Ontario Trails Organizations

Guide for accessible web design
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Introduction

This Guidebook is intended to help our members better understand the accessibility requirements for websites, but we also include information on making other trail promotional and communication tools accessible.

While most trail organizations are aware of accessibility requirements for the design and development of trails in the Integrated Accessibility Standards Regulation, Ontario Regulation 191/11¹, many are not aware of accessibility requirements for the communication tools used to promote trails.

The Ontario Trails Council developed this guide through an EnAbling Change Project with the Government of Ontario as a best practice so our members can better understand the requirements regarding accessible information and communication in the Integrated Accessibility Standards Regulation.

This guide is not legal advice. If you require assistance in interpreting the legislation or the regulation, please contact your legal advisor.

All locations and imageries are based in Ontario. For any questions, please contact the Ontario Trails Council.

¹www.e-laws.gov.on.ca/html/regs/english/elaws_regs_110191_e.htm
About the Ontario Trails Council
The Ontario Trails Council (OTC) is Ontario’s authoritative voice for trail enthusiasts, trail organizations and the trail economy. Its website is the definitive trail resource in Ontario.

The Ontario Trails Council has a membership of over 200 municipalities, regional tourism, economic development, parks and recreation, hiking and cycling clubs etc., reaching over 1,000 trail organizations providing 2,300 trails in Ontario. We represent all sorts of trail activity including Ontario’s accessible trails, for:

- hiking,
- cycling, equestrian,
- canoeing and kayaking,
- skiing,
- Snowmobiling, and
- ATV’ing
SECTION 1

Introducing the Ontario Trails Council’s Accessible Website

In 2007 the Ontario Trails Council launched its award winning website www.ontariotrails.on.ca. Attracting 50-75,000 visitors a month, equalling nearly 1,000,000 a year, the site is heavily used and responsible for about 4.5 million planned outdoor trips on an annual basis. We reach an additional 22,000 individuals regularly on or through social media, and we have 500 newsletter subscribers.

The website was developed to house the trail inventory available for use in Ontario. The website includes a visual description of the trail, the local weather, maps to the trailhead, and tracks some characteristics, such as open, closed, parking, portage, and accessibility.

In 2013, the Ontario Trails Council undertook a website redesign to improve the services and information. While not required under the Accessibility for Ontarians with Disabilities Act standards to make our website accessible because we are considered a small not-for-profit having less than 50 employees, as a sector industry association, we were very interested in making the information on our website available to all Ontarians, including people with disabilities.

Since 85% of the visitors to the Ontario Trails Council website are referred to other websites for more local and distinct information about a trail, we want to encourage our members to consider accessibility for their website as a best practice.

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2For more information on the awards, please visit: http://www.ontariotrails.on.ca/trail-news-events-2/awards
SECTION 2

Accessible Communications
Accessible communications are important for trail organizations

There is an emerging economic case for considering accessibility when developing communications programs and plans that promote trail opportunities.

A 2013 Statistics Canada report on the Canadian Survey of Disability includes the prevalence of disability by type – while many trails are being designed to be wheelchair accessible – we’re only addressing barriers for 11% of people with disabilities. According to most recent survey findings, 8% of people with disabilities in Canada experience barriers to communications.\(^2\)

Additionally, over the next 17 years, an aging population and people with disabilities will represent 40% of Ontario’s estimated total income of $536 billion. This demographic will represent nearly half of all dollars spent in Ontario.\(^3\)

In fact, we’re already beginning to see the demographic shift in the age of the population on the Ontario Trail Council Website. According to our statistics, the website is being accessed by an aging demographic at a significant rate with 30% of visitors being between the ages of 45 – 65 compared to 22% between the ages of 35 – 45.

Finally, accessibility can also benefit local tourism economies. It is estimated that improving accessibility in Ontario could help generate up to $1.6 billion in new tourism spending.\(^4\)

\(^1\)Disability in Canada: Initial findings from the Canadian Survey on Disability http://www.statcan.gc.ca/pub/89-654-x/89-654-x2013002-eng.htm


\(^3\)Releasing Constraints: Accessible Version http://www.martinprosperity.org/media/ReleasingConstraintsAccessible.html#markets
Overview of Accessibility for Ontarians with Disabilities Act (AODA) Standards

In 2005, the government enacted the Accessibility for Ontarians with Disabilities Act. This act laid the framework for the development of province-wide mandatory standards on accessibility in all areas of daily life. Its goal is to make Ontario accessible for people with disabilities by 2025.

Ontario now has accessibility standards in five areas:
- Customer service
- Employment
- Information and communications
- Transportation
- Design of public spaces

Depending on the size of your organization there are requirements for accessible communications that will be phased in over the next several years. For a list of the accessibility requirements that your organization needs to comply with and by when, you can use the AODA Compliance Wizard on the government’s website (www.ontario.ca/accessibilitycompliance). By answering a short series of multiple-choice questions, the Wizard will provide a personalized list of requirements for your organization that you can print.
Access to website requirements
– what you need to do

Under the Integrated Accessibility Standards Regulation beginning January 1, 2014, if you are an organization with 50 or more employees launching a new public website and web content or doing a significant site refresh, the site and its content must conform to the World Wide Web Consortium Web Content Accessibility Guidelines (WCAG) 2.0, Level A. By January 1, 2021, all internet websites and web content must conform with WCAG 2.0 Level AA, other than,

i. success criteria 1.2.4 Captions (Live), and
ii. success criteria 1.2.5 Audio Descriptions (Pre-recorded).

† Context Creative was commissioned by the Ontario government to create an annual report for Ontario’s Climate Change Action Plan. This PDF was designed to be highly usable and useful and served as examples of accessibility in communication.
What is Website Accessibility?
What is website accessibility?

An accessible website is simply good design—taking into account the variety of ways that people with disabilities navigate and understand web content.

Use the following link to learn more about how people with disabilities use the web:
www.w3.org/WAI/intro/people-use-web/Overview.html

People with vision loss or low vision may need to use accessibility tools like:
- screen readers or navigable audiobooks
- refreshable Braille displays or Braille embossers
- large monitors or screen magnification software.

Providing an accessible website allows people to use software that will turn text into speech or Braille and navigate through the website without relying on vision.

People with hearing loss often rely on:
- text alternatives for audio information such as transcripts for video.
- some people with hearing loss may rely on images to understand context.

Some people with physical disabilities may use:
- a specialized mouse, keyboard, or pointing device
- speech recognition software,
- an eye-gaze system, or other assistive technologies to navigate a web page

People with developmental and learning disabilities rely on:
- information provided in clear language, and
- a simple layout

Individuals who use assistive technologies may require additional time to respond to requests for information or choices.
What is WCAG Level A or AA?

WCAG 2.0 is an internationally accepted standard designed for web developers to ensure accessibility as agreed by the World Wide Web Consortium (W3C), an international team of experts.

WCAG 2.0 sets out guidelines for organizations to make their websites more accessible. Each guideline has three levels of accessibility: A, AA and AAA. Level AAA is the highest level of accessibility.

The WCAG 2.0 guidelines cover things like:

- Writing web content in clear language
- Providing alternate text for images, or
- Making sure your website can be navigated with just a keyboard.

The Integrated Accessibility Standards Regulation requires obligated organizations to design their websites using the WCAG 2.0 guidelines. Initially, as of January 1, 2014, new or refreshed websites will be expected to meet the accessibility requirements of Level A, followed by Level AA by January 1, 2021.

This allows organizations to plan and integrate accessibility improvements as part of regular business planning.
Principles for website accessibility

The WCAG 2.0 guidelines are organized under 4 design principles: perceivable, operable, understandable, and robust. These principals are the goals or objectives that accessible website design should achieve.

1. Perceivable
   • Provide text alternatives for non-text content.
   • Provide captions and other alternatives for multimedia.
   • Create content that can be presented in different ways, including by assistive technologies, without losing meaning.

2. Operable
   • Make all functionality available from a keyboard.
   • Give users enough time to read and use content.

3. Understandable
   • Make text readable and understandable.
   • Make content appear and operate in predictable ways.
   • Help users avoid and correct mistakes.

4. Robust
   • Maximize compatibility with current and future user tools

For more information on WCAG 2.0 principles go to www.w3.org/WAI/WCAG20/glance
SECTION 4

Making your website accessible
Learn from Others

What steps did the Ontario Trails Council take towards accessibility?

We reviewed the guidelines regarding accessibility and worked with a team of developers and graphic designers to incorporate accessibility features in the site.

A lot of work went into the infrastructure and the architecture of the site to make it accessible. Many of the accessibility features are not things you can see – much of it relates to coding (e.g. structure of code, labeling of elements, etc.) for screen readers.

That said, accessibility did not compromise the outward appearance of our website. What we learned is accessible web design is good design that makes the website easier to use for everyone. Accessibility is also an ongoing process of ensuring that new content and updates to the site are also made with accessible usage in mind.

Test your current site

The first step in making your website accessible is to find out if your website and web content is already meeting WCAG 2.0 accessibility standards.

There are a number of online tools available you can use to test your site to see if your website is accessible.

One way is using as evaluation assessment to flag any issues that may need to be resolved. There are many Internet sites that will, when you put in your site’s URL, will assess your site for WCAG 2.0 compatibility. One such checker list can be found at: wave.webaim.org

See www.w3.org/WAI/ER/tools/complete for a list of available online resources.
Case Study: Ontario Trails Council Website

The following are a few examples of accessible considerations in action on our website:

**Responsive and Flexible Design**
The site is built to be responsive so that it dynamically configures itself according to the size of the browser or screen being used.

The font size can also be adjusted by the user using their preferred browser controls.

Responsive design provide an optimal viewing experience across a wide range of devices (mobile phones, tablets and desktop computer monitors).
Contrast and Visibility
The new design takes into consideration colour contrast to assist in visual recognition.

It also uses a large default font size to make content easier to read.

Upfront Navigation
We allow upfront navigation of the site in more than one location to make content easy to access. Users are able to navigate throughout the website.
Keyboard Tabbing
The drop-down menus and other interactive elements can be accessed by keyboard tabbing. This is crucial for visitors who do not use a mouse and/or primarily access content through screen readers.

Alternative and Descriptive Text
We aim for images and visuals on the site to have alt (alternative) text descriptions.

For example, we ask visitors providing information, such as photography of a trail, to provide descriptions for images they submit.

Additional Due Diligence
- Links are checked to ensure they work
- We solicit feedback from people who use the site.
Designing for Success

If you don’t have accessible web development experience, the following steps may help you find and work with a web developer to make your website more accessible.

1. Finding a web developer
   There are many website design companies and consultants that you could choose from.

   What we would recommend is that you make sure you talk to a Registered Graphic Designers (RGD) Certified Web Designer, or that the company you use has one on staff.

   The Association of Registered Graphic Designers is a hub for the graphic design community, promoting knowledge sharing, learning, research, advocacy and mentorship. The RGD works to establish professional standards, best practices and innovative thinking within our industry and beyond.

2. Determine level of expertise
   Make sure your in-house developer, or the developer you plan to hire has the expertise needed to make your website more accessible.

   Here are some questions to ask:
   • Are you familiar with WCAG 2.0, Level A and AA?
   • Have you developed/redesigned a website that is accessible (WCAG 2.0, Level A or higher)?
   • Do you have links or references for these sites?
   • Do you code manually or with the assistance of a program—if so, does the program support accessibility?
   • Do you test the website for accessibility using automated and manual assessments and assistive technology?

The association of Registered Graphic Designers (RGD) has developed practical guidelines and resources that help design buyers and practitioners meet requirements in the Accessibility for Ontarians with Disabilities Act. Visit their website at www.rgd-accessibledesign.com
3. Communicate your expectations
Think about accessibility from the start. When working on the website design, let your web developer know your expectations for:
• making the website and web content accessible (WCAG 2.0)
• the level of accessibility (Level A or AA), and
• timelines for completing the website

Find a designer/developer
The RGD has fully researched and promoted web based accessibility, and understands the internet the way trail groups do not. For more information on the RGD, visit their website at www.rgd.ca

The Global Alliance for Accessible Technologies and Environments (GAATES) has developed the following guide: www.gaates.org/alCout/Outsourcing_2013-07-31.pdf

4. Ask for a project plan
Whether the developer is fixing accessibility issues or creating an entirely new website, they should be able to clearly tell you when and how the project will be delivered.

Your developer should provide you with a project plan for completing the website, that:
• Identifies techniques or software used
• Outlines key deliverables and timelines
• Specifies accessible coding techniques or software that supports accessible websites.
• Outlines how your website will be tested
• Includes automated and manual tests, as well as testing using assistive technology.
• Identifies how the site will be maintained.
This should include either instructions on how create accessible content, or an agreement to maintain the website.

5. Review key milestones and changes
Keep a record of the accessibility issues that have been repaired, or ask your web developer to maintain one. This will show you the completed work and the new level of accessibility. It will also be helpful if your organization is asked to show that your website is WCAG 2.0 compliant.

6. User testing and feedback
Review your site using assistive technology like screen readers to make sure the design and technical aspects of the site are accessible. If possible, ask people with disabilities to test your new or redesigned site before you launch. Get feedback from customers and other site users to find out if there are any improvements needed.
Designing your own accessible website

If you design your own website, below are some accessible website design objectives we kept in mind to address the needs of people with disabilities.

For more information on accessibility checklist design tools use the following W3 website link: www-03.ibm.com/able/guidelines/web/accessweb.html

Provide captions and text alternatives for images and multimedia
If someone is using a screen reader, it will scan an image or graphic text to find a description and read it aloud. If you haven’t provided any, the user won’t know what the image is.

Use strong contrast between text and background
A lack of contrast impacts people with low vision, and people who are colour blind. It also makes your site difficult to navigate for people using devices, like cell phones or in bright sunlight. Try colour combinations like dark blue and matte white, black and white or yellow and black – or use an online contrast analyzer to make sure it’s accessible.

Allow for text adjustment
Start by making your zoom and size settings flexible, especially for text. If you don’t allow users to make text larger, or if it causes the content to lose its structure, you may be preventing people with low vision from using your website.

Avoid CAPTCHAs and give users enough time to read and use content
To prevent Spam, CAPTCHAs (Completely Automated Public Turing test to tell Computers and Humans Apart), typically require users to type letters or digits from a distorted image to make sure they are human. If your CAPTCHA asks people who have vision loss to type in the image they see, the test could be impossible. Instead, ask the user to answer a simple question, like whether fire is hot or cold or provide an auditory option.

Avoid using time limits when asking users to provide a response or information
If you need to use a time limit for security reasons allow the user to extend the time limit if needed.

Avoid blinking images
Businesses often assume that flashing content will draw attention to their website, but any content that flashes more than three times in one second could cause a person with epilepsy to have a seizure.
Help users navigate and find content
Make sure your links state what they lead to so people using screen readers can easily scan the links on the page. For example, instead of your link stating ‘click here’, try expanding the link to ‘click here for more information on prices’, or just ‘prices’.

Help users avoid and correct mistakes
If you use any type of online form, avoid using a generic ‘error’ message. This makes it difficult or impossible for someone with a cognitive disability or someone using a screen reader to fix the mistake they have made.

Make your tables accessible
Tables are often used to showcase price lists, but if you haven’t indicated what cells are headings and/rows, people using assistive technology may not be able to read the information in a way that makes sense.

↑ The Government of Ontario website, November 2014. Websites and web content controlled either directly by the Government of Ontario or through contractual relationships conform to the World Wide Web Consortium Web Content Accessibility Guidelines (WCAG) 2.0, at Level AA.
SECTION 5

Accessibility for other trail communications
Accessibility for other trail communications

Trail organizations communicate several things that are unique to our audience. Not all of our information is on websites.

A lot of our communication is on the ground (so to speak) such as maps, signs and brochures.

Under the Accessibility for Ontarians with Disabilities Act customer service standards, all organizations with one or more employees must make their information and communications accessible when requested. There is no one-size-fits-all solution to making information accessible. People with the same type of disability may have different needs. For example, only a small percentage of people who are blind use Braille.

You don’t have to have accessible formats on hand, and the law does not specify what format or communication support to use. It’s flexible, because what you provide will depend on your resources, the type of information, its current format and the needs of the person making the request. You don’t have to provide the specific format an individual asks for, but you do have to work with them to try to meet their needs.

Use the following link to learn more about how to make information in an accessible to people with disabilities. www.mcss.gov.on.ca/documents/en/mcss/accessibility/iasr_guides/info_en.pdf

An example of signage from an accessible trail. The signage feature high contrast colour, directional arrow and the international symbol of accessibility.
Trailhead signs
The Integrated Accessibility Standards Regulation, Part 4.1, the Design of Public Spaces requires trailhead signs to be placed at each trailhead for any new or redeveloped trail. Each trail head must provide the following information:

- Trail length
- Surface type on the trail
- Average and minimum trail width
- Average and maximum running slope
- Average and maximum cross slope
- Location of amenities, where provided

To help people with low vision, the text on the signage must have a high tonal contrast with its background and the font must be san serif. Sans serif is a typeface that does not have the small projecting features.

Trail maps
While trail groups produce maps of accessible trails, they do not necessarily produce maps that are accessible. The problem with maps is too much detail tends to distort or minimize the readability of the content.

Trail maps should be augmented with on the ground direction and wayfinding tools. The map should not be the encyclopedia of all available information.

Accessible communications for consultation
Once the accessibility requirements for trails in the Design of Public Spaces come into effect, organizations will need to consult with the public. Accessible communications for consulting the public will be an important consideration for our sector.

Trail organizations that are planning a new trail, or redeveloping an existing trail, will need to consult with people with disabilities on certain design aspects of the trail.

Considering accessible communications for public consultation will help you reach out to more people in your community. The Ontario Municipal Social Services Association has developed two resources to help public sector, non-profit as well as private sector organizations make their public or stakeholder engagement accessible.

Looking Ahead

Ontario Trails Council works everyday to help all Ontarians appreciate and understand the diversity of our province’s trails.

This project is another example of how the Ontario Trails Council brings trail experiences to as many people as possible. By using the tools and resources in this guide, you will be able to reach more people also!
Appendix A: List of resources

**WCAG 2.0 Guides**

**Web Accessibility Initiative**
The Web Accessibility Initiative (WAI) develops strategies, guidelines, and resources to help make the Web accessible to people with disabilities. They invite everyone to explore their website and to share ideas.

[www.w3.org/WAI](http://www.w3.org/WAI)
[www.w3.org/WAI/mobile](http://www.w3.org/WAI/mobile)

**Web Checker List - Complete**
Web checker tools check web pages for conformance with accessibility standards to ensure the content can be accessed by everyone

[www.w3.org/WAI/ER/tools/complete](http://www.w3.org/WAI/ER/tools/complete)

**Accessible Information and Communications**

**RGD Access Ability Best Practices Handbook**
For additional information on accessible graphic design


**CNIB Web and Digital Accessibility and Accessibility Resources**
CNIB’s commitment is to ensure the digital world is a resource for everyone to use equally. These resources are designed to spread information and knowledge on this commitment.

[www.cnib.ca/en/services/web_digital_accessibility/Pages/default.aspx](http://www.cnib.ca/en/services/web_digital_accessibility/Pages/default.aspx)
[www.cnib.ca/en/services/resources/Pages/default.aspx](http://www.cnib.ca/en/services/resources/Pages/default.aspx)

**Accessible Trail Design**

**Ontario Trails for All Ontarians—Design of Trails**
This comprehensive trail design and building guide was produced according to Universal Trail Assessment Processes (UTAP) in consultation with Ontario Trails, and the Accessibility Community. Provides necessary accessibility information for planners.


**GAATES - The Illustrated Technical Guide to the Accessibility Standard for the Design of Public Spaces**
Provides technical advice on the Accessibility Standards for the Design of Public Spaces and includes a section for recreational trails and beach access routes

[www.gaates.org/027BuiltEnvironment.php](http://www.gaates.org/027BuiltEnvironment.php)
Appendix A: List of resources

Accessible Trail Design – Continued

Pathways to Recreation: Learning about Ontario’s Accessibility Standard for the Design of Public Spaces
This guidebook addresses the Design of Public Spaces Standard to provide owners, managers and/or operators of municipal and not-for-profit parks, outdoor recreation facilities and amenities with a better understanding of the requirements to make these facilities accessible, and to provide promising practices that can support successful implementation.

www.prontario.org/index.php?ci_id=9181

AODA – Accessibility Standards, Tools Resources & Policy Guidelines

Accessible Customer Service Standard
To learn what it means to provide accessible customer service

Integrated Accessibility Standards Regulation
For additional information on the accessibility requirements see the government policy guidelines

The Design of Public Spaces Standards
For additional information on the accessibility requirements see the government policy guidelines