



LPRO

LEGISLATIVE POLICY
AND RESEARCH OFFICE

From Awareness to Action

LPRO's Plan for Accessible Maps and Apps

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Agenda

- **Presentation**
 - Web Content Accessibility Background
 - Building Awareness
 - Reviewing Products
 - Revisiting Processes
- **Q&A**



Web Content Accessibility Background

The New Federal DOJ Rule

- Relates to Title II of the Americans with Disabilities Act (ADA)
- Specifies that web content must meet Web Content Accessibility Guidelines (WCAG) **Version 2.1, Level AA**
- Gives governments with a population of 50,000 or more until **April 24, 2026** to comply
 - Special district governments and population under 50,000 until **April 26, 2027**



What is web content?

“Web content” is defined as the information and experiences available on the web, like text, images, sound, videos, and documents.



Exceptions

- Archived web content
- Preexisting conventional electronic documents
- Content posted by a third party where the third party is not posting due to contractual, licensing, or other arrangements with a public entity
- Individualized documents that are password-protected
- Preexisting social media posts



What is WCAG Version 2.1 Level AA?

- It is a technical standard that says specifically what is needed for something to be accessible.
- The standard includes:
 - Overall principles
 - General guidelines
 - Testable success criteria
 - Sufficient and advisory techniques



Fact Sheet: New Rule on the Accessibility of Web Content and Mobile Apps Provided by State and Local Governments
<https://www.ada.gov/notices/2024/03/08/web-rule/#how-long-state-and-local-governments-have-to-comply-with-the-rule>

Web Content Accessibility Guidelines (WCAG) 2.1
<https://www.w3.org/TR/WCAG21/#wcag-2-layers-of-guidance>

WCAG Principles

Perceivable

- Information and user interface components must be presentable to users in ways they can perceive.

Operable

- User interface components and navigation must be operable.

Understandable

- Information and the operation of user interface must be understandable.

Robust

- Content must be robust enough that it can be interpreted reliably by a wide variety of user agents, including assistive technologies.



Examples of Success Criteria

Perceivable

- All non-text content that is presented to the user has a text alternative that serves the equivalent purpose

Operable

- All functionality of the content is operable through a keyboard interface

Understandable

- Content does not change the user context when an item gets focus

Robust

- For all user interface components the name and role can be programmatically determined



Building Awareness

Rule Discovery and Initial Response

Does this apply to us?

01

Wrote Memo

02

LPRO
Leadership

03

Consult
Legislative
Council

04

Information
Services
Discussion



How does this change our current practices?

For new public content tried to:

- Include alt text
- Use proper heading structure
- Use adequate contrast
- Use colorblind friendly colors

When limitations encountered tried to:

- Offer alternate form of data
- Offer a phone number to call



What do we need to do?

Assess existing products

- What changes are needed for compliance?

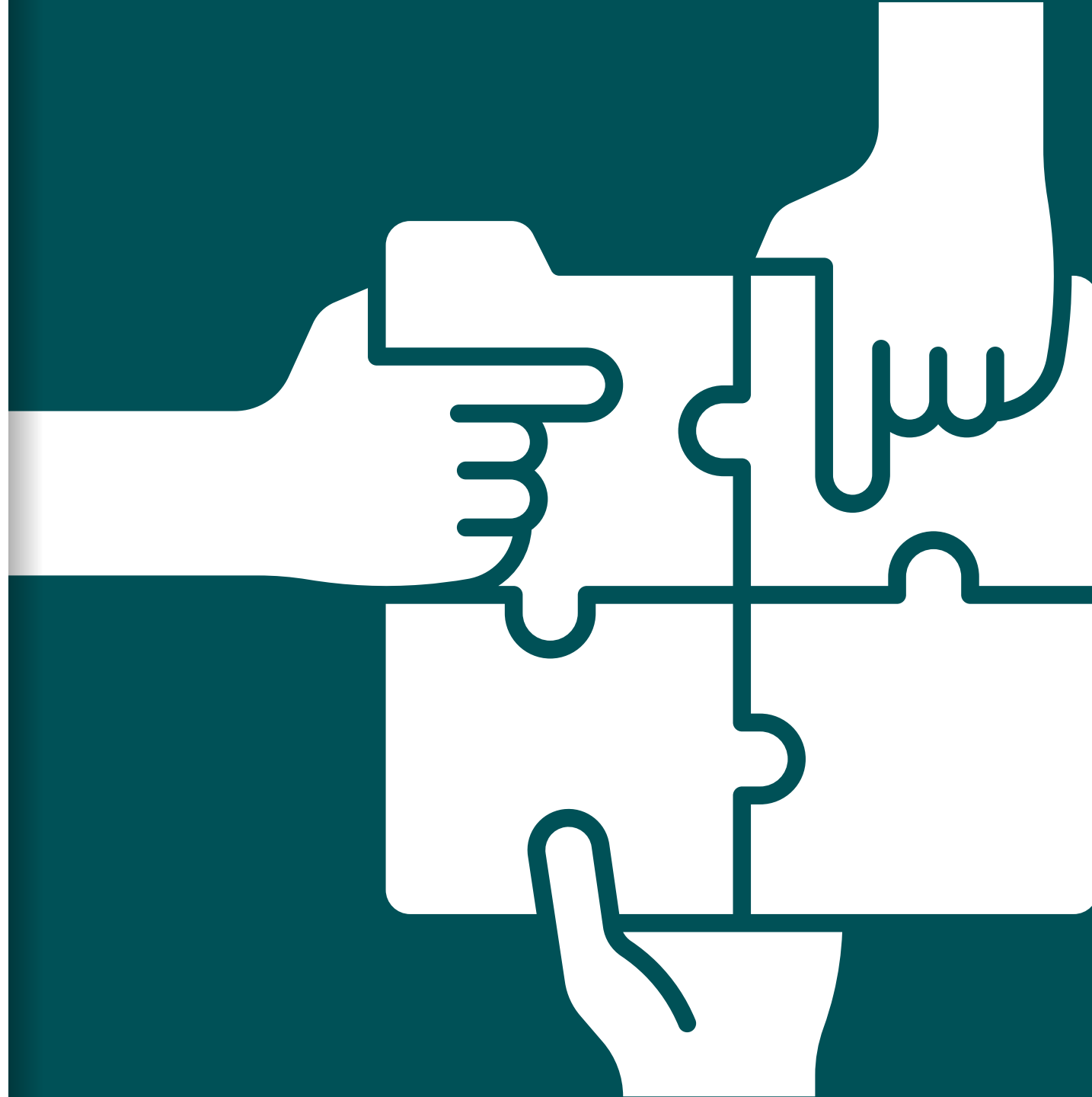
Assess (and develop) processes

- What changes are needed to develop accessible content going forward?



Who should we work with?

- ADA Coordinator?
- Information Services
- Legislative Council
- Agency Leadership
- Coworkers
- Map Users



Reviewing Products



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ArcGIS Online Public Items



39 Mapping Applications

23 Maps

27 Feature Services

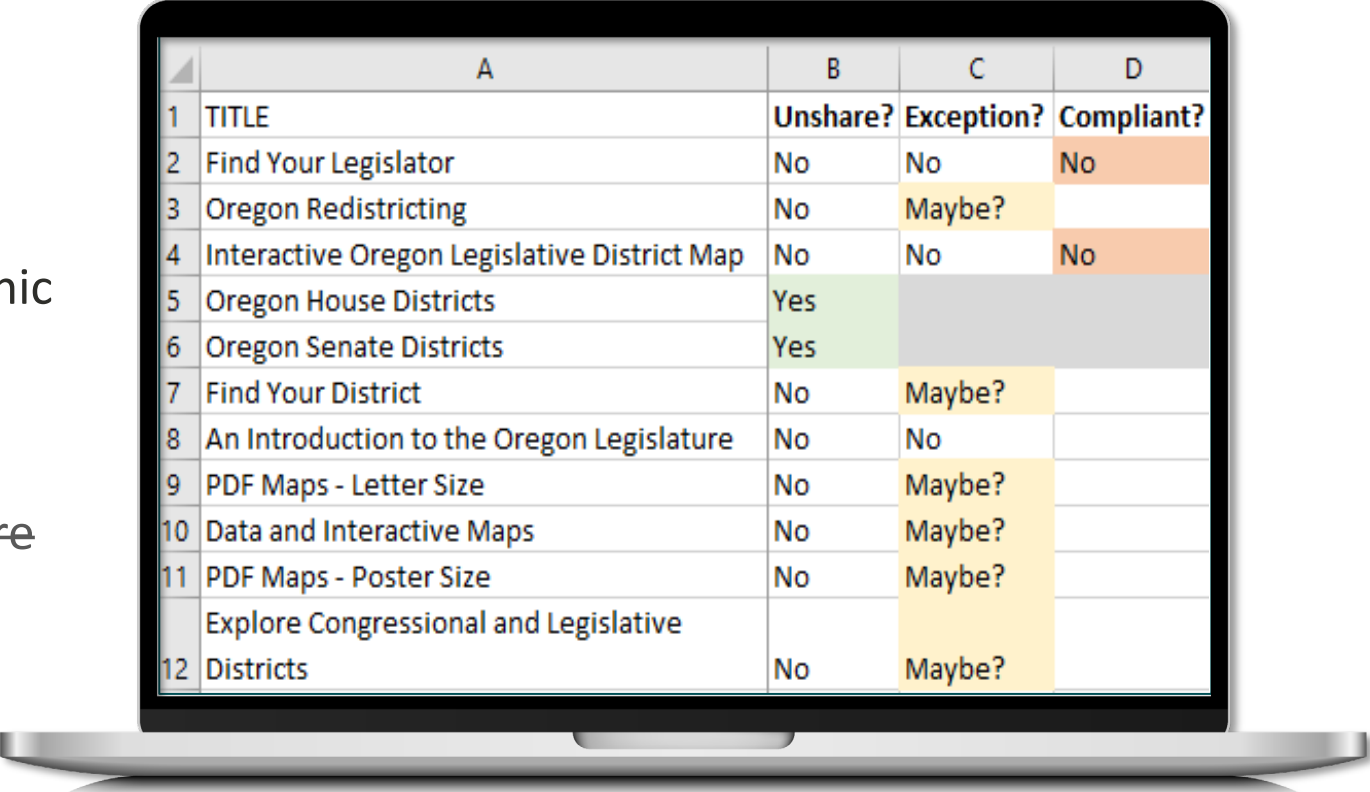


237 Files (mostly PDFs)



Does the rule apply?

- Does the content still need to be shared?
- Does the content fall under an exception?
 - Archived web content
 - Preexisting conventional electronic documents
 - ~~• Content posted by a third party~~
 - ~~• Individualized documents that are password-protected~~
 - ~~• Preexisting social media posts~~



	A	B	C	D
1	TITLE	Unshare?	Exception?	Compliant?
2	Find Your Legislator	No	No	No
3	Oregon Redistricting	No	Maybe?	
4	Interactive Oregon Legislative District Map	No	No	No
5	Oregon House Districts	Yes		
6	Oregon Senate Districts	Yes		
7	Find Your District	No	Maybe?	
8	An Introduction to the Oregon Legislature	No	No	
9	PDF Maps - Letter Size	No	Maybe?	
10	Data and Interactive Maps	No	Maybe?	
11	PDF Maps - Poster Size	No	Maybe?	
12	Explore Congressional and Legislative Districts	No	Maybe?	



Does the content meet WCAG 2.1 AA?

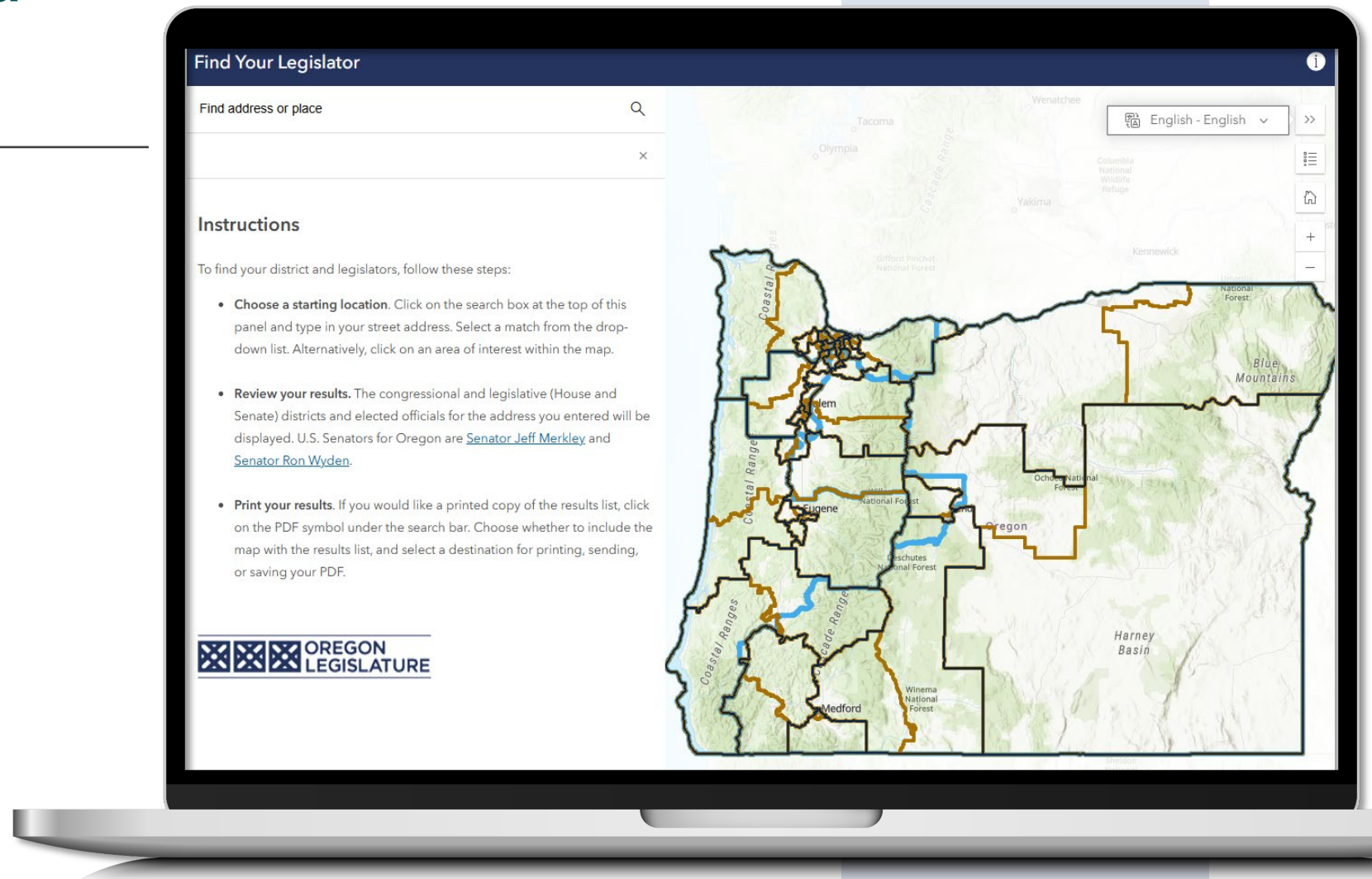
A non-exhaustive list of ways an independent contractor or someone in house can check for compliance

- **Automated Testing**
 - WAVE Evaluation Tool
 - Google Lighthouse
 - Accessibility Insights for Web
- **Manual Testing**
 - Screen readers (NVDA, Jaws), Keyboard Navigation, Color Contrast, Resizing
- **User testing**



Example 1: Find Your Legislator

- Zone Lookup Instant App
- Linked from oregonlegislature.gov
- Have to test instructions and results page separately



Example 1: Technical Fixes

Perceivable

- Empty <H2> HTML Elements
- High Contrast Mode
- Resize Text
- Text Spacing
- Use of Color and Contrast
 - Change symbology
 - Change basemap?

Operable

- Language Switcher Keyboard Trap
- Link Purpose

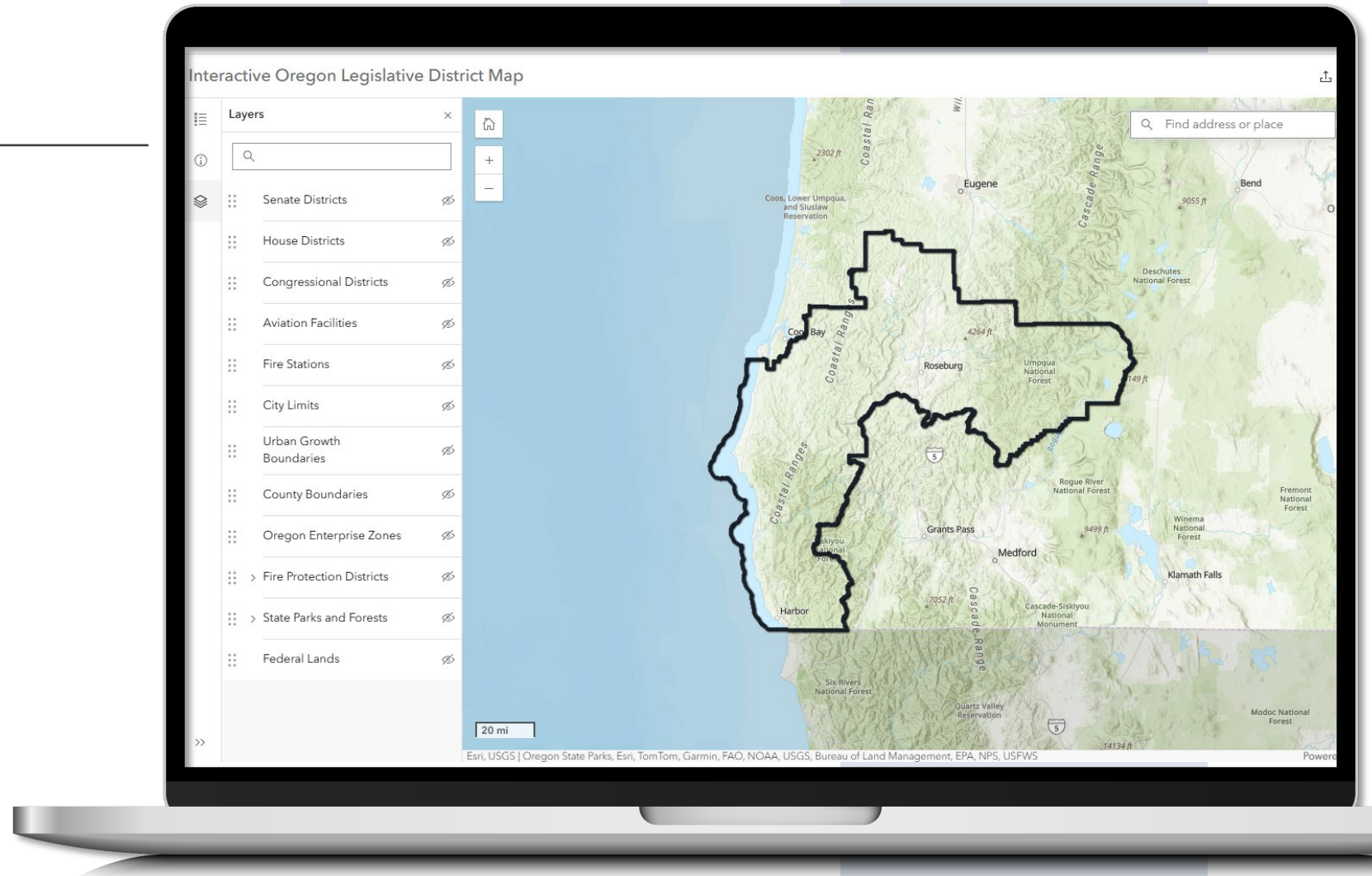
Robust

- ???????



Example 2: District Map

- Sidebar Instant App
- Embedded in oregonlegislature.gov



Example 2: Technical Questions

- **How to resolve <H1> in main page and in embedded mapping app?**
- **How to meaningfully make data available?**
 - Enable table functionality
 - Switch to Nearby/Zone Lookup
- **How to make symbology compliant with so many layers?**



Example 3: Data Hub - Redistricting

- ArcGIS Hub Site with multiple pages
- Home to ~233 PDFs
- Linked to from oregonlegislature.gov



Example 3: Legal Questions

Is this site subject to an exception?

- Archived web content
- How do you indicate an entire website is archived?

Are only the PDFs subject to an exception?

- Preexisting conventional electronic documents



Example 3: PDF Options

Remediate Existing PDFs

- Use Adobe to add tags, title, headings, ect
- Contract for remediation

Create New PDFs

- ArcGIS Pro has some functionality – limited with map series
- Need Adobe for heading structure

Unshare PDFs?



Product Review Lessons Learned



Testing for accessibility takes time to learn



Some accessibility criteria are hard to test without coding knowledge



Many issues can only be fixed by Esri



Collaboration with IT, legal, and others is critical



Revisiting Processes & Policies

Across the Project Lifecycle



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Software Procurement

Policy Changes

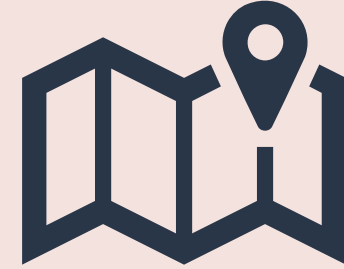
- Requirement to procure compliant software?

Process Changes

- Review VPATs
- Test public software?



Solution Design



Is the map/app purpose clear?

Which app to use?

- Review VPATs
- Is there a more accessible option?

How to structure document?

- Is alt text sufficient?
- Is a table or appendix needed?

Map & Application Creation

Have folks received training on:

- accessible cartography
- WCAG guidelines
- app accessibility specifics

Is there someone they can go to for questions?



Map & Application Testing

Does the GIS team know how to test for accessibility?

Does the organization offer accessibility testing?

Is external accessibility testing an option?

The screenshot displays the 'Accessibility Insights for Web' application. The top navigation bar includes a search icon, the title 'Accessibility Insights for Web', and a dropdown menu set to 'Assessment'. Below the navigation bar, a sidebar on the left lists various test categories with progress indicators: Overview (71% Completed), Automated checks, Keyboard, Focus, Landmarks, Headings, Repetitive content, Links, Native widgets, Custom widgets, Timed events, Errors / status, Page navigation, Parsing, Images, Language, and Sensory. The main content area is titled 'Overview' and contains a summary of the assessment progress. It shows a green bar for '58%' completion and a grey bar for '29%' completion. Below the summary, a table titled 'Test details' lists various test categories and their results, represented by green checkmarks and red X's.

Target page: Find Yo... → Export result Save assessment Load assessment

Overview

This page contains a summary that indicates the progress of your assessment. A manual experience in which you navigate through a set of tests that cover all V and 2.2 AA success criteria. Each test has one or more requirements that can be:

- Automated
- Assisted
- Manual

Where possible, Accessibility Insights for Web "assists" the test process by generating instances to evaluate and highlighting them on the screen. Accessibility Insights allows you to manually record failure instances.

Summary

✓ 58% ○ 29%

Test details

Automated checks	✓ 60	Images
Keyboard	✓ ✓ ✓ ○ × ×	Language
Focus	✓ ✓ ✓ × × ×	Sensory
Landmarks	✓ ✓ ○	Adaptable content
Headings	× × ×	Audio / video
Repetitive content	✓ ✓ ✓ ○	Multimedia



Questions & Resources

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Resource Document:

