



# Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs

## Accessibility Checklist: Static Digital Maps

Use this checklist to ensure your static digital map meets all requirements for accessibility. Please refer to the [GIS accessibility guidance for static maps from ArcGIS Pro](#) page on Mass.gov for details on how to meet these requirements.

**Date Reviewed:** \_\_\_\_\_ **Map Name:** \_\_\_\_\_

### Symbology

- Map colors are compatible with color vision deficiencies.
- Color is not the sole communication method.
- A combination of color, size, shapes, and patterns is used to convey information.
- Symbols have a logical connection to data and what is being communicated; use commonly accepted symbol styles where possible.
- Colorblind-friendly ramps are used where possible.
- Collectively, map symbology color choices don't have conflicting hues and/or extremely bright hues.
- Layer fill and outline have a contrast ratio of at least 3:1.
- Layer outline and basemap have a contrast ratio of at least 3:1 over darkest possible basemap color.

### Surrounding Map Elements and Text

- A sans serif font is used (applicable only when custom text blocks are used).
- Bold is used sparingly, and only to convey important information.
- Text is not center aligned.
- Sentence case is used when possible. Avoid the use of all capital letters (abbreviations are an exception).
- Minimum font size is 18 px (14 px if bold).
- Text meets contrast ratio guidelines against background (4.5:1 for small text and 3:1 for large text).
- Text is plain and easy to understand. Common, everyday words are used (avoid the use of jargon and idioms).
- All acronyms are defined at least once before they are used.
- Sentences are used, where possible, to convey information.

### Labels

- A sans serif font is used.



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- All key features are labeled. If data is provided in an alternative format, only essential information is labeled.
- Typography meets size and contrast ratio guidelines (9 px Regular = 4.5:1; 14 px Bold = 3:1; 18 px Regular = 3:1).
- Plain language is used whenever possible.
- Labels are easily readable (e.g. not at an extreme angle, etc.).
- Halos are used to increase contrast against underlying data and/or basemap (and a 4.5:1 contrast ratio between font color and halo color is used).

### Cartography and Legend

- Map uses logical visual hierarchy (most important information is conveyed first).
- Only include layers which are necessary to the narrative of the map.
- Focus strategies are used, when appropriate, to help focus the map's purpose.
- All layers and symbol classes have clear and meaningful titles.
- All coded values have descriptions provided.
- Plain language is used. All underscores, abbreviations, and acronyms are removed.
- Complex symbology, such as bivariate symbology, has been avoided.
- Legend is easy to distinguish from other cartographic elements (e.g. legend has a border and background).
- Legend only shows layers with features visible in the map extent.
- A sans serif font is used.
- Font size is no less than 12 px.
- Text is not centered or justified.
- Bold is used sparingly.

### Map Alternative Text

- Alternative text has been added to all maps, charts and images included in the layout.
- Accessible tags have been included prior to exporting the map to PDF.
- A written map description has been provided that serves the equivalent purpose of the visual. This should describe key patterns, takeaways and the purpose of the map.

### Alternate Formats

- Map data is available in an alternative format, such as (select one):
  - Through a table that is included with a standalone map
  - As a table included within the body of text before/after the map (e.g. if the map is included within a report)
  - As a table that is included within the appendix of a document (e.g. this might be appropriate for multi-page tables).