

# High-level accessibility review – BTAA (Techstreet - final version)

## Primary Point of Contact

Michael Fairchild  
Accessibility Consultant

Deque Systems, Inc.

Web: [www.deque.com](http://www.deque.com)

Email: [michael.fairchild@deque.com](mailto:michael.fairchild@deque.com)

**December 10<sup>th</sup>, 2018**



# High-level accessibility review – Techstreet

## TABLE OF CONTENTS

High-level accessibility review – Techstreet .....	2
Techstreet .....	3
Summary (top 3 problems for Techstreet) .....	3
Accessibility findings .....	3
Project wide issues.....	3
1. Techstreet landing page.....	4
2. Techstreet browse landing page.....	5
3. Search feature.....	6
4. Search results.....	7
5. Test a document page.....	8

## Techstreet

### Summary (top 3 problems for Techstreet)

---

This assessment covers the Techstreet application. It is obvious that the developers of this application have paid attention to accessibility. Pages have headings, the search feature uses aria-live to announce autocomplete results, and semantic html is often used correctly. The assessment did however reveal significant problems.

1. **Inaccessible modals and tooltips** – Focus is not sent to the modals when they are opened. It is also possible to focus elements in the parent document after a modal has been opened. Additionally, it is possible to read the parent document with a screen reader while a modal is open. These issues will make it difficult for screen reader users and keyboard-only users to find and operate the modals. Additionally, it is not possible to open tooltips without a mouse.
2. **Pages are refreshed after changing filters and sort options** – The entire page is refreshed after changing the value of a filter. This forces blind screen reader users and people with motor disabilities to start back at the top of the page every time a filter is changed. Many users will find this very frustrating and time consuming, especially without prior notice. Many will most likely find the application difficult to use.
3. **Color contrast not met** – There are many instances throughout the application where minimum color contrast requirements are not met. This will make it difficult for people with low vision and/or color blindness to use the application.

### Accessibility findings

---

#### Project wide issues

The issues presented in this section were identified in multiple pages and are recorded here to avoid repetition. These are applicable to each screen. Due to particularities, similar issues are reported on a page per page basis, where applicable.

#### Automated findings using Axe

- **SC 1.4.3** – Text must meet contrast ratio requirements. This applies to orange text on white or gray backgrounds, white text on orange or gray backgrounds, and gray text on white or gray backgrounds.
- **SC 3.3.2** – Search textbox must have a programmatic label.

Issues found through automated testing come from the Axe plugin, an open source accessibility testing tool that is available for Firefox and Chrome. Details here: <https://www.deque.com/products/axe/>.

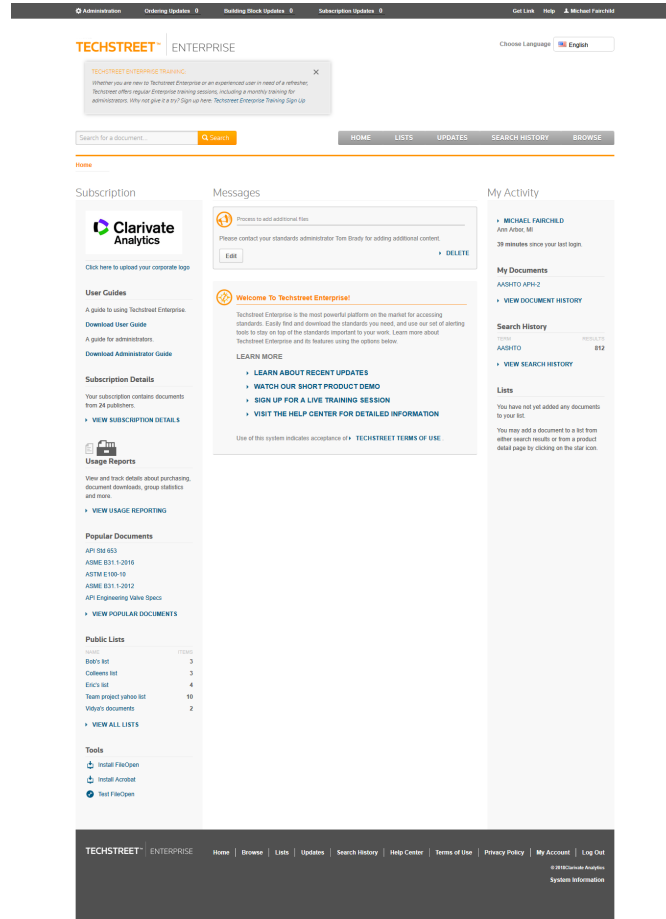
#### Additional manual findings using NVDA screen reader

- **SC 1.3.2** – When a modal is opened, it must not be possible to read the parent document with a screen reader.
- **SC 2.1.1** – All tooltips must be usable by keyboard alone.
- **SC 2.4.3** – Focus must be sent to a modal when it is opened.
- **SC 2.4.3** – Elements outside of a modal must not be focusable until the modal is closed.

## 1. Techstreet landing page

Source: <https://subscriptions.techstreet.com/>

Test case: Test platform landing page, including menus, learn more options, search box, etc.



### Automated findings using Axe

- **SC 1.1.1** – Decorative flag images in language dropdown must have alt attributes.
- **SC 1.4.3** – Text must meet color contrast requirements (see project wide issues).
- **SC 2.4.7** – Language selection must have a visible focus indicator.
- **SC 3.3.2** – Search textbox must have a programmatic label.

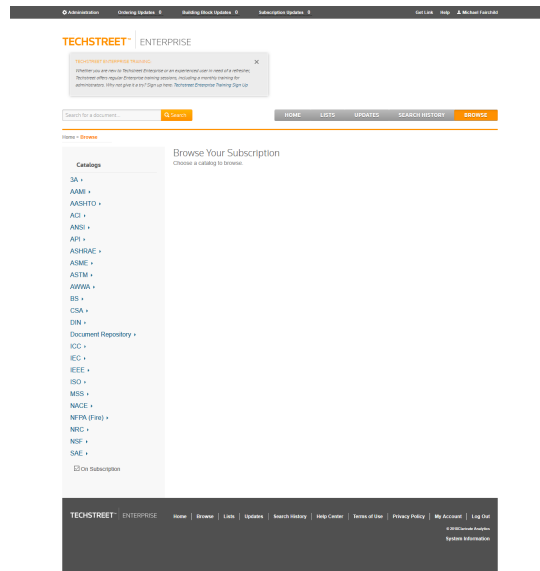
### Additional manual findings using NVDA screen reader

- **SC 1.1.1** – Images such as the “Clarivate Analytics” image must have meaningful alternative text.
- **SC 2.1.1** – All tooltips must be usable by keyboard alone, including tooltips in the header.

## 2. Techstreet browse landing page

Source: [https://subscriptions.techstreet.com/catalogs?on\\_subscription=yes](https://subscriptions.techstreet.com/catalogs?on_subscription=yes)

Test case: Test the various catalog links (AASHTO, AHAM, ANS, etc.), along with the subgroup links. Test search (upper left side).



### Note

To assess subgroup links we tested Browse > 3A > 3-A Accepted Practices, located at [https://subscriptions.techstreet.com/subgroups/466?on\\_subscription=yes](https://subscriptions.techstreet.com/subgroups/466?on_subscription=yes)

### Automated findings using Axe

- **SC 1.3.1** – the “On Subscription” checkbox must have a programmatic label.
- **SC 1.3.1** – the “sort by” select element must have a programmatic label.
- **SC 1.3.1** – DL elements must be structured correctly

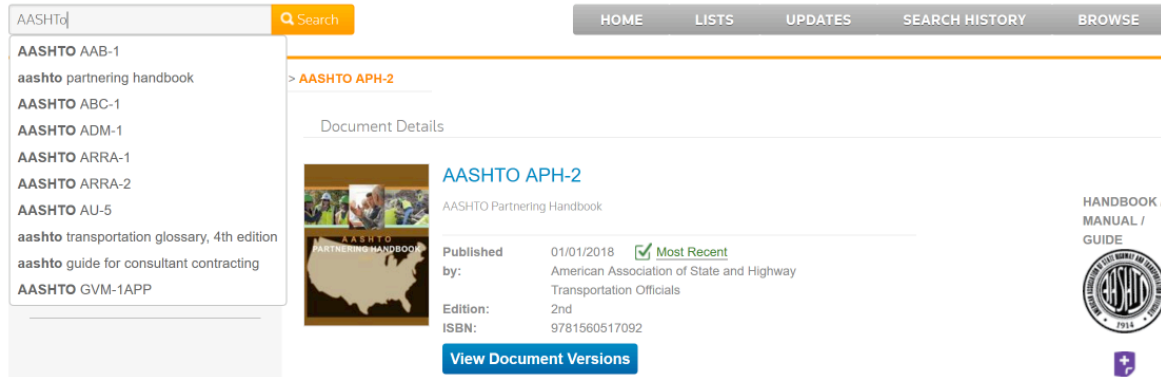
### Additional manual findings using NVDA screen reader

- **SC 1.3.2** – When a modal is opened, it must not be possible to read the parent document with a screen reader.
- **SC 2.1.1** – All tooltips must be usable by keyboard alone.
- **SC 2.4.3** – Focus must be sent to a modal when it is opened.
- **SC 2.4.3** – Elements outside of a modal must not be focusable until the modal is closed.
- **SC 3.2.2** – Modifying the “on subscription” checkbox or sort select must not submit the form without prior notice.

### 3. Search feature

Source: [https://subscriptions.techstreet.com/catalogs?on\\_subscription=yes](https://subscriptions.techstreet.com/catalogs?on_subscription=yes)

Test case: Test search (upper left side). Search for “AASHTO” and click on “Search.”



#### Automated findings using Axe

- **SC 3.3.2** – Search textbox must have a programmatic label.

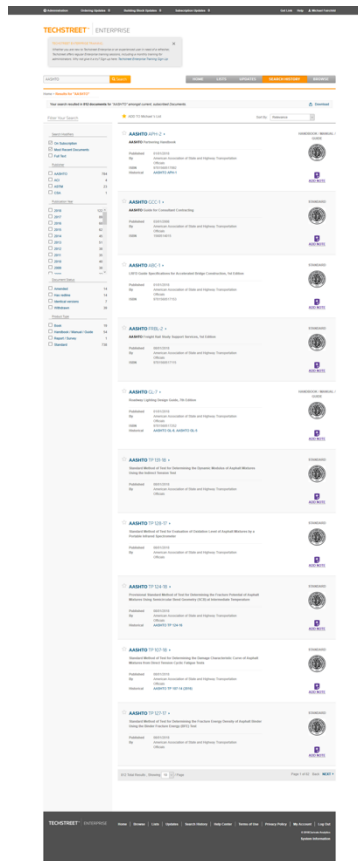
#### Additional manual findings using NVDA screen reader

- **SC 4.1.2** – Search results must have a role. The href attribute is missing which removes the link role.

## 4. Search results

Source: <https://subscriptions.techstreet.com/searches/6232667>

Test case: Test the search results page, including: “Filter Your Search” (Search Modifier, Publisher, Publication Year, etc.), “Sort By” dropdown.



### Automated findings using Axe

- **SC 1.3.1** – the filter checkboxes must have programmatic labels.
- **SC 1.3.1** – the “sort by” select element must have a programmatic label.
- **SC 1.3.1** – the pagination select element must have a programmatic label.
- **SC 1.3.1** – DL elements must be structured correctly

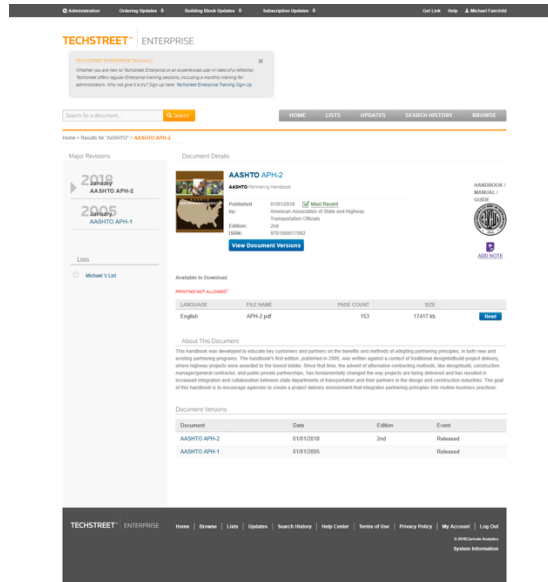
### Additional manual findings using NVDA screen reader

- **SC 1.3.2** – When a modal is opened, it must not be possible to read the parent document with a screen reader.
- **SC 2.1.1** – All tooltips must be usable by keyboard alone.
- **SC 2.4.3** – Focus must be sent to a modal when it is opened.
- **SC 2.4.3** – Elements outside of a modal must not be focusable until the modal is closed.
- **SC 3.2.2** – Modifying the filters and sort options must not submit the form without prior notice.

## 5. Test a document page

Source: <https://subscriptions.techstreet.com/products/784347>

**Test case:** Go to a document by clicking on a title (AASHTO APH-2, for example). Test the landing page, including links to Major Revisions on the left-hand side. Also test the “View Document Versions” button along with the “Read” button.



### Automated findings using Axe

- **SC 1.3.1** – DL elements must be structured correctly.

### Additional manual findings using NVDA screen reader

- **SC 1.1.1** – The year background images must have meaningful alternative text.
- **SC 1.1.1** – Images such as the book cover image must have meaningful alternative text.
- **SC 1.1.1** – Image to indicate the currently selected year must have alternative text.
- **SC 1.3.2** – “Document Versions” table does not have programmatic column headers.
- **SC 1.3.2** – When a modal is opened, it must not be possible to read the parent document with a screen reader.
- **SC 2.1.1** – All tooltips must be usable by keyboard alone.
- **SC 2.4.3** – Focus must be sent to a modal when it is opened.
- **SC 2.4.3** – Elements outside of a modal must not be focusable until the modal is closed.