Maps and Graphic Communications

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Poor Map
Good Map (or just better)
DC Metro

Note use of color and symbology
Intuitive
Relative proximity vs. Geographic
Keep it Simple Stupid
Analytical Maps

- 50 students' outlines of the extent of the "Great Plains"
- Coincident lines show agreement and disagreement.

Annals of the AAG
Map Design

“You need to understand the issue [that] you are going to communicate, and you need to bring the appropriate data to it and do analytics and manipulation, and then come up with a compelling graphic design that helps us understand”.

- Jack Dangermond
March 3, 2012
COLOR

Purple Haze

One way to analyze the 2004 presidential election results yields a black-and-white case of red and blue, as shown in the inset map, which appeared widely in the media. The same numbers can also be represented with a very different result, as shown in this map, prepared by the UO Geography Department’s InfoGraphics Lab. Thanks to Oregon writer Bob Hedman for suggesting this map.

PROJECTIONS

Modified Interrupted Collignon or Cylindrical Equidistant Projection
Contents fold and unfold to make an orthographic map.

GRAPHIC DESIGN

Typography

CLASSIFICATION

Population 1999
- 1378 - 3770
- 4592 - 6847
- 6891 - 8243
- 9094 - 16171
- 30420 - 258483
Color Impairment

~10% U.S./Europe (mostly males)

Shinobu Ishihara, M.D.
http://www.colorcube.com/illusions/clrblnd.htm
What if this map....
Looked like this?
ADCIRC Model LSU Center for Study of Public Health Impacts from Hurricanes

Or this…?
Grayscales and Non-complementary colors

Typically no more than 6 greyscale tones

Purple and Gold: HIGHLY effective!
Avoid Excessively Ornate Elements
SLOSH Model Maximum Cat 2

[Map showing storm surge and tide levels]
Ike Storm Surge Forecast
Guidelines

- Emphasize message/idea conveyed
- Know your audience
- Is a map/graphic/photo the best way?
- Conventional style?
- Coordinate maps with accompanying text.
- Avoid oversimplified or complicated
- What size will the map be?
- Use visual hierarchy to reflect levels of importance
Sea-Level Rise Vulnerability in the Albemarle-Pamlico Estuarine System

Potential Inundation
- Red: 0.4 meters (1.3 feet)
- Orange: 1.0 meters (3.3 feet)
- Yellow: 1.4 meters (4.6 feet)

Highways
Municipalities

Atlantic Ocean
Pamlico Sound
Albemarle Sound

New Bern
Morehead City
Elizabeth City
Plymouth
Washington
Manteo
Ocracoke
Cape Hatteras