



Town of Hingham, MA

Website Accessibility

Executive Summary Report

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Introduction

IHCD conducted an internal review of the Town of Hingham's official website (<https://www.hingham-ma.gov/>). The objective of this report is to provide a high-level overview of the major accessibility conformance issues and recommend areas for improvement to provide a website experience accessible for all users including, but not limited to, people with a wide range of disabilities.

In general, the website has a foundation of accessibility features that work well: for example, a "skip to main content" link that works well, general color contrast throughout the site, and some descriptive link text. However, within the functionality that the website offers, there are currently some major barriers that need to be addressed in order to provide an equitable and usable experience for people navigating with assistive technologies such as screen readers and screen magnifiers, as well as non-native technology users for whom some website behavior may be disorienting and prevent independent access to content. Website functionality should be built to work well for as many users as possible from the outset rather than requiring some groups of users to seek assistance or ask for accommodations to access information that is readily available to others.

This report does not provide an extensive or all-inclusive list of all the issues that persist across the site and all third-party websites with which it connects. It is only an overview of the major areas that need to be addressed towards conformance with the Web Content Accessibility Guidelines (WCAG 2.1 AA) and Section 508. Where applicable, we include guidance and best practices based on industry standards and insights gleaned from decades of testing and reviewing products and services including websites, digital interactives, and multisensory immersive experiences with people with lived experiences with physical, sensory or brain-based functional limitations.

Overview

In general, on websites with a large amount of content and varying kinds of content, some of the major issues that need to be addressed for a seamless user experience are the main navigation menu, keyboard accessibility, semantic markup and Accessible Rich Internet Applications (ARIA) roles and states, link text and alt text, accessibility of PDFs and other documents available download, and navigation with assistive technology such as screen readers and screen magnifiers. Specifically for municipality websites, functionality of content like the calendar and information about accessibility are also key. Within the Town of Hingham's website, some of these issues pose barriers preventing independent and equitable access to information for all.

One major issue preventing equitable access is that the Website Accessibility webpage (<https://www.hingham-ma.gov/834/Accessibility>), includes information about the levels of access intended when designing the website and supported technologies. However, the page goes on to put the onus on the user to seek out information or request accommodations to gain access to information that is readily available to some users. As an example, the page states:

Adobe Reader is required to view and print PDF documents that appear on this website.

- To download this program for free, visit the [Adobe website](#).
- To read PDF documents with a screen reader, please visit the [Adobe Reader Accessibility website](#) which provides useful tools and resources.

However, most or all of the PDFs on the website are not designed to be accessible. The process specified above only provides access to people using screen readers if the PDFs themselves are made accessible and equipped with the appropriate tagging and metadata required for a screen reader to read the information to a person who is blind and using the assistive technology.

Additionally, there are multiple instances on the page where users are provided an embedded "Contact Us" link to request assistance or report issues they may be having with accessing information on the website — the link, however, directs users to the full Staff Directory for the Town, listing departments and contact phone numbers, rather than an individual or team of employees who can provide direct assistance and answers to someone seeking assistance with web

problems. The combination of information provided on this webpage could cause frustration for many as people with disabilities often seek out the Accessibility page on a website looking for specific, helpful accessibility-related content, or after they have already experienced issues with accessing information on the website, which this page would compound.

The ideal experience would be to build an accessible and inclusive backend infrastructure so that each interactive element on the website provides equitable access for all users. While the process to achieve that level of access would involve multiple layered steps, the issues outlined below could be remediated in the short-term to ensure a higher level of access than currently provided.

Summary of Issues

- **Main menu navigation with screen readers**

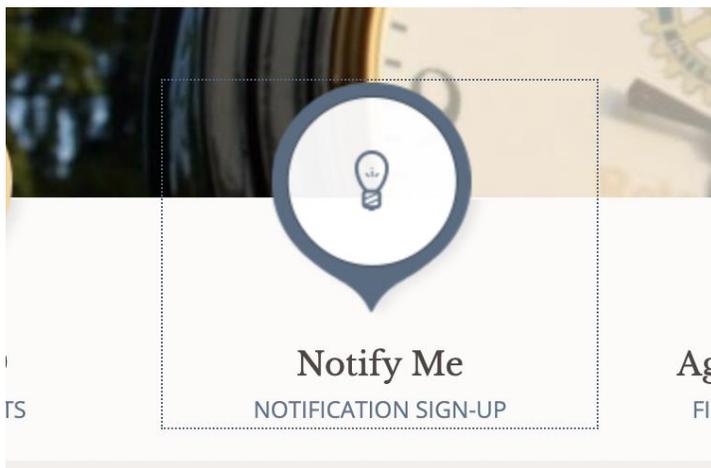
Each of the main menu items have submenus associated with them, which only open on hover with a mouse or trackpad. For users navigating with screen readers, there is no easy way to access the submenu content other than to click on the menu item and be redirected to another page. The main menu items are missing ARIA attributes (aria-haspopup and aria-expanded) to convey that each menu item has submenu content, and the status of the menu item. The submenus expand upon receiving focus (rather than explicit user interaction to expand them), but present a combination of issues to access submenu content: for users navigating using tab and other keyboard shortcuts, such as the down/up arrow keys, they are forced through all submenu content without context for which parent item they belong to or a way to dismiss the submenu.

Recommendations: Ideally, redesign the navigation to include ARIA roles and states that convey the dropdown submenus for each menu item. The submenus should expand only when a user selects a main menu item, following which they can use tab or directional arrows to access submenu content (as should be specified in instructions). Especially for websites with such a high volume of content, redirecting users to an additional page to

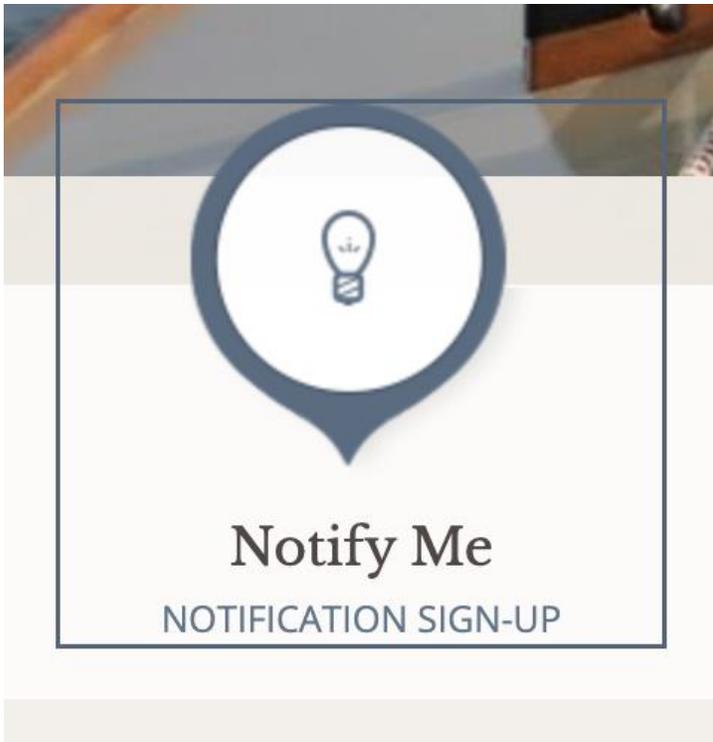
navigate through submenu options, and then to the page they are looking for, is an unnecessary additional step that can be alleviated. If submenus will expand on focus (with keyboard-only navigation and with a screen reader), ensure that the appropriate CSS is added to show which main menu item is selected, and ARIA attributes are added to inform users of the visual changes on the screen, with instructions on how to navigate through and dismiss new content. With either approach, the objective should be to ensure that there is easy and independent access to all main menu content for all users navigating with and without assistive technology, given the importance of the main menu on a municipality website with important information.

- **Keyboard Accessibility**

All website content should be accessible to users navigating with a keyboard without a screen reader. Many users rely on the use of a keyboard to navigate through web content due to a dexterity impairment or personal preference. Adequate visual focus indicators are necessary to facilitate navigation through the site and ensure that users know exactly where they are at any time. Visual focus in some instances is inadequate and should be improved and maintained consistently across the website. For example:



Current visual focus indicator



Recommended approach for visual focus indicator (outline: solid 2px;) — this is only one example showing an adequate focus indicator. It can be adapted as necessary as long as it remains visible and discernible for all users.

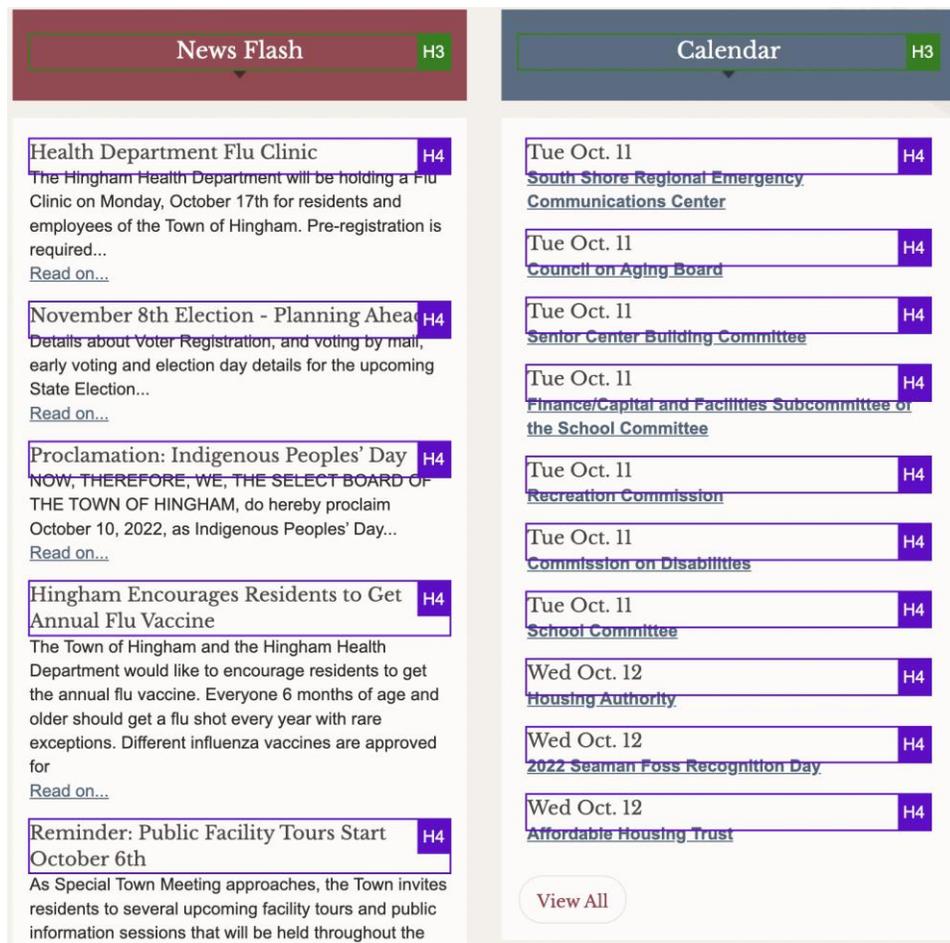
- **HTML Semantic Markup and ARIA Roles and States**

Heading levels are an important means of orientation for people navigating with screen readers. When implemented correctly, they provide an easy and equitable means of access to “skim” through content on a page to find what they are looking for. To facilitate the accessible experience,

- Heading levels should never be skipped.



- Heading tags should be used accurately for content that is descriptive and can help a user navigate. Multiple headings titled “Oct 11” do not provide the necessary context for a user navigating through the site without visual cues. The headings under the “News Flash” section are more meaningful.



- They should only be used to convey the semantic structure and information hierarchy of a webpage. They should not be used as a stylistic element to adjust font sizes — CSS should be used to do that.

- **Alternative Text for Images**

Images should have descriptive or null alternative (alt) text depending on the context in which they are included. When descriptive alt text is provided, it should convey what is visually shown in the image. It should not duplicate the image caption. It should be concise.



In the example of the two flag images towards the bottom of the home page, the alt text duplicates the image captions for both. Instead, consider providing a visual description of the Hingham flag and the setting for the flag posts in both images. Alt text should convey in succinct words what is visually apparent in an image, and be supported by the caption.