Accessibility and the Map/Data Library

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Topics

- Accessibility legislation in Ontario

- Impacts on libraries in general; Map/Data Libraries in particular

- OCUL Scholars Portal activities: accessibility of web mapping applications like Scholars GeoPortal

Ontario's accessibility legislation

Accessibility for Ontarians with Disabilities Act 2005 (AODA)

● Make Ontario accessible by 2025
● Standards in five areas
  ○ Customer service
  ○ Employment
  ○ Information and communications
  ○ Transportation
  ○ Design of public spaces

About the Accessibility for Ontarians with Disabilities Act, 2005 (AODA)

PUSH TO OPEN

Access ON donne accès

Breaking Barriers Together
www.AccessON.ca

Ontario's accessibility legislation

Accessibility for Ontarians with Disabilities Act 2005 (AODA)

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- Standards in five areas
  - Customer service
  - Employment
  - **Information and communications**
  - Transportation
  - Design of public spaces

Why Accessibility?

Ontario government perspective:
    "It's just good business"

University perspective:
    Foster a community of natural curiosity and inclusivity, within our ever-diversifying communities

Accessibility benefits everyone

How is accessibility defined?

"Ability [of persons with disabilities] to obtain the same information, at the same time, for the same price and at the same quality [as persons with no disability]."

Americans with Disabilities Act, 2013

Accessibility in Libraries: Collections

- Academic libraries are expected to "provide, procure or acquire...an accessible or conversion ready format...upon request" (Section 18, AODA)
- Both the content and the platform need to be accessible
- If accessible procurement is not available
  - Document the steps taken to identify alternative
  - Document a plan for obtaining alternative if one is requested

Accessibility in Libraries: Public Service

- Academic libraries are expected to provide accessible methods of interacting with their services, including:
  - Websites
  - Documents
  - Event signups
  - Videos, tutorials, research guides, etc.
  - Learning Management Systems
  - Interpersonal communications, reference services

Compliance timeline

Jan 2014
- All new internet websites and web content on those sites going back to January 1, 2012 must conform with Web Content Accessibility Guidelines (WCAG) 2.0 Level A

Jan 2015
- Accessible formats and communication supports
- Educational libraries - print-based resources

Jan 2020
- Educational libraries - multi-media/digital resources

Jan 2021
- All internet websites and web content must conform with WCAG 2.0 Level AAA (excluding live captioning and audio description)

You may be asking...

- But...how can maps and GIS be made accessible?
- Users require proprietary software which we have no control over!
- Our collections are unique and can't be procured in alternate formats!!
- Our collections are inherently visual!!!

The reality is...

- There are many kinds of disabilities
- People with a range of disabilities can and do use maps & GIS
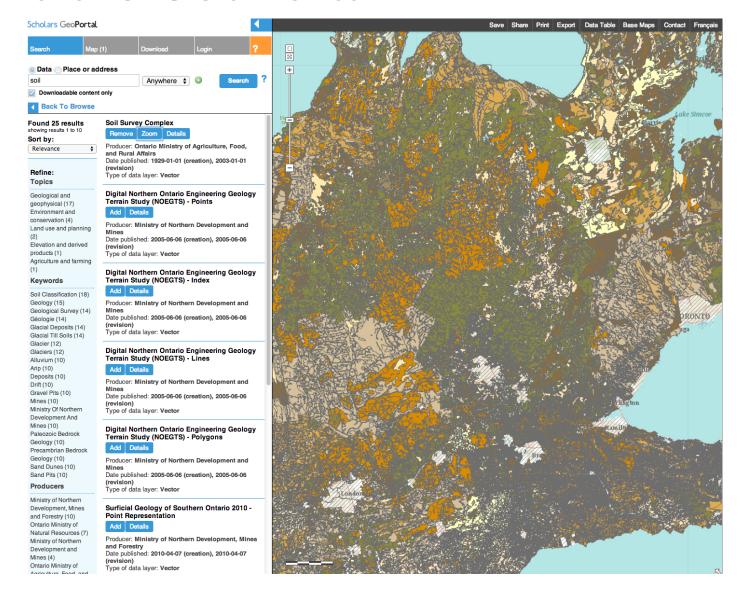- There is plenty we can do to support them!

Strategies

- Communication: "Patience, respect and a willingness to find a way to communicate are your best tools" *www.accessiblecampus.ca*
- Collections: Provide alternative formats (digitized maps, data conversion)
- Advocate for users with disabilities when negotiating with data producers
- Make online user interfaces accessible

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Scholars GeoPortal

Disabilities & Assistive Technology

Visual

- Screen reader software (e.g. Jaws, VoiceOver, ChromeVox)
- Magnifiers (software such as ZoomText, or physical devices),
- colour contrast enhancers (e.g. Vischeck)

Disabilities & Assistive Technology

Auditory

- o Transcripts
- o Captioning
- o Sign language interpretation

Disabilities & Assistive Technology

Mobility/dexterity

- o Specialized keyboards and mice/pedals
- o Voice recognition software (e.g. Dragon NaturallySpeaking)

Disabilities & Assistive Technology

Cognitive

- o Specialized keyboards with simplified layouts or custom iconography
- o Simpler interfaces

Checking the code
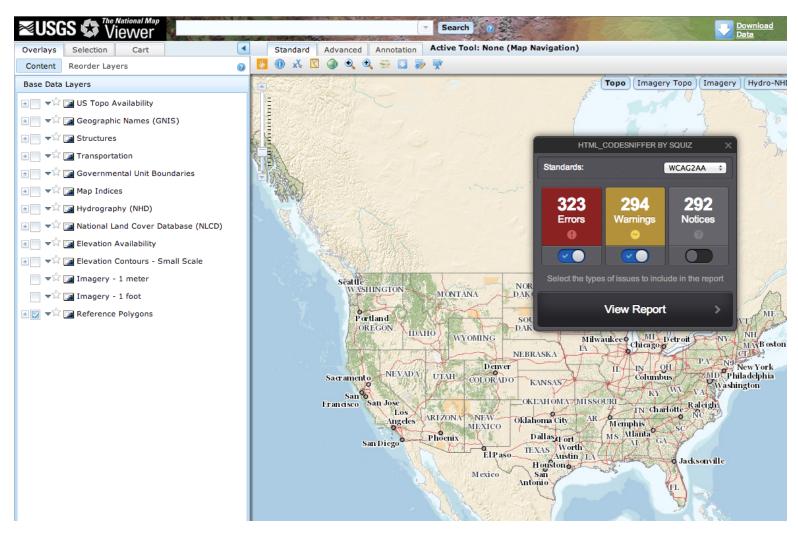
HTML_CodeSniffer

Results

By comparison
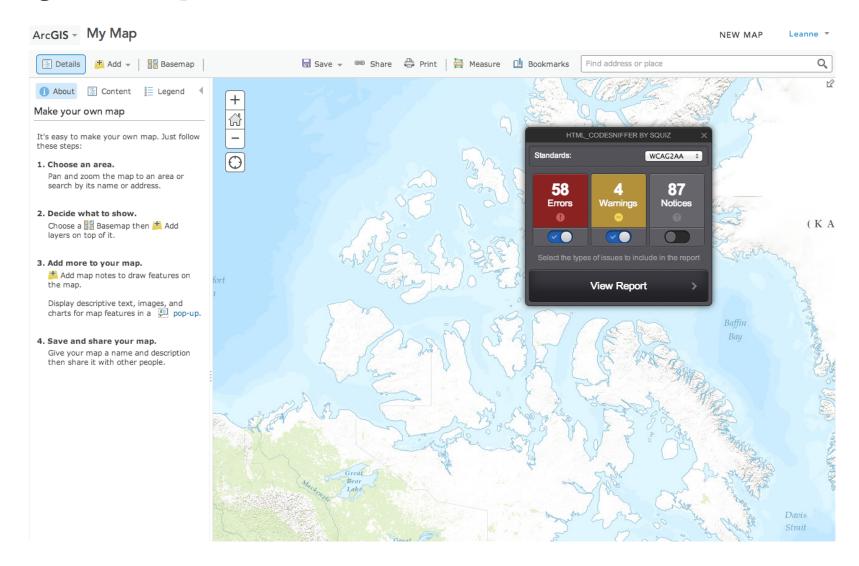
By comparison

By comparison

By comparison

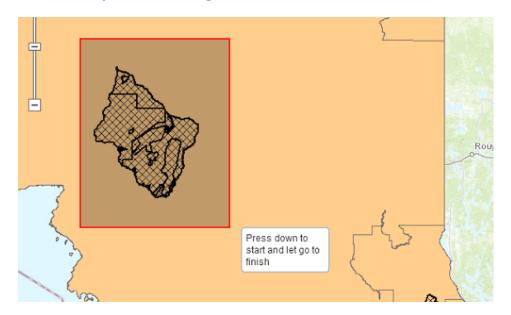# What's causing the errors?

video demo

Improvements Needed

- Need an accessibility statement
- Images need 'alt tags', form controls need labels
- Structure site to allow users to gain an overview of available sections of the site, and features within sections (ARIA / HTML5 section tags)
- Keyboard navigable map controls (pan, zoom)
- Ensure that all pop-ups, panels, and alerts can be interpreted by assistive technology
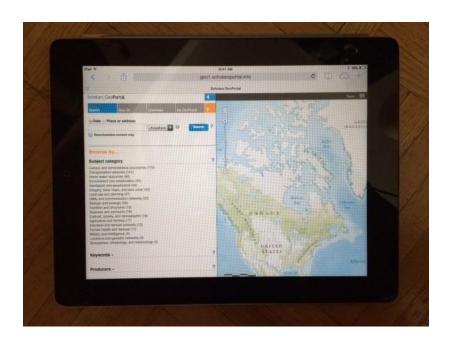- High contrast mode

The really hard stuff

- Areas of the site where both physical movement and visual awareness are required
  - "Clip & ship" (drawing a box on the screen)
  - Clicking on a point to view attributes
  - Annotations (drawing shapes on the screen)

The really hard stuff

- Full site functionality on tablets
  - Touch screen controls offer new possibilities for people with disabilities
  - However, Scholars GeoPortal download tools don't work on tablets at this time

Where do we go from here?

- Start working on improving the Scholars GeoPortal user interface!
- Tackle the low-hanging fruit first (2014)
- Reconsider our site design with universal design principles in mind (2015)

Resources

OCUL Accessibility Information Toolkit for Libraries http://www.ocul.on.ca/node/2127

Derek Featherstone webinar on Accessible Maps (fee based):
http://store.simplyaccessible.com/virtual-seminar/accessible-maps/

Love, B. (2014). Accessibility in map and GIS libraries. *ACMLA Bulletin*, 146: 10-15.