



## Webinar Transcript: Wednesday May 29, 2024

### Webinar #3: WCAG Requirements and Working with Web Developers to Create Accessible Websites

Emily Walker: Welcome to our third webinar celebrating Manitoba Access Awareness Week or MAAW 2024, and this focus is on achieving accessible information and communication.

I'm also happy to let you know that it is National Accessibility Week. So, a number of activities and events are happening in Manitoba and across Canada right now to celebrate the valuable contributions of people with disabilities as well as showcase individuals, organizations and other communities who are actively working to remove barriers to accessibility and inclusion. So, I think we will get started. I don't see the numbers going higher. I have just been welcoming you to our presentation. If you are here for WCAG, for website accessibility guidelines you are in the right place. So, my name is Emily Walker. I am a person with a disability, and I'm also a senior policy analyst here at the Manitoba Accessibility Office.

We welcome you.

This week we have been hosting a series of webinars, so this is our third webinar this week, and they are all focused on different aspects of the Accessible Information and Communication Standard regulation. I'm not sure if you are aware, but the internet has become an integral part of our daily lives. Obviously, we are all here now on the internet, providing us with access to information, access to goods, services, entertainment, and even educational webinars. But how can we ensure that it remains accessible to everyone? Today's topic will explore website requirements and how best to work with web developers to create accessible websites.

Emily Walker: Before we start, on behalf of the Manitoba Accessibility Office and the Accessibility Compliance Secretariat, I would like to take a moment as we gather today virtually and celebrate MAAW 2024 to acknowledge that I am physically located in Winnipeg on Treaty One Territory and that Manitoba is located on the Treaty Territories and ancestral lands of the Anishnabeg, Anishininewuk, Dakota Oyate, Denesuline and

Nehethowuk Nations. We acknowledge that Manitoba is located on the homeland of the Red River Metis, and we acknowledge that northern Manitoba includes lands that were and are ancestral lands of the Inuit, and we respect the spirit and intent of treaties and remain committed to working in partnership with First Nations Inuit and Metis peoples as we walk a shared path of truth and reconciliation. It is really important because as we consider the rates of lived experience with disability in Manitoba and across Canada, we know that Indigenous peoples experienced a significantly higher rate of disability and discrimination, so it is very important for us to acknowledge and reflect on the impact of colonization and the history of the land that we occupy. I encourage you to do the same as you go about your day.

Emily Walker: A few housekeeping items. If you have any technical difficulties, please contact our office, folks working behind the scenes will help you, email us at [mao@gov.mb.ca](mailto:mao@gov.mb.ca) or phone (204)945-7613 or toll free at (1-800) 282-8069, extension 7613 and someone can assist you.

You may have noticed when you joined the session, you were muted, and microphones and videos were turned off. This helps to keep background noise and visuals to a minimum so that we have less noise on the recorded. So, it is a zoom recording. So, we will spotlight and pin all presenters and interpreters for your convenience. There are a few accessibility and language features on zoom. To access live closed captioning, go to the meeting controls bar at the bottom of your screen, there is a CC Show Captions Icon. It is on the right side. Click on the CC to activate the captions. We have a live captioner, and I think you can click and drag the captions to move their position if that will work for you, if, where they are located doesn't work for you. For ASL interpretation, you can click the globe icon. It is at the bottom, I think it is more if you are there, it is also on the bottom right hand of the page. And you can access French Language as well if you choose. And, as I said, the webinar is being recorded, we will have the recording and the transcript and questions and answers document posted on our website, [accessibilityMB.ca](http://accessibilityMB.ca) as soon as it is available.

We welcome your questions. We ask for questions that will be answered at the end of Andrew's presentation. So please type your questions in the Q&A box so this can be accessed at the bottom of the screen as well. You can also email them in if you can't find the Q&A box, email us at [mao@gov.mb.ca](mailto:mao@gov.mb.ca). And we can add that to the list, and if we are unable to get to all of the questions today, which could happen, because I'm sure that you all have lots of questions, we can get them answered in a question and answer document that we will send out at the end, maybe tomorrow or the next day, in a few days when we can get to all of the answers. So, if you use the chat, I think we have disabled the chat, yes, I think we have disabled the chat. So, please use the Q&A for

questions or email those in. At the conclusion of the webinar, you will be able to complete a feedback survey on zoom to let us know how we did.

Emily Walker: As I mentioned, we are hosting webinars throughout the week with the last one tomorrow. Today's presentation is by Andrew Boardman of Mangrove, and it is on website requirements and working with web developers to create accessible websites. So, we had I think 220 people register for this session and it looks like we have 120 on this session right now so that is wonderful. Thank you for taking the time out of your day to join us today. And your participation and engagement are really crucial for the success of MAAW and for making the world better honestly for everybody.

Emily Walker: Without further delay, I'm pleased to introduce Andrew who will tell you a bit about himself and this timely topic.

Andrew Boardman: Thank you, Emily, hi everybody. I will switch to share screen and, with the magic of the web, see if this works. Can everybody see this? It is not full screen, but it looks, okay?

Emily Walker: We can see the browser as well.

Andrew Boardman: You can see the browser. Okay. How do I change that? Let's see... Let me see, how do I... find a way that I can share my notes but also have the whole screen here. Let's see, one second. I'm not sure, I have done this before I swear.

Emily Walker: It is on google docs.

Andrew Boardman: It is.

Emily Walker: Maybe that is...

Andrew Boardman: Let me... Let me back out for one second, sorry, everyone, let me back out and I will try again. Hold on one second.

Emily Walker: No problem.

Andrew Boardman: Okay, it looks like... It looks like this might be the best I can do. I'm sorry everybody. I will decrease the size and then maybe the aspect ratios will be better for everybody.

Emily Walker: Can you try F11?

Andrew Boardman: F11? Sure. No. Did that change anything for anyone?

Emily Walker: It is bigger for me.

Andrew Boardman: Okay.

Emily Walker: I can still see the browser at the top. Is there any crucial information at the bottom of the screen? I can't see.

Andrew Boardman: No, there is not.

Emily Walker: Okay. Then that should work. And we can also... Are we able to send a pdf of the information to people after?

Andrew Boardman: Absolutely.

Andrew Boardman: Okay that is good. People will get this information at the end, regardless if they can see it currently or not.

Andrew Boardman: Thanks for everyone's patience. I appreciate it. So sorry, a big thank you to the Manitoba Office of Accessibility, thank you to everybody on this call. I know how complex and confusing making a website accessible is. I just want to say thank you for taking the time out of your day and for listening to me and for considering accessibility for your site. And then, my quick apology, last prologue is that Kelly did an amazing presentation yesterday. There will be a bit of redundancy in my presentation, but it will be presented in a slightly different way with a bit more focus on development. So, I hope that you will stick around. There is always overlap with this type of information, and I will present it in a slightly different format with a slightly different sequence and probably more detail around development.

Andrew Boardman: I want to do a first land acknowledgment on the part of Mangrove. We are located on Treaty One Territory and the homeland of the Metis Nation. We honour the lands that we occupy and their traditional keepers anishinaabe, Cre, Dakota and Metis, and we respect the treaties made on those territories, and we acknowledge the numerous and significant harms that were done to the First Peoples of Canada which as noted are disproportionately represented as folks with disabilities. We seek to be partners in peace and justice in our work as designers, technologists, and communicators.

Andrew Boardman: A little bit about me, my name is Andrew Boardman, as noted, Creative Director at Mangrove Web, a digital agency in the United States, and in Canada. I built my first accessible website way back in 2004, a long time ago. I built it for a consultancy doing accessibility work for the United States Government at the time. My focus is on usability and accessibility, and my overall interest is in creating a more ethical web. I think that the web is this magical incredible thing, despite all of its faults and challenges. I joined Mangrove in 2023, last year after managing my own design studio called Manoverboard in Manitoba for over 20 years, and I helped to manage a team of 16 designers, developers, project managers and strategists and it is quite an amazing job I have. I feel very fortunate.

And so, Mangrove's mission is to create joyful, equitable, inclusive digital experiences that enable change makers to do their work, that is our focus. We are a Certified B Corporation, based both in Canada and the United States, Certified women-owned business Enterprise and women owned small business. Philosophically, our values drive us as an agency, and that is why accessibility is so critically important.

We don't just design and build websites, we design and build websites for as many people as we can, and we do this with accessibility and sustainability in mind and leveraging technology to assist people. As you will see in this presentation, the one through line we are building websites for people, not for tests and not for accessible compliance per se, we are building them for folks to use. And I just want to shout out this one website that we made a couple of years ago, built in 2022, called Make It Accessible. It is [makeitaccessible.com](https://makeitaccessible.com) built with support from Manitoba Accessibility Office with a grant through them. As we talk about this, if you're more interested in information, you might find this site useful. It talks about design, content, and development which I will be speaking to today. Underlying it is this concept that making a website accessible and beautiful is within reach. It does not have to look one way or another way. A website can be accessible no matter how it works or looks but certain things have to happen.

Andrew Boardman: So, just a quick introduction about web accessibility. It is achievable as I mentioned in the last slide, and the work that you do today will pay off. It will payoff for you and payoff for your stakeholders, for your visitors, for anyone who uses your site.

I encourage you to start small. Like the information I will provide today can be a little overwhelming to folks especially if they are new to this, don't get overwhelmed, we are starting... A lot of us are starting where we are starting and that is totally legitimate. There is no such thing as perfect.

I learned that the hard way over the years as a die-hard perfectionist trying to outlive my old ways. Accessibility means helping people not websites. I think that is really what I want to underline as I mentioned earlier.

Andrew Boardman: Today's focus is on how to ensure that your website will quote unquote meet or exceed globally followed World Wide Web Consortium Guidelines, Web Content Accessibility Guidelines WCAG 2.2 Level AA. I will try to break that down, a lot of content, a lot of legalese that I will help to break it down and we will discuss website design, content, and development with a slight emphasis on development and developers who need to make these changes to a website. And this is a really important and powerful note that I love by Tim Berners-Lee who invented the worldwide web, the

most amazing title is the inventor of the World Wide Web. The power of the web is in its universality. Access by everyone regardless of disability is an essential aspect. And Berners Lee said this in 1995. The web had been around for just a few years, around 10 years, depending on the date.

And it is a really, really important part of the web. The original promise of the web is that it can be and should be accessible. I think we saw the statistic yesterday from Kelly, 27% of Canadians identify as having a disability. And meanwhile, at the same time, digital accessibility seems so hard to do. We are constantly asking questions about digital accessibility, it does seem really complicated and it can be, but it doesn't have to be so demystifying. It is really important for that 27% and for the totality of Canadian and North American and global populations. Speaking to that point, a billion people around the world have a disability and many, many of them use the web. We are not only talking about folks in Manitoba, Canada, or the United States, we are talking about a worldwide audience, which is the World Wide Web. And yet at the same time, makers of the web are still trying to figure out how to make sites accessible. And doing this for 20 years, web accessibility is even longer or older as a discipline.

Andrew Boardman: I will cover, this is my topic or agenda today. We will talk a bit about what is digital accessibility, what is WCAG, why does it matter especially in Manitoba, designing for accessibility, writing accessible content, and developing for accessibility. And then steps for internal buy in, including your boss. It would be really nice if you were able to walk away today with reasons, rationale and some logic for why digital accessibility, web accessibility, in particular is important. And I will take questions afterwards.

Andrew Boardman: Okay. So, what is digital accessibility? Digital accessibility is the practice of ensuring that there are no barriers or few barriers that prevent interaction with or access to websites by people with physical disabilities, situational disabilities and socio-economic restrictions on bandwidth and speed. The reality is when sites are correctly designed and developed and edited and maintained, more users have equal access to information, and features and functionality. This is...

I'm using Wikipedia's definition which I think is quite excellent and accessibility applies to everyone. I know that you have probably heard this before in previous presentations and probably online, you may have read it, but it is true, this stock photo of this person to the right.

We don't know if this person has an accessibility challenge or if there is a barrier to them having access to information, but it is entirely possible. I can tell you that last year, I had to be fitted with hearing aids. I did not expect that to be the case. A disability can

happen to any of us, anytime, it can be permanent or not. It is something that we should be aware of.

That this is not... We are not talking about individuals in wheelchairs all the time, right? And I just want to show you an example of... This is a usability challenge for those who are sighted. I thought it might be helpful to kind of show how complex the web has become, even for sighted people.

So, I did a search on accessibility in the law, and I came across the Forbes Website, a big popular multi, many multi-thousand-page website and, as a sighted user, this is what I saw. It is a mess. It is a total mess! There is a huge ad on top of the content, another video ad on the right. The navigation takes up quite a bit of the page. There are links above it. There is like a thing that says "beta" on the right. It is so visually disorienting and complicated and not useful. You will notice that it is. It is a cut and paced and I could not read, if I blank out everything, this is the content that I was able to see. It is not very useful for me, and I can imagine how difficult it would be for folks that have other types of disabilities or have disabilities.

Andrew Boardman: So, what is digital accessibility and what are the motivations for making digital products accessible? I think there are three, ethical obligations, they are business implications and there are legal requirements, and I will talk about all three right now just to give you a bit more background.

Andrew Boardman: In terms of ethical obligations, which I think are the most important and I think are probably the reason why a lot of folks have up until today, you know, really considered accessibility. Information should be a right, not a privilege. The U.N. Convention on the Rights of Persons with Disabilities recognizes access to information as a basic human right. It doesn't get any more black and white than that. And as communications professionals which I assume all of us on this call are, we really have a responsibility to all stakeholders, everyone who we interact with and who we potentially will interact with, we have an ethical obligation and there are business implications.

According to a 2018 report from the Conference Board of Canada, consumer spending power of Canadians with disabilities was estimated to be around \$55 billion. An astounding statistic is that 40% of Ontario's consumer base will be people with disabilities in 2035. And then there is another statistic around if Canada were a fully accessible and inclusive society, economic benefits would amount to \$337 billion. There are micro and macro economic business implications, as well as of course government implications, which brings us to the legal requirements.

There is the ADA in the United States, the AODA in Ontario and thankfully, so happy to say this the Manitoba Accessible Information and Communication Standard Regulation.

Even though it is a mouthful, it is an amazing tool, amazing piece of legislation. I'm very, very happy that it exists, I have to say. Most legal requirements will use the WCAG, Web Content Accessibility Guidelines as standard and that is what I will talk about next. And this is just my post it note but web accessibility is not a one and done event. You don't snap your fingers or check a list, you can do both of those things, your website, your visitors, the law, and technology are always changing. It is not just... There are checklists but the checklists get longer, and it is something that you need to be monitoring and maintaining as the world changes.

Andrew Boardman: WCAG, What the What? The numbers are real. Just a bit of background why WCAG exists. In the 2024 Web Aim report that Kelly mentioned yesterday, the top 1 million sites were reviewed and 95.9% of home pages had detected WCAG errors. We have a long ways to go before we are compliant with WCAG. The good news is that most of those, 95% of home pages and other parts of the site can be fixed and that is why we are here today. A lot relate to color contrast or alt text, a lot of changes can be made quickly by you and your web team. I want to put that out there. All is not lost. We really can make an accessible web.

The WCAG is part of a series of Web Accessibility Guidelines published by the Web Accessibility Initiative of the World Wide Web Consortium, the W3C, they are international organizations, but they create standards we are discussing on version WCAG 2.2, the most recent and set of standards and that is what we will be speaking to today. These are an excellent set of standards not without their complexity, but I will try to break it down for you a bit.

Three levels of standards, Level A, Level AA, and Level AAA. The Level A is the minimum level of accessibility online. It is basically if you did a bit of tweaking, here and there, you could probably get to Level A very easily. It is not a great standard. I think eventually it will be deprecated.

Andrew Boardman: But we are really here today to talk about Level AA, and this is most recommended by developers, accessibility advocates, and activists, practitioners, governments. Level AA is the standard and that is what we are here to talk about today.

Text, things like text and background must use color contrast. Content needs to be organized well and follow different standards in terms of logical orders. Navigation needs to be tight. Level AA is like... It is really an excellent, excellent standard. And then triple A is very difficult to achieve. It is doable, I hope some day it will be maybe the standard but until then, we are really good with Level AA as a tool.



Andrew Boardman: I won't talk much to these levels, except that, you know, that there are three different levels of which to comply with and they build on each other from A to triple A.

A bit of history, WCAG 2.0 published in 2008, 2.1 in 2018 and 2.2 in 2023, last October. 2.0, 2.1 and 2.2 contain the same success criteria. These are incremental but important updates to WCAG, it is a living document. I will show it to you in a minute.

WCAG 3.0 will be out soon. It is an evolving standard. It will really change the game, but don't worry about it, we are only focused on WCAG 2.2 and, if we can get anywhere close to that with websites, we are talking about today we will have done a lot of good.

Andrew Boardman: What is this WCAG thing and what are the principles behind it? There are four and I will demonstrate them a bit here with some examples. The principles are Perceivable, Operable, Understandable and Robust, kind of like fancy schmancy words for creating accessible websites based on these set of guidelines. I will walk through each of them. I think it is important to understand how these standards exist and why they exist.

So, we will take Perceivable first. Information must be presented for the Perceivable category or Perceivable principle, in a way that users can perceive it using at least one of their senses. That means good color contrast, needs to be captions for audio and video.

Alt text applied to images so that images can be described through a screen reader or another device. Text needs to be readable; you need to change the size of a font in a given browser or a client, and colors, shapes and text should be used...

Should not necessarily be used to convey information. Show you an example. Here is a really lovely cat lying down in probably some beautiful place in Greece. For me, I can tell you what that is, because I'm sighted. For folks that may not be sighted, alt text description would say something like this, "a tan colored tabby cat with black stripe. It is laying on its side, at least three of its paws are visible." And this is an example of alt text, it is alternative text that describes the image. This can be applied on any website. Any good website will allow you to describe image or video, but image in particular, to others that may not be sighted.

Operable, users must be able to interact with the components of the page without a mouse or track pad. Websites are interactive. We click on things for those of us who have a mouse and the site must be navigable and easily useable and buttons should be clear, and we need to give people time. Here is an example.

Andrew Boardman: Most of you heard of TED. I use my keyboard to tab through the TED website to show what it would be like if I did not have the ability to use a mouse, and it worked. So, one of the tabs is, I was able to tab to the “watch navigation” item, the first menu item. I could then tab to “participate.” I could then tab over to “motivation.” I didn't do a full test and I don't know whether this site is really, you know, superbly developed, but I did do a few tests and it seemed good over 5 or 10 minutes.

Show you an example of using a non mouse device, a keyboard to navigate a site, and it worked. Kudos to TED.

Andrew Boardman: And then the next element is Understandable, the next principle of WCAG is Understandable. Information and the operation of any user interface must be understandable. Content is readable and understandable. Navigation is consistent and relevant. Forms and input fields, so that is like contact forms, they need to include labels and instruction. You can't have a form with, you know, bare information. Aria labels which are more technical should be used for interactive elements. And to give you an example, this is a site we designed for Riverview Health Foundation in Winnipeg, a good example of clear navigation. It is consistent, relevant and the content is understandable. Okay.

Andrew Boardman: And then the last principle is called Robust, and content must be robust enough that it can be interpreted by a wide variety of user agents, like screen readers or other assistive technologies. In this way, the website should have maximum compatibility with current users and technologies and ideally have compatibility with future technologies. The beauty of the web is that it is both backward and forward compliant in its essence and that is one of the things that makes it truly remarkable.

Look at a website from 15 years ago and it still will mostly work if it was built correctly. And this is the example of a different type of user agent. This is a refreshable Braille display that shows, translates on screen text to Braille in real time. Okay, and I just took a screen video, screen gif to show you what the WCAG reference is. This is a quick reference. To show you, all of this is documented. If you are really interested and you want to get super geeked out about it, go to this URL at the W3.org and click through to see what are the various requirements around success criteria and it will take you through it. This is like the most detailed view of it. But there are other views of it on this site and other sites if you want to learn more. Okay.

Andrew Boardman: Why does all of this matter especially in Manitoba? Simply, because the Accessible Information and Communication Standard Regulation, which I kind of said, I'm a huge fan of and supporter of. This is the third standard enacted under The Accessibility for Manitobans Act and I think I quote this directly from the website,

“organizations need to consider how Manitobans interact with or access information, including on websites to develop measures, policies and practices to create barrier free information and communication.” All that is to say that there is a new regulation in place that we all need to be compliant with. The regulation builds on existing requirements of the Human Rights Code. It removes, helps organizations identify and remove barriers to website users and members of the public and adopts, this is why we are here today, adopts this globally recognized WCAG Guideline. And interestingly and importantly, it applies to all organizations in the province with one or more employees.

And how does it apply to websites? Web applications, web content, both of these must meet Level AA Guidelines, WCAG 2.1 Guidelines. Okay.

Andrew Boardman: What standards do we need to follow? Like I said, WCAG 2.1 Level AA, Guidelines, and organizations, web content... This is from the documentation, an organizes web content, it applies if the web content is published on or after the standard comes into force or the web content is required to access an organization's goods and services, basically means everybody. I take that as really great news.

So, what do we do? How do we make our site accessible.

Andrew Boardman: So, talk about design first. Designing for the web really should address all visitor's needs, interacting with and understanding a site's content.

Accessible design is really just smart design. It is a kind of core component of inclusive design, which means it reaches a wider audience and easy for most users to navigate. It costs less to build accessibility into a product at the start when you are designing rather than going back after you developed it. Accessible design and designing up front is really, really important. I want to state, web developers, I love web developers, have been working with them for many, many years and they also need to understand that design is not just decoration. It is not just putting icing on the cake or making text different cool colors. It really... Design is about helping folks to make the most and best use of a website. I think most web developers believe that and think that, but it is really important that, you know, designers advocate for themselves, that design is not decoration. It is so much more!

Accessible design requires developers to respect design constraints. So, good design can also be accessible design. I don't see it as a trade off.

There are cool, wild things you can do with the web these days. That does not mean it is accessible, it is wild and cool. Accessible design overlaps with user experience and best practices which is another conversation and compliance standards and using design is applying an ethical lens. If you think about, I want my site to be most useful to the most people and how do I design for that, that is really the big question, right?

Mention that page structure is important. It is a way to provide clear information, architecture, and content structure so that folks can skim and navigate and understand a website. These are like almost like the basics of good design, but page structure is really, really important for accessibility, text should be flush left aligned so it allows people to easily read and find content and then minimize visual clutter. Good page structure with visual clutter is still not good design. You want a minimum of visual clutter with a good overall structure. Everything should serve a purpose basically.

Andrew Boardman: I thought I would show an example of the New York times. In general, I think they have excellent usability, and their site is mostly accessible I would say. They use I think Kelly mentioned these yesterday, these are different header styles, or header elements like you could say. So, this is H1, "summer is coming. It is time to check your feet." That is H1, it is large, larger, and defined on the back end as an H1, so that a user who may not be able to see this content would be... would understand that this is the most important element. This is the title of the page. And as you scroll down, see H2, smaller but also important, kind of an indicator to the reader of what is to come in the content. And scroll down a bit more on the same page, see more headers, more body copy, and...

[ inaudible]

So, using the semantics of the web, built into the web, headers and bold and italic, using structural elements is really, really important for accessibility.

Andrew Boardman: Typefaces. Type is one of the most important areas of accessibility for me and for many other people. Select fonts that are legible, that are easy to read and letter forms or shapes of letters that are consistent and balanced. Presenting to you a font that I don't know a lot about, but people are talking about it called Lexend. It is designed with dyslexia in mind. There is so much to say about type and typography. Think about the fonts that you are using as a means to best communicate the information to the greatest number of people and a couple of typography tips from a design standpoint. Try to break up content into small scannable chunks. Keep your line lengths smaller, 76 characters, have to double check on that, 76 characters in width. Use heading structures as I mentioned earlier. Keep your body text size 16 px minimum mobile and larger on desktop. Avoid all caps. All caps look like they are screaming at you. Anyway, avoid all caps and minimize use of italics. Very often, italics are hard to read except for short amounts of text and only use bold when you need it. Don't bold whole paragraphs in general, because it is just harder to read and does not look good in the first place. Use caution with text on top of images.

Andrew Boardman: I will show you an example of this. I can't remember where I found this yesterday or two days ago, an ad I think maybe on I don't know somewhere on social media. It says it is Robert Half and says we know the value of top talent. With our help, you can too. A photo of a woman looks like she is holding a piece of paper and staring at someone to her right. Because the text is embedded in the image. If there is no alt text, this is what the meaning of the image is. It would just be a person... you know, at a desk, staring off. Try to keep your text outside of an image. It is much better to have a caption, people will be able to understand what the meaning of the image is.

Andrew Boardman: Color contrast is critical. It is a core part of the WCAG requirements or goals here. Ensure sufficient color contrast on a website, make sure that there are enough options for color combinations on a website and strong palette will help with brand recognition and accessibility. If your site has four colors, that is probably okay, make sure that the four colors are useful and useable and provide enough color contrast for text so that people can read it. Show you an example in a minute. Color contrast is critical.

Andrew Boardman: Level A does not require compliance around text contrast. Level AA does and Level AAA does even more. And I will show you an example.

This is a quote from Steve Krug. I don't know how many folks can read this; it is light text on a light background. This gets, if I put it through a contrast checker, a text contrast checker, color contrast checker it fails. It gets a score of 2.96, which means it fails for AA, for large text, AA for large text, AA for normal text and AA for normal text. There is not enough contrast. For someone who may have difficulty seeing text with... in various color ranges, this would not work. This is a bit better. I increased the darkness of the text a bit. The background is the same and then a score of 5.88, ratio of 5.88 between the foreground and background. So, we are starting to get there. We pass on A, Triple A for large text, AA for normal text but for smaller text this would not work. It would not pass accessibility. It would not pass WCAG 2.2 accessibility compliance. If I increase contrast a bit more to 9.05 it passes. And hopefully everyone will be able to see that.

If you are sighted right now you can see that there is quite a big difference between this and this and I will show you one more.

If I just have black text on white background, it is super legible. The text should be crisp and very, very clear. So, there is color contrast that matters for type, for text. Navigation should connect visitors with your content. Predictable design features help visitors navigate a website. This is the Mangrove website; thought I would use it as an example. If you are on this site, you will see that there is navigation. We have a persistent

navigation as you scroll up and down the page, navigation stays the same and that makes it easier for people to navigate. The navigation does not switch and go all over the place or collapse. It is persistent and useable for the long haul.

Andrew Boardman: Buttons and Labels, accessible links and buttons help to guide visitors through websites and increase responses to your calls to action. Use verbs.

Show you an example. I would say I won't read all of this; it is important to increase accessibility and effectiveness of calls to action by using short action-oriented text and high contrast visible buttons. If you want people to do something on your website, make it really clear and make those buttons super viewable and recognizable. Here is an example. I like examples. The example on the left says, "save changes, would you like to save your changes before exiting" and the button says "yes." That is a generic word for button label, no or yes. I think the answer would be yes. But a better example is "save your changes? Would you like to save your changes before exiting?" and the answer is "save." By clicking on that action verb, it is very clear to a user, regardless of their ability or disability, what should happen on a website.

Another great example is "get free shipping with Prime Membership" on the left and it says, "click here for details." We often see this "click here," "click here," "click here for details." It is generic, just an instruction. On the right, a much better example is "get free shipping with Prime Membership," the button says, "read details." That is very clear, it is an action and very descriptive. It makes me want to click on it to be honest, I want to read details because it says, "read details."

Andrew Boardman: Images, there are many, many aspects to consider when selecting images. In general, this goes for not just accessibility, but to usability and for creating good ethical web. Select purposeful images that illustrate a range of experiences, settings and people and choose images that empower those of different abilities and backgrounds. I encourage folks to show models that represent real people rather than those portraying a disability.

Andrew Boardman: And just say a bit about data and charts. Data and charts for sighted folks are incredibly useful, incredibly powerful. Meaningful visual aids like data will help to tell the story of your organization, of a specific initiative, of a project. But remember, try to give people time to look at and read those charts. And as you can see, make the charts big.

Here I have a little chart on the right. I'm squinting, what does that say? If I make it larger, a chart can be so much more useful and helpful.

A lot of this is common sense, a lot of this is about basic usability. This is a website we designed and built for Pearl Consulting, a B Corporation, and I want to show you, this is

their video. It is really, really important that on a given video on a website, you have a pause button. A lot of folks get overstimulated or cannot take in that much visual information through video., and it is important that there is a pause button to allow folks, visitors to pause or stop a video because they might be reading other content on the site and that video content may be intrusive and problematic.

Andrew Boardman: I think this is the last one for design. logo scalability, I will not talk about it too much, logos actually matter right?

Your font size matters. I want to make sure that one of the things you take away is that text size matters. This is a brand refresh we did for an organization, nonprofit focused on alcoholism and drug dependence, and we made sure that the typography, the text was large enough that people could read it easily from many different media and viewpoints. Okay.

Andrew Boardman: I'm going to go through this a bit faster, around writing, especially I want to get to development next. Writing accessible content is really about creating clear, consistent, and easy to navigate that content. And really, this is a lot like design, this is about following best practices. Everyone prefers writing that is easy to understand, whatever their education and abilities prime minister and if you are writing to meet accessibility standards it is not that different from writing for a general audience. Most importantly, choose words that ease navigation, that help the visitor go through a site and serve their needs.

Copywriting tips, this is really basic stuff, but minimize the use of italics and all caps. Avoid jargon. Avoid uncommon word construction that screen readers may have difficulty interpreting. Screen readers are devices, tools that many folks use to have a website read to them. And use descriptive and meaningful page titles. In general, our practice is to aim for a reading level of grade 8, when speaking to general audiences. If you are writing for much more expert audiences, aim for the most appropriate educational level, depends on if you are writing for doctors or grad students, there will be a bit of a different play. Keep your sentences short and to the point. And replace technical jargon with everyday terms that people can understand especially on the top-level pages like home or about or services or products.

Content structure, as I mentioned earlier, helps comprehension. A clear structure and heading hierarchy help visitors scan and digest information like in the New York Times page I showed and develop your content in short blocks and assign headings to each section for clarity. There is an art to writing for the web, I'm sure that you know this. There are writers and web writers, and they are not always the same. People who can

write for the web are incredibly valuable because they really do understand how the web is read and approached.

Andrew Boardman: As I mentioned, alt text is really important. When screen readers or search engines can't interpret non text content such as images, alt text provides us a text substitute or alternative text to provide visitors what the missing context is for an image. Make alt text short but describe the image's function on the site. And you don't really need to worry about it for decorative images like sun set at the top. You don't need alt text on that. That is just a decoration really.

Andrew Boardman: I want to show a beautiful example of alt text applied.

The Nasa's Webb Telescope, not to be confused with web. They released this image earlier this year of this is a spiral galaxy, spiral... Sorry, spiral galaxy, NGC 4254. And the alt text of this image I wanted to show you where it is. I look at...

Inspect the element you see it down here, a beautiful alt text that is embedded into this image on that page. And if I bring it up here, this is the html around that image. You can see that someone took the time to write about this beautiful image, two observations of galaxy NGC 4254 are split diagonally, et cetera, et cetera and this helps to provide context for someone who is visually disabled. They have gone the extra mile, and a lot of folks love Nasa for this, for providing excellent examples of what alt text should be. It is not short, which it generally should be for most websites, when you have such a complex rich image, it is very, very helpful for people.

Andrew Boardman: Captions and transcripts, include captions and transcripts for all video content, sometimes they are automatically developed, not always the best but they are better than nothing.

Can be inaccurate, but we do what we can. Try to review your captioning and edit for clarity. And do a quick bonus here, hashtags in media, use camelCase where you smash together two capital words. Digital accessibility matters, in all lower case if you camelCase it, it is easier for anybody to read those hashtags.

Andrew Boardman: And my final part about developing for accessibility. A well coded website will take into consideration everyone's needs including those with disabilities. Developing an accessible site starts with thinking of numerous ways that visitors will interact with it. It is much easier to start at the beginning to build an accessible website, but there is nothing wrong with going back to fix what has been done. We pay close attention to features that allow visitors to use a mouse, keyboard, touch pad or assistive device. We think about the totality of the type of devices that people will use to look at this website or review this website. Remember that accessibility is not one and done.



New devices are coming out all the time, new tools, new Americanisms coming out all the time. Accessibility is a process, not a product.

Andrew Boardman: So, how do we know if a website is accessible? Having said all of this. Use WCAG Guidelines, and three different things I can recommend for ensuring compliance. Use an online platform to test your site, you can use a checklist to manually test your website. Hire an agency or consultancy or people with lived experience to audit your site.

Talk about a platform, a platform called Wave, which stands for Web Accessibility Evaluation Tool. It is free, powered by Web Aim. These automated tools like Wave are a good start. Encourage anyone to go in and plug their current website into Wave and see what it shows.

Caveat is, I say this, is that these tools only catch about 40%, I think it may be a bit higher, of accessibility issues. And if you get a good score on Wave, it doesn't mean that you passed.

It does not mean that you are in compliance. You need human beings to determine if your website is accessible, but this is a very good start. I would much rather see people use Wave and try to make changes and edits than say it is too hard, I will forget about it. Wave...

The Wave tool and other tools like it are very, very good. And I'm just...

Eating our own dog food, show you what it looks like when we put Mangrove website through Wave there are no errors, we got two contrast errors on the left in the summary alert box. This is what website will look like, it is messed up, but Wave is dissecting this website for me, telling me about structural and the aria elements and overall, we got a good score. It shows you how this tool is interpreting and evaluating this site for accessibility. And overall, we have done a good job of ensuring that the site is mostly, I would say, vast majority is accessible. The other thing you can do to make sure that your site is accessible or conforms to WCAG rules is to use a checklist.

Show you the A11Y Project in a moment. Most checkers are just that, most of these checklists are just that, can't tell you if your site is 100% useable but they will get you fairly far. I will show you, do a bit of a screen grab of what this checklist looks like. It is a really good comprehensive checklist. You can check off various boxes, and it provides some information along the way to a bit more information along the way for each of these elements. This is a very good checklist, been around for a couple of years, developed by a bunch of developers, and it is quite excellent. So, checklists can be super helpful. Because essentially, WCAG is based on a large, sophisticated checklist.

Andrew Boardman: The last one is to hire an agency or consultancy. Some will conduct manual testing with people with lived experience. That is the best way to ensure that your site is accessible. It takes more time and more resources.

I will keep moving to this next one. Multiple parts to auditing and mediating a site or remediating a site. A consultant or an agency will first audit your site. This is the general way that an audit and remediation will work. Consultancy or agency or consultant will audit your site and come up with a prioritized list of changes, fixes and edits and use similar tools and platforms you may use on your own, as well as a bunch of other complex and paid platforms and tools to come up with that list and potentially they will also work with folks with lived experience and also might have other tools and methodologies to come up with that list, but that list will be reviewed together with you and then you decide which were the ones that are most important to fix first and then typically those elements are fixed and modified, usually on another server, not on your current live site and they are tested, and then they are deployed live by the development team and after that you decide when and how to address the rest.

It is almost impossible to get to all of them all at once.

It usually takes two to three stages and sometimes it takes multiple years to get a site to be compliant, depends on the size of the site and complexity of the site.

I want to talk a bit about overlays. Overlays, if you have seen this icon on the bottom right, it does exist on the bottom right of a website. This is an icon that belongs to a company called Accessible. You may have seen it. It is a tool that sits in the bottom right and you click on it and a box will pop up, a modal window pops up and makes the site quote unquote accessible. I will show you before I talk about this in a second. See it on the motley fool website, an investment website around for years. See that icon. Picture of a person. It is blue with a ring around it, and when you click on it, it opens up this window to the right. And you can see it has all kinds of buttons. You can click on screen reader, contrast, smart contrast, highlight links. It essentially will by clicking on these buttons in this overlay, you change how the site is displayed. If I click on light control, light contrast you will see it changed contrast of the next. If I clicked on smart contrast, it changed the lights in of the text or contrast of the text based on another algorithm. It is not great. I want to say there are a lot of people that use them.

Overlays are very, very popular. They are very, very easy to implement. They can be very expensive. I want to... There is a website called Overlay factsheet, and the vast majority of folks with disabilities have said that it makes it harder for them to use a website with an overlay. Many users of disabilities have expressed strong words of dissatisfaction with overlay products and the end users that these features claim to

serve will already have the necessary features on their computer either as a built-in feature or additional piece of software that the user needs to access not only the web but all software. Sometimes this overlay software gets in the way of them using assistive devices. And overlays themselves may have accessibility problems significant enough for users to take steps to actively block overlays from appearing at all. Users have to turn off this overlay in order to access the site.

Andrew Boardman: I am going to show you one more example of it. This is a website by... From Generation IM, a former client of mine. I feel like I can use their site.

Not designed and developed by me. You can see, they are an investment firm based out of London and New York, a really good decent firm, B-Corps, and they have accessibility tools in the top left. If I click on that link, it says accessibility tools. You get this thing, bar at the top from a company called Recite. And you see various buttons that ostensibly, theoretically will make the site more accessible to people with disabilities. It doesn't really work that well from everything I have seen and read.

I will show you what happens when you click on it here. I changed the dark background, but by changing the dark background, like certain things now on the website are now obscured. The drop down itself is obscuring content. I don't know if it is any better for folks with color issues, color vision issues, if I increase the font size, you can see what happens, it makes the text less legible. It has, like if I clicked on the...on the magnifying glass, you see it doesn't do much for me. These tools are not that useful, but they are being paraded and promoted as quick answers to creating web accessible... accessible websites.

I say avoid... This is coming from me, I would suggest avoid using these overlays. They are a band-aid. I think they can stop the bleeding, and, in some cases, they can be useful just to be truly transparent. There are people that think we should be using these, because the vast majority of websites are not accessible. And by applying at least a band aid perhaps we are doing some good. But I think like any band-aid that is left on too long, the underlying problems will just fester. It is a big and complex conversation that a lot of developers are having these days about these overlays. Think twice, that is just my recommendation. Okay.

Seven steps for internal buy-in, go quick with these but these are important.

Andrew Boardman: How do you get buy in for ensuring that your site or sites are accessible or can be made accessible? It is really a strategic choice. It is really an ethical and strategic choice to get buy-in, but it can boost your business and demonstrate your values in a very public and material way.

Understanding and investing in the power of digital accessibility is necessary. I believe it is necessary for any business to succeed in this evolving on-line world. And whether reviewing your current state of the site or building a new site, there is a cost to making your site accessible. Not only is there time but there is money involved. It is not a one-time initiative, not like you throw \$1,000 at it and you are done forever, there is work and there is...

There are funds that need to go along with it. And it needs ongoing attention and improvement as I indicated over time. Just by way of example, you are probably always adding content to your website. Someone should be monitoring and making sure that that content as it is being added by people who may or may not know about accessibility is therefore accessible. So, it is a bit... It is a bit of work going hand-in-hand with both your team and with managers. But what I would suggest is build a plan that generates buy-in.

In doing that consider the following steps.

Determine the essentials. Why does accessibility matter to you? Is it just for compliance reasons? Is there ethical or legal logic behind it? Is there a business logic behind it?

Understand your level of investment in both time and money. Demonstrate that return on investment, as much as you can and then try to bring it together. We have a blog post about how to prioritize and I can post a link to this later. Okay.

Getting started. Start where you are. There really is not any better time than now. Learn what you can. Apply what is reasonable and then just keep going.

There are a lot of things that you can do on your own, in your own team, with your current web developers, with your current management staff. You don't need to do a full overhaul in a lot of cases. You don't have to wait to become an expert. You don't need to take six courses. You can use a lot of the stuff that I have been showing and what Kelly showed yesterday, and you can do... You can make transformative experiences for folks. There is really... And there is an abundance of resources and tools to support you on your journey of accessibility. And we love this quote from Maya Angelou, "do the best you can until you know better. Then when you know better, do better." That applies for so much in life but especially around accessibility, I think.

In terms of funding, there are organizations that will sometimes... You can sometimes obtain alternative funds or funding for digital accessibility work. There are various organizations in Canada and in the United States and in Manitoba right here that can provide funding if you don't have access to that funding. Like I say, a lot of it can be done internally and on your own.

Easy fixes first. Big believer in starting small.

Create an accessibility statement, and you can ask your design, development, or communications team to help to figure out what that should say. I encourage you to be honest and open. You can even say we do not think our site is accessible to many folks.

We are working to remediate that. Please let us know if you have any questions. That is like... That goes a long, long way towards open and honest communications. And keeping that open feedback loop is so, so important.

Do an on-line assessment of your site with a tool like Wave as I mentioned. Start to add alt text as I mentioned and run a color contrast checker on your site and start with the small things. Start a conversation with your designer, your developer your, writer, to see what can be done quickly and easily. Start a conversation with your manager or management to see what the organization's mandate can do to support accessibility. And maybe, even, create a working group which might be a fun thing for folks especially if they are communications focused to discuss digital accessibility. It can be a good way to build a team around really strong ethical...

Who are interested in building out the strong ethical core of the business. Okay. And then I think this is it. I'm wrapping up here.

Disability community is the single largest minority.

Things to remember in Canada and in United States, accessibility is not one size fits all and doing accessible digital products is not one and done. It is a process, not a product. It is an investment over time. It can drive business innovation and growth. I think that is a super-powerful thing to take away here. Treat people with disabilities with dignity and respect including through access to technology. Listen to the disability community and build on your best practices for access and inclusion. And last but not least, this is my mic drop, but AI will affect digital accessibility, of course, because it is affecting everything. And that is like a whole other set of topics. Keep your eyes on AI, as things change. It will influence accessibility over the next five or 10 years. Okay. That is, it for me. Hopefully, there is enough time for some questions and answers. I would be happy to connect with you if you have any questions or thoughts or if there is anything I got incorrect in this presentation, please let me know. I'm [andrew@mangrove-web.com](mailto:andrew@mangrove-web.com). Thank you again for listening to me and participating today. I really appreciate it.

Emily Walker: Great. Thank you, Andrew. That was super informative. I think everybody appreciated that and we have got a few questions. We have got nine questions and some hands up as well.

Andrew Boardman: Okay. Sounds great.

Emily Walker: If we don't get to them all we will get the answers and then send them out or put them on the site as well.

Andrew Boardman: Cool.

Maria Ferraro: Our first question is, our website developer stated that their designs are WCAG 2.2 compliant, and the developer gave me a link to complete with an access scan which found 60 issues. Many are design-based. What have you found is the best to get issues resolved when the company is not Manitoba based.

Andrew Boardman: What I would say, if I understand the question correctly, there was a web audit done, design does not... There are still design challenges, organization is not Manitoba-based. So, what I would probably do is ask... You know, we could speak offline about this, I would try to go back to whoever developed the site, see if they would be willing to for free or for a fee, make those changes to the site. And the question is always around contract. I have been running a web design studio and agency for a long time. Did the contract, the original contract say that the site would be WCAG 2.2 compliant or say we would do the best we could or not even mention it. There may be some contractual obligations as well. I don't know if that is a solid enough answer but certainly happy to talk with you offline as well. It is really complicated. A lot of folks will say one thing and not 100% true and often requires negotiation and understanding of terms of what accessibility means. The beautiful thing about WCAG, it is relatively black and white about what passes and what doesn't. Can I say one more quick thing about this, checklists alone will not do it. There is no such thing as 100%, even if you checked off every single box and your designer and developer said this site is 100% accessible, it is probably not. There are use cases outliers and people that may not be able to access all of the content on the site. I just want to say that, too. It is not about checking a box or checking boxes.

Maria Ferraro: Great. Thank you.

Maria Ferraro: second question says, not quite a question, but comment. WCAG 2.3 came out in November but the info.com standard is for version 2.2. Do you have a comment on that?

Andrew Boardman: I don't. I have to ask our developers about that. I can get back to you on it. Good question. Okay. I will ask Andrea to email you directly then.

Participant: Sure. Thank you. That would be great.

Maria Ferraro: The next one is alt text; do you have any recommendations for guidelines regarding what makes good alt text?

Andrew Boardman: Yes, one of the things I have been seeing a lot of folks are starting to use ChatGPT, you can drop an image into Chat GPT and say hey generate some alt text. I think that is an acceptable solution if it provides context. So, remember, if you have... Say you are running a zoo and your website is showing a lion, that is a very different alt text that would be about that lion than say you are running a bank and you had a picture of a lion on that website. Context really matters. It should not say "lion lying in sun." It should explain why that picture is also there. So, it should provide more bountiful information, depending on the context of that image, and why it is there and what it is doing there. I'm not against using AI tools but remember that really the human... It will be humans that will be interacting with your site.

Participant: Perfect. Thank you.

Maria Ferro: Next question is does hitting tab only navigate through links and videos?

Andrew Boardman: It depends on the website. You can use tab. There are different ways of navigating, using different keyboard... different aspects of your keyboard. But you can try it and one of the things I might say is you can use a number of different tools on Apple's... I can't help how it works, go into... If you are using an Apple product, you can go in and try out the accessibility tools and see how they might work for someone who is differently abled. And it will show you how those tools work. Both keyboard and other devices, but, yes, tab is one of them but there are many other things you can do.

Participant: Great.

Maria Ferraro: The next one says have you... Do you have any recommended sources or tips to find good photos with diverse people. We are a small business and can't solely depend on our own photo library.

Andrew Boardman: That is the greatest question. You know, stock photography companies have done a real disservice to us, to us designers and communicators. It is very, very difficult to find a truly diverse set of audiences, whether it is, you know, race, ethnicity, gender, or ability or disability, it is very, very hard. I think we might have a list of stock sources both free and paid. And I will try to find that list for you. And try to post it. It is really hard to find good and inexpensive stock that is appropriate and ethical. You can use, I will mention there are a few free sites like Pexels and Unsplash, and they are okay. They are free and they are okay. But I sympathize with you. It is not easy.

Participant: Great. Thank you.

Maria Ferraro: Next question is, is it better to develop your own video content to ensure accessibility rather than using available YouTube videos?

Andrew Boardman: Yes, definitely. I'm all for developing your own content, not only because you have total control over it, and you know, you can design and build and say whatever you want in your message or story. But also, you can control the speed, you know, you can have people speaking more slowly or more quickly, depending on the audiences and you can have the captions do and say what you want. So, if you can afford it custom made bespoke video is the best.

Participant: Okay, great.

Maria Ferraro: What might you recommend to larger organizations where a majority of the employees offer digital content for both internal and external audiences, in our case post secondary context. It is not exactly viable to reach out to a consultant, fee for each course developed.

Andrew Boardman: Maybe read it one more time so I understand.

Maria Ferraro: What might you recommend to larger organizations where a majority of employees... I think it says offer digital content for both internal and external audiences, in our case post secondary context. It is not exactly viable to reach out to a consultant, fee for each course developed.

Andrew Boardman: I mean... It is a really good and hard question. One thing you could think about is deputizing or assigning that task to somebody internally and saying it is your job, Sam, or sally, to help whatever course is developed or whatever on-line content is developed to make it as accessible as possible. There are people, what I found over the years, there are people, if you tap them they are willing to step up and say yeah, I would love to spend an extra half hour or whatever it is, an hour or couple of hours a week helping with this type of work, because, because they know somebody who is disabled or perhaps they themselves a disability or perhaps they are looking for something else to kind of grapple with. But see if you can find an advocate internally that can kind of support that without having to encounter additional costs. That is my one hint. But other than that, yeah, it is... I sympathize again, it is hard to find a way to do it consistently and actively.

Maria Ferraro: Great. The next question, how do you work with organizations that have thousands of pages? How do you strategize the process of making the site accessible?

Andrew Boardman: Sites with thousands of pages, typically what would happen it depends on how old the site is, what the type of content management system is being... is running it, it depends on, you know, the organization and their size and of course their budget. But typically, what would happen is we would look at the...



we would look... This is what I would say to you, look at the most important pages of the site and use Google Analytics or another analytics tool and try to figure out which are the most important pages that need to be tackled first. It is unlikely that all of those thousands of pages are being accessed evenly. I would probably estimate, probably an 80/20 rule.

probably 20% of those pages are being visited by 80% of the people so try to tackle the most important pages first and worry about those secondary and tertiary pages next. It may be a rule of just tackling the biggest boulders first and then the secondary ones later.

Participant: Perfect. Great. Thank you.

Maria Ferraro: The next question is how to integrate people with disabilities, whether externally and internally when creating web content, especially in government organizations.

Andrew Boardman: Yes, great question. I think, you know, we are getting to the point in our history and in our culture, where we really need to be able to ask everybody to step up and this should not just be the part of managers. This should be talking about and connecting with folks from every single walk of life, is part of everybody's job. So, it is not just a question of management needing to do this. But I think it is reading, right? And I guess what I would say is ask around, like, you may not know who may or may not be interested in this again. But ask around and see what folks may be willing to step up and to talk about their experiences and how they may apply to a given website or how, you know, people have experienced a website internally and how they might be willing to step up and help. It is a really complex question. And, you know, it depends on culture and, you know, of course, you know, who is involved and how many managers there are, but it can be done. I have seen it done and there are... You can transform your culture around this if you are... If you have enough energy and resources internally.

Participant: Great.

Maria Ferraro: Next question, how would you suggest navigating as a municipality the need to communicate specific legal requirements such as public notices or permit forms while also making them accessible?

Andrew Boardman: Say the first part of the question again...

Maria Ferraro: How would you suggest navigating as a municipality the need to communicate specific legal requirements such as public notices or permit forms?

Andrew Boardman: I can't speak exactly to that question, I'm not sure. But what I would say is overarching important point is to create an accessibility statement on your site

that says, you know, these are really important notices. We are doing our best to make them accessible and then try to figure out how to make them accessible. And you might want to put that right on your home page, that accessibility statement, because it just indicates to people that this is a priority for you. And that, you know, this is a critical part of your work and your information, governance.

Participant: okay. Perfect. Sorry, do you have something else to say there?

Andrew Boardman: No, no, it is such an interesting and big topic. I would love to learn more.

Maria Ferraro: Heather Smith, you have your hand up. I will unmute you, see if you have a question for Andrew?

Heather Smith: I don't have a question. Thank you for asking.

Maria Ferraro: Thank you. And Baya Krahn, you have a question, your hand is up as well.

Baya Krahn: I don't have.

Maria Ferraro: But there is another one in the question box. How do you know if a PDF document is accessible as there are different ways that they are added to a site, scanned, exported to a PDF, or printed to a pdf. How do you fix existing pdfs on the site if not compliant as there are many?

Andrew Boardman: that is a fantastic question. I love that question. PDF accessibility has its own kind of world. It is important because there are so many PDFs and municipality question, I'm sure that a lot of those documents are in PDF format. Making accessible pdf is doable but it requires a different set of skills on the part of the designer. So, you can... There are courses that show how... that tell you how to make a PDF accessible. It is not super hard, but it is a bit different scope and different type of features and functions than for web. I will say this, most PDFs are poorly made and are not very accessible like a lot of the web and it can be done, and it is not that hard.

Participant: Great, thank you Andrew.

Maria Ferraro: That is everything for questions.

Andrew Boardman: Cool, okay.

Emily Walker: Well, thanks very much, Andrew. That was great, I appreciated the real-life examples that you gave us so that we could see what to do and not what to do.

I will start my video, there we go. I'm here. Thank you so much for sharing that knowledge with us.

Emily Walker: Just do some shoutouts before we log off. Please visit [accessibilityMB.ca](https://accessibilityMB.ca) and we will post the recordings here for MAAW on our website. And that also includes further information on the standard, to view a handbook on implementing the requirements of the standard or to take relevant training on our Accessible Information and Communication Standard Learning Module. The module can be accessed at [AMALearningMB.ca](https://AMALearningMB.ca) and there are scorm files which you can use them in your learn management system and available to download for all Manitoba businesses and organizations at no cost. So, we have training on the standard generally. You can also subscribe to our newsletter, Accessibility News for monthly updates on accessibility. A reminder about tomorrow's event, if you enjoyed our other webinars this week, we will have one final webinar tomorrow, May 30th, from 1 to 2:30. And we will wrap up the week with a presentation by Lisa Snider of Access Changes Everything on digital accessibility audits. Andrew did mention auditing websites with people with lived experience, well Lisa will talk more about that tomorrow, what is involved and the importance for ensuring that websites are accessible. So, as I mentioned, the webinar recordings will be available on our website. If you have feedback on the sessions or other questions, comments, you can email us at [mao@gov.mb.ca](mailto:mao@gov.mb.ca) or call (204)945-7613.

happy to hear your feedback. You also have an opportunity at the end when you leave to complete a short feedback survey. We really value your input. It helps us to plan for future events, to kind of learn from these ones and what people are interested in. So, thank you so much to everyone, to the team at my office for your hard work organizing these webinars. Thank you to our interpreters, our captioner for helping us out today, thank you to Andrew for taking the time to explain this really interesting topic to us. Thanks everybody for taking the time to join us and we really appreciate seeing or seeing your name, can't see your faces, but happy MAAW 2024 and enjoy the rest of the week!