



Center for Technology and Disability Studies

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u n i v e r s i t y o f w a s h i n g t o n

Box 357920 Seattle, WA 98195-7920

Evaluation Date: 5/6/2019

Web Accessibility Testing and Report hours: 4 hours @ \$125/hr

Website Evaluated: <https://sites.omniballot.us/UW/app/home>

## Testing Technology and Evaluative Tools Used

The website was tested on Windows 10 using JAWS 2018 and Chrome browser. While this is a typical assistive technology configuration, it should be noted that not all operating systems, screen readers, or browsers are the same. Results may vary somewhat between platforms and circumstances, as with any internet technology.

The following content and tools were used to test for WCAG 2.0AA and Section 508 compliance:

- Web Content Accessibility Guidelines: <http://www.w3.org/r1VWCAG20/>
- WAVE Browser Extensions (For Chrome and Firefox): <http://wave.webaim.org/extension/>
- WebAIM color checker: <http://wave.webaim.org/extension/>
- WebAIM Web Accessibility Checklist (WCAG 2.0 Guidelines): [webaim.org/standards/wcag/checklist/](http://webaim.org/standards/wcag/checklist/)
- Markup Validation Service: <http://validator.w3.org/>
- US Dept of Health & Human Services: HTML 508 Compliance Checklist: <https://www.hhs.gov/web/section-508/making-files-accessible/checklist/html/index.html>
- ICT refresh: <https://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-ict-refresh/final-rule/single-file-version#E205-content>

## Executive Summary

Overall, the site is very accessible in its current form. Keyboard access was effective in all web pages tested. Screen reader access was also strong. Screen reader navigation was mostly consistent and easy to understand. When marking ballots the state of the checkboxes was announced before and after making a selection. One recommendation is made below to improve usability.

Due to the fact that WCAG 2.0 AA Success Criteria are more explicit than the current 508 Standards, focus was directed to identifying compliance with WCAG 2.0 AA Success Criteria. <https://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-ict-refresh/background/comparison-table-of-wcag2-to-existing-508-standards>

Unless mentioned specifically below, WCAG 2.0 and Section 508 compliance was found to be met.

## General Evaluation and Commentary

### 1.3.2 Meaningful Sequence

When reading the Sierra County Elections Department PDF with Jaws, the reading order does not align with the visual order in which information is presented. The line "I declare that:" is read before "Voter's Declaration/Oath of Voter". Taking a look in Adobe Acrobat Pro, the reading order is incorrect for these two lines although the document is tagged in the correct order. Correcting the reading order and then running the auto tag utility fixes this issue.

### 1.4.3 Contrast

There are several different color combinations on this website that did not meet Level AA Criterion for contrast. In order to comply with WCAG 2.0 AA criterion one of the following conditions must be met:

- Text and images of text have a contrast ratio of at least 4.5:1.
- Large text - at least 18 point (typically 24px) or 14 point (typically 18.66px) and bold - has a contrast ratio of at least 3:1.

On most of the pages the buttons have a background color of #007fb6 with white text color #eeeeee which has a contrast ratio of 3.84:1. The font size was found to be typically 16px which is equivalent to 12 pt font.

The links such as "Skip to Bottom" in the County Voter Information Guide or "How to Vote" under Additional Info are in #007fb6 with a white background #eeeeee, contrast ratio 3.84:1 which do not provide adequate contrast for the 16px font. On mouse hover the links are even lighter #00a3e5, contrast ratio of 2.46:1.

Recommendation is to change the background color to increase the contrast ratio to 4.5:1 or increase the font size to 18 point (typically 24px) or 14 point (typically 18.66px) and bold.

### 2.4.1 Bypass Blocks

The "Skip to Bottom" links in the Reference Ballot do not function.

### 2.4.2 Page Titled

Web pages are not titled <title></title>

### 2.4.6 Headings and Labels

Inconsistent use of Headings in the Additional Info- How to Vote page. There are two "How to Vote" level 2 headings. Also one instance of the heading "How to Vote" is in all caps whereas the other is not. Towards the bottom of the page "Spanish Language Assistance" is heading level 1 which is inconsistent with the Heading structure above.

### 2.4.7 Focus Visible

On the Print Your Choices page of the Ballot Marking Application, the "Print Selection" button does not change to yellow on hover or on focus with keyboard navigation. The blue focus rectangle does not provide enough contrast to the blue button background color.

### 3.2.4 Consistent Identification

The “Continue” buttons at the bottom of the Welcome Voters page are recognized as links by Jaws whereas the “Continue” buttons on other pages are recognized as buttons. Recommendation to change the links to buttons on the Welcome page to improve consistency.

### 3.3.2 Labels or Instructions

In the Ballot Marking Instructions page the instructions state to “click on the following link” however there are no links following. “Go Back” and “Continue to Ballot” are both buttons. Also in the tab order and using Jaws, the next object the user comes to is the “Go Back” button. Recommendation to provide more specific instructions for improved understanding of next steps.

### 4.1.1 Parsing

The W3 Validator tool was used for these findings: <http://validator.w3.org/>

On all the pages, the below error was identified. This is also mentioned under section 2.4.2.

**Error:** Element `title` must not be empty.

From line 5, column 10; to line 5, column 17

```
↵ <title></title>↵ <ba
```

On the live ballot application page the following errors were identified. Despite these errors, the page was completely accessible using Jaws indicating that the page has appropriate tag structure.

**Error:** Forbidden code point U+0085.

[At line 89, column 7902](#)

```
=["+a+]", s="...", c=RegExp ("^"
```

**Error:** Forbidden code point U+007f.

[At line 724, column 6200](#)

```
e", "\t": "Tab", "□": "Delete", ""
```

**Error:** Forbidden code point U+001b.

[At line 724, column 6213](#)

```
, "□": "Delete", "": "Escape", Del
```

**Error:** Forbidden code point U+0090.

[At line 724, column 6462](#)

```
O: "/" , "`": "0" , "□": "NumLock" }; j
```

**Error:** Forbidden code point U+0085.

[At line 773, column 8977](#)

```
= "[+a+]" , c="..." , u=RegExp ("^"
```

### Usability

Hidden headings are used for Language and Main Menu to provide information and quick navigation access to screen reader users. For consistency, consider adding a similar heading to the list of links for Instructions, Candidate Statements, Measures, etc.