Map Design

Accessibility Quick Card

Follow these best practices to help create maps that are well designed and accessible.
For the complete Map Design Guide and more information on map design and accessibility, visit the [MNIT Office of Accessibility website](#).

Use only necessary data and appropriate layout size

Too much information can bury the map's story. Make sure a map is the best way to show the information. Choose the appropriate scale and page size for the map.

Keep fonts simple and appropriately sized

Use two to three font typefaces at most. In general, use sans serif fonts. Font size and emphasis reflect the importance of features. Important features have a large font size. Descriptive text has a min. font size of 12pt. Labels have a min. font size of 6pt. Fonts must also meet Contrast (Minimum) standards. Normal text to background ratio is 4.5:1. Large text (a min. of 14pt bold or 18pt) ratio is 3:1.

Use high-contrast colors

Have important information stand out and have reference information fall to the background. For simple maps with a few colors, non-text elements ratios are 3:1; The exception is complex maps that require several colors to convey essential information graphically. If many colors are needed on a map, use a combination of color values and styles. Validate design colors with color vision checkers. Sample schemes and color checker tool options are available in the complete Map Design Guide.

Use consistent and uniform labels

Make labels consistent throughout and uniform in orientation and placement. Never overlap labels and do not exceed a 90° angle (not upside down). Use leader lines when necessary. Use appropriately sized halos to emphasize text on a busy background.

Use recognizable and consistent symbology

Imitate the real world whenever possible. Choose colors and symbols that people associate with the represented feature types. Be consistent across maps.

Limit patterns

Limit the use of patterns—one or two maximum. Avoid overlapping patterns. Never use dashed lines on top of an opaque pattern.

Keep line styles to a minimum

Too many line styles on one map can be confusing—limit to no more than six or consider making multiple maps. When using the same color, have line weights differ by at least 1pt (e.g., highways: 3pt, major roads: 2pt, local roads: 1pt). Use lighter shades of the same color to distinguish features on lesser elements.

Soften background images

Visually soften background and basemap images, such as aerial photos, with transparency or muted colors, so the map objects stand out.

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