

Welcome to WAG Meeting
an AMAC Accessibility Webinar



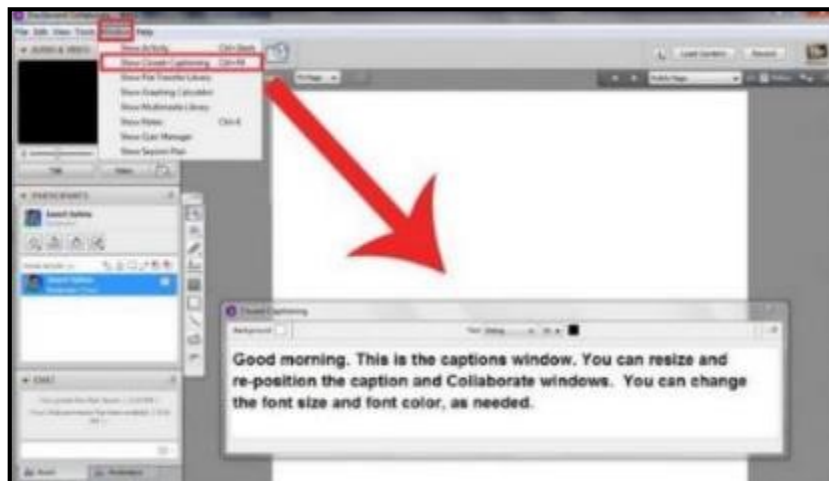
WCAG 2.1 *Discussion*

Janet Sylvia, WAG Coordinator

June 6, 2018

To Show Closed Captioning

- From Menu: Window>Show Closed Captioning
- Keyboard: CTRL or CMD + F8
- Closed Captioning Provided by AMAC



Comments or Questions



- **During presentation type comments or questions in Chat**
 - **Mouse: click in Chat Box**
 - **Keyboard: CTRL or CMD + M**
 - **Type your message**
 - **Press Enter on keyboard**
- **Q/A and Discussion at end of the presentation**

Today's Presenter



- **Janet Sylvia**
 - **WAG Coordinator and Accessibility Specialist**
 - **AMAC Accessibility Solutions**





Discussion WCAG 2.1

Current Status

- **WCAG 2.1 Recommendation published June 5, 2018**



Reasons for Updating WCAG



- **Web Content Accessibility Guidelines (WCAG) 2.0**
 - Published 2008
- **Updated to fill known gaps**
 - Cognitive
 - Low Vision
 - Mobile
- **Previously W3C released WCAG 2.0 *Extensions***
 - Conformance with existing format
 - Success Criteria
 - How to Meet
 - Understanding

Section 508 and WCAG

- Section 508 “incorporates by reference” WCAG 2.0
 - WCAG 2.0 *Extensions* part of WCAG and the basis for WCAG 2.1
- Section 508
 - E101.2 Equivalent Facilitation



Difference WCAG 2.0 and WCAG 2.1

- **17 Success Criteria (Newly Proposed)**
 - **5 Level A**
 - **7 Level AA**
 - **5 Level AAA**

WCAG 2.0 and WCAG 2.1

WCAG 2.0 Guidelines

1 Perceivable

1.1 Provide text alternatives for any non-text content so that it can be changed into other forms people need, such as large print, braille, speech, symbols or simpler language.

1.2 Provide alternatives for time-based media.

→ 1.3 Create content that can be presented in different ways (for example simpler layout) without losing information or structure.

→ 1.4 Make it easier for users to see and hear content including separating foreground from background.

2 Operable

2.1 Make all functionality available from a keyboard.

→ 2.2 Provide users enough time to read and use content.

→ 2.3 Do not design content in a way that is known to cause seizures.

→ 2.4 Provide ways to help users navigate, find content, and determine where they are.

3 Understandable

3.1 Make text content readable and understandable.

3.2 Make Web pages appear and operate in predictable ways.

3.3 Help users avoid and correct mistakes.

4 Robust

→ 4.1 Maximize compatibility with current and future user agents, including assistive technologies.

0.5.1 New Features in WCAG 2.1

The following Success Criteria are new in WCAG 2.1:

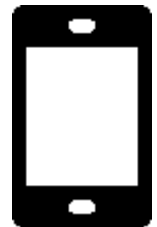
- 1.3.4 Orientation (AA)
- 1.3.5 Identify Input Purpose (AA)
- 1.3.6 Identify Purpose (AAA)
- 1.4.10 Reflow (AA)
- 1.4.11 Non-Text Contrast (AA)
- 1.4.12 Text Spacing (AA)
- 1.4.13 Content on Hover or Focus (AA)
- 2.2.6 Timeouts (AAA)
- 2.3.3 Animation from Interactions (AAA)
- 2.5.1 Pointer Gestures (A)
- 2.5.2 Pointer Cancellation (A)
- 2.5.3 Character Key Shortcuts (A)
- 2.5.4 Label in Name (A)
- 2.5.5 Target Size (AAA)
- 2.5.6 Concurrent Input Mechanisms (AAA)
- 2.5.7 Motion Actuation (A)
- 4.1.3 Status Messages (AA)

1. Perceivable - *Adaptable*

- **1. Perceivable**
 - **Guideline 1.3 Adaptable – create content that can be presented in different ways without losing information or structure**
 - **1.3.4 Orientation (AA)**
 - **1.3.5 Identify Input Purposes (AA)**
 - **1.3.6 Identify Purpose (AAA)**

1.3.4 Orientation (AA)

- Content **does not restrict its view and operation to a single display orientation**, such as portrait or landscape, unless a specific display orientation is *essential* (bank check, piano keys, etc.)
- ***Intent***
 - To ensure all content and functionality is **available in fixed display orientations**, whether fixed in portrait or fixed in landscape.



1.3.5 Identify Input Purpose (AA)

- The purpose of each **input field** collecting information about the user can be programmatically determined when:
 - The input field serves a **purpose identified in** the [Input Purposes for User Interface Components](#) section; and
 - The content is **implemented** using technologies with **support for identifying** the **expected meaning** for form input data.
- **Intent:**
 - Include **metadata with** the identified **form inputs** to help people recognize and understand the intention of the input fields.



1.3.6 Identify Purpose (AAA)

- In content implemented using **markup languages**, the **purpose** of User Interface Components, icons, and regions can be programmatically determined.
- ***Intent:***
 - To allow user agents to supply information that can be **customized** based on need.



1. Perceivable - *Distinguishable*

- **1. Perceivable**
 - **Guideline 1.4 Distinguishable - Make it easier for users to see and hear content including separating foreground from background.**
 - **1.4.10 Reflow (AA)**
 - **1.4.11 Non-Text Contrast (AA)**
 - **1.4.12 Text Spacing (AA)**
 - **1.4.13 Content on Hover or Focus (AA)**

1.4.10 Reflow (AA)

- Content can be presented **without loss of information or functionality**, and **without requiring scrolling in two dimensions** for:
 - Vertical scrolling content at a width equivalent to 320 CSS pixels;
 - Horizontal scrolling content at a height equivalent to 256 CSS pixels;
- ***Intent:***
 - Allow browser zoom to increase to 400% **without requiring scrolling in more than one direction**. Content will reflow (i.e. wrap) to stay within windows boundaries.



1.4.11 Non-Text Contrast (AA)

- The visual presentation of the following have a **contrast ratio** of at least 3:1 against adjacent color(s):
 - **User Interface Components**
 - **Graphical Objects**
- **Intent:**
 - To ensure **active interface components** (buttons, forms, fields, etc.) and **meaningful graphics** (print icon, line graph, images, etc.) can be **distinguished** by people with low vision.



1.4.12 Text Spacing (AA)

- In content implemented using markup languages that support the following **text style properties**, **no loss of content or functionality** occurs by setting all of the following and by changing no other style property:
 - **Line height** (line spacing) to at least 1.5 times the font size;
 - **Paragraph** spacing to at least 2 times the font size;
 - **Letter** spacing to at least 0.12 times the font size;
 - **Word** spacing to at least 0.16 times the font size.
- ***Intent***
 - User can **override** author settings without breaking content.



1.4.13 Content on Hover or Focus (AA)

- Where **receiving and then removing** (pointer, hover or keyboard focus) **triggers additional content** to become visible and then hidden, the following are true:
 - **Dismissable**
 - **Hoverable**
 - **Persistent**
- ***Intent***
 - Content is designed to allow the option to **perceive** the additional content and **dismiss it without interrupting the page ex**



2. Operable – Keyboard Accessible



- **2. Operable**
 - **Guideline 2.1 Keyboard Accessible: Make all functionality available from a keyboard.**
 - **2.1.4 Character Key Shortcuts (A)**

2.1.4 Character Key Shortcuts (A)

- If a **keyboard shortcut** is implemented in content using only letter (including upper- and lower-case letters), punctuation, number, or symbol characters, then at least one of the following is true:
 - Turn off
 - Remap
 - Active only on focus
- ***Intent***
 - Allow speech input users to turn off single-key shortcuts to avoid accidentally firing batches of them at once.



2. Operable – Enough Time



- **2. Operable**
 - **Guideline 2.2 Enough Time: Provide users enough time to read and use content.**
 - **2.2.6 Timeouts (AAA)**

2.2.6 Timeouts (AAA)

- Users are **warned** of the duration of any **user inactivity** that could cause data loss, **unless** the data is preserved for more than 20 hours when the user does not take any actions.
- ***Intent***
 - Content that **cannot be completed** in a single sitting can be left **without losing their place**.



2. Operable – Seizures and Physical Reactions



- **2. Operable**
 - **Guideline 2.3 Seizures and Physical Reactions** - Do not design content in a way that is known to cause seizures or physical reactions
 - **2.3.3 Animation from Interactions (AAA)**

2.3.3 Animation from Interactions (AAA)

- **Motion animation triggered by interaction** can be **disabled**, unless the animation is *essential* to the functionality or the information being conveyed.
- ***Intent***
 - Avoid **user-initiated animations** that occur **unexpectedly**.



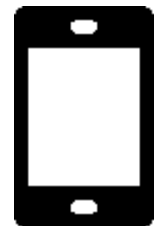
New Guideline 2.5



- **2. Operable**
 - **Guideline 2.5 Input Modalities - Make it easier for users to operate functionality through various inputs beyond keyboard**
 - **2.5.1 Pointer Gestures (A)**
 - **2.5.2 Pointer Cancellation (A)**
 - **2.5.3 Label in Name (A)**
 - **2.5.4 Motion Actuation (A)**
 - **2.5.5 Target Size (AAA)**
 - **2.5.6 Concurrent Input Mechanisms (AAA)**

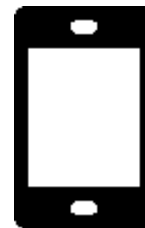
2.5.1 Pointer Gestures (A)

- All functionality that uses **multipoint or path-based gestures** for operation **can be operated with a single pointer** without a path-based gesture, unless a multipoint or path-based gesture is *essential*.
- ***Intent***
 - To ensure content can be operated through a **single point activation** and **not complex gestures**.



2.5.2 Pointer Cancellation (A)

- For functionality that can be operated using a **single pointer**, at least **one of the following** is true:
 - **No Down-Event**
 - **Abort or Undo**
 - **Up Reversal**
- ***Intent***
 - To make it easier to **prevent accidental or erroneous** pointer input



2.5.3 Label in Name (A)

- For **user interface components with labels** that include text or images of text, the **name** contains the text that is presented visually.
- ***Intent***
 - Ensure **visible labels**, including hover labels of icons, **match hidden labels**.



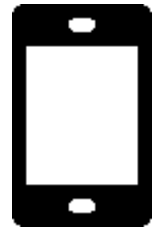
2.5.4 Motion Actuation (A)

- **Functionality** that can be operated by **device motion** or **user motion** can also be operated by **user interface components** and responding to the motion **can be disabled** to prevent accidental actuation, except when:
 - **Accessibility Supported Interface**
 - *Essential*
- **Intent**
 - Avoid relying on motion, which some people **cannot perform** and that other people may **inadvertently perform** and thus activate the functionality without intention.



2.5.5 Target Size (AAA)

- The **size** of the **target** for **pointer inputs** is at least 44 by 44 CSS pixels except when:
 - **Equivalent**
 - **Inline**
 - **User Agent Control**
 - ***Essential***
- ***Intent***
 - To help users who have **difficulty activating a small target** due to motor impairment, tremors, etc.



2.5.6 Concurrent Input Mechanisms (AAA)

- Web content **does not restrict** use of **input modalities** available on a platform except where the restriction is *essential*, required to ensure the security of the content, or required to respect user settings.
- **Intent**
 - Users can interact with web content with **whichever input mechanism** is **preferred**. They can also **switch mechanisms** as needed, and add/remove mechanisms at any point in a task or interaction.



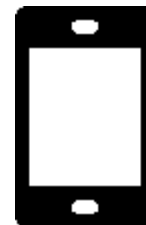
4. Robust - Compatible



- **4. Robust**
 - **Guideline 4.1 Compatible - Maximize compatibility with current and future user agents, including assistive technologies.**
 - **4.1.3 Status Messages (AA)**

4.1.3 Status Messages (AA)

- In content implemented using markup languages, **status messages** can be programmatically determined through **role** or **properties** such that they can be presented to the user by assistive technologies **without receiving focus**.
- ***Intent***
 - To ensure more users can be made **aware of important changes** in content that are not given focus, in a way that **doesn't** unnecessarily **interrupt** their work.





Next Major Revision of WCAG

- **WCAG 2.1 is a .dot release**
- **W3C Accessibility Guidelines Working Group**
 - Preliminary work on successor to WCAG 2.1
 - Guidelines will have a new name that reflects broader scope beyond web content
- **Code name: *Silver***

- **1) Type questions in Chat**
 - **Mouse:** click in Chat box
 - **Keyboard:** (CTRL or CMD) M
 - **Type your message**
 - **Press Enter on your keyboard to send message to Main Room**

- **2) Ask Questions via Microphone**
 - **Raise your Hand to be part of the question queue**
 - **Select Hand icon (above participant names)**
 - **We will take questions in order received**



Contact Information

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Thanks for Joining us Today!