

## Welcome

This webinar is part of a series showcasing “Best Practices in Federal Section 508 Implementation.” Other presentations can be viewed at:

- [www.adaconferences.org/CIOC/archives](http://www.adaconferences.org/CIOC/archives) and
  - [www.fedlink.org/allqual/resource-shared-webinars.cfm](http://www.fedlink.org/allqual/resource-shared-webinars.cfm)
- A best practice is a policy, process, procedure or technique proven effective over time and repeatable by multiple agencies.
  - A best practice is generalized so that diverse agencies may use it in their own organizations but specific enough to provide useful guidance and instruction.
  - The CIO Council’s Accessibility Community of Practice has published a library of 508 Best Practices at [www.Section508.gov](http://www.Section508.gov).

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## Section 508 Best Practices Webinars

### **Webinars are bi-monthly:**

- January, March, May, July, September, November

### **Next Webinar: September 28, 2021**

- “The Civil Rights Complaint Portal: An Accessibility Journey”
- Time: 1:00 to 2:30 p.m. Eastern

This webinar series is a collaborative program between the Accessibility Community of Practice of the CIO Council and The U.S. Access Board.

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## Background Terms and Context

### 1. WCAG

- Pronounced like: Wuh-kag or Way-kag
- Web Content Accessibility Guidelines
- Industry consensus standards curated by the World Wide Web Consortium (W3C)
- WCAG 2.0 is “Incorporated by Reference” with the current Section 508 regulations

### 2. 508 or Section 508

- Pronounced like: Five-oh-eight
- Section 508 is part of the 1998 amendments to the Rehabilitation Act (1973)
  - Rehabilitation Act is civil rights legislation
- Shorthand reference to the accessibility standards promulgated by the U.S. Access Board, as required by the 1998 amendments
  - Section 508 covers ICT other than websites

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## Some Disclaimers

- WCAG 3.0 is under development and *is not finished* and is not ready for use
- Section 508 Standards are final and in effect
  - U.S. Access Board has not yet planned future review or update of the 508 Standards
  - WCAG 2.0 Level AA (including all Level A and Level AA success criteria and conformance requirements) remains the minimum legal requirement
- Federal agency rulemaking process is deliberative and requires notice
  - USAB rulemaking overview: [www.access-board.gov/about/rulemaking.htm](http://www.access-board.gov/about/rulemaking.htm)
  - Agencies post proposed rulemaking notices to the “Unified Agenda” which is available at: [www.reginfo.gov](http://www.reginfo.gov)

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## More Disclaimers

- Neither Jeanne Spellman nor Bruce Bailey represent W3C
  - Jeanne and Bruce are active participants in the W3C Accessibility Guidelines Working Group (AG WG)
    - Neither Jeanne nor Bruce represent the AG WG
  - Jeanne is a volunteer (and lead editor) working on the WCAG 3.0 project
  
- WCAG 2.0 is great!
  - WCAG 2.0 has had a tremendous impact with advancing the cause for accessibility of the web
  - Jeanne and Bruce are huge fans of WCAG 2.0
    - If you hear anything today that makes you question the efficacy of WCAG 2.0, please ask during the Q&A

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## Agenda

- Interplay between WCAG and 508
- Gaps in Web Accessibility Standards
- WCAG 3.0 Approach
- Proposed for WCAG 3.0
- Differences between WCAG 2.0 and proposed WCAG 3.0 approaches
- How to Contribute
- Questions and Answers

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# Interplay between WCAG and 508

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## Interplay between WCAG and 508

- WCAG/508 Timeline
- Influence of WCAG 1.0 on Original 508 Standards
- Influence of Original 508 Standards on WCAG 2.0
- Influence of WCAG 2.0 on Revised 508 Standards
- Influence of Revised 508 Standards on WCAG 2.1, 2.2

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## WCAG/508 Timeline

- 1999 – W3C publishes final version of WCAG 1.0
- 2000 – Access Board issues Original Section 508 Standards
- 2008 – W3C publishes final version of WCAG 2.0
- 2011 – Access Board publishes revised draft proposed rule
- 2013 – W3C publishes Applying WCAG to ICT (working group note)
- 2017 – Access Board issues final rule, Revised Section 508 Standards
- 2018 – W3C publishes final version of WCAG 2.1
- 2021 – first draft of WCAG 3.0 published

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## Influence of WCAG 1.0 on Original 508 Standards

- Just how similar were WCAG 1.0 and Original 508 §1194.22?
- What was *not* adopted from WCAG 1.0?

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## Original 508 Citation to WCAG 1.0

- “Note to §1194.22” (emphasis added):
  1. The Board interprets paragraphs (a) through (k) of this section **as consistent with** the following priority 1 Checkpoints of the Web Content Accessibility Guidelines 1.0 (WCAG 1.0) (May 5, 1999) published by the Web Accessibility Initiative of the World Wide Web Consortium
- Eleven item table, example 1194.22(a) versus WCAG 1.0 Checkpoint 1.1
  - A text equivalent for every non-text element shall be provided (e.g., via “alt”, “longdesc”, or in-element content).
  - Provide a text equivalent for every non-text element (e.g., via “alt”, “longdesc”, or in element content).

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## What was **not** adopted into 508 from WCAG 1.0?

- WCAG 1.0 grouped “checkpoints” into three tiers or “priorities”
  - The checkpoints Original 508 cited were all from “Priority 1” grouping
  - 508 Standards do not use priorities or levels
- Original 508 Standards did not include some WCAG 1.0 Priority 1 checkpoints
  - Example of checkpoint which was not sufficiently testable:
    - 14.1 Use the clearest and simplest language appropriate for a site’s content.
  - Example of checkpoint which was too limiting:
    - 6.3 Ensure that pages are usable when scripts, applets, or other programmatic objects are turned off or not supported. If this is not possible, provide equivalent information on an alternative accessible page.

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## Influence of Original 508 Standards on WCAG 2.0

- Features of Original 508 Standards that were adapted into WCAG 2.0
  - Original 508 Standards web requirement covered more technologies, see §1194.22(m):
    - When a web page requires that an applet, plug-in or other application be present on the client system to interpret page content, the page must provide a link to a plug-in or applet that complies with §1194.21 (a) through (l).
    - §1194.21 contains the accessibility requirements for software
  
- As compared to 1.0, WCAG 2.0 is:
  - Less subjective / more testable
  - Allows that “scripts, applets, or other programmatic objects” can be accessible
    - Not limited to only “W3C technologies”
    - Applies same requirements (i.e., success criteria)

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## Influence of WCAG 2.0 on Revised 508 Standards

- WCAG 2.0 Incorporation By Reference (IBR)
- Uses WCAG 2.0 as metric for accessibility of website, software, and documents
  - Initially, using WCAG 2.0 for non-web documents and applications was controversial
    - See the W3C “Guidance on Applying WCAG 2.0 to Non-Web Information and Communications Technologies (WCAG2ICT)”
    - [www.w3.org/tr/wcag2ict](http://www.w3.org/tr/wcag2ict)

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## Influence of Revised 508 Standards on WCAG 2.1

- WCAG 2.0 attractive to regulators
  - Legislation (not just U.S.)
  - Judicial (e.g., U.S. legal system settlements)
- Accessibility Guidelines Working Group (AG WG) mindful of WCAG 2.0 impact
  - SC new to 2.1 and 2.2 consider implications of WCAG2ICT activity
  - AG WG participation increased

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## Potential influence of 508 community on WCAG 3.0

Experience of 508 program managers with enforcement, monitoring, and advancing accessibility within their agencies is influencing WCAG 3.0

- WCAG2ICT work broke ground for the expanded scope of WCAG 3.0
- Some 508 community members participating routinely in W3C working groups
- Public opportunities for feedback (call for comment) have featured 508 community members
- Ongoing opportunities for input to WCAG 3.0 development
  - Details at end of this presentation

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# Gaps in Web Accessibility Standards

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## Difficulties with Current Approach

- Who is the audience?
  - Developers? Management? End-Users? Regulators?
- Accessibility is a continuum
  - Standards compliance tends to binary
    - yes/no — true/false — pass/fail
- Testing and evaluation is not entirely ambiguous
  - Different SME can reach different conclusions
  - Subject matter seems to have steep learning curve
- Levels are not intuitive
  - Why have different levels when legal requirement combines A and AA?
  - Why clutter the baseline requirement (A and AA) with advisory best practices (AAA)?
  - Why a requirement is at A or AA is not obvious (in many cases)
  - A, AA, AAA approach resulted in more A and AA for people with vision impairments than for people with hearing or cognitive disabilities

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# WCAG 3.0 Approach

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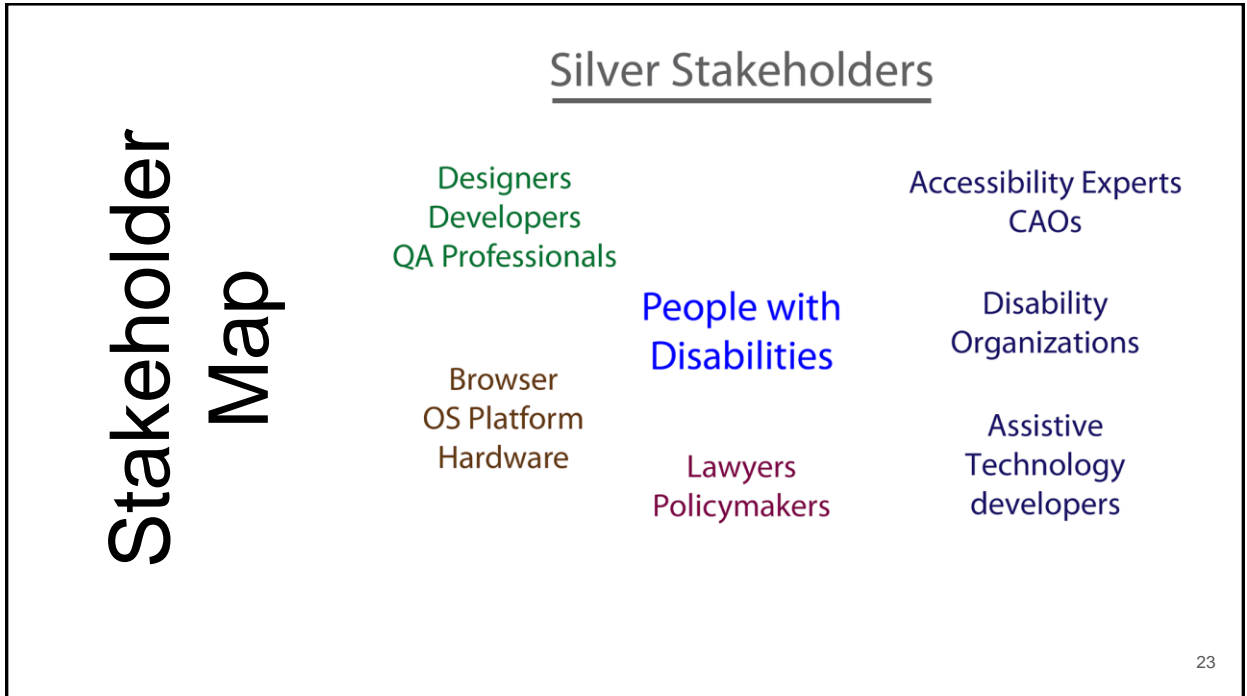
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## WCAG 3.0 Stakeholders

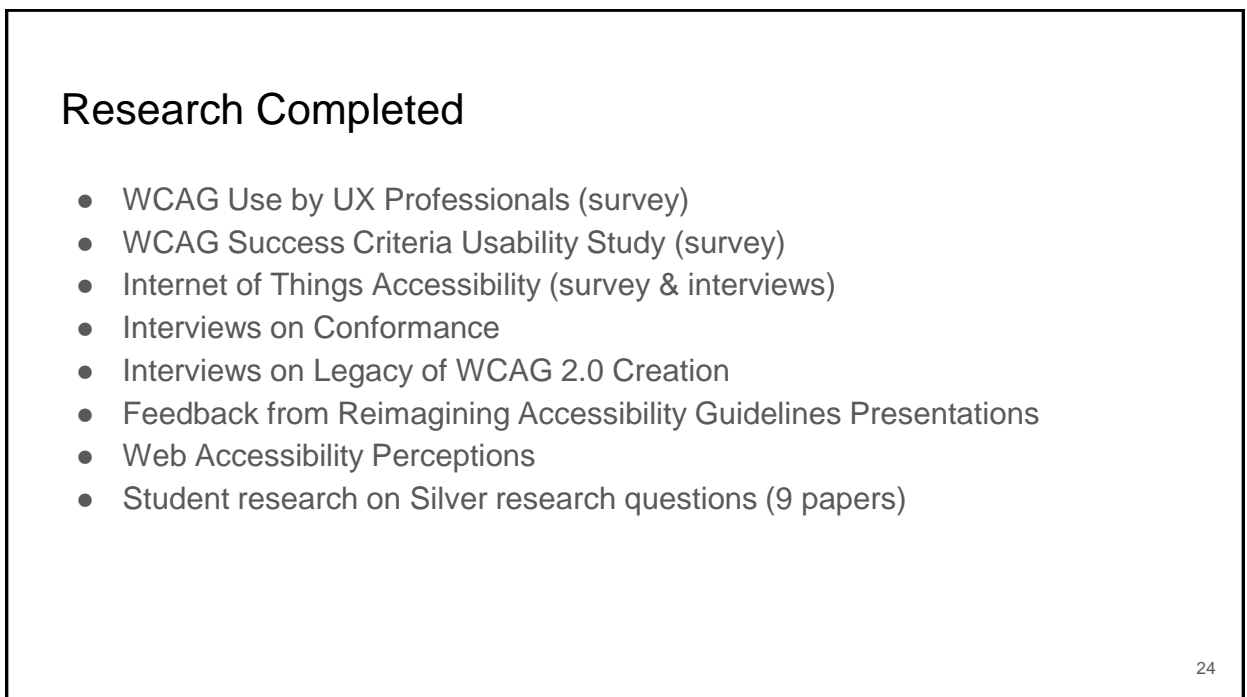
- WCAG 2.0 did not develop a stakeholder list, but is primarily oriented for developers, testers and regulators.
- As a first step, the group developing WCAG 3.0 (code named “Silver”) identified 31 stakeholder groups that used accessibility standards.
- They wrote usability-oriented “job stories” of how each stakeholder group used accessibility standards.

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## Analysis: Structural Problem Statements

### Usability

- Too Difficult to Read
- Difficult to get started
- Ambiguity in interpreting the success criteria
- Persuading Others

### Conformance Model

- Strictly Testable Constraints
- Human Testable
- Accessibility Supported
- Evolving Technology

### Maintenance

- Flexibility
- Scaling
- Governance

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## Kicking off the Solutions: Silver Design Sprint

- 27 Industry leaders representing parts of the accessibility community: CEOs, consultants, UX professionals, developers, legal, policy, and more
- Participants came from the US, Canada, UK, Spain, India, Japan, Australia
- An experienced Agile sprint leader guided participants to find solutions to the Problem Statements
- People worked in 5 groups of 5-6 people for 2 days in San Diego, CA



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## Design Sprint Topics Explored



- Writing Silver in simple language
- New information architecture
- Flexible, filterable guidance
- Reduce burden of “Accessibility Supported” as an author responsibility
- Role-based filtering of guidance
- Avenues for contributing to guidelines
- Browser and assistive technology guidance
- Flexible conformance model
- Inclusion of user testing results for conformance

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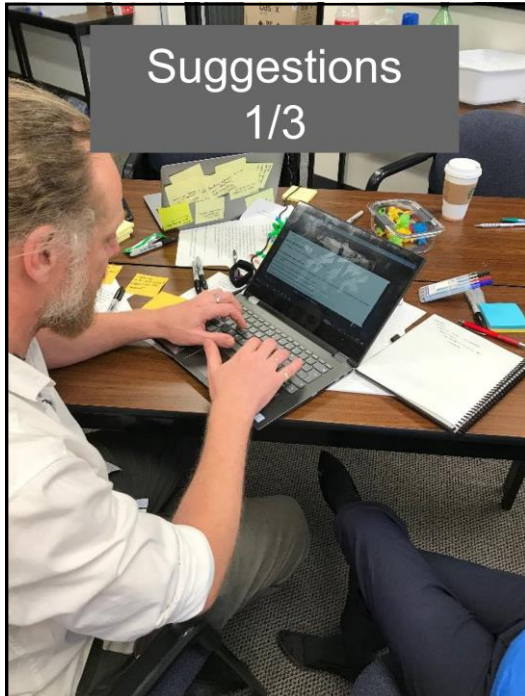
## Suggestions

From the Silver Design Sprint

[Draft Final Report of Silver Design Sprint](#)

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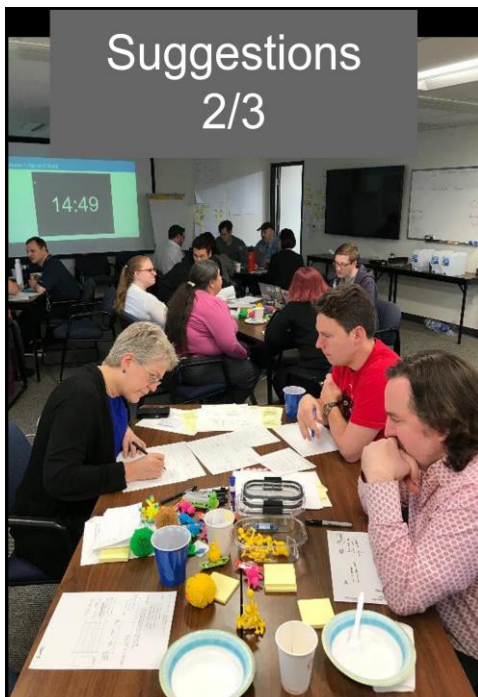


## Usability

- Simple language
- Filtering – “database all the things” to target info
- Easier to find info
- Find info by role, by problem, by disability, and by platform
- Provide a starting point for beginners

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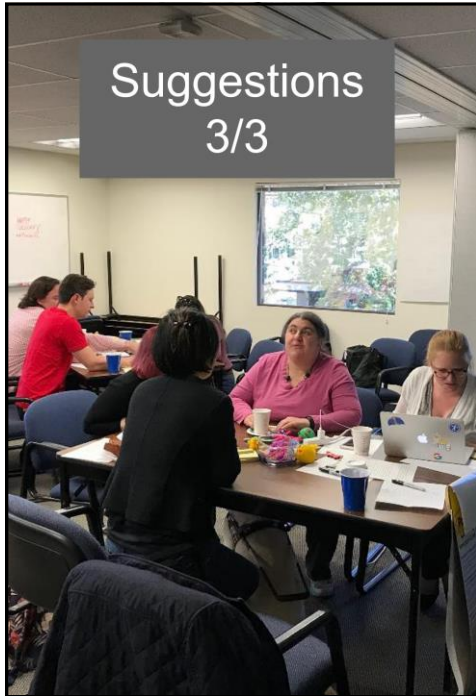


## Conformance

- From Pass/Fail tests to also include other forms of measurement
- Rubric for testing task accomplishment
- Point and ranking system
- Accommodate dynamic or frequently updated content

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## Maintenance

- Allow experts to contribute code, tests, design patterns
- Improve spec tools to allow more people with disabilities to contribute
- Allow more public participation

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## Silver Requirements

- Design Principles
- Requirements

### Requirements for WCAG 3.0

W3C First Public Working Draft 21 January 2021



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## Design Principles

### ***Accessibility guidelines:***

1. Wider range of people with disabilities
2. New measurement and conformance structure
3. Include emerging technologies.
4. Follow accessibility guidance  
*“Eat our own dogfood”*
5. Be written in plain language

### ***Guidelines process:***

6. Include people with disabilities
7. Facilitate global participation and feedback
8. Data-informed and evidence-based

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## Requirements

- Multiple ways to measure
- Flexible structure
- Multiple ways to display
- Technology Neutral
- Attention to Readability and Usability
- Suitable for Regulatory Environment
- Motivation to do more than minimum
- Scoped for a diverse group of stakeholders

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## Proposed for WCAG 3.0

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## Improving equity between different disability groups

- Developing a more comprehensive list of functional needs of disability groups
  - Section 508 includes nine “Functional Performance Criteria”
  - WCAG 3.0 currently references a list of 50+ disability categories
    - Example: WCAG 3.0 has a more granular inclusion of different cognitive disabilities
- Developing guidelines starting with an evaluation of user needs
  - Instead of starting with the technical solutions
  - WCAG 3.0 identifies conflicting user needs
    - Example: high contrast is a barrier for some cognitive disabilities and visual impairments
- Testing any scoring proposal with the impact on different disability groups
  - WCAG 3.0 has a group focused on testing and evaluating the different proposals

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## Addressing Usability

- Simple Language
- Database – (still to be designed) with filtering and sorting by tags
- How-To for each guideline with information for beginners and project team members

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## How-to Example

- Get started
- Plan
- Design
- Develop
- Examples
- Resources

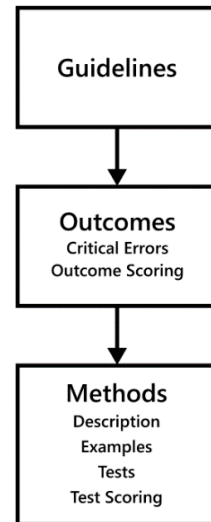
The screenshot displays the 'WCAG 3 How-Tos' navigation menu on the left, with 'Text alternatives' selected. The main content area is titled 'WCAG 3.0 (Silver) Guidelines (Text alternatives)' and features a document icon and the heading 'Text alternatives'. A sub-heading reads 'Provide text alternative for non-text content.' Below this is a navigation bar with buttons for 'Get Started', 'Plan', 'Design', 'Develop', 'Examples', and 'Resources'. The 'Get Started' button is highlighted. A 'Summary' section is visible at the bottom of the page. In the top right corner, there is a small logo with the text 'w3c a11y dg silver'.

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## Structure for the WCAG 3.0

- **Guidelines:** high-level, plain-language version of the content for managers, policy makers, individuals who are new to accessibility
  - **How-To** sections describe the guideline
- **Outcomes:** testable criteria that include information on how to score the outcome in an optional Conformance Claim
  - Outcomes are technology neutral
- **Methods:** detailed information on how to meet the outcome, code samples, working examples, resources, as well as information about testing and scoring the method
  - Methods are technology specific



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## Proposed Conformance Approach

- Adjectival rating tiers
- Option for very granular rating of methods

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## Critical Errors

- A critical error is an an accessibility problem that will stop a user from being able to complete a process
- Critical errors include:
  - Items that will stop a user from being able to complete the task if it exists anywhere on the view (examples: flashing, keyboard trap, audio with no pause)
  - Errors that when located within a process means the process cannot be completed (example: a submit button that is not in the keyboard tab order)
  - Errors that when aggregated within a view or across a process cause failure (example: a large amount of confusing, ambiguous language)

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## Differences between WCAG 2.0 and proposed WCAG 3.0 approaches

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## True/False vs. Adjective ratings

### WCAG 2.0

- Clear measurement of what is accessible
- Fits traditional regulatory model

### WCAG 3.0

- Allows inclusion of more guidance that helps more disability groups
- Accessibility is rarely binary true false – accessibility generally is a continuum
- Often accessibility features for one disability category can be a barrier for another category – different groups can benefit from different ratings
- User need driven

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## 100% Pass Fail vs Point Scoring

### WCAG 2.0

- Page-based conformance model
  - A website (i.e., a collection of pages) is passed at 100%, or it fails
  - 100% conformance is rarely realistic
- Large dynamic sites cannot claim conformance, even if they have good accessibility

### WCAG 3.0

- Point scoring gives a more nuanced view of the accessibility of a site or product
- Helps businesses to realistically claim accessibility, even if there are minor issues
- Recognizes that all software has bugs, while encouraging owners to prioritize accessibility issues over other defects

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## Plain language vs precision

### WCAG 2.0

- Precise wording of success criteria
- Can be difficult to interpret or learn
- Has some ambiguity and has some inconsistent interpretation

### WCAG 3.0

- Written in plain language where possible, and uses simple language summaries where technical language is needed
- Develops tests early in the guideline development cycle so ambiguity can be identified and corrected before the guideline is finalized
- Uses longer descriptions and bullet lists to describe edge cases and exemptions, instead of trying to fit requirements into one statement

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## How to Contribute

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## How to contribute to WCAG 3.0

- Beginning Commitment
  - Review the W3C WCAG 3 landing page: [www.w3.org/wai/wcag3](http://www.w3.org/wai/wcag3)
  - Subscribe to the Silver mailing list
  - Provide feedback during formal calls for comment
  
- Medium Commitment
  - Join the Silver Community Group
    - [www.w3.org/community/silver](http://www.w3.org/community/silver)
  
- Advanced Commitment
  - Join the Accessibility Guidelines Working Group (AG WG)
    - Requires being affiliated with W3C member organization or Invited Expert status
    - [www.w3.org/groups/wg/ag](http://www.w3.org/groups/wg/ag)



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## Questions and Answers

Please submit your questions in the **Q&A Area**  
Questions submitted in the Chat area will not be addressed

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**Thank you for participating  
in today's webinar**

**Next scheduled session:**

**“The Civil Rights Complaint Portal: An Accessibility  
Journey”**

**September 28, 2021**

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