

Teaching GIS After April 24, 2026

A University Perspective on Title II
WGAC 2.1 Accessibility Standards

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A presentation based on collaborative work

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All maps designed by EWU students, unless otherwise indicated



Topic: a US Dept. of Justice Ruling

Fact Sheet: New Rule on the Accessibility of Web Content and Mobile Apps Provided by State and Local Governments

Comply by April 24, 2026

April 08, 2024

On April 24, 2024, the Federal Register published the Department of Justice's (Department) final rule updating its regulations for Title II of the Americans with Disabilities Act (ADA). The final rule has specific requirements about how to ensure that web content and mobile applications (apps) are accessible to people with disabilities.

Topic: a US Dept. of Justice Ruling

that's us

State and local governments must make sure that all services, programs, and activities they provide are accessible to people with disabilities – including those offered online and through mobile apps.

Fact Sheet: New Rule on the Accessibility of Web Content and Mobile Apps Provided by State and Local Governments

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Comply by April 24, 2026

The university perspective

ONLINE:

- Admissions, Registration, Financial Aid
- Payroll, Facilities, Security Systems
- **Classes, Learning Management Systems**
- **GIS**

The ^{real} university perspective

Jared Diamond Collapse Level **DENIAL**

- Ignore the mandate until Jan 22, 2026
- **Send out email to entire faculty**

Dear Faculty Colleagues,
On behalf of the Provost's Office, Faculty Commons, and Instructional Technology, I am writing to share resources, guidance, and training opportunities to support you in strengthening digital accessibility in your courses. The Americans with Disabilities Act (ADA) has applied to digital content and applications—including websites, learning platforms, course materials, videos, documents, and social media—for nearly three decades. [Recent updates to Title II of the ADA](#) clarify expectations for large public universities, requiring proactive delivery of digital content that meets recognized accessibility standards by April 24, 2026. EWU has long been working to improve the accessibility of our digital environment to better serve all members of our community. This work has taken on added importance as we prepare for the implementation of these updated requirements. Under the new regulations, EWU's digital materials must meet the [Web Content Accessibility Guidelines \(WCAG\) 2.1, Level AA](#). To support this responsibility, faculty will need to review materials used in [new courses offered after April 24, 2026](#), to ensure they meet these standards. We recognize that this work can feel daunting. In partnership with Instructional Technology, Faculty Commons is providing practical training, tools, and step-by-step guidance. Available and upcoming resources include:

- **Title II Tuesdays** at Faculty Commons (Every Tuesday in February, 1:00–2:00 p.m.) Visit with Instructional Designers, Jim Ryan and Crista Calderon, and Faculty Commons Director/Accessible Pedagogy Expert, Dr. Cindy Nover. They will be there to answer questions, identify problems, and provide solutions. As always, there will be coffee and excellent fellowship.
- **The Accessibility Compliance Repository**, hosted on the Faculty Commons website. You can also find this by navigating to the Faculty Commons website and using the Resources dropdown menu. Here you will find tools to help identify accessibility issues in your course, tutorials, podcasts, and other resources from both ITWS and Faculty Commons to help guide you toward useful solutions.
- **In Person Consultations**. If you don't find what you need, or you would like to consult with someone individually please reach out directly to [Cindy Nover](#), [Crista Calderon](#), [Ryan](#), or [Gwen Cash-James](#). We will make sure to get you connected to someone who can help you as soon as possible.

This is the first time some of us heard of it 😞

What will be different after April 24, 2026?



real The university perspective

ADA STUDENT SUPPORT SERVICES

- **Already well established**
- **Adept at captions, alt text, PDF headers**
- **Traditional lectures, readings, exams**
- **Anything else? One-on-one**

What will be different after April 24, 2026?

Not much



The image is a screenshot of a Federal Register notice. At the top left is the National Archives logo. To its right is the text "FEDERAL REGISTER" in large, bold, black letters, with "The Daily Journal of the United States Government" underneath in a smaller font. To the right of this text is the seal of the National Archives and Records Administration, featuring an eagle with a shield and the year "1985". Below the header is a blue horizontal bar with a white "R" in a circle and the word "Rule" in white. The main title of the notice is "Extension of Compliance Dates for Nondiscrimination on the Basis of Disability; Accessibility of Web Information and Services of State and Local Government Entities". At the bottom left, it says "A Rule by the Justice Department on 04/20/2026", with the date "04/20/2026" highlighted in a yellow box. At the bottom right, there is a small flag icon.

on
April 20, 2026:

**ONE YEAR
EXTENSION**

What will be different after April 24, 2027?

We have one year to . . .

1. Understand the new standards
2. Implement in GIS education
3. Apply to our own GIS work



ArcGIS Online



ArcGIS Pro



canvas



Panopto™



I. UNDERSTANDING THE NEW STANDARDS

some
background

ADA established in 1990

WCAG added in 1999

WCAG 2.1 AA
refined in 2018

I. UNDERSTANDING THE NEW STANDARDS



Credit: CHAT GPT

some
background

ADA established in 1990

WCAG added in 1999

WCAG 2.1 AA
refined in 2018

I. UNDERSTANDING THE NEW STANDARDS



Credit: Claude

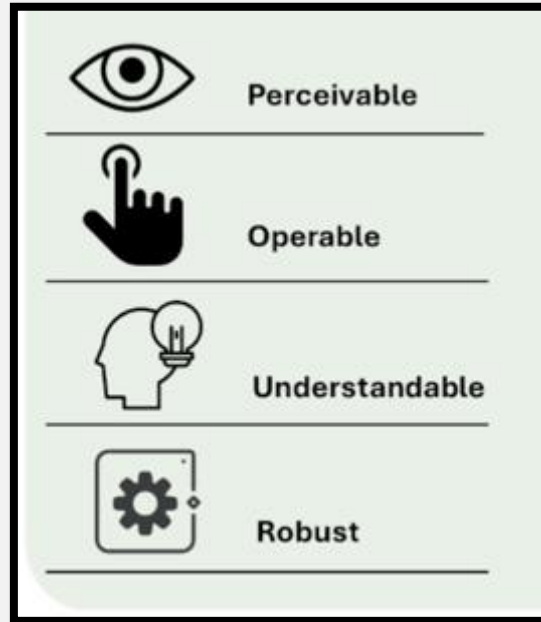
some
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ADA established in 1990

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I. UNDERSTANDING THE NEW STANDARDS



some
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I. UNDERSTANDING THE NEW STANDARDS



Credit: Glenda Sims

some
background

ADA established in 1990

WCAG added in 1999

WCAG 2.1 AA
refined in 2018

WCAG 2.1 AA

Perceivable

- Information must be perceivable to people using only one of their senses

Operable


- End users must be able to interact with all webpage elements

Understandable

- End users must be able to understand web page content and functionality information.

Robust

- Web pages must effectively communicate information to all users, including users of assistive technologies



People with visual disabilities
People with auditory disabilities
People with cognitive, learning, and neurological disabilities,
People with physical disabilities
People with speech disabilities

II. IMPLEMENTING IN GIS EDUCATION

Not something you can accomplish overnight.

- WCAG 2.1 Quick Reference Guide alone has over 100 sections



Viewing



Interaction



Flow

Viewing

Interaction

Flow

- Alt text for images
- Captions for videos
- Ability to pause video
- Orientation can be changed
- Contrast — the 3:1 or 4.5:1 rule
- Resizable text
- Links have purposeful meanings

Viewing

Interaction

Flow

- Keyboard controls available
- Instructions or navigation does not rely solely on shape, color, size (sensory)
- No elements that flash more than 3x a second
- Web pages have titles, headings, labels
- Input field purpose identified
- Error suggestions (for correction)

Viewing

Interaction

Flow

- Meaningful sequences in order of content presentation
- Content can be presented without scrolling in two dimensions
- Default language can be selected
- Consistent navigation

My Experience Builder!

Spokane County Racial Covenants Locator Map

About Racial Covenants

Racially restrictive covenants were one of many tools used by white segregationists to build all-white neighborhoods in the first half of the 20th century. White property owners added racial restrictions to over 7000 lots in Spokane County between the 1920s and 1950s. Though discrimination based on race was banned by the 1968 Fair Housing Act, the unenforceable language still persists in many property documents.

In Spokane County, covenants were most common in the northwest part of the City of Spokane (Audubon and Shadle), on the South Hill, Airway Heights, and in the Spokane Valley. They were often applied to entire neighborhoods (or even towns) when an addition or subdivision was surveyed and platted, but they were also included in deeds when a single lot changed hands.

Please visit our website for more information on the history of covenants and remedies for property owners or residents of impacted lots.

2603 W OLYMPIC AVE

Parcel ID: 26363.3801 (click to zoom)

Abbreviated Legal Description: First Glenwood Park Addition, Block 38, Lot 2

RACIAL COVENANT ASSOCIATED WITH THIS PROPERTY

Recording Date: Mar 24, 1944

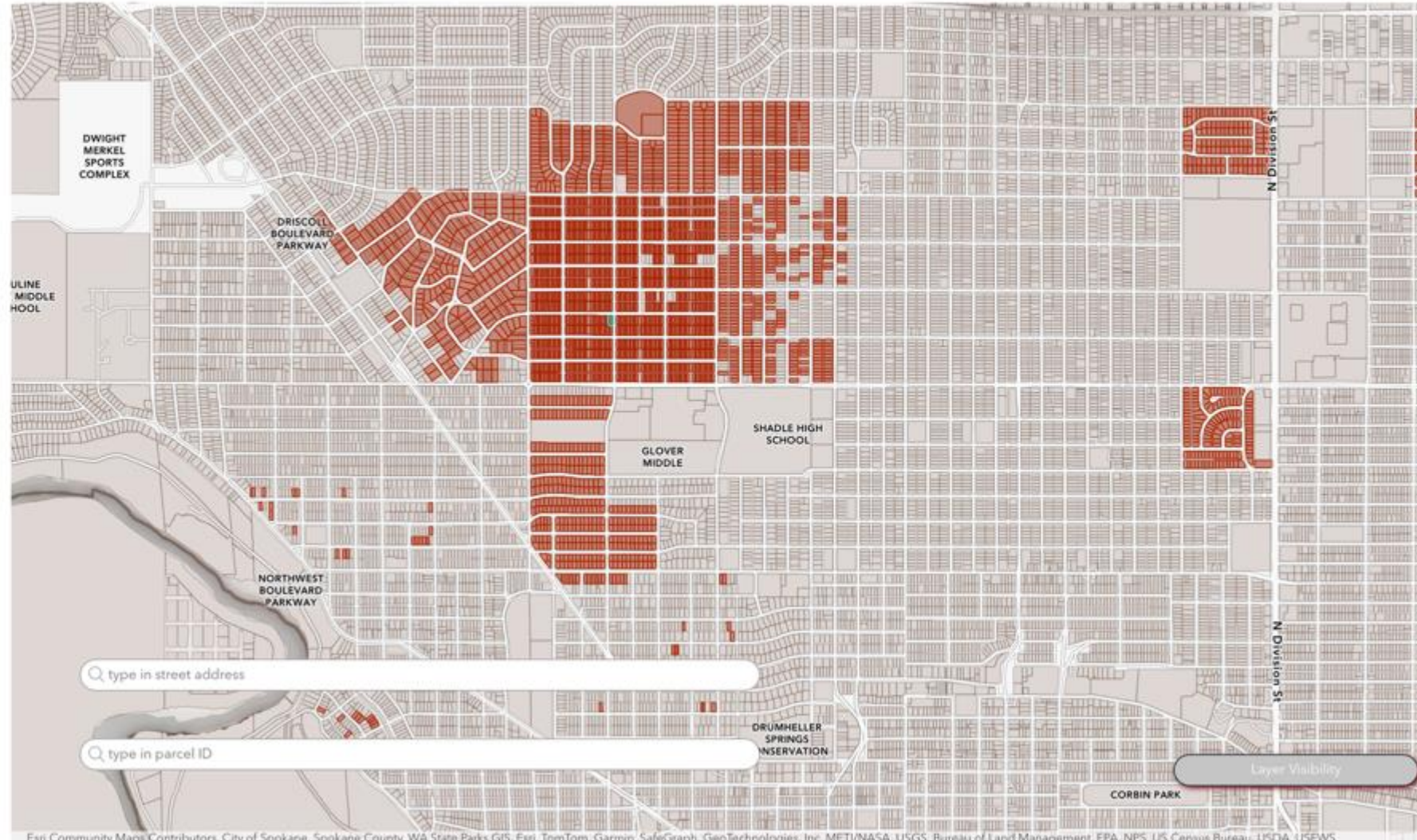
Recording Number: 615780A

Grantor: Boulevard Homes, Inc

Grantee: n/a

Racial Covenant: k. No persons of any race, other than the white race, shall use or occupy any building upon thses premises, except as a domestic servant domiciled with owner or tenant.

About this Map



Teaching our students (and ourselves) how to make accessible GIS products

“I frame it as design not accessibility.
Might need to rethink that”



Rob Saunders

**Very Informal
Accessibility Audit:**

- We teach GIS skills that lead to better map design (symbolology, color, labels)
- Skills needed to meet interaction, flow, understanding standards? **“Not so much”**

Prepare our students for a range of GIS Careers

- Over 30 million digital maps of some sort are on public-facing websites
- The digital map market was worth \$28 billion in 2024
- Will accessible GIS design be a valued skillset moving forward?



INTEGRATE INTO THE CLASSROOM

ADOPT A RESEARCH METHODOLOGY APPROACH

1. Pose a Research Question
2. Literature Review
3. Prepare Rough Draft
4. Feedback
5. Final Version

INTEGRATE INTO THE CLASSROOM

ADOPT A RESEARCH METHODOLOGY APPROACH

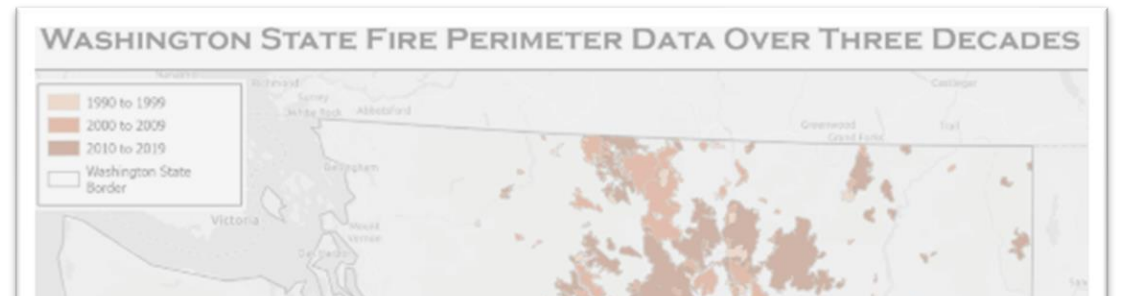
1. Pose a Research Question

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- what is your map trying to communicate to the audience?
- how does it **not** succeed?



Thanks, Emelia

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1. Pose a Research Question

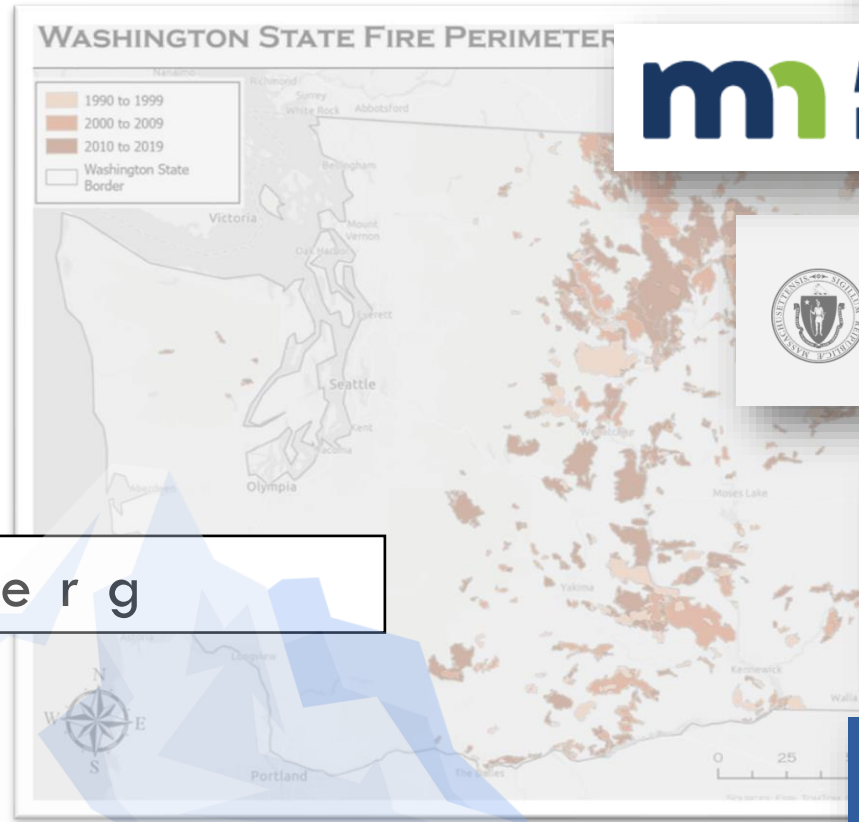
2. Literature Review

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tip of the iceberg



There is (probably) a tool for that



Effects

- Transparency: 0.0%
- Layer Blend: Normal
- Feature Blend: Normal

Element

Map Frame

Options

- General
 - Name: Map Frame
 - Visible:
 - Locked:
- Map Frame
 - Map: Summarize
 - Use map background color:
- Accessibility
 - Alt Text: Proportional circles display historic counts per county, with a minimum of 12 (Kittitas) and a maximum of 7139 (Spokane)

Color Vision Simulator

Accessibility

But not for everything

```
const arcgisDirectionalPad = document.querySelector("arcgis-directional-pad");  
document.body.append(arcgisDirectionalPad);  
await arcgisDirectionalPad.componentOnReady();  
console.log("arcgis-directional-pad is ready to go!");
```



by LoganCaruthers1
New Contributor

Post Options ▾

Hi Everyone!

At my company we are required to comply with the ADA Title II federal law which addresses digital accessibility. One of the Web Content Accessibility Guidelines (WCAG) addresses relying on dragging for navigation. The following is the guideline

Guideline 2.5.7: Dragging Movements (Level AA):

Goal: Don't rely on dragging for user actions



me too

Example: A map allows users to drag the view of the map around, and the map has up/down/left/right buttons to move the view as well

I run into an issue with this guideline as my maps in Dashboards and Experience do not have a button for moving the view left and right. As far as I know, (did a search), it seems like ArcGIS Online does not have a capability for this. Please let me know if I am mistaken! I was wondering if anyone has a solution to this?

I was told to use the keyboard, however some disabled users are unable to use a keyboard which is why the single button click is required for the guideline. Thanks for the help!



by David_McRitchie 02-16-2026 09:05 AM

Post Options ▾

Hey I would post this on the Accessibility board as well, its a good idea <https://community.esri.com/t5/accessibility/ct-p/accessibility>.

At present, the only method I would know to do this would be coding it with the ArcGIS SDK for JavaScript using a [directional pad](#).

Should students
(or faculty)
memorize
every
standard and
every solution?

Should students
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- 1. **Perceivable**
 - 1.1 Text Alternatives
 - 1.1.1 Non-text Content
 - 1.2 Time-based Media
 - 1.2.1 Audio-only and Video-only (Prerecorded)
 - 1.2.2 Captions (Prerecorded)
 - 1.2.3 Audio Description or Media Alternative (Prerecorded)
 - 1.2.4 Captions (Live)
 - 1.2.5 Audio Description (Prerecorded)
 - 1.2.6 Sign Language (Prerecorded)
 - 1.2.7 Extended Audio Description (Prerecorded)
 - 1.2.8 Media Alternative (Prerecorded)
 - 1.2.9 Audio-only (Live)
 - 1.3 Adaptable
 - 1.3.1 Info and Relationships
 - 1.3.2 Meaningful Sequence
 - 1.3.3 Sensory Characteristics
 - 1.3.4 Orientation
 - 1.3.5 Identify Input Purpose
 - 1.3.6 Identify Purpose
 - 1.4 Distinguishable
 - 1.4.1 Use of Color
 - 1.4.2 Audio Control
 - 1.4.3 Contrast (Minimum)
 - 1.4.4 Resize Text
 - 1.4.5 Images of Text
 - 1.4.6 Contrast (Enhanced)
 - 1.4.7 Low or No Background Audio

Should students
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- 1.4.8 Visual Presentation
- 1.4.9 Images of Text (No Exception)
- 1.4.10 Reflow
- 1.4.11 Non-text Contrast
- 1.4.12 Text Spacing
- 1.4.13 Content on Hover or Focus

2. Operable

- 2.1 Keyboard Accessible
 - 2.1.1 Keyboard
 - 2.1.2 No Keyboard Trap
 - 2.1.3 Keyboard (No Exception)
 - 2.1.4 Character Key Shortcuts
- 2.2 Enough Time
 - 2.2.1 Timing Adjustable
 - 2.2.2 Pause, Stop, Hide
 - 2.2.3 No Timing
 - 2.2.4 Interruptions
 - 2.2.5 Re-authenticating
 - 2.2.6 Timeouts
- 2.3 Seizures and Physical Reactions
 - 2.3.1 Three Flashes or Below Threshold
 - 2.3.2 Three Flashes
 - 2.3.3 Animation from Interactions
- 2.4 Navigable
 - 2.4.1 Bypass Blocks
 - 2.4.2 Page Titled
 - 2.4.3 Focus Order

Should students
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- 2.4.4 Link Purpose (In Context)
- 2.4.5 Multiple Ways
- 2.4.6 Headings and Labels
- 2.4.7 Focus Visible
- 2.4.8 Location
- 2.4.9 Link Purpose (Link Only)
- 2.4.10 Section Headings

- 2.5 Input Modalities
 - 2.5.1 Pointer Gestures
 - 2.5.2 Pointer Cancellation
 - 2.5.3 Label in Name
 - 2.5.4 Motion Actuation
 - 2.5.5 Target Size
 - 2.5.6 Concurrent Input Mechanisms

3. Understandable

- 3.1 Readable
 - 3.1.1 Language of Page
 - 3.1.2 Language of Parts
 - 3.1.3 Unusual Words
 - 3.1.4 Abbreviations
 - 3.1.5 Reading Level
 - 3.1.6 Pronunciation
 - 3.2 Predictable
 - 3.2.1 On Focus
 - 3.2.2 On Input
 - 3.2.3 Consistent Navigation
 - 3.2.4 Consistent Identification
 - 3.2.5 Change on Request
-

Should students
(or faculty)
memorize
every
standard and
every solution?

- 3.3 Input Assistance
 - 3.3.1 Error Identification
 - 3.3.2 Labels or Instructions
 - 3.3.3 Error Suggestion
 - 3.3.4 Error Prevention (Legal, Financial, Data)
 - 3.3.5 Help
 - 3.3.6 Error Prevention (All)

4. Robust

- 4.1 Compatible
 - 4.1.1 Parsing
 - 4.1.2 Name, Role, Value
 - 4.1.3 Status Messages

5. Conformance

- 5.1 Interpreting Normative Requirements
- 5.2 Conformance Requirements
 - 5.2.1 Conformance Level
 - 5.2.2 Full pages
 - 5.2.3 Complete processes
 - 5.2.4 Only Accessibility-Supported Ways of Using Technologies
 - 5.2.5 Non-Interference
- 5.3 Conformance Claims (Optional)
 - 5.3.1 Required Components of a Conformance Claim
 - 5.3.2 Optional Components of a Conformance Claim
- 5.4 Statement of Partial Conformance - Third Party Content
- 5.5 Statement of Partial Conformance - Language

Should students
(or faculty)
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every
standard and
every solution?

NO

INTEGRATE INTO THE CLASSROOM

ADOPT A RESEARCH METHODOLOGY APPROACH

1. Pose a Research Question

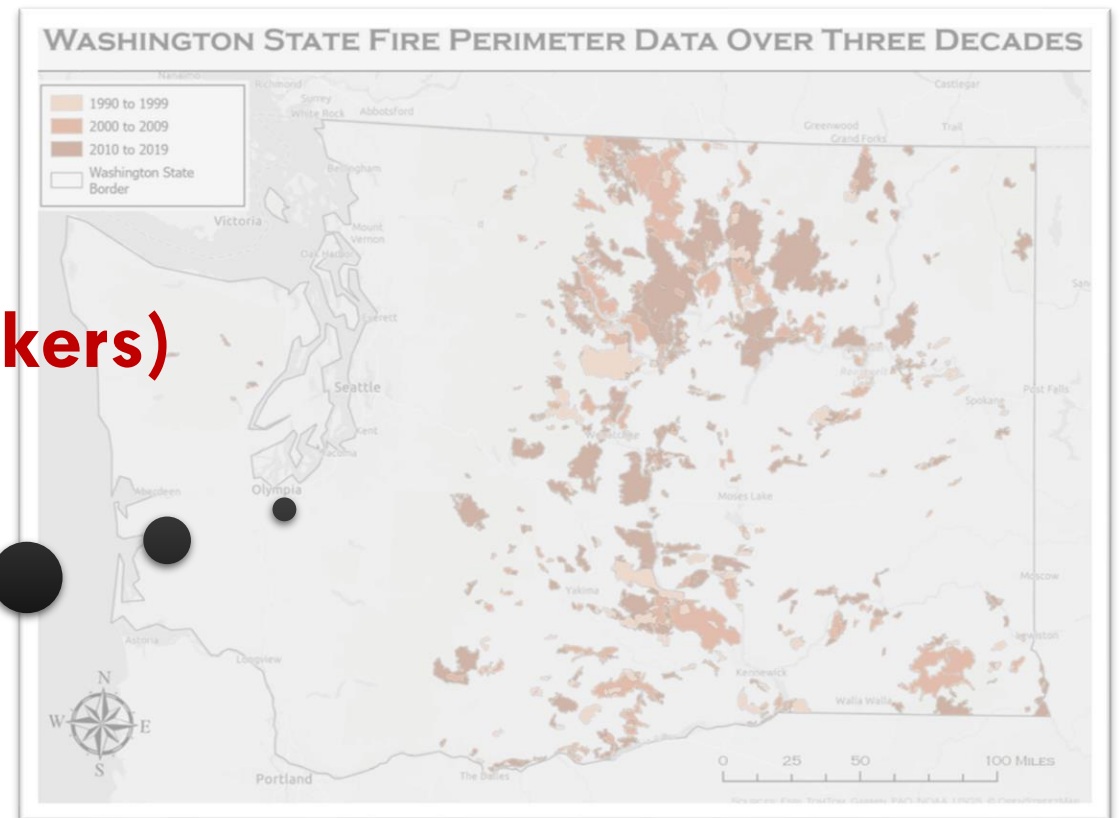
2. Literature Review

3. Prepare Rough Draft

4. Feedback (accessibility checkers)

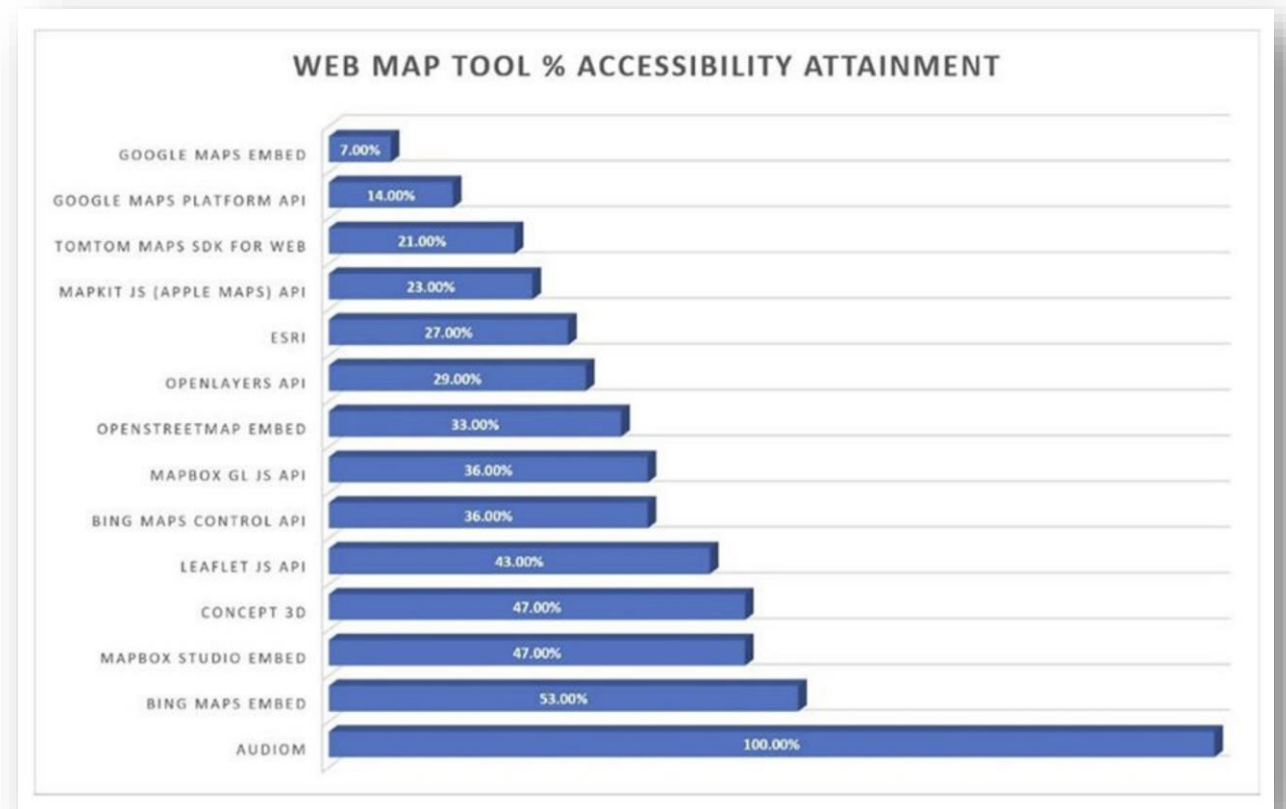
5. Final Version

What is realistic?



If our students can master just three, they will be ahead of 13 of the 14 largest digital map providers

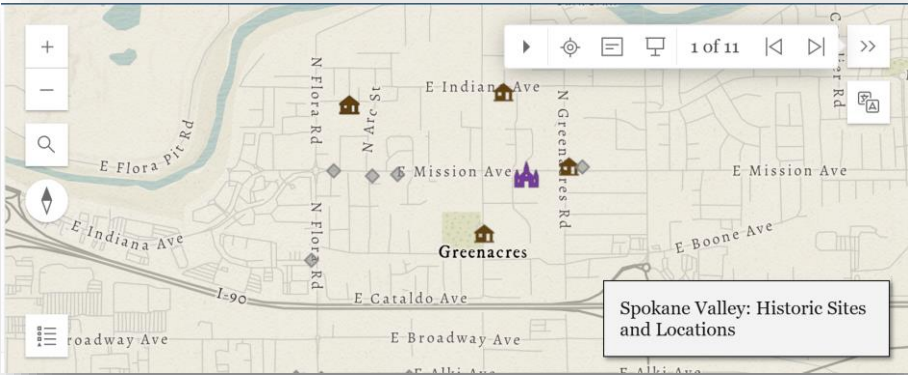
1. Non-text content
2. Non-text contrast
3. Keyboard accessibility



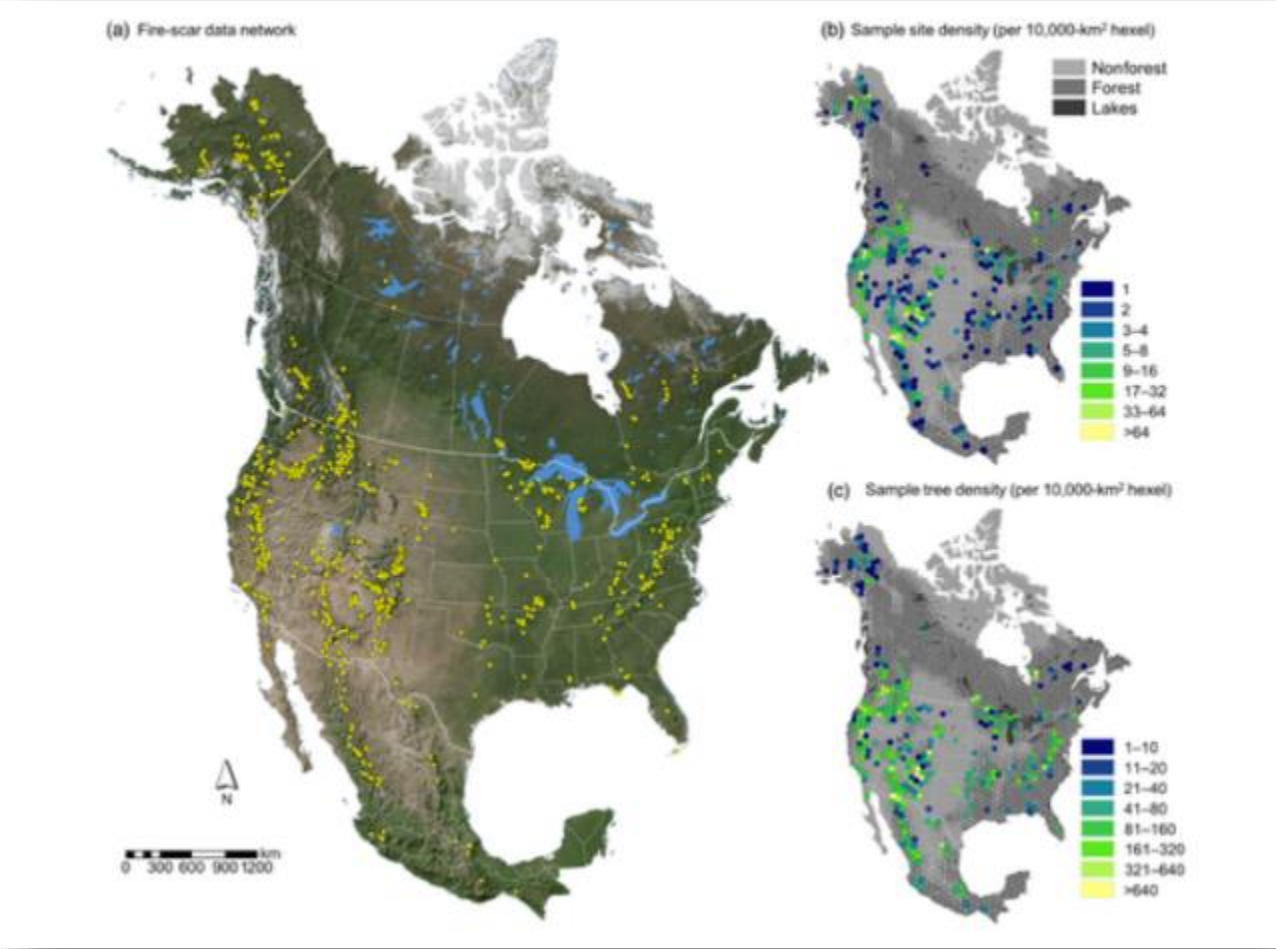
III. APPLY TO OUR OWN GIS WORK



Shawn's Color-Blind Friendly Squirrels



Holly's Keyboard Accessible Historic Tour



Lauren's Dual-Encoded Fire Scars

Thank you!

Resources Cited

[The State of Colorado GIS Accessibility Guidelines](#)

[Commonwealth of Massachusetts Accessibility Guidelines](#)

[The State of Minnesota IT Map Accessibility Guidelines](#)

[US EPA Map and Cartography Guidelines](#)

[ESRI Community: WCAG 2.1 - Common Fixes - Title II of the Americans with Disabilities Act \(ADA\)](#)

[ESRI Accessibility Blog: Resources for Digital Accessibility in ArcGIS](#)

[Biggs, Brandon et al. 2025. “Systematically Evaluating Digital Map Tools Based on the WCAG” J Technol Pers Disabil; 13: 145–168.](#)