sign that reads: I cannot even get to the back of the bus. A direct reference to Rosa Parks who was known for basically her protest of sitting at the front of the bus which in that day and age was very much frowned upon.

This gentleman is making the point that he cannot get to the back of the bus. Again, this is tied closely together, Civil Rights and Disability Rights. It is really about disenfranchising large portions of the population. Many of you may have heard of the passing of Judy Heumann. She was really a pioneer in the area of disability awareness and accessibility. Specifically with Section 504. This is a quote from Judy Heumann:

*Disability only becomes a tragedy when society fails to provide the things we need to literally lead our lives. Job opportunities or barrier free buildings for example. It is not a tragedy to me that I am living in a wheelchair.*

To the right, I have a screenshot of the documentary called *Crip Camp* a disability revolution. This is apropos especially considering this is the 50th anniversary of Section 504. I have watched this decrement documentary 2 times. If you have not seen it is on Netflix. I believe it is available on Amazon as well. I would strongly encourage you to watch it.

It is very sobering to witness how individuals with this had to fight in order to get Section 504 in place. To raised national awareness of the needs of people with disabilities. It is very sobering and gives a big great backdrop to how we got to Section 504 as a significant piece of legislation in this country.

Living with a disability. According to the CDC, approximately one in four about 26% of adults in the United States have some type of disability. Very often when we think of disability, we can often compete and compartmentalize that. Someone else with a disability and not me. But truthfully if we live long enough, we will likely all have a disability of some kind. The CDC has listed different categories . Vision, movement, thinking, remembering, learning, communicating, hearing, mental health, social relationships.

Disabilities post pandemic on the side of it, I think there is a greater and heightened awareness of disabilities encompassing a much larger population than many people may have thought. Hidden disabilities. I will say the large part of the work that we do at CIDI, the population that we serve the majority have hidden disabilities. Some disabilities do not have physical signs. We cannot always tell if somebody has one.

Hidden disabilities can include autism, mental health, acquired or traumatic brain injury, sensory processing, multiple sclerosis, epilepsy, partial sight and hearing loss. To the right is a sunflower. A lot of people are still learning what the sunflower is about. I suspect many of you on the call are familiar with this. This really represents the hidden disabilities community.

It is a tool to voluntarily share that a person has a hidden disability and might need assistance when in shock, at work in transport or in a public space. It is available in airports around the world including at least 77 airports in the United States. A friend of mine who is a flight attendant had a woman who appeared to be or to have some level of dementia on the airplane.

She was completely turned around not knowing what she was doing on the airplane. Her having the symbol which is a lanyard that is offered to and so many airports would have helped. It has something to be aware of. When you see the sunflower, it is often a person with a hidden disability who may or may not necessarily want to identify it as such to every person they come into contact with. But if they do experience difficulties, this can certainly indicate to many some additional assistance may be needed.

This screenshot is from Microsoft. I will give them full credit. Microsoft has really taken some strides toward greater accessibility and inclusion. These are personas on disabilities. Solve for one, extend too many. I will just go through a few of these. We have 3. Permanent disability, temporary and situational disability.

Permanent disability can be someone who maybe has one arm. Temporary disability can be someone with an injured arm. A situational disability may be a new parent or someone who is commuting in their vehicle and only has limited access to one hand. Ideally we do not want to have people texting or looking at their phone while driving but that does happen.

Regardless of whether it is permanent temporary or situational disability, it is still the same level of need here in many cases. Right? Some level of accommodation that needs to take place. Just thinking of disability is something that more than just a permanent disability. We all have disabilities in our lives at different states.

The other one is seeing. Someone who may be blind, cataract although cataract could be classified as a temporary disability in some countries it can be permanent . Surgery for cataracts is not available there. Distracted driver. We think of the Speech To Text and Text To Speech technology that is so prolific in our society today. That benefits everyone. Not just individuals who are blind or low vision.

Thinking of disabilities across the spectrum, thinking of it in a broader perspective that it will likely impact us and our personal ability to access content at some point in our lives, thinking of it in my perspective will make it more real and tangible for everyone.

A little bit about digital accessibility in the legal landscape. First I will qualify this by saying I am not an attorney. But I will be talking about some of the legal landscape here. Touching on some best practices as well beyond the bottom basement level of the legal landscape in a checkbox approach and Rayianna will discuss that as well.

The ADA was signed into law in 1990. It was signed into law before the Internet was actually even a thing. We have George H.W. Bush here in the photo signing the legislation into law. I suspect he was not aware at the time he was signing it that the ADA likely benefited him directly. In his later years, he experienced dementia and was also in a wheelchair.

So when we think of building codes, wheelchair accessibility, I suspect this really benefited him directly. The ADA is a civil rights law that prohibits discrimination against individuals in public life and jobs in schools and transportation and all public and private places open to the general public. It is important to realize the ADA as it now stands does not really say much about digital accessibility.

It does a robust job of spelling out building codes and other codes for the built environment but there is essentially nothing in the ADA that points to digital accessibility. So the emphasis with the ADA is really based on the spirit of the law not just the letter of the law. That is why the interpretation of the ADA is really subjective to the specific circuit or judge that is overseeing a case.

I pulled this from UsableNet. This is a snapshot of the ADA accessibility lawsuits, digital accessibility lawsuits that have taken place over the years. In 2018 there were 2314 cases and bumped up to 2890 the next year. Just over 3520 20, over 4020 21 and in 2022 to climb to 4061 cases. I suspect with the pandemic; it drove some of the numbers as well with this increase.

Section 504's is celebrating 50 years. You are probably somewhat familiar with Section 504. It is a civil rights law impacting education activities and programs. It was historic because for the first-time people with disabilities were viewed as a class, a minority group. Previously public policy had been characterized by addressing the needs of particular disabilities by category based upon diagnoses.

I am originally from Canada; I have my colleagues in Canada mentioning that they wished they had some legislative teeth like 504 and the ADA in place. This is a piece of legislation that was hard-fought. It certainly has benefited people across the country over the years.

The US access two is a small organization. However it has a lot of clout. An independent agency of the United States government devoted to accessibility for people with disabilities. The US Access sports established Section 508 standards that implement the law and provide requirements for accessibility.

It requires federal agencies to make their ICT like technology, online training and websites accessible for everyone. Going back to the ADA, there was nothing specifically spelled out about digital accessibility. On a state and local level, a lot of agencies and organizations have adopted Section 508 requirements for digital content.

ICT Refresh. Also known as 508 refresh. US Access Board Final Rule published in January US Access Board Final Rule published in January 2017. A lot of people get those confused . The difference between WCAG Web Content Accessibility Guidelines and Section 508. Essentially WCAG 2.0 Level AA is the same as Section 508 refresh.

Other than the fact that because they have been harmonized, other than the fact that Section 508 refresh gets into the hardware aspects more in the software applications on desktop for instance, but when it comes to digital content online, WCAG 2.0 Level AA and Section 508 are essentially the same.

This applies to US government agencies and specifically federal government agencies and their contractors. As I said many State and Local Government have adopted the ICT Refresh and/or WCAG standards as statutes or regulations and policies. This is a piece of proposed legislation called the Website and Software Applications Accessibility Act. There has been a lot of buzz about this. People are cautiously optimistic.

The legislation was introduced in Congress in September 2022. The law would require regulations to tell everyone how to make websites and software accessible to disabled people. This is kind of a wait and see to determine what kind of teeth this will actually have legislatively. Then something else that has come up recently which I did not incorporate into the slide. This was just posted this month.

I have asked Amy one of our team members to drop the link into the chat. This is a Title II and we cannot really call it NPRM that is notice for proposed rulemaking because it does not have an actual start date. If you notice, the posting has may but no specific date in May. This will be posted for 2-month period for comments. This is from the office of information regulatory affairs which is an office of the management and but it. The title is nondiscrimination on basis of disability accessibility and web information and services of State and Local Government.

A quick synopsis. Americans with Disabilities Act states that no qualified individuals with a disability be excluded from participation in or be denied the benefits of services programs or activities of public entity. Or be subjected to discrimination by any such entity. However many websites and public entities like State and Local Government's failed to incorporate or activate features that enable users with disabilities to access public entity services, programs, and activities. This is substantial.

The department tends to publish a notice of proposed rulemaking to amend its Title II ADA regulation to provide technical standards to assist public entities in complying with their existing obligations. To make their websites accessible to individuals with disability. So again it is Title II, referencing State and Local Government.

There is a bit of a caveat under alternatives, it states the department intends to ensure full access to websites for State and Local Government and will solicit public comments. That provide some wiggle room for state agencies and entities that may not be able to incorporate that full accessibility. They are looking at alternatives for that as well.

It is also worth noting, there is no reference to the standards that are going to be used. Will it reflect WCAG 2.0, 2.1, 2.2? There are still many questions about this NPRM. It is very promising and I am very excited about the prospect of moving this forward to greater accessibility. Let me check my time. I know I am a bit short.

This is worth mentioning. There's a lot of DEI initiatives Diversity Equity and Inclusion very often accessibility is not part of the equation. There is an executive order from the White House stating as the nation's largest employer, the federal government must be model for diversity, equity and inclusion and accessibility where all employees are treated with dignity and respect. They identify accessibility as something that is not rolled into DEI because often when it is, it is very often overlooked. So the White House has made it clear. A clear initiative toward highlighting the importance of accessibility.

Now I will play a short video. One moment please. A lot of people here about accessibility and digital accessibility. But it always surprises people that have actually seen it and heard it in action. That is my hope that this very brief maybe about six-minute video will give you a highlight of what accessibility looks and sounds like. I will play it.

[ VIDEO PLAYING ]

JOHAN: For the sake of time, I am going to cut that short. Hopefully you got the gist. The way that individuals with this access content, the content itself has to be accessible. They need to have the correct tools in order to do so. With that, I am going to go ahead and pass it to Rayianna Daniels.

RAYIANNA: Thank you Johan. With this portion of the presentation I will be providing you with a few things. We will talk about WCAG 2.0/2.1 and a bit about 2.2 and a bit about WCAG 3. Also we will talk about automated tools and about how they work while you are testing. Testing with manual testing with assistive technology. I will wrap up with writing and designing and developing for greater accessibility. Then I will give it back to Johan.

Starting off before we can really dive into WCAG, we must talk about the principles of WCAG. I feel like most of you may be familiar with them but if you are not I will give you an explanation. The WCAG organizing principles for accessibility are summarized around the acronym P.O.U.R.

Starting out with P for perceivable. Make your content easy to see and hear but include alternatives for people who cannot access the content is intended. Falling under WCAG guidelines, this would be the success criteria that talks about alternative text or providing captions for your videos.

O-Operable. Make it possible to navigate and interact with the content using a variety of tools. The biggest one that stands out or falls under this principle is keyboard access. Not everyone is able to use a mouse. They may use other peripheral devices or assistive technologies. You want to be sure the content is accessed and navigated with both devices and technologies.

U-Understandable. Make your content predictable and consistent and avoid complicated or confusing language and also give help when possible. That is a really big one because you want to make sure people who access your content and websites and your apps can actually understand and comprehend the information you are providing. Finally make sure your content is robust. Accommodate the person's needs and preferences without regard to the device or tools they are using or how they access the content.

WCAG 2.0, 2.1 and 2.2 I will talk a bit about. WCAG 2.0 was published and finalized December 2008. That came about I believe nine years after WCAG 1.0 which addressed all the changes that had been happening in technology and updated and refreshed standards and guidelines to match. In 2018 we saw the release order the publishing of WCAG 2.1.

In that 10-year gap from 2.022.1, there was an increase usage in mobile devices. This is saying that people stopped that people did not stop using desktops but we tend to look at things more on our phones. I usually do not go to my laptop first but look it up on my phone. And wanted to make sure they were standards and success criteria around mobile accessibility. 2.1 add it criteria that help address people with low vision and people with cognitive and learning disabilities.

That is kind of where we were and where we are now is WCAG 2.0 – which was supposed to be released in May 2023 but was pushed back I believe to sometime in the summer. With this new update, there is add it criteria for keyboard access and there will be the removal of obsolete criteria as well.

That is a bit about WCAG 2 and the sequence of updates. Getting into levels of performance of the bottom of the slide you have level A, AA and AAA. Level A performance is essential requirements to meet. If you fail to meet these requirements you can assure it will be impossible for one or more groups to access the web content. Success criteria that fall under level A would be your alt text, keyboard access.

Just basically the bare minimum things that people need to access your content and understand it and perceive it and operate it. Level AA necessary requirements to meet. If you fail to meet these, some groups will find it difficult to assess your content. They may become frustrated with it. Level AAA, typically regarded as best practices. Basically achieving the best overall experience for the user.

Here we have a White House Accessibility Statement which reads our ongoing accessibility effort works toward conforming to the Web Content Accessibility Guidelines WCAG version 2.1 Level AA. These guidelines not only help make Web content accessible to users with sensory cognitive and mobility disabilities but ultimately to all users regardless of ability.

This gives the perception of where the White House is heading or what they use as a baseline regarding accessibility. WCAG versions. We have a quote from the W3C .org regarding WCAG 2 which states WCAG 2 developed through W3C process and cooperation with individuals and organizations around the world. A goal of providing a single shared standard for web context of that meets the needs of individuals organizations and governments internationally.

Below that we have some big things about WCAG some of the things you want to remember. The first is WCAG is intended to be a living standard that changes at the web changes. You can kind of see that play out on real time with updates. As I said before, the move from WCAG 2.0 the move from WCAG 2.022.1 or the inclusion of it, it started to focus on mobile accessibility. That was one of the main things.

The next thing to remember regarding WCAG is content conforming to 2.1 or higher will conform to WCAG 2.0. It is kind of like a waterfall effect. Another thing is WCAG 2.1 does not replace 2.0 neither will point to replace 2.1.

Finally, W3C recommends using the most recent version when developing or updating content. Just to be sure you are in compliance with what the standard is at the time. We have already talked about the conformance level but here they are again. Level A baselevel guidelines that all web content must meet to be usable. That is the bare minimum. Level AA, guidelines that can be reasonably achieved by creators to make content more usable.

This is typically where most organizations should try to meet or are actively trying to meet. Level AAA, guidelines that require significant investment to achieve but provide a better overall experience. I would recommend shooting for Level AAA if you can. At least then you will know your striving toward the best experience for all users.

Here is the WCAG quick reference guide. It is probably the most used site I know for myself regarding Web Accessibility Evaluation Tool this is a resource that I will turn to for every single evaluation. It provides all of the WCAG guidelines in a linear fashion 1 which makes it easy to read and understand and 2, it allows you to customize what you see on the page.

You can filter by conformance level, by WCAG version and if you only want to see the attic criteria for 2.1 or WCAG 2.0 or just want to see WCAG 2.1 or everything altogether, you can filter by the techniques. Sufficient techniques, advisory techniques, failures. It is a really great resource for pretty much anybody who deals with web content striving toward making the content accessible.

If you are a beginner to web accessibility, this would be your first point. This is where you get to know the different guidelines, all of the success criteria that fall under each guideline and how they all kind of play on top of one another. You will learn some pretty good techniques on how to implement better content or how to make your content more accessible.

As I said before I will talk a bit about WCAG 3. This is where W3C is going in terms of standards and guidelines. The conformance level A, AA and AAA will be replaced with the new levels bronze, silver and gold. I believe it is on their website that I read bronze will be a little bit more comparative to WCAG 2.1 Level AA.

It feels like they are moving the goalpost a bit to push everybody toward more accessibility in a way. It is something to keep in mind. Something to keep in mind for a minute anyway because it does not look like it will be a standard for at least a few years. We are still very much in the early production phase. Looks like details are still being hammered out.

However if you go to the website, you can find a lot of information about WCAG 3, how they are changing things and shaking things up. What will be new. One of the biggest things is the focus will be shifting to include Digital Products. Such as EPUB files, PDFs, mobile apps, and other emerging technologies. Another added feature that will completely take the place of what is occurring now is the rating system also outcomes.

These play hand-in-hand with each other. You will have outcomes and the scoring for those outcomes if I understand correctly will be based upon this rating system from 0 to 4 which is very poor to excellent. Instead of having the typical true-or-false pass or fail, you will have I guess I don't want to say complex but intricate way of testing the success criteria if that makes sense.

That is bit about WCAG 3 and there is more I can dive into because there is a lot going on. But I will leave you with that for now. It is a working draft and as I said, it probably will not be standard for few years.

Shifting gears a bit, we will talk about some automated tools and how they work and manual tasting using assistive technology. Automated tools. If you are not familiar with automated tools for testing for accessibility, they are essentially tools you can build within your browser that will scan the webpage code inside issues that might cause problems with assistive technology.

I find them very useful but I also do not rely too heavily on them or I will never rely solely on automated tools to complete an evaluation. There has to be some level of manual testing simply because 1, automated tools will catch the low-level issues. Such as alt text whether or not an image has all text or whether or not contrast ratio meets certain criteria. Very low hanging fruit kinds of accessibility issues.

Also automated tools will only find at most, 50% of all accessibility issues within your page. A lot of those issues must be found to manual testing or testing with assistive technology. As I said before, I still use automated tools to speed up the testing process because it gets the low-level accessibility issues. To get them ahead of time so I have actual log I can work from and refer to for those issues. What I will do is go through issues found by the tools and make sure they are actually issues because a lot of times with automated tools, you can get a lot of false positives.

Here are some common automated testing tools: aXe from Deque, Wave from WebAIM and ARC Toolkit from TPG I. I have used all of these and WebAIM is the one I have used the most because is the most familiar but these are all very powerful tools. They can definitely speed up your testing time for grabbing a lot of those early issues so you can have more time to manually test and look for more deeper and complex issues.

Assistive technology and manual testing. As I said automated tools do not catch everything so you must test using assistive technology and without it. Here are some key areas you want to test or focus on. 1 keyboard access. I would recommend going to your website using a keyboard only. Just to see how well you can navigate through the site. Seeing if you can get from point A to point B and complete some of the processes that are most popular for your website.

See how it works. You can find a lot of issues that way and that is a form of manual testing. I challenge you again once you have done that to use a screen reader while using a keyboard. You will notice sometimes; your site may respond differently when you use a keyboard only versus a keyboard with a screen reader.

When doing this type of testing for keyboard access, you are looking for the main content link. Does it work? Is it in a good location? Do you actually have one at all? Tab navigation. That is the navigation is it logical is a following a logical path? Can you get in and out of things? Activating user interface components can you enter or space visible focus, can you track on the page? These are the things you want to look for when testing keyboard access. The next area of focus is site colors and images.

Colour Contrast. Automated tools will catch some of these but not all. I have noticed that. Especially if you are moving things around with CSS, they cannot get an accurate reading on the background color versus the foreground. You want to manually test these things especially if you think something may be a false positive after you have ran your automated testing tool.

You can do this using another tool which is not automated but the Colour Contrast Analyser by I think is from TPG I. It is the Colour Contrast Analyser that is what it is called. Images. Automated tools will tell you if you have all text or not but they will not tell you if you have sufficient all text. Or if an image should not have all text because it is decorative. Images of text. Same thing. It will not tell you if you have sufficient all text or if that image that actually be just text as opposed to an image of text.

Complex images. Again will not tell you if you need a longer description for the image. It will not know if it is a complex image or not and complex images are like charts like bar charts or graphs, etc. The third area to focus on with manual testing is video and audio content. Being sure the videos are captioned and have transcripts and being sure you have Audio Descriptions for complex video content.

The last area of focus is page language and instructions. Automated tools will tell you if you are missing a language attribute. But it will not tell you if you are using the correct one and it will not tell you if you have provided another for a change in language on the page. For instance, if you have a webpage that is mostly in English but you have a section for users who speak Spanish, that section if it is in Spanish needs to have the Spanish language code, otherwise the screen readers will not pronounce the words correctly.

Is your content understandable? That is something you would have to go through manually to check the content yourself and be sure you explain, complex things in a simplified way and be sure you’re spelling out acronyms or abbreviations. Are you providing alternative or complex text? Are you providing instructions for interactive or user interface components or other processes and are the instructions clear and concise? These are things automated tools will not be able to help you with. You will need to do some manual testing with and without assistive technology.

Assistive technology for testing. Here are some common screenreader and browser combinations. Chrome and JAWS. Firefox in NVDA, Internet Explorer and JAWS, Safari and VoiceOver. I have also found that NVDA and chrome the developer version of Chrome works well and that is what I typically use.

Here are some common specialized AT. You may have heard of them. Voice to text software like Dragon NaturallySpeaking, switch controls like sip and puff and joystick, and finally voice assistants such as Alexa and Siri. These are all common specialized assistive technology that you can use for testing to be sure everything works as it should.

Accessibility overlays. If you have been to a website and in the bottom corner or in a random corner there is an icon that does not really match the branding of the site and looks like it should not be there. It might have been an accessibility overlay.

The developer added it to the site. It overlays are a broad term for technologies that attempt to improve a website accessibility usually by inserting third-party code into the source code. The issue with accessibility overlays is they tend to duplicate a lot of the features already available via assistive technology. For the target audience, they are actually more of a hindrance and help than a help because they just replicate things.

The overlays tend to rely on automated repair that may or may not meet specifications. Also, it can actually slow down the load time of the page. That can cause frustration at the least. Overlays can introduce in play compliance issues in other areas like data protection and finally, users with disabilities just do not like them. The overly fact sheet.com website has actual testimonies by users who have disabilities who have just basically stated the issues with overlays and the types of issues that have arisen when going to a site with an overlay.

Below is a quote I think by Laney Feingold: *Companies selling overlays say they will protect the company from being sued. But lawsuit still happen when companies use overlays*. The link below that is to an article written by Laney Feingold regarding legal matters with companies and overlays. You should check it out when you have a chance. It is a pretty good read.

Writing, designing and developing for greater accessibility. This is how you can make your things more accessible. Writing for web accessibility. Provide informative and unique page titles. I cannot tell you how many times I have seen a website where the name of the site, let us just say for instance is a car website. Cars.us. That is the title for every single page on the site.

That does not do anything or provide any unique information for the various pages within the site especially if looking at a specific carpet be sure you have unique page titles that is a must. Next, use headings to convey meaning and structure. If you have good headings, you can assure the content is easy to understand.

Also easy to navigate using screen readers. Making sure you missed those properly is a big must. That feeds into the hierarchy of the page and helps for better understanding of the flow of the page. For the users who might you screen readers especially. Make your link text meaningful.

In the video Johan shared, there were links that were just click here or read more. That is not meaningful at all especially to someone who may be using a screen reader and it is only listening and if they are going to pull those links into a list of links, saying read more does not provide any information about the link. What are they going to read more about?

Be sure the text is meaningful. Right meaningful text alternatives for images. All text to be typically depends upon the context. Making sure you write the right alt text for the context of the image. If you have let us say you have a painting and you are on an art website. The description for the painting will be a little bit more descriptive than the description for the painting on a different website about something else.

Being sure you have descriptive alternatives for images and being sure they fit the context. Create transcripts for captions for multimedia. Being sure the videos are captioned and have transcripts and provide clear instructions. Being sure that your instructions are clear and concise and keep the content clear and concise as well. Designing for web accessibility provide sufficient contrast between foreground and background. Be sure that the ratios are on point. You don't want to use white text on a yellow background.

It does not look good and nobody can read it. Do not use color alone to convey information. I know sometimes if you create cool beings, like a chart or something that is interactive people like to use color to convey information on a chart as opposed to just providing the information in text as well. It looks cool but it does not provide much information to the user. Especially a user who is colorblind. Ensure that your interactive elements are easy to identify. Make sure for instance a link is a link. It is usually underline.

If you have a link in a paragraph text you take away the underline, it will be hard to tell where the link is. Provide clear and consistent navigation options. You don't want to have your main navigation at the top of the page on the homepage but at the bottom of the page on the next page and on the right of the page on the next page. Be sure it is clear and consistent throughout the entire site. Ensure form elements are clearly associated with the labels. That is 2-fold.

Be sure you have a label visually but be sure you have the label associated on the back end with the form field. That is how screen readers users will know what the input field is for. Provide easily identifiable feedback. Especially when there are error messages were things that pop up on the screen. Use headings and spacing to group related content.

Create designs for different viewport sizes. This is a big one. A lot of people still do not design with the mobile first approach. Sometimes they do not design for it at all. When somebody tries to access the website on a mobile device, it is all over the place and stretched out in some things do not work properly, etc. Be sure the content can be viewed on different screen sizes. I recommend the mobile first approach because you can build outward and it is easier.

Include image and media alternatives in your design and finally, provide controls for content that starts automatically. That is another big one. Something that plays automatically, there should be something or mechanism to stop it or posit or hide it. This is especially beneficial for users who might have a cognitive disorder or get easily distracted or get mentally fatigued easily by a lot of moving parts.

Developing for web accessibility. Associate a label with every form control. That is a must. You don't want orphaned form controls because the user may not know what the form control pertains to. Include alternative text for images. I cannot say that one. Identify page language and language changes was mentioned earlier and that is a big one because if you do not identify these things in code, the screen reader will not read the text of the information correctly to the user. There are certain pronunciations that can change how something is understood by the end-user.

Use markup to convey meaning and structure. Help users to avoid and correct mistakes. That is a big one. Providing instructions and error messaging, etc. Reflect the reading order in the code order. Basically, you do not want to have your code order the one thing and that is how the keyboard will get the wrong page in the actual visual order will look differently. Floating things left and right . That is talking about that.

Write code that adapts to the user’s technology. Make sure it is robust . Provide meaning for nonstandard interactive elements. If you are creating cool buttons and things like that on your site, that require a bit more intuitiveness to use, you want to make sure the user understands it 1 and has instructions for how to use it, 2.

Ensure all interactive elements are keyboard accessible. A big must! As I said before some users do not have access to use for the capability to use a mouse. So they rely on keyboard access and they cannot use a keyboard for access to get on your site they will probably leave the site if they can. Avoid CAPTCHA were possible. That is a big one in general.

Best practice accessibility and usability by the end-user. Include people with disabilities throughout every aspect of the project if you are able to do so. They will provide the best feedback . Honestly. Ensure continued feedback is received by people with disabilities and/or assistive technology users on a regular basis as content is uploaded and new features are added.

I know how to use a screen reader but I am not as proficient as somebody who uses it on a daily basis that has been using it for years on end. They can provide a different kind of feedback and information and perspective.

Finally, provide an easy and effective means for all users to provide additional feedback on various and challenges they may experience. Make it easy for them to give you this information. Whatever that may mean to you, just do not embed a text block all the way on the back of the website for feedback. Be sure it is prominent and available for the users to provide feedback.

Best practice may become standard practice in the future. How WCAG 3 is going to move. WCAG only recently updated to include guidelines specific to mobile devices. New guidelines improve included in WCAG 2.1 1.4.10 reflow and 2.5.2.2 cancellation are now AA guidelines.

Previous to WCAG 2.1 having your content reflow were considered best practices. Now they are required. Keeping up with best practices websites rely heavily on mobile traffic and will be able to avoid costly redesigns. As WCAG 2.1 becomes more widely adopted standard. Guidelines cannot keep up with the rate of technology changes which is very true. Following best practices might require you to innovate not just follow guidelines.

Many WCAG articles specifically mentioned technologies like Flash and Silverlight and design techniques like image maps. These are pretty much obsolete. Popular new technologies like smart watches and new design techniques like article cards are not mentioned.

You can fall back on the underlying principles of accessibility to guide you. Understanding and applying these is more important than meeting a checklist. That is 100% true. There is a little image that says does my browser support flash and you can see the different kinds of browsers. Let me throw it back to Johan now.

JOHAN: Okay excellent. Thank you Rayianna. Some of you may feel like Rayianna went into more granular detail than you are used to. Honestly she is just scratching the surface! There is a lot to this. Building that Knowledge Base and that understanding of what accessibility really is really crucial.

I want to mention that we are really approaching this from the end-user perspective. Some of the references Rayianna made that she uses screen readers all the time for testing. But neither her or I or full-time screen readers. I use voice over on my phone all the time. The screen reader VoiceOver just because my phone is so small but when it comes to desktop JAWS in NVDA I know how to test with it but it is focusing on the end-user. Guidelines and standards often are pretty outdated.

MODERATOR: Johan? It is just the time check. It is 2:15 PM.

JOHAN: Thank you. Really focusing on the end user is going to be paramount. I will mention at Georgia Tech, if this were simply a technological hurdle, Georgia Tech would have figured it out. It really is a cultural shift that is needed and an attitudinal shift that not only comes from the top down but the bottom up as well.

Some points to consider. Include people with disabilities throughout the process and consider your work force. I know at CIDI, since I have been employed at CIDI, I have had the opportunity to work with several of the staff and some of whom have disabilities which I have learned so much from. Having individuals with disability in your work force can really serve as a tremendous asset. To better understanding of individuals with the spirit also inclusion of individuals with this a so they are part of the workflow from the beginning to the end.

As Rayianna mentioned, just reaching out to individuals who actually use the Assistive Technology versus a checkbox of approach is really going to take you further down the road as far as to accessibility. Establish basic understanding of accessibility. A lot of people have a preconception of disabilities and what that means.

As we talked about, there are many hidden disabilities. Just becoming aware of what the range of disabilities are, and what can be included to be more inclusive for products and services for everyone. Include implementation at the earliest stages. This cannot be emphasized enough. I have worked closely with Rayianna for several years now, we are so used to seeing developers far down the road of developing a specific application or website, those retrofits are costly and time intensive.

If we could be pulled in earlier to do that accessibility testing, and to include individuals with the to get that concrete feedback, that would have saved many of the organizations we have worked with a lot of time and money.

Ensure a range of people with disabilities is included. Whether or not it is in your work force or you have relationships with various disability communities, right now we are in the process of doing some user experience testing specifically for pulling people and who are blind. Consider this as part of the budget planning as well.

I do not think individuals with disabilities should do this for free. So providing them some kind of incentive and compensation for their time and effort. Obviously they are contributing a great deal to the betterment of that specific product or service. Taking into consideration that that needs to be accounted for as well.

Here is a quote a change in culture and awareness. The ADA was a wonderful achievement but it was only the tip of the iceberg. You can pass a law but until you can change society's attitudes, that law will not be much. That is from Denise Sherer Jacobson. As I referred to earlier with the ADA and all of those lawsuits that I covered, those numbers, it is the spirit of the ADA and not just the letter of the ADA.

Again it is a cultural shift and an attitudinal shift of individuals with the they are a significant portion of our society. We will all likely have a disability at some point in our lives. So when we provide services and products for quote unquote people with disabilities, we are likely benefiting ourselves in the long run.

Denise Sherer Jacobson has been decades working to promote education and awareness of the social and political rights of people with disabilities just to give you an idea of where the quote was from. With that, we have about 10 minutes left. I will draw on Barbara Tucker for some questions we can answer.

MODERATOR: Thank you so much Johan and Rayianna for your information that you provided to us this afternoon. Yes we do have some questions. The first question came from Jessica. Where are the numbers on the law cases cumulative per year?

JOHAN: I think I understand the question cumulative versus yearly. Those were yearly not cumulative. When you saw it go from 2000 to 4000, those are per year. They are not just stacked on top of each other. I hope that answer that.

MODERATOR: Thank you so much. The next question is from Kelly. How are Digital Accessibility Specialist, UX designers and CITO responding and reacting to the joint statement from the Office of Civil Rights, consumer protection Bureau, Federal Trade Commission, and equal opportunity commission about the need for regulation for use of artificial intelligence?

JOHAN: I wish I had the answer to that! When we talk about AI, my goodness -- 2 with Apple Steve Wozniak, I heard recently he just left Google . I am not slamming Google I am really not. But he left Google because of the potential for unethical and dangerous misuse of AI. That is a wide-open question.

 As Rayianna talked about, WCAG 3.0 I hope they can and bought embed some kind of standards are guidelines for individuals with the spirit because I think individuals using assistive technology and not being able to access that content on the same level very often as the majority of us especially if it is not accessible, or probably even more vulnerable. As far as the different entities responding I cannot answer that. I will let Rayianna weigh in. She is younger than me and probably more on the cusp of AI than me.

RAYIANNA: Honestly I do not have an answer for that either at this moment.

JOHAN: Okay thank you.

MODERATOR: Thank you both. This is from VA. Are there font guidelines, minimum font sizes written out or just suggested?

JOHAN: There are but WCAG says virtually nothing about this font size and types. I can understand why they chose to do that. It is kind of murky. APH the American printing house which you might want to Google as APH font accessibility types. They provide guidance and I think the American Foundation for the Blind does as well.

Generally speaking, you want to use sans serif. You want to get away from the swirly garlands and you want to make sure the text is a straightforward and un-embellished as possible. Not only does it benefit individuals with low vision, but it also benefits individuals with learning disabilities and cognitive disabilities.

For example, dyslexia. There is a significant amount of crossover between making font more readable for individuals who are low vision and also have dyslexia. I believe the NIH National Institute of Health has a list of font types but we are documenting all of these questions and Rayianna and I can follow up on some concrete resources we can send your way. Good question.

RAYIANNA: I will say as far as size, I would make sure it is not written in their but be sure the font is responsive and using responsive units because that will actually help you adhere to the guidelines I cannot remember the number four but where the text has to be resized up to a certain point.

JOHAN: That is fantastic feedback I eat live and breathe responsive design. Thank you.

MODERATOR: Thank you both Johan and Rayianna. The next question is from Amanda. Is there a way or resource we can use or share with our IT to share the color of things that appear on the website or email for example using a better color instead of blue for aging population?

JOHAN: I am sure there is and I will take a stab at this and then pass it to Rayianna. The challenge with that is we are accustomed to the blue being hyperlink. Sometimes they are black and underlined and that can be hyperlink. The underlying indicates a hyperlink usually but not always. The general rule of thumb is blue indicates a hyperlink.

A suggestion is if there is any confusion with hyperlink underlined them. Even with PowerPoint, we have change hyperlinks to a darker blue so it is still in the blue family but the contrast is higher as well. Rayianna did you have any thoughts on that?

RAYIANNA: Know exactly what you said. I think the main thing is you said is to make sure it is consistent because people are used to links being blue and underlined . If you start changing the color that can create a lot of confusion that you would not actually want. But as you said, if you want a larger contrast ratio, darkening the blue so it pops out a bit more. I do not have anything extra to add.

MODERATOR: Thank you both the next question is can you provide any information on the Senate proposed rule for web accessibility?

JOHAN: The Senate proposed rule for accessibility? I think that is one of the slides I covered. That is still pending I believe it was submitted in September. The accessibility community I know is helpful. But it is kind of a wait and see scenario. I do not have any end additional insights other than what is already out there which is pretty scant actually to be honest.

MODERATOR: Thank you. The next question in regard to digital accessibility, can you please share your thoughts on in-line frame or iframes on websites and the need of social media to be accessible?

RAYIANNA: As far as in line frames, if you are making identifying the I-frame or providing an actual title, then making the content within it accessible, I think you will be good to go. Do not just insert I-frame and leave it and not provide any description or information about it. As far as making Social Media accessible with content on it, definitely do so if you can.

We actually do talk about this in a different kind of presentation all about Social Media Accessibility. If you can add all text images which you can on many different sites, do that. Provide captions for the videos. Make sure if you can get away with text only posts, do that because text is the most accessible. Those are my thoughts on that. I hope I answered that correctly.

JOHAN: Yes the only thing I would add to that is, if you think of the social media posts throughout COVID were the testing sites were for example or emergency situations as Rayianna mentioned, the majority of traffic is on mobile now. Tablet and smartphones. Social media plays a critical part in disseminating very important information.

It is more than playful TikTok videos, etc. I think and I am not an attorney but I would think from an accessibility standpoint, for an end-user whose livelihood or safety may be compromised because of lack of accessibility of social media posts, I think that would be critical point to consider regarding the importance of accessibility in that arena.

MODERATOR: Thank you Johan and Rayianna. Our final question this afternoon is we are interested in how other local governments are dealing with new title to access website requirements. Can you share your thoughts and experience regarding this?

JOHAN: New web access requirements. There is pending legislation. There is a proposal. But as far as, right now, I am not aware of new legislation that is in place regarding accessibility. There is loose language around the need for accessibility. But there is still a lack of standards that need to be identified.

For example, it is not completely explicit that unless a state adopts it as their own policy, that WCAG 2.0 or 2.1 should be the default guideline or standard. I would need a little bit more clarity on that question to be able to answer it.

MODERATOR: We can submit that Johan and do a bit of research and get more information. I would like to first thank all of our presenters for the wealth of knowledge that you have shared with us all this afternoon.

Thank you all for attending the first day of the 2023 virtual ADA Conference for State and Local Government. We will resume conference sessions tomorrow with CYSHCN 2 A in the morning at 10 AM Eastern standard time. Thank you all for attending and we will see you in the morning.

JOHAN: Thank you all.

RAYIANNA: Thank you all and goodbye.

Session Ended.

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