

GIS Map/App Accessibility Checklist

This list is meant to be comprehensive, and not every item on this list will apply to every map / application.

Color

- Map colors are compatible with color deficiencies. Patterns and shapes are used where colors aren't differentiable.
- Layer fill and outline have a contrast of at least 3:1.
- Layer outline and basemap have a contrast of at least 3:1.
- Large text has a contrast of at least 3:1.
- Small text has a contrast of at least 4.5:1.
- Color is not the only communication method (ex: several patterns are included).

Typography

- An accessible font is used (sans serif over serif fonts).
- Water features are always italicized.
- Uses hierarchical text/heading levels.
- Standard capitalization is used when possible (all caps should be avoided).
- Minimum font size is 12pt (16px).
- Line height is 1.5.
- No Loss of content or functionality when user overrides page for paragraph spacing to 200% of the font size, text line height/spacing to 150% of the font size, word spacing to 16% of the font size, and letter spacing to 12% of the font size.

Labels

- Minimum label size is 6pt.

- Labels are not at an extreme angle.
- Halos are around text if contrast is too low.
- The text (or halo) and background color have a 4.5:1 contrast level for small text and 3:1 for large text.

Cartography

- Symbology imitates real-world symbols wherever possible.
- Map utilizes visual hierarchy (the most important information is conveyed first).
- Include a basemap gallery with the light and dark Enhanced Contrast basemaps.

Text

- Text is plain (no metaphors or slang, etc.).
- Sentences are straightforward and use an active tone.
- Words are common everyday words.
- Buttons have useful titles.
- Acronyms are spelled out at least once.
- Pop ups, tables and layer titles are clear and understandable.
- Hyperlinks are appropriately formatted (ex: "For more information, go to the [Monmouth County Website](#)" instead of "<https://www.visitmonmouth.com/>" or "[CLICK HERE](#)").

Alternative Text

- All non-text content has a text alternative that serves an equal purpose (including the map itself).
- If alternative text is not possible, the user is aware of constraints through other text and a description of the item is given.
- Complicated graphs and charts have alternative text.
- Popups contain information that adds helpful context to the map.

- Popups are easily understandable and formatted in a readable way.
- A legend is included.

Zoom Tools

- All important elements and text are still visible when zoom is 200%.
- Able to navigate without a mouse when zoom is 200%.
- All important elements and text are still visible when zoom is 400%.
- Able to navigate without a mouse when zoom is 400%.

Navigation

- Able to access all elements of the web map without using your mouse (including any maps or apps in an iframe).
- Links open in the app window unless it will disrupt a multi-step process.
- User is able to close out of any splash screens and is able to access the full app without getting trapped.
- Tooltips close when the mouse moves off.
- Map data is available in another format outside the map itself (ex: table).
- All targets for user input (buttons, hyperlinks, etc.) must be at least 24 by 24 CSS pixels (px).
- All keyboard-operable elements must have a visible and (at least partially) unobscured keyboard focus indicator.
- All functionality that uses a dragging movement for operation can be achieved by a single pointer without dragging.
- Maintain consistency by providing contact information, tutorials, and any help mechanisms in the same order as other page content created by the same organization, author, or group.
- Information already given by the user required to be entered again in the same process is auto-populated or available for the user to select.

Online Apps / Maps

- App is fully keyboard navigable (Tab, Enter, Space).
- All error messages are descriptive and actionable (ex: 'Please enter a valid email address' not just 'invalid input').
- Tested with accessibility check tools for hidden compliance issues.
- A cognitive function test (such as remembering a password or solving a puzzle) is not required for any step in an authentication process.

Static Maps

- There is alternative text for the map.
- There is metadata for the document.
- There are appropriate tags.
- The reading order of the PDF makes sense.
- North arrows, legends, and scales do not have alternative text and are not tagged.
- If possible, a description of the map is on the page.
- Another format of the data is available, either by table or hyperlink.
- A human contact is provided.
- Minimum font size for labels should be 6pt, and the minimum font size for explanatory text should be 12pt (or 16px). For inset maps, keep labels at least 6pt.