

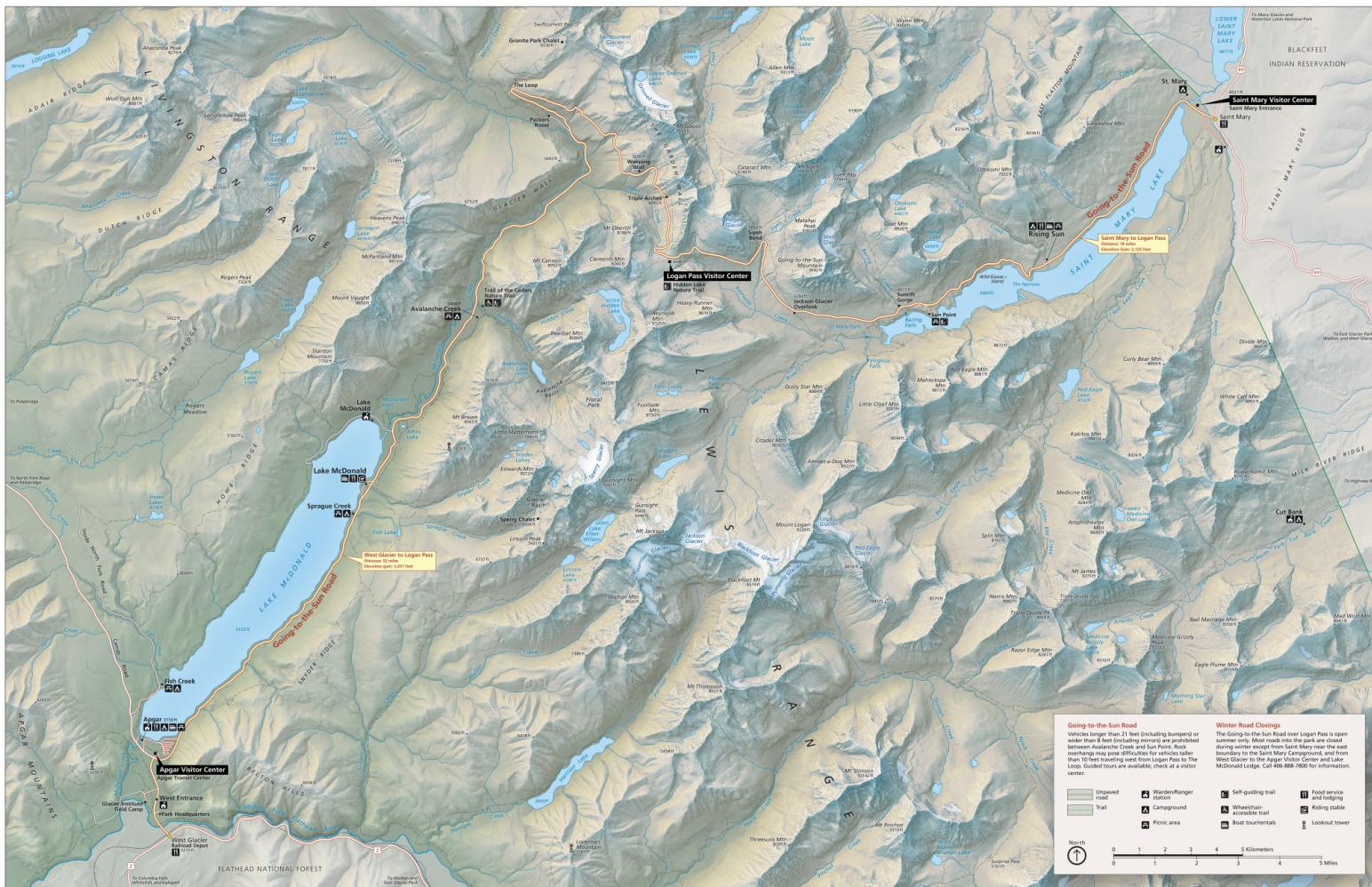
Cartographic Typography

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American Geosciences Institute

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Going-to-the-Sun Road • Glacier National Park, Montana



Tom Patterson
<http://www.shadedrelief.com/shadedreliefmaps.html>

Typeface

Myriad Pro

Font

Black

Black condensed

Black condensed italic

Black italic

Bold

Bold italic

Italic

Light

Light condensed

Regular

Semibold condensed

Semibold condensed italic

Serif vs.
Sans Serif

Typographic Vocabulary



Kerning

ANALYSES

ANALYSES

ANALYSES

Poor kerning

Flip and rotate to identify problems

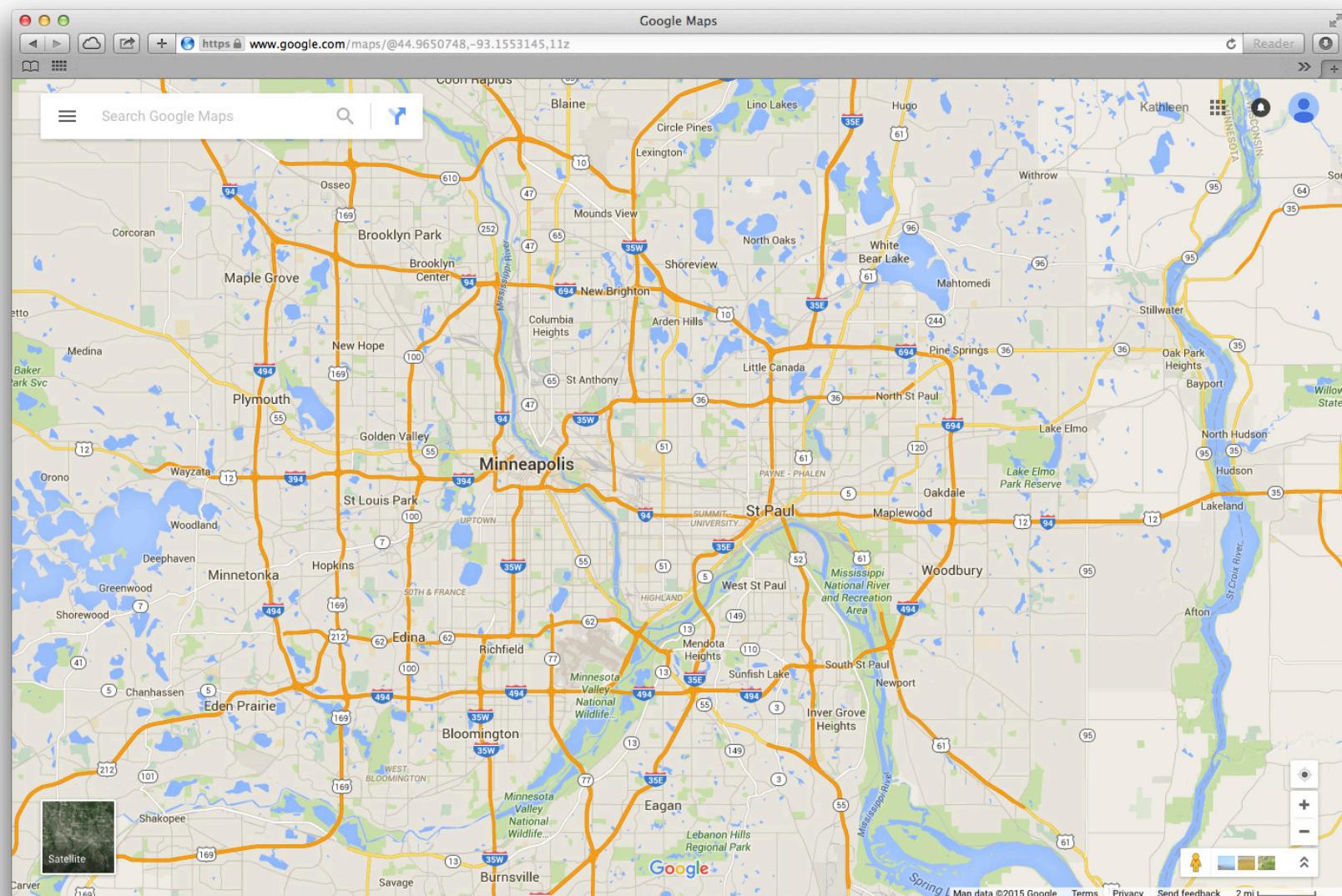
Improved kerning

Kerning Practice:

<http://type.method.ac/#>

Example font: Arial Bold

Visual Hierarchy



Typeface Characteristics

- Medium to large x-height

Mr. Big versus Mrs. & Mr. Little

32-PT HELVETICA

32-PT MRS EAVES

32-PT MR EAVES

Typeface Characteristics

- Medium to large x-height
- Open counters

Bases 89

Bases 89

Myriad Pro

Haettenschwetter

Typeface Characteristics

- Medium to large x-height
- Open counters
- Distinct characters

I vs. l

c a g | c a g Corbel

g g a a

Double-story
lowercase
(minuscule) g

Single-story
lowercase
(minuscule) g

Double-story
lowercase
(minuscule) a

Single-story
lowercase
(minuscule) a

Typeface Characteristics

- Medium to large x-height
- Open counters
- Distinct characters
- Font variety
- Robust letterform strokes
- Narrow line length

O vs. O

Perpetua

CONSIDER THE WIDTH

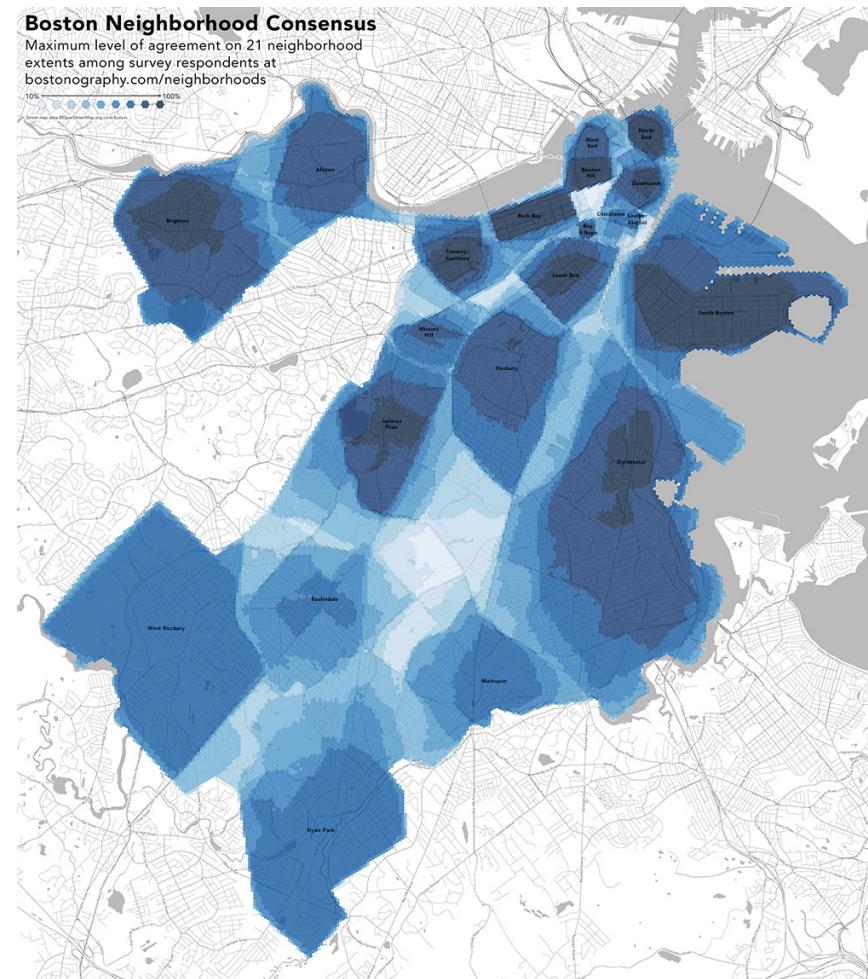
Consider the width

Copperplate

Myriad Pro

Typeface Characteristics

- Medium to large x-height
- Open counters
- Distinct characters
- Font variety
- Robust letterform strokes
- Narrow line length
- Cohesive personality
- Typographic lineage



Andy Woodruff and Tim Wallace

<http://bostonography.com>

Legibility Guidelines

- A mix of upper and lower letters is easier to read than all capital letters
- Keep text condensed to avoid conflicts
- Reversed text benefits from sans serif and increased letter spacing
- Text color must contrast with background
- Leading should be 120–145% of the point size
- Copy and outline your text for final file



Gretchen Peterson

<http://www.gretchenpeterson.com/blog/archives/842>

Cartographic Standards

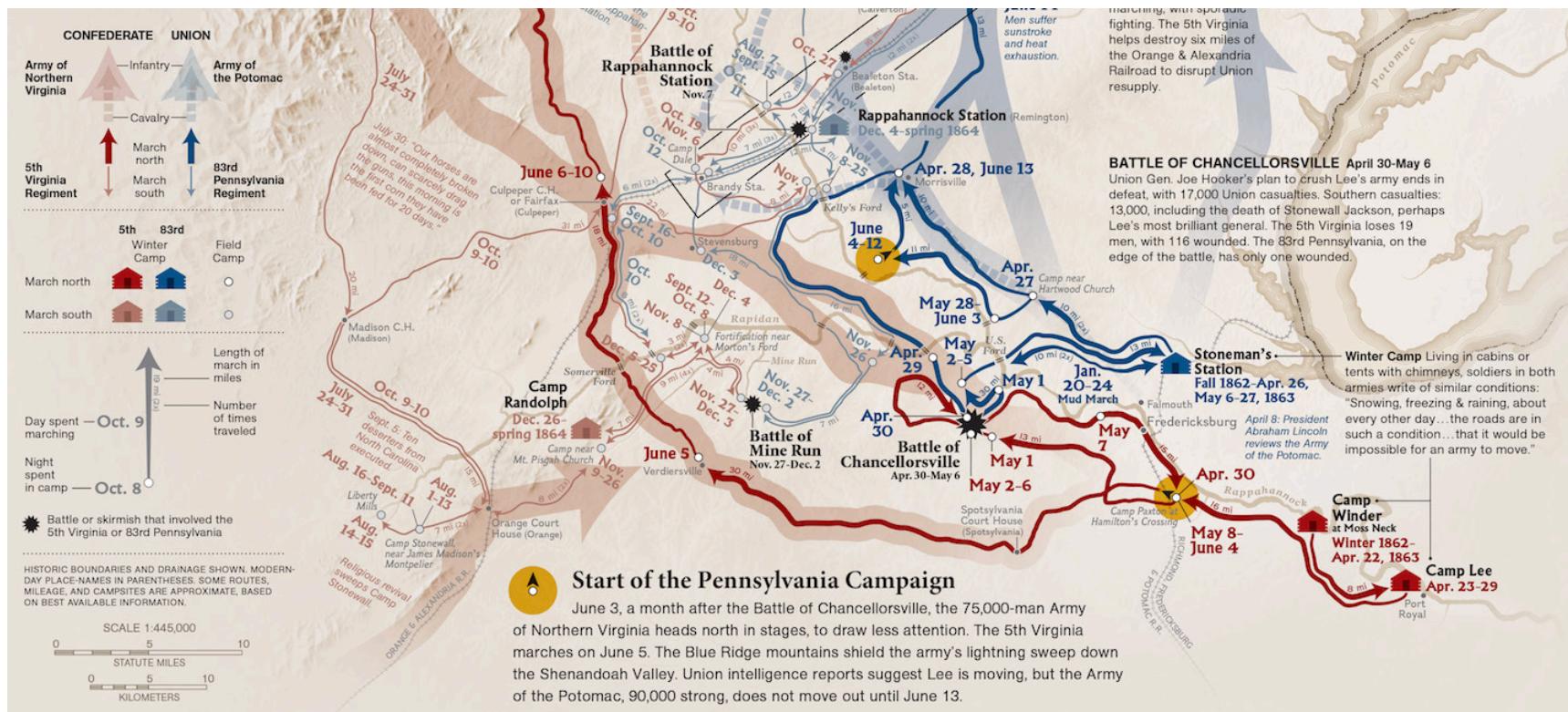
- Serif for natural features, sans serif for man-made features (debated)
- **Bold** and UPPERCASE indicate high importance
- Black as standard color choice for labels
 - Brown for contours
 - White or blue for water features
- Water features labeled in script or italic
- River labels sit above vector, on straightest portion
- Label placement:

Option 2 Option 1
 ●
Option 4 Option 3

Option 7
Option 6 Option 5
 ●
Option 8

Typographic Example

Angle of diagonal text is consistent - no choices are made arbitrarily. Notice the clear hierarchy of information.



National Geographic

<http://atlasofdesign.org/2015/04/09/a-look-inside-national-geographics-march-to-gettysburg/>

Typographic Exercises



Gretchen Peterson

<http://www.gretchenpeterson.com/blog/archives/category/typography>

Typographic Exercises

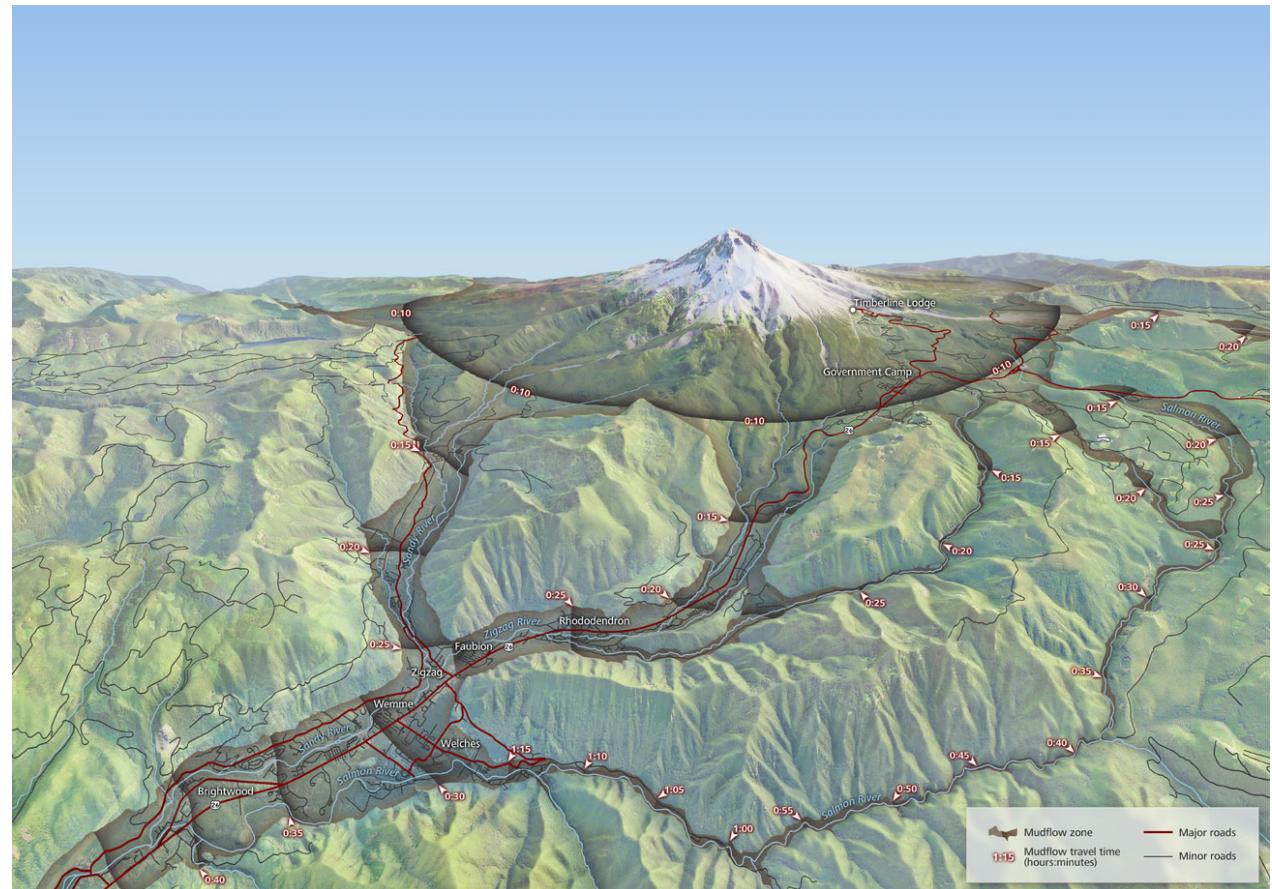


Gretchen Peterson

<http://www.gretchenpeterson.com/blog/archives/category/typography>

Typographic Example

Text halos can be blurred, or applied on 50% opacity to remain effective without jarring the reader.



Charles Preppernau

<http://cartography.oregonstate.edu/NaturalHazardsInformationSystems.html>

Typographic Exercises



Open face font



Reduced opacity



Gretchen Peterson

<http://www.gretchenpeterson.com/blog/archives/category/typography>

Notice where your eye falls. Subtle text is legible but does not dominate the composition.



Tom Patterson

<http://www.shadedrelief.com/shadedreliefmaps.html>

Typeface Collection

Serif

- Garamond
- Meridien
- FF Parable
- ITC Stone
- Rotis
- Sabon
- Georgia
- Goudy
- Hoefler Text & Titling
- Kepler
- Adobe Jensen
- Camden (for antique maps)
- Old Claude (for antique maps)
- Caslon Antique (for antique maps)

Sans Serif

- Frutiger
- Cisplain
- Gill Sans
- ITC Stone
- Rotis
- Univers
- Venus Mager
- Helvetica (Neue)
- Beorcana
- ITC Franklin Gothic
- Myriad Pro
- Delicious Italics (water features)
- Optima
- Tahoma (web)
- Verdana (web)

Resources

Free Fonts

<http://www.fontsquirrel.com/>
<http://losttype.com/>
<http://www.theleagueofmoveabletype.com/>
<http://fontfabric.com/category/free/>
<http://www.smashingmagazine.com/2010/01/25-new-high-quality-free-fonts/>

Cartographic Typography

<http://www.cartotalk.com>
<http://www.typebrewer.org>
<http://www.gretchenpeterson.com/blog/>
<http://maphugger.com/post/28344751603/practical-cartography-8-tips-for-better>

Font pairing

<http://www.typebrewer.org>
<http://www.gretchenpeterson.com>
Book: Cartographer's Toolkit \$35
Booklet: Type for Maps \$10

Traditional Typography

<http://www.thinkingwithtype.com/>
<http://practicaltypography.com/>

Font Resources

<http://www.exlibris.com>
<https://www.p22.com/>
<http://www.railfonts.com/index.html>
<https://www.youworkforthem.com/type-foundries>
[http://typographica.org/on-typography/my-favorite-font-sources-a-shortlist-of-trusted-foundries-and-retailers/](http://typographica.org/on-typography-my-favorite-font-sources-a-shortlist-of-trusted-foundries-and-retailers/)

Other resources:

<http://atlasofdesign.org/blog/>
<https://somethingaboutmaps.wordpress.com/>
<http://maphugger.com>
<http://cartography.oregonstate.edu/>

Gallery

Clean label placement and well-designed visual hierarchy



Daniel Huffman

<https://somethingaboutmaps.wordpress.com>

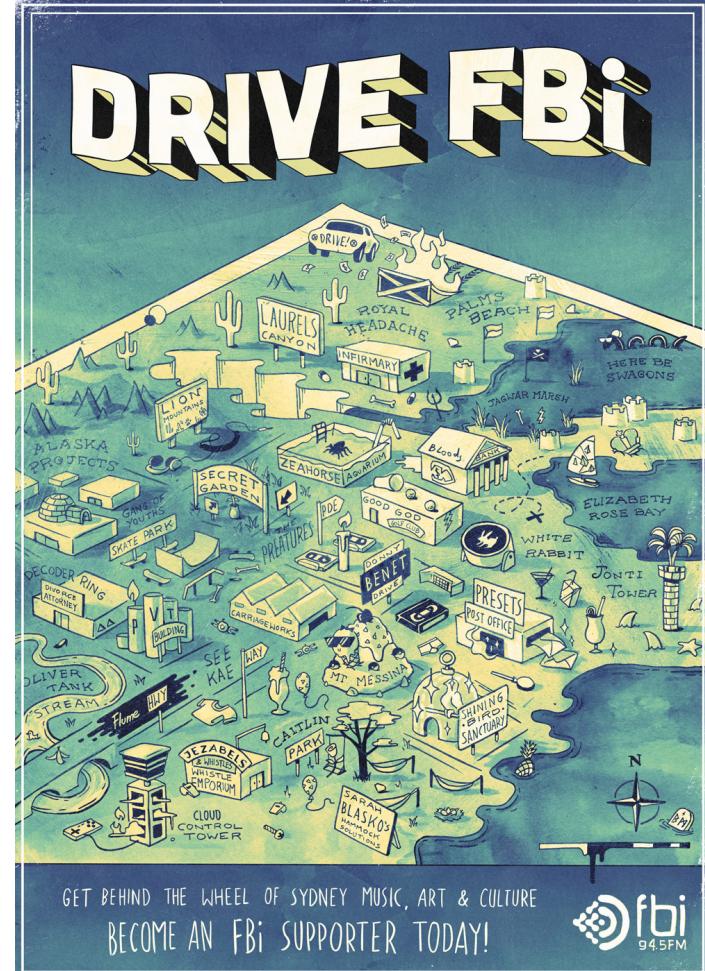
Gallery

Personality through typography



Kevin Cannon

<http://www.kevincannon.org/>

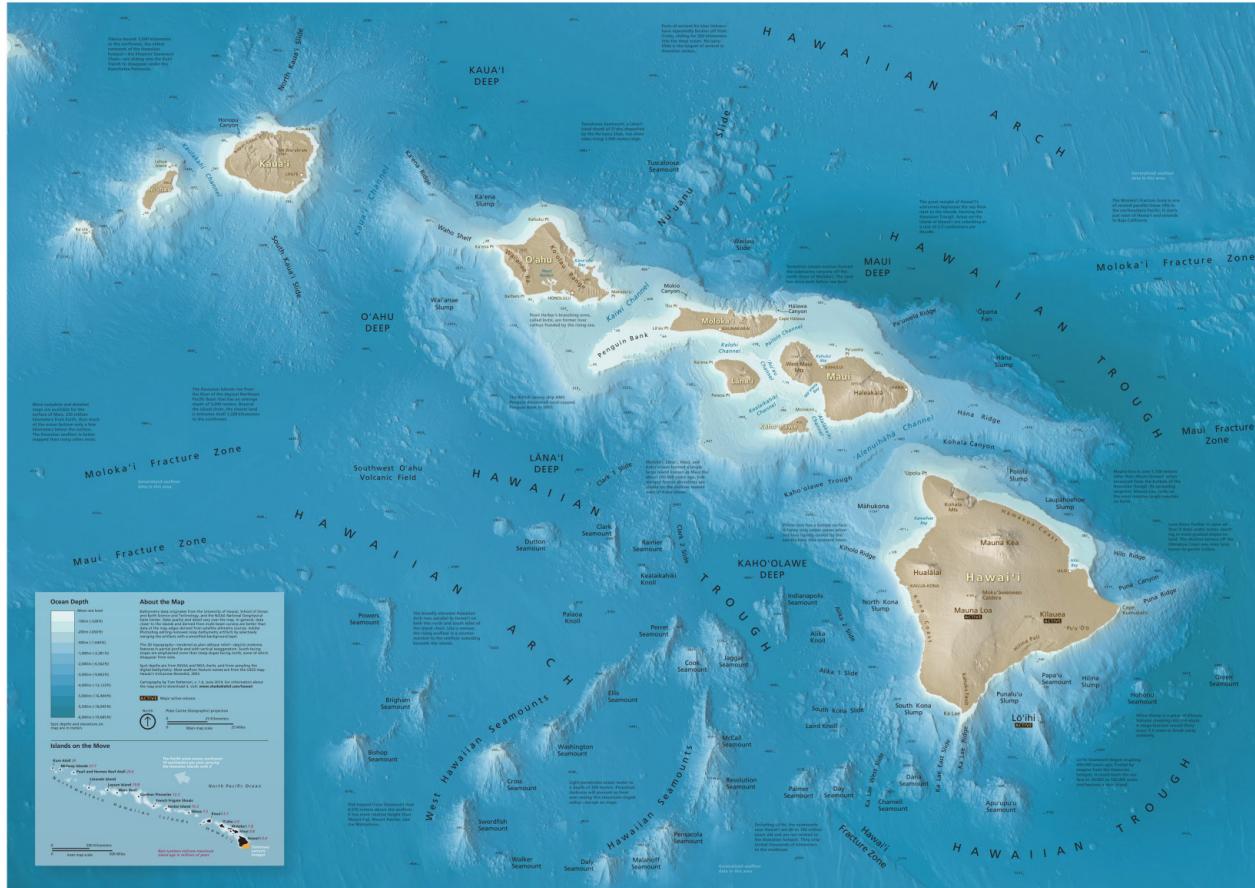


Ben Marriott

<http://benmarriott.tumblr.com/>

Gallery

Seafloor Map of Hawai‘i

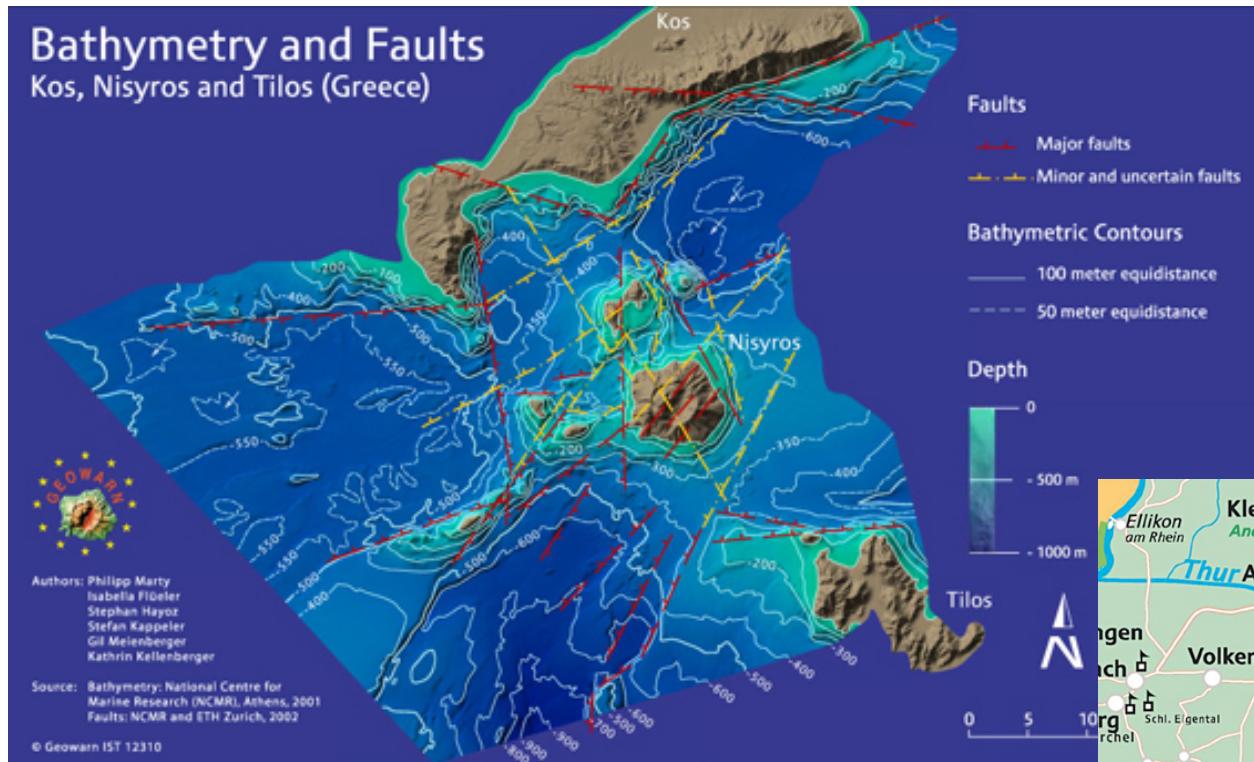


Note the distance
between the letters of a
label never exceeds the
distance to the next-
nearest label

Tom Patterson

<http://www.shadedrelief.com/shadedreliefmaps.html>

Typeface example: Cisalpin



Examples of a font designed specifically for cartography



Grundbuch- und Vermessungsamt Kanton Zürich

land-am-rheinfall.org

<http://www.linotype.com/2276/cisalpin.html>