**Low Vision Supplemental Guidance**

This page lists the supplemental guidance that is being considered by the LVTF, along with details for each topic.

**Visual appearance of body paragraphs of text (**Body text defined as more than two lines of related text in a block or column.)

| **Short Name** | **Brief Description with Link to Discussion &/or Draft** | **Category** | **2.2 Relationship** | **User Agents? Authors?** | **WCAG 2.3 ?** | **WCAG 3 ?** | **Lead Editors** | **Status** | **Priority** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Size of body text | For body paragraphs of text, avoid large text and avoid small text. Font-size is not standardised across different fonts, so this will need to be specified in terms of x-height, and translated into what this means for different fonts. For a well-behaved font like Helvetica, it will probably end up something like font-size should be at least 12px and at most 18 px (TBC) |  |  |  |  |  |  |  |  |
| Lightness Contrast of body text | For body paragraphs of text, avoid low contrast text and avoid high contrast text. Large text can be readable at low contrasts, but large text is not practical for body paragraphs of text, hence low contrast text should be avoided. High contrast text can cause issues with migraines (TBC). Exact values TBC, depending on whether we do it as a ratio or APCA contrast difference. In APCA contrast probably something like at least 60 and at most 80. (TBC). If contrast ratios are used for this then dark backgrounds may need different values to light backgrounds as the ratio model is not perceptually uniform.  Using coloured text and/or coloured backgrounds needs extreme caution here. Colourblindness is one issue, as is chromatic aberration (TBC) |  |  |  |  |  |  |  |  |
| Font-weight of body text | For body paragraphs of text, avoid thin fonts, and avoid thick fonts. Font-weight is not standardised across fonts so this may need to be specified in terms of the ratio of the stroke width compared to the x height, or by describing the limits in terms of some reference fonts that are well behaved. For a well-behaved font like Helvetica, font-weight for continuous paragraphs of text should be 400, with increased weight used only for emphasis. |  |  |  |  |  |  |  |  |
| Padding and line spacing for body text | Ensure sufficient padding between text and the edge of the viewport / any other elements  ensure sufficient padding between each paragraph, this should be visually distinct from the line spacing within paragraphs.  Line-height is not standardised across different fonts. A font like verdana needs a much bigger line height than most other fonts. This may need to be specified as a ratio of the x-height rather than the body height (TBC - sdw uses line-height 1.4 em for Verdana)  Background colour behind the text must continue at least 1em round the text in all directions. (addresses local adaptation issues) |  |  |  |  |  |  |  |  |

**Visual appearance of text for spot reading (individual words or single lines)**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Size, lightness contrast and font-weight of text for spot reading | For text for spot reading, it's not feasible to set thresholds for size, contrast and font weight that are independent of each other. The APCA tool attempts to address this, further work is needed to verify some simplified minimum thresholds for size, contrast and font weight. Nonuniformity of font-weight and font-size for different fonts also needs to be addressed.  Additionally, given that text for spot reading can be lower contrast than text for body paragraphs, the dark pairs problem becomes considerably more apparent.  This might be resolvable by specifying APCA contrast difference instead of contrast ratio. Or it might be resolvable by specifying a minimum ratio where the lightest colour is very bright, and a different minimum ratio where the lightest colour is not very bright (TBC).  Brightness contrast must also be checked to make sure that is maintained with the different kinds of colour vision loss (red deficient, green deficient, blue deficient). Chromatic aberration also needs considering (TBC) |  |  |  |  |  |  |  |  |
| Padding and line spacing for body text | Single lines of text may still become multiple lines when the text is zoomed, so line-height is still an issue for single lines of text (and often forgotten!). However the line-height probably doesn't have to be as big as the body paragraphs of text (TBC)  Background colour behind the text must continue at least 1em round the text in all directions. (addresses local adaptation issues) |  |  |  |  |  |  |  |  |

**Other technicalities related to low vision**

| **Short Name** | **Brief Description with Link to Discussion &/or Draft** | **Category** | **2.2 Relationship** | **User Agents? Authors?** | **WCAG 2.3 ?** | **WCAG 3 ?** | **Lead Editors** | **Status** | **Priority** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Visual access to alternative text | Users can access alternative text for images, without a screen reader, formatted as they need (e.g,. size of text). | Alternative Text | Related to but not required for SC 1.1.1 | UAAG | No | Yes | none | unassigned |  |
| Alternative themes | Support for high contrast/dark mode and alternative themes | Personalization | Related to SC 1.4.8 | TBD | Yes | Yes | none | unassigned |  |
| Proximity | Related info is close to each other, e.g., labels and controls. [**Discussion 108**](https://github.com/w3c/low-vision-a11y-tf/discussions/108) | Layout Design | WCAG Advisory Technique @@link, [UAAG 1.10.1](https://www.w3.org/TR/UAAG20/#sc_1101) | Authors | Yes | Yes | none | unassigned |  |
| Loss of focus on form submit | When a page is submitted the page may reload the focus is returned to the body of the page changing the context of the magnified area. | Focus | Related to SC 2.4.3 but not directly covered. | Authors | Yes | Yes | none | unassigned |  |
| Minimum viewport and text input size | Use of sticky headers and other layout containers can cause a small area for reading, especially with zoomed in content. Input fields and other content areas that when zoomed are very short. | Viewport | Related to SC 1.4.10 but not directly covered. | Yes | Yes | Yes | none | unassigned |  |
| Feedback within viewport | When feedback such as an item is placed in the cart this feedback needs to be visible within the viewport (magnified or unmagnified) | Viewport | Related to SC 4.1.3 | TBD | Yes | Yes | none | unassigned |  |
| Limit large areas of white space - | Extra white spacing can mean only a few items are visible at a time on a website requiring vertical scrolling reducing the information available at a given time to users who are zoomed in. This removes context from controls and information. | Viewport | Related to targe spacing. | Authors | Yes | Yes | none | unassigned |  |
| Content over other content. | Situations where content such as a passive cookie notice doesn't obstruct access to a site when not zoomed in but obstructs site when zoomed in - but the notice can be accepted. This isn't so much as fail under current requirements as it can be accepted and dismissed but requiring low vision users to accept something that a non-disabled user can choose not to seems un equal. This issue also occurs with videos that cover text when zoomed in or when controls cover text when zoomed in but the text can be scrolled. | Viewport | TBD | Authors | Yes | Yes | none | unassigned |  |
| Maximize use of viewport | Sometimes panels or other UI elements take up valuable real estate but can't be collapsed/closed forcing content into small areas. (e.g. Google slides with fixed width slides on left side). | Viewport | None | TBD | Yes | Yes | none | unassigned |  |
| UI components have clear affordance | Users can recognize UI components by how they look. (e.g., a form field has a plain border). Overlaps with COGA, e.g., [Objective 1](https://wai-wcag-supplemental.netlify.app/wcag-supplemental/supplemental-guidance/) and [Ensure that interactive elements are easy to identify](https://www.w3.org/WAI/tips/designing/#ensure-that-interactive-elements-are-easy-to-identify) | Affordance, Contrast | Related to 3.2.7 Visible Controls & [1.4.11 Non-text Contrast](https://www.w3.org/WAI/WCAG21/Understanding/non-text-contrast.html) | Authors | Yes | Yes | none | unassigned |  |
| Disabled Components have sufficient contrast | Provide icons for disabled UI interface elements and ensure disabled/inactive elements have sufficient contrast. | Contrast | [AG GitHub Issue 661](https://github.com/w3c/wcag/issues/661) and [suggested 2.2 SC (Sheet)](https://docs.google.com/spreadsheets/d/11IKqjRFvkRd2dAfUiyc5whhB3yIYXvSiirWct7KQIB0/edit#gid=0) | TBD | Yes | Yes | Andy"Myndex" |  |  |
| Font replacement | Ability to change fonts without font icons disappearing | Font | role img techniques | TBD | Yes | Yes | none | unassigned |  |
| Text resize greater than 200% of default | SC 1.4.10 only requires that text not scroll in two direction at 320CSS pixels (horizontally). This means text can becomes smaller when you zoom in as long as at some point it can be 200% of the default. Some users need text to become larger than 200%. | Resize Text | Related to SC 1.4.10 but not directly covered. | TBD | TBD | Yes | none | unassigned |  |
| Scaling for resize of text for large type elements | Large headings may already be 200% the body size of text. Responsive design reduces amount of content on screen taking away context and surrounding context. Requiring all text to scale by 200% may not be practical or help. Text needs to scale in proportion so relationships can still be determined. | Resize Text | Not addressed by SC 1.4.4 | Authors | TBD | Yes | Andy"Myndex" |  |  |
| Disambiguation of icons | Provide a text label for non-standard icons to communicate their purpose. Related to COGA: [Use Icons that Help the User](https://wai-wcag-supplemental.netlify.app/patterns/o1p07-icons-used/) | Icons | TBD | TBD | Yes | Yes | none | unassigned |  |
| Print customized text | Users need to be able to print content with customized text, e.g., larget font. [**Discussion 107**](https://github.com/w3c/low-vision-a11y-tf/discussions/107) | Print | [1.4.12 Text Spacing](https://www.w3.org/TR/WCAG22/#text-spacing), [1.4.8 Visual Presentation](https://www.w3.org/TR/WCAG22/#visual-presentation) | author and user agent | No | Yes | Shawn | just started |  |