

# City of Montpelier, VT | Website Review

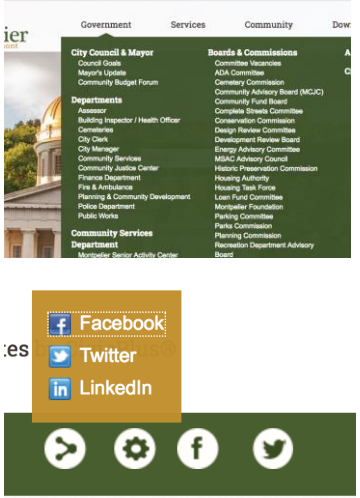

	Image	Section	Issue Name	Issue Details	Issue Tags
		Navigation	Inaccessible main navigation	<p><b>Background</b> All menu items and mega-menu functionality must be accessible by keyboard-only navigation to allow screen reader users and keyboard-only users to navigate the web.</p> <p><b>Current</b> The popovers at each of the five main menu items are not accessible. When navigated to with a screen reader, there is no indication that the user is interacting with a collapsed list. The popover HTML is not nested within the menu unordered list, therefore it does not show on the accessibility tree.</p> <p><b>Solution</b> Menu popovers should always be expanded using not only hover, but also keyboard focus. In addition, the HTML should be nested in the same intuitive order as the visual layout.</p> <p><b>Engineering notes</b> Review documentation for accessible mega-menus using web-aria, proper html structure, and keyboard focus. See Adobe open-source library for accessible mega-menus: <a href="https://github.com/adobe-accessibility/Accessible-Mega-Menu/">https://github.com/adobe-accessibility/Accessible-Mega-Menu/</a></p>	Blind, Low-vision, Dexterity Impairments, WCAG 2.1
		General Content	Header hierarchy	<p><b>Background</b> Diverse groups of users rely on headers for navigation within websites and pages. For screen reader users, headers provide an important hierarchy which helps them make sense of a website and find what they are looking for with relative ease. For some users with brain-based conditions, good and consistent header hierarchy provides organization to a page that can aid visual focus and reduce anxiety or stress. In addition, it can also increase the ease with which non-native tech users can interact with content.</p> <p><b>Current</b> Heading levels are currently skipped and some visually styled html elements are not placed within heading tags. While the banner image on the home page has a &lt;h1&gt; tag, the &lt;h2&gt; and &lt;h3&gt; tags are skipped before event dates in the event calendar</p>	Blind, Low-vision, Deafblindness Mobility/Dexterity, WCAG 2.1


Image	Section	Issue Name	Issue Details	Issue Tags
			<p>widget get a &lt;h4&gt; tag. The &lt;h3&gt; tag is then used for the social media links at the bottom of the page. This disorganization can be disorienting to many users.</p> <p><b>Solution</b> Ensure that the order of headings is semantically correct; h1 to h6 element tags should be in descending order. In addition, ensure that visually styled elements are placed within the appropriate heading tags.</p> <p><b>Engineering notes</b> Review W3's documentation on heading level/ranks: <a href="https://www.w3.org/WAI/tutorials/page-structure/headings/">https://www.w3.org/WAI/tutorials/page-structure/headings/</a></p>	
	General Content	Automatically changing content and missing alt text	<p><b>Background</b> Automatically moving, changing or blinking content must provide an option for the user to pause, stop or hide the element.</p> <p><b>Current</b> The rotating images on the home page do not provide an option to pause, stop or be hidden. This can be distracting and disorienting for users with some brain-based conditions. In addition, several images that appear on the 'slider' have alt text that is not descriptive of the image, featuring generic file titles, as seen in the example below:</p> <pre data-bbox="989 971 1749 1036">&lt;img src="/ImageRepository/Document?documentID=4416" alt="JS-6183" title="JS-6183" ...&gt;</pre> <p><b>Solution</b> Ensure that the changing images are accompanied by a pause, stop or hide button that allows users control over not only whether they want to see this content, but also the speed at which they may choose to engage with it. Additionally, ensure that all images have alt text that is descriptive of the content they display.</p> <p><b>Engineering notes</b> For example,</p> <pre data-bbox="989 1409 1749 1442">&lt;img src="..." alt="The big clock tower in downtown</pre>	Blind, Low-Vision WCAG 2.1

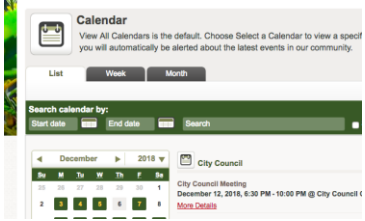
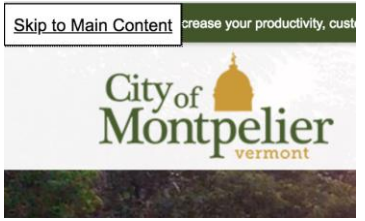
Image	Section	Issue Name	Issue Details	Issue Tags
	Events Calendar	Missing form labels	<p><code>Montpelier" title="JS-6183" ...&gt;</code></p> <p><b>Background</b> Each form element must have a programmatically associated label element.</p> <p><b>Current</b> The search and date fields in the event calendar do not have label elements. While they do have placeholder values, the missing labels can mean that navigation is extremely difficult or even impossible for users of some assistive technology:</p> <pre>&lt;input onkeydown="searchTextHook(event);" onblur="removeDefaultStartDate(this);" onfocus="removeDefaultStartDate(this); showPopup(this, event);" onclick="showPopup(this, event);" title="Start Date" id="startDate" type="text" value="Start date"&gt;</pre> <p><b>Solutions</b> Providing appropriate labels for corresponding fields will ensure that users have context for the elements they are interacting with.</p> <p><b>Engineering notes</b></p> <pre>&lt;label for="startDate"&gt;Start Date&lt;/label&gt;</pre>	Blind, Low- Vision, WCAG 2.1
	General Content	Broken skip link	<p><b>Background</b> Screen reader dependent users rely on skip links to jump past redundant navigation content. Skip links must anchor to the main content on each page.</p> <p><b>Current</b> The skip link target does not exist and is not focusable:</p> <pre>&lt;a href="#cc9b263b9d-a7e2-4e23-b747-b6d686e76be0" target="_self" class="skipToContentLink"&gt;Skip to Main Content&lt;/a&gt;</pre> <p><b>Solution</b> Ensure all skip links have a programmatically focusable target using <code>tabindex="-1"</code>.</p> <p><b>Engineering notes</b></p>	Blind, Low- Vision, WCAG 2.1


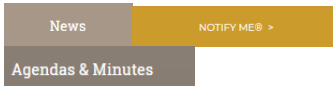
Image	Section	Issue Name	Issue Details	Issue Tags
			<p>For example:</p> <pre>&lt;a href="#main" target="_self" class="skipToContentLink"&gt;Skip to Main Content&lt;/a&gt; &lt;nav&gt;...&lt;/nav&gt; &lt;div id="main" tabindex="-1" class="siteWrap"&gt;..&lt;/div&gt;</pre>	
	General Content	Ambiguous icons	<p><b>Background</b> Screen reader dependent users rely on alternative texts to navigate the site.</p> <p><b>Current</b> Facebook and Twitter icons are labeled as images. Sharing icon is ambiguous.</p> <p><b>Solution</b> Make the icons more understandable by differentiating between sharing this page on Facebook/Twitter and the Facebook and Twitter pages of Montpelier.</p> <pre>&lt;a href="javascript:void(0);" target="_self" class="fancyButton fancyButton222 "</pre> <p><b>Design Notes</b> For example: Label “share” with “Share this page”. Also, relabel the Facebook icon to be “Montpelier Facebook Page”.</p> <p><b>Engineering notes</b> For example:</p> <pre>&lt;a href="javascript:void(0);" aria-label="Return to top of page" target="_self" class="fancyButton fancyButton222"</pre>	
	General Content	Color contrast	<p><b>Background</b> All text elements must have sufficient contrast between text in the foreground and background colors. Text that is too close is luminance (brightness) to the background can be hard to read for users with low vision.</p>	Low-Vision, Brain-based, 65+ WCAG 2.1

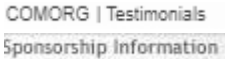

Image	Section	Issue Name	Issue Details	Issue Tags
			<p><b>Current</b> There is insufficient color contrast for the white text on light grey background (2.8:1), white text on orange background (2.1:1), and white text on dark grey background (3.9:1).</p> <p><b>Solution</b> Ensure all text elements have at least 4.5:1 contrast for small text and 3:1 for large text. IHCD recommends the Paciello Group’s Colour Contrast Analyser: <a href="https://developer.paciellogroup.com/resources/contrastanalyser">https://developer.paciellogroup.com/resources/contrastanalyser</a></p>	
	Video Players	Color contrast	<p><b>Background</b> All text elements must have sufficient contrast between text in the foreground and background colors. Text that is too close in luminance (brightness) to the background can be hard to read for users with low vision.</p> <p><b>Current</b> There is insufficient color contrast for the grey text on white background (3.2:1).</p> <p><b>Solution</b> Ensure all text elements have at least 4.5:1 contrast for small text and 3:1 for large text. IHCD recommends the Paciello Group’s Colour Contrast Analyser: <a href="https://developer.paciellogroup.com/resources/contrastanalyser">https://developer.paciellogroup.com/resources/contrastanalyser</a></p>	Low-Vision, Brain-based, 65+ WCAG 2.1
	Widgets	Improper HTML semantics	<p><b>Background</b> HTML markup may not change the graphical user interface, however screen reader users rely on this semantic information to make sense of the web and interact with elements.</p> <p><b>Current</b> “Events Calendar” and “News” currently are links with &lt;a&gt; tag. However, these elements behave as tabs which is confusing for screen reader users because the behavior does not match semantics.</p>	Blind, Low- Vision, WCAG 2.1

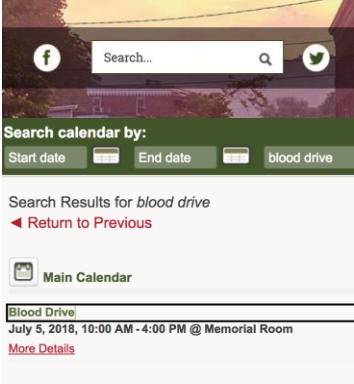
Image	Section	Issue Name	Issue Details	Issue Tags
			<pre data-bbox="989 207 1325 310">&lt;a href="#..."&gt; &lt;span&gt; Calendar &lt;/span&gt; &lt;/a&gt;</pre> <p data-bbox="989 347 1724 496"><b>Solutions</b> Always use proper native HTML semantics for user interface components when available. For custom components, use role and ARIA attributes to give screen reader users appropriate context.</p> <p data-bbox="989 529 1220 589"><b>Engineering notes</b> For example:</p> <pre data-bbox="989 621 1717 740">&lt;div role="tab" aria-selected="true" aria-controls="calendarPanel" id="calendarTab" tabindex="0"&gt;Calendar &lt;/div&gt;</pre> <p data-bbox="989 776 1570 865">See: <a href="https://developer.mozilla.org/en-US/docs/Web/Accessibility/ARIA/Roles/Tab_Role">https://developer.mozilla.org/en-US/docs/Web/Accessibility/ARIA/Roles/Tab_Role</a></p>	
	General Content	Search focus	<p data-bbox="989 911 1703 1027"><b>Background</b> Focus should always programmatically be sent to the most intuitive next element when users are interacting. In addition, system status should be visually salient.</p> <p data-bbox="989 1060 1749 1243"><b>Current</b> For screen reader users, the focus is sent above the search field after a search request is made. This caused users to assume the search did not happen or was empty. In addition, for sighted users, the green search bar stays as the most visually prominent element and most sighted users did not notice search results.</p> <p data-bbox="989 1276 1745 1425"><b>Solution</b> Programmatically focus the search results ( .focus () ) for screen reader users. In addition, for sighted users, either collapse the search block on results page, or use an anchor to ensure results are in the window instead of the search block.</p>	Blind, Low- Vision, WCAG 2.1

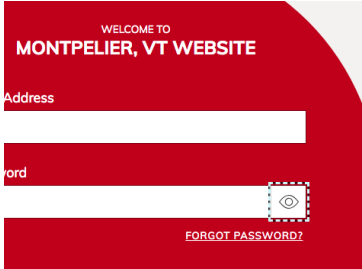
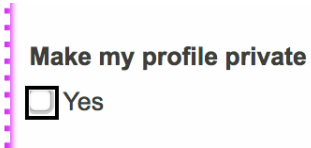
Image	Section	Issue Name	Issue Details	Issue Tags
	General Content   Sign-in	Missing ARIA Label	<p><b>Background</b> Buttons must have discernible text in order for screen reader users to be able to interact with them correctly.</p> <p><b>Current</b> The button highlighted in the image (intended to “show or hide password” upon interaction) does not have any discernible text or label associated with it. Screen reader users may misinterpret it as the button to “sign in” as it is the next step after entering their password.</p> <pre data-bbox="989 513 1705 651">&lt;button type="button" class="cp-Btn cp-FormField-insetBtn cp-SignInForm-togglePassword" tabindex="6"&gt;&lt;svg&gt;&lt;use xlink:href="#iconView"&gt;&lt;/use&gt;&lt;/svg&gt;&lt;/button&gt;</pre> <p><b>Solution</b> Ensure that the button has discernible text or a label (for example, “click to show password”) associated with it so that screen readers describe it when interacted with.</p> <pre data-bbox="989 841 1749 979">&lt;button aria-label="click to show password" type="button" class="cp-Btn cp-FormField-insetBtn cp-SignInForm-togglePassword" tabindex="6"&gt;&lt;svg&gt;&lt;use xlink:href="#iconView"&gt;&lt;/use&gt;&lt;/svg&gt;&lt;/button&gt;</pre>	Blind, Low- Vision, WCAG 2.1
	General Content   Sign-in	Confusing language	<p><b>Background</b> Content available to users must be presented in simple, understandable language. Aim to avoid situations where confusion may arise.</p> <p><b>Current</b> On the sign-in page, a question asks users whether they want to make their profile private. The question is set up in a way that is confusing to users with cognitive disabilities as the only response option it provides is “yes.”</p> <p><b>Solution</b> Make the question a checkbox for “make my profile private” or provide “yes” and “no” as possible response options.</p>	Brain-based, 65+, Low- Vision, WCAG 2.1



Image	Section	Issue Name	Issue Details	Issue Tags
	Widgets   Weekly Calendar	Improper ARIA label	<p><b>Background</b> Labels on image buttons should describe the button's function, instead of describing the button itself.</p> <p><b>Current</b> The previous and forward buttons are not correctly labeled; both are labelled "previous."</p> <p><b>Solution</b> Change the label of the right arrow from "previous" to "next."</p> <p><b>Engineering Notes</b></p> <pre data-bbox="989 576 1705 638">&lt;img src="/common/images/Calendar/arrowright.png" width="20" height="20" alt="next"&gt;</pre>	Blind, Low-vision, WCAG 2.1
	General Content	Improper use of heading levels	<p><b>Background</b> Headers are extremely important for a variety of users, among them those navigating with screen readers. Headers should be organized intuitively and provide visual clarity.</p> <p><b>Current</b> Icons are contained within an &lt;h3&gt; tag. This is confusing and disorientating for blind users navigating the page with heading commands because these should not be headers.</p> <pre data-bbox="989 1003 1705 1125">&lt;h3&gt;&lt;img alt="Site Tools" class="imageHover" data-hover="/ImageRepository/Document?documentID=38" data-image="/ImageRepository/Document?documentID=37" src="/ImageRepository/Document?documentID=37"&gt;&lt;/h3&gt;</pre> <p><b>Solutions</b> Heading level tags should be reserved for main content, not icons.</p>	Blind, Low-vision, WCAG 2.1





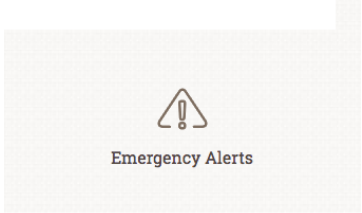
Image	Section	Issue Name	Issue Details	Issue Tags
	General Content	Video link on home page	<p><b>Background</b> Captions and audio descriptions must be provided for all video content with pre-recorded audio. All links must have alt text.</p> <p><b>Current</b> After a user hits “play” on the video, it opens in a new window without prior warning. On the popup window, several links are displayed around the video that do not have alt text and the video itself does not have closed captions or audio descriptions.</p> <p><b>Solutions</b> Ensure that all links have alt text and provide captions for the video. When focus is on the video link on the home page, alert users that they will be directed out of the Montpelier website to a new popup window where the video will play.</p> <p><b>Design note</b> Consider using common icons for external links: </p>	Blind, Low-Vision, 65+, Deaf and Hard of hearing, Brain-based WCAG 2.1
 <p><b>Online Payments</b></p> <p><b>Payment Options</b></p> <ul style="list-style-type: none"> <li>By phone at 1-800-2PayTax, enter Juris 5527</li> <li><a href="#">Online</a></li> </ul>	General Content	External Links	<p><b>Background</b> Unexpected new tabs or windows are very disorientating for assistive tech users and often confusing for non-native tech users. It should be clear when users are directed out of the site.</p> <p><b>Current</b> Many links throughout the site open in new tabs or windows or otherwise direct users unexpectedly off of montpelier-vt.org. For example, the menu item “Online” opens <a href="http://www.officialpayments.com">www.officialpayments.com</a> and clicking on the “Emergency Alerts” link takes users to <a href="https://vem.vermont.gov/vtalert">https://vem.vermont.gov/vtalert</a>. This is very unexpected and confusing behavior because users expect menu items to be internal routes.</p> <p><b>Solution</b> Links should always clearly signify when users will be directed out of the site.</p> <p><b>Design note</b> Consider using common icons for external links:</p>	Blind, Low-Vision, 65+, Brain-based WCAG 2.1


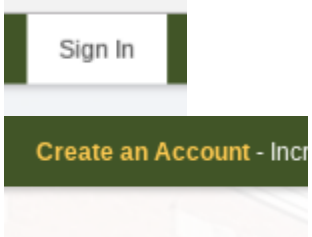
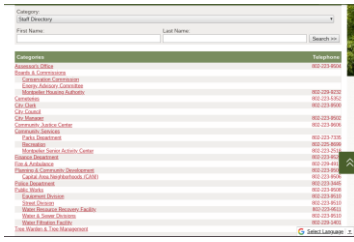
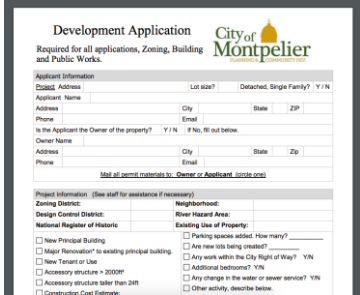
Image	Section	Issue Name	Issue Details	Issue Tags
			 <p><b>Engineering note</b>            Insure a external links or icons are properly labeled to give context to screen reader users:  <code>&lt;i class="external-link" aria-label="External Link" /&gt;</code></p>	
	General Content	Improper HTML semantics	<p><b>Background</b>            HTML markup may not change the graphical user interface, however screen reader users rely on this semantic information to make sense of the web and interact with elements.</p> <p><b>Current</b>            Some improper HTML markup creates confusion. For example, “Sign In” and “Create an Account” are given the role of button. Buttons should be reserved for actions such as submitting a form. Here, “Sign In” and “Create an Account” function as links.</p> <pre>&lt;a href="/MyAccount" role="button" class="button" id="loggedOutToolBarSignInButton"&gt;&lt;span&gt;Sign In&lt;/span&gt;&lt;/a&gt;</pre> <p><b>Solution</b>            Always use the most semantic and appropriate HTML roles and tags. Since “Sign In” has an &lt;a&gt; tag it already functions as a link so removing the “role=button” attributed to it should ensure it functions as a link.</p> <pre>&lt;a href="/MyAccount" class="button" id="loggedOutToolBarSignInButton"&gt;&lt;span&gt;Sign In&lt;/span&gt;&lt;/a&gt;</pre>	Blind, Low-Vision WCAG 2.1
	General Content   Accessibility	Missing contact information	<p><b>Background</b>            One of the most useful tools for users who identify with a disability is a direct contact when facing an accessibility issue on the web.</p> <p><b>Current</b>            The Accessibility page does have a “Contact” link, however this</p>	Blind, Low-Vision, 65+, Brain-based WCAG 2.1

Image	Section	Issue Name	Issue Details	Issue Tags
			<p>link brings the user to an expansive “directory” page with no accessibility contact. There is not an intuitive way to get support when experiencing an access issue on Montpelier’s webpage.</p> <p><b>Solution</b> Best practice is to include an email and phone number for accessibility concerns listed on the accessibility page.</p>	
	<p>General Content</p>	<p>Inaccessible documents and forms</p>	<p><b>Background</b> Downloadable forms, documents and resources must be made accessible.</p> <p><b>Current</b> Some applications and forms are not accessible to screen-reader users and users with low vision, and no accessible alternatives are provided for these documents.</p> <p><b>Solution</b> Some easily implementable alternatives to inaccessible PDFs include plain text versions of the documents or downloadable Microsoft Word files that are appropriately labeled. Making downloadable resources accessible includes ensuring that the content complies with WCAG 2.1 guidelines for color contrast, text size, and images.</p> <p><b>Design Notes</b> Refer to resources for PDF accessibility techniques. <a href="https://www.w3.org/TR/WCAG-TECHS/pdf.html">https://www.w3.org/TR/WCAG-TECHS/pdf.html</a> And please review <a href="#">Adobe's Accessibility Training</a></p>	<p>Blind, Low-Vision, 65+, Brain-based WCAG 2.1</p>