

Software-Based Accessibility Audit



Website URL

<https://www.humberside.police.uk/>

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Methodology

A software-based accessibility audit involves aggregating the results of various web accessibility testing tools.

We looked at a sample set of 100 pages on the Humberside Police website. We then ran each of these URLs through our accessibility software to find any issues that are currently affecting those URLs. The tools evaluate the web pages against the WCAG guidelines.

Upon finding an on-page accessibility issue with one of the URLs, we then cross referenced the URL with the additional accessibility tools to ensure we had an accurate outlook on any problem found.

After finding a URL with an accessibility issue, we made a note of the URL, the issue itself and where in the code that issue is located. In the table below, you will find all of this information with an added explanation on how the issue affects a user and also a link to the corresponding WCAG 2.1 guideline for more information.

Whilst we have found a number of accessibility issues using the software based approach, it's worth remembering that you can't solely rely on software accessibility testing as a complete, turnkey solution. Unfortunately, computers aren't able to understand context the way we, as humans, are.

Tools Used During This Review

aXe

The axe accessibility checker for Chrome is an accessibility testing tool that returns zero false positives. It only tests for accessibility issues that can be accurately detected via automation, and it only tests for components that actually exist on the page or application you're testing.

Sort Site

SortSite is a website testing tool that tests for accessibility, broken links, HTML and CSS standards, search engine optimization, and cross-browser compatibility. The accessibility checker will run against all three WCAG 2 levels (A, AA, AAA), as well as guidelines specific to Section 508

Google Lighthouse

Lighthouse is an open-source, automated tool for improving the performance, quality, accessibility, and correctness of your web apps.

WAVE

WAVE is a web accessibility evaluation tool developed by WebAIM.org. It provides visual feedback about the accessibility of your web content by injecting icons and indicators into your page.

WCAG 2.0 and 2.1 References

<http://www.w3.org/TR/WCAG21/>
<https://www.w3.org/TR/WCAG20/>

General Comments

In its current form, the Humberside Police website does not adhere to WCAG 2.0/2.1 accessibility guidelines. A number of accessibility issues have been found that will make it difficult for some users to access the site.

The main issues that are affecting the Humberside Police website are:

- Elements do not have sufficient colour contrast.
- HTML elements do not have a valid lang attribute
- Form elements do not have labels
- Some links do not have discernible text

Audit Report

Success Criterion	Level	Evaluation	Comments
1.1.1: Non-text Content	A	Fail	<p>An image with a null alt attribute should not have title, aria-label or aria-labelledby by attributes.</p> <p>If the image should be voiced use a descriptive alt attribute. If the image is purely decorative remove any title and ARIA label attributes. Impact on users:</p> <ul style="list-style-type: none"> • JAWS : Ignores all images with alt="" • NVDA : Reads some images with alt="" and a title or ARIA label. • VoiceOver : Reads images with alt="" and a title or ARIA label. <p>https://www.humberside.police.uk/become-community-safety-volunteer - line 750 765</p> <p>Guideline: WCAG 2.1 A F39 Section 508 (2017) A F39</p>
1.2.1: Audio-only and Video-only (Prerecorded)	A	N/A	Not Detectable via Software Audit
1.2.2: Captions (Prerecorded)	A	N/A	Not Detectable via Software Audit
1.2.3: Audio Description or Full Text Alternative	A	N/A	Not Detectable via Software Audit
1.2.4: Captions (Live)	AA	N/A	Not Detectable via Software Audit
1.2.5: Audio Description	AA	N/A	Not Detectable via Software Audit
1.2.6 Sign Language	AAA	N/A	Not Detectable via Software Audit
1.2.7 Extended Audio Description	AAA	N/A	Not Detectable via Software Audit
1.2.8 Media Alternative	AAA	N/A	Not Detectable via Software Audit
1.2.9 Audio-only (Live)	AAA	N/A	Not Detectable via Software Audit
1.3.1: Info and Relationships	A	Fail	<p>Identify row and column headers in data tables using th elements, and mark layout tables with role=presentation.</p> <p>Data tables allow screen reader users to understand column and row relationships. Layout tables read cells as a series of unrelated</p>

			<p>paragraphs with no tabular structure. Without <code>th</code> or <code>role</code>, screen readers apply heuristics to decide whether a table is a layout table or data table.</p> <p>These heuristics vary greatly between screen readers, and are affected by browser being used, window size, and font size (so the outcome is very unpredictable without <code>th</code> or <code>role</code>). If a data table has headers marked up using <code>td</code>, then change these to <code>th</code>. If a data table has no headers, add <code>th</code> elements describing each row and/or column. If the table is only used for layout add <code>role=presentation</code> to the table element. Impact on users:</p> <ul style="list-style-type: none"> • JAWS Reading: Treats tables without <code>th</code> and <code>role</code> as layout tables if the table contains cells above or below certain pixel sizes. This measurement is affected by browser window size, browser font size, and the browser used. • NVDA Reading: Applies a layout table heuristic to tables without <code>th</code> and <code>role</code> which varies depending on the browser used and on the window size in some circumstances. • VoiceOver Reading: Uses a sophisticated heuristic on tables without <code>th</code> and <code>role</code> which is similar (but not identical) to the heuristic used by NVDA with Firefox. <p>https://www.humberside.police.uk/firearms-licensing line 727</p> <p>https://www.humberside.police.uk/operation-wilberforce line 782 823</p> <p>https://www.humberside.police.uk/our-plan-page line 733 750 764</p> <p>https://www.humberside.police.uk/terrorism line 828</p> <p>Guideline: WCAG 2.1 A F91 Section 508 (2017) A F91</p>
1.3.2: Meaningful Sequence	A	N/A	Not Detectable via Software Audit
1.3.3: Sensory Characteristics	A	N/A	Not Detectable via Software Audit
1.3.4 Orientation	AA	N/A	Not Detectable via Software Audit
1.3.5: Identify Input Purpose	AA	N/A	Not Detectable via Software Audit
1.3.6: Identify Purpose	AAA	N/A	Not Detectable via Software Audit
1.4.1: Use of Color	A	N/A	Not Detectable via Software Audit
1.4.2: Audio Control	A	N/A	Not Detectable via Software Audit

1.4.3: Contrast (Minimum)	AA	Fail	<p>Ensure all text elements have sufficient color contrast between the text in the foreground and background color behind it.</p> <p>Element has insufficient color contrast of 2.33 (foreground color: #999999, background color: #e6e9ea, font size: 9.8pt (13px), font weight: normal). Expected contrast ratio of 4.5:1</p> <p>Some people with low vision experience low contrast, meaning that there aren't very many bright or dark areas</p> <p>Guidelines: WCAG: 1.4.3</p>
1.4.4: Resize text	AA	N/A	Not Detectable via Software Audit
1.4.5: Images of Text	AA	N/A	Not Detectable via Software Audit
1.4.6: Contrast (Enhanced)	AAA	N/A	Not Detectable via Software Audit
1.4.7: Low or no Background Audio	AAA	N/A	Not Detectable via Software Audit
1.4.8: Visual Presentation	AAA	N/A	Not Detectable via Software Audit
1.4.9: Images of Text (No Exception)	AAA	N/A	Not Detectable via Software Audit
1.4.10: Reflow	AA	N/A	Not Detectable via Software Audit
1.4.11: Non-Text Contrast	AA	N/A	Not Detectable via Software Audit
1.4.12: Text Spacing	AA	N/A	Not Detectable via Software Audit
1.4.13: Content on hover or focus	AA	N/A	Not Detectable via Software Audit
2.1.1: Keyboard	A	N/A	Not Detectable via Software Audit
2.1.2: No Keyboard Trap	A	N/A	Not Detectable via Software Audit
2.1.3 Keyboard (No Exception)	AAA	N/A	Not Detectable via Software Audit
2.1.4: Character Key Shortcuts	A	N/A	Not Detectable via Software Audit

2.2.1: Timing Adjustable	A	N/A	Not Detectable via Software Audit
2.2.2: Pause, Stop, Hide	A	N/A	Not Detectable via Software Audit
2.2.3: No Timing	AAA	N/A	Not Detectable via Software Audit
2.2.4: Interruptions	AAA	N/A	Not Detectable via Software Audit
2.2.5: Re-authenticating	AAA	N/A	Not Detectable via Software Audit
2.2.6: Timeouts	AAA	N/A	Not Detectable via Software Audit
2.3.1: Three Flashes or Below Threshold	A	N/A	Not Detectable via Software Audit
2.3.2: Three Flashes	AAA	N/A	Not Detectable via Software Audit
2.3.3: Animation from Interaction	AAA	N/A	Not Detectable via Software Audit
2.4.1: Bypass Blocks	A	Fail	<p>iframe and frame elements must have a title attribute.</p> <p>Add a title attribute or ARIA label to each iframe and frame element (e.g. title='Main Content'). Without a title some screen readers read out the frame filename, which is usually meaningless. Impact on users:</p> <ul style="list-style-type: none"> • VoiceOver macOS 10.14 Safari 13.0 macOS 10.14.6 Reading: Meaningless frame title read out. • VoiceOver macOS 10.13 Safari 12.1 macOS 10.13.6 Reading: Meaningless frame title read out. • VoiceOver macOS 10.12 Safari 10.1.2 macOS 10.12.6 Reading: Meaningless frame title read out. • VoiceOver macOS 10.11 Safari 9.1.2 macOS 10.11.6 Reading: Meaningless frame title like 'frame zero' read out. <p>https://www.humberside.police.uk/Covid-19 line 962 https://www.humberside.police.uk/online-vigilante-groups line 751 https://www.humberside.police.uk/PCRecruitment line 779 https://www.humberside.police.uk/student-survival line 825</p> <p>Guideline: WCAG 2.1 A 2.4.1 Section 508 (2017) A 2.4.1</p>
2.4.2: Page Titled	A	N/A	Not Detectable via Software Audit

2.4.3: Focus Order	A	N/A	Not Detectable via Software Audit
2.4.4: Link Purpose (In Context)	A	Fail	<p>Link uses general text like 'Click Here' with no surrounding text explaining link purpose.</p> <p>Screen reader users use text around links to help understand what the link does. If the link text is very general, and there's no surrounding text, there's no way to work out what the link does. Either use a descriptive link label (which helps all users) or add an aria-label or aria-describedby to the link (which helps screen reader users).</p> <p>Link text: Read more Read more Read more Read more https://www.humberside.police.uk/DA line 1083 1130 1172 1219</p> <p>Link text: Read more https://www.humberside.police.uk/female-genital-mutilation-fgm line 875</p> <p>Link text: Read more https://www.humberside.police.uk/forced-marriage line 863</p> <p>Guideline: WCAG 2.1 A F63 Section 508 (2017) A F63</p>
2.4.5: Multiple Ways	AA	N/A	Not Detectable via Software Audit
2.4.6: Headings and Labels	AA	Fail	<p>Form field labels should be unique on a page, or be close to text providing context.</p> <p>Form fields with the same label need extra context (such as a heading) to explain the differences between the fields.</p> <p>Label used: Submit Submit https://www.humberside.police.uk/ line 70 414</p> <p>Label used: Submit Submit https://www.humberside.police.uk/home line 136 706</p> <p>Guideline: WCAG 2.1 AA 2.4.6 Section 508 (2017) AA 2.4.6</p> <p>Headings should not be empty.</p> <p>Add text to the heading, or alt text if the heading contains an image. Screen readers read out page headings, allowing users to quickly skip to a section, but some older screen readers do not ignore empty headings.</p> <p>https://www.humberside.police.uk/Covid-19 line 971 https://www.humberside.police.uk/DA line 896 935 https://www.humberside.police.uk/protect-your-vehicle line 749 776 808</p>

			<p>https://www.humberside.police.uk/student-survival line 774 855 921 995</p> <p>Guideline: WCAG 2.1 AA G130 Section 508 (2017) AA G130</p>
2.4.7: Focus Visible	AA	N/A	Not Detectable via Software Audit
2.4.8: Location	AAA	N/A	Not Detectable via Software Audit
2.4.9: Link Purpose (Link Only)	AAA	Fail	<p>Each a element must contain text or an img with an alt attribute.</p> <p>A link name allows screen readers to voice what the links does. If there is no link text or the `alt` text is blank, screen readers have nothing to read, so read out the URL instead. To add a name do one of the following:</p> <ul style="list-style-type: none"> • Add text between the a element start and end tags • Add an aria-label attribute • Add an aria-labelledby by attribute • Add a img alt attribute if the link contains an img element <p>https://www.humberside.police.uk/ line 372 581 620 659 1060 ...</p> <p>https://www.humberside.police.uk/about-us line 618 934</p> <p>https://www.humberside.police.uk/home line 854 858 922 926 988 ...</p> <p>https://www.humberside.police.uk/our-chief-officers line 618 892</p> <p>Guideline: WCAG 2.1 A F89 Section 508 (2017) A F89</p> <p>Several links on a page share the same link text, but go to different destinations.</p> <p>Make the link text unique for each target, or add additional text using aria-label.</p> <p>Link text: Read More Read More Read More Read More Read More https://www.humberside.police.uk/ line 561 600 909 941 970 ...</p> <p>Link text: Read More Read More Read More Read More Read More https://www.humberside.police.uk/home line 889 957 1023 1547 1597 ...</p> <p>Link text: Read More Read More Read More https://www.humberside.police.uk/news line 769 837 903</p> <p>Link text: Find out more Find out more https://www.humberside.police.uk/protect-vulnerable-people line 839</p> <p>Guideline: WCAG 2.1 AAA 2.4.9</p>

2.4.10: Section Headings	AAA	N/A	Not Detectable via Software Audit
2.5.1: Pointer Gestures	A	N/A	Not Detectable via Software Audit
2.5.2: Pointer Cancellation	A	N/A	Not Detectable via Software Audit
2.5.3: Label in Name	A	N/A	Not Detectable via Software Audit
2.5.4 Motion Actuation	A	N/A	Not Detectable via Software Audit
2.5.5 Target Size	AAA	N/A	Not Detectable via Software Audit
2.5.6 Concurrent Input Mechanisms	AAA	N/A	Not Detectable via Software Audit
3.1.1: Language of Page	A	Fail	<p>Use the lang attribute to identify the language of the page.</p> <p>In HTML add a lang attribute containing a language code to the html tag, and in PDF set the language using Document Properties in Acrobat. This allows screen readers to pronounce words correctly. This page sends a Content-Language HTTP header, which is not a substitute for the HTML lang attribute, and is ignored by screen readers. Current advice from the W3 says "Use language attributes rather than HTTP to declare the default language for text processing"</p> <p>https://www.humberside.police.uk/ line 2 https://www.humberside.police.uk/about-us line 3 https://www.humberside.police.uk/home line 3 https://www.humberside.police.uk/our-chief-officers line 3</p> <p>Guideline: WCAG 2.1 A 3.1.1 Section 508 (2017) A 3.1.1</p>
3.1.2: Language of Parts	AA	N/A	Not Detectable via Software Audit
3.1.3: Unusual Words	AAA	N/A	Not Detectable via Software Audit
3.1.4: Abbreviations	AAA	N/A	Not Detectable via Software Audit
3.1.5: Reading Level	AAA	N/A	Not Detectable via Software Audit
3.1.6: Pronunciation	AAA	N/A	Not Detectable via Software Audit
3.2.1: On Focus	A	N/A	Not Detectable via Software Audit

3.2.2: On Input	A	N/A	Not Detectable via Software Audit
3.2.3: Consistent Navigation	AA	N/A	Not Detectable via Software Audit
3.2.4: Consistent Identification	AA	N/A	Not Detectable via Software Audit
3.2.5: Change on Request	AAA	Fail	<p>Avoid specifying a new window as the target of a link with target=_blank.</p> <p>Displaying new windows without warning can be very confusing to non-sighted and mobile users. Some screen readers and mobile devices give very little indication a new tab or window has opened. If you cannot avoid displaying a new window, insert a warning into the link text like the following: "opens in a new window".</p> <p>https://www.humberside.police.uk/ line 581 620 659 698 737 ... https://www.humberside.police.uk/home line 854 858 922 926 988 ... https://www.humberside.police.uk/making-complaint line 752 https://www.humberside.police.uk/Strategies_Decisions line 747</p> <p>Guideline: WCAG 2.1 AAA F22</p>
3.3.1: Error Identification	A	N/A	Not Detectable via Software Audit
3.3.2: Labels or Instructions	A	N/A	Not Detectable via Software Audit
3.3.3: Error Suggestion	AA	N/A	Not Detectable via Software Audit
3.3.4: Error Prevention (Legal, Financial, Data)	AA	N/A	Not Detectable via Software Audit
3.3.5: Help	AAA	N/A	Not Detectable via Software Audit
3.3.6: Error Prevention (All)	AAA	N/A	Not Detectable via Software Audit
4.1.1: Parsing	A	Fail	<p>Duplicate id - the same ID is used on more than one element.</p> <p>id=logo id=logo https://www.humberside.police.uk/ line 599 1736</p> <p>id=logo id=logo https://www.humberside.police.uk/about-us line 596 886</p> <p>id=logo id=logo https://www.humberside.police.uk/home line 599 1736</p> <p>id=logo id=logo</p>

			https://www.humberside.police.uk/our-chief-officers line 596 844 Guideline: HTML5 WCAG 2.1 A 4.1.1 Section 508 (2017) A 4.1.1
4.1.2: Name, Role, Value	A	Fail	<p>HTML form control has no label.</p> <p>A label (or name) linked to the control allows screen readers to voice the label correctly when reading the control. To add a label do one of the following:</p> <ul style="list-style-type: none"> • Use a label element with the for attribute set to the ID of the form control • Wrap a label element around the form control • Add a title attribute • Add an aria-label attribute • Add an aria-labelledby attribute <p> https://www.humberside.police.uk/ line 69 413 https://www.humberside.police.uk/about-us line 129 https://www.humberside.police.uk/home line 132 702 https://www.humberside.police.uk/our-chief-officers line 129 </p> <p>Guideline: WCAG 2.1 A F68 Section 508 (2017) A F68</p>
4.1.3: Status Message	AA	N/A	Not Detectable via Software Audit

Appendix

The sample of page URLs that were tested can be found below:

<https://www.humberside.police.uk/>
<https://www.humberside.police.uk/about-us>
<https://www.humberside.police.uk/accessibility>
<https://www.humberside.police.uk/air-weapons-licensing-scotland>
<https://www.humberside.police.uk/antisocial-behaviour>
<https://www.humberside.police.uk/apprenticeships>
<https://www.humberside.police.uk/become-community-safety-volunteer>
<https://www.humberside.police.uk/child-sexual-exploitation-cse>
<https://www.humberside.police.uk/clares-law>
<https://www.humberside.police.uk/community-safety-accreditation-scheme>
<https://www.humberside.police.uk/Covid-19>
<https://www.humberside.police.uk/DA>
<https://www.humberside.police.uk/debit-and-credit-card-fraud>
<https://www.humberside.police.uk/distraction-burglary-and-rogue-traders>
<https://www.humberside.police.uk/dogs>
<https://www.humberside.police.uk/drugs>
<https://www.humberside.police.uk/familycourt>
<https://www.humberside.police.uk/feedback>
<https://www.humberside.police.uk/female-genital-mutilation-fgm>
<https://www.humberside.police.uk/find-my-team>
<https://www.humberside.police.uk/firearms-licensing>
<https://www.humberside.police.uk/forced-marriage>
<https://www.humberside.police.uk/force-management-statement-summary-2019>
<https://www.humberside.police.uk/fraud>

<https://www.humberside.police.uk/herbert-protocol>
<https://www.humberside.police.uk/home>
<https://www.humberside.police.uk/how-do-i-hide-my-visit-site>
<https://www.humberside.police.uk/humber-talking>
<https://www.humberside.police.uk/information-advice>
<https://www.humberside.police.uk/information-victims>
<https://www.humberside.police.uk/issues/graffiti>
<https://www.humberside.police.uk/issues/litter-flytipping>
<https://www.humberside.police.uk/issues/road-safety>
<https://www.humberside.police.uk/issues/unauthorised-encampments>
<https://www.humberside.police.uk/join-us>
<https://www.humberside.police.uk/lifestyle-project>
<https://www.humberside.police.uk/making-complaint>
<https://www.humberside.police.uk/media-information>
<https://www.humberside.police.uk/missing>
<https://www.humberside.police.uk/my-community-alert>
<https://www.humberside.police.uk/neighbour-disputes>
<https://www.humberside.police.uk/neighbourhood-watch>
<https://www.humberside.police.uk/news>
<https://www.humberside.police.uk/news/drugs-seized-and-pair-arrested>
<https://www.humberside.police.uk/news/firearm-and-class-drugs-seized-warrants>
<https://www.humberside.police.uk/news/man-charged-stealing-charity-box>
<https://www.humberside.police.uk/newsroom>
<https://www.humberside.police.uk/night-challenge>
<https://www.humberside.police.uk/noise-nuisance>
<https://www.humberside.police.uk/online-safety-and-security>
<https://www.humberside.police.uk/online-vigilante-groups>
<https://www.humberside.police.uk/operation-galaxy>
<https://www.humberside.police.uk/operation-wilberforce>
<https://www.humberside.police.uk/our-chief-officers>
<https://www.humberside.police.uk/our-plan-page>
<https://www.humberside.police.uk/our-police-stations>
<https://www.humberside.police.uk/our-supporters>
<https://www.humberside.police.uk/overseas>
<https://www.humberside.police.uk/PCRecruitment>
<https://www.humberside.police.uk/philomena-protocol>
<https://www.humberside.police.uk/police-and-agency-requests>
<https://www.humberside.police.uk/police-cadets>
<https://www.humberside.police.uk/police-community-support-officers-pcso>
<https://www.humberside.police.uk/police-staff>
<https://www.humberside.police.uk/police-victim-right-review-key-facts>
<https://www.humberside.police.uk/protect-vulnerable-people>
<https://www.humberside.police.uk/protect-your-business>
<https://www.humberside.police.uk/protect-your-cycle>
<https://www.humberside.police.uk/protect-your-home>
<https://www.humberside.police.uk/protect-your-motorbike>
<https://www.humberside.police.uk/protect-your-vehicle>
<https://www.humberside.police.uk/publication-scheme>
<https://www.humberside.police.uk/registering-lifestyle-team>
<https://www.humberside.police.uk/register-youth-group>
<https://www.humberside.police.uk/report-it>
<https://www.humberside.police.uk/safeplace>
<https://www.humberside.police.uk/scams>
<https://www.humberside.police.uk/seized-or-recovered-vehicles>
<https://www.humberside.police.uk/sites/all/themes/hp2015/img/hp-logo-small.png>
<https://www.humberside.police.uk/standards>
https://www.humberside.police.uk/Strategies_Decisions
<https://www.humberside.police.uk/student-survival>
<https://www.humberside.police.uk/taser>
<https://www.humberside.police.uk/terrorism>

<https://www.humberside.police.uk/useful-info-a-f>
<https://www.humberside.police.uk/useful-info-g-p>
<https://www.humberside.police.uk/useful-info-r-w>
<https://www.humberside.police.uk/useofforce>
<https://www.humberside.police.uk/victims-code>
<https://www.humberside.police.uk/wanted>
<https://www.humberside.police.uk/weather>
<https://www.humberside.police.uk/wildlife-and-rural-crime>
<https://www.humberside.police.uk/witness-appeals>
<https://www.humberside.police.uk/your-rights-and-responsibilities>
<https://www.humberside.police.uk/youth-engagement>