

MORE TIPS FOR VISUALS
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“Getting to Know New Students at The Evergreen State College”

Considerations for Maps

- Why are you making the map?
- Who is the audience or users of your map?
- What type of map best represents your data? For instance, choropleth maps show aggregate statistics within a particular boundary, e.g. counts by state or county. Point maps are useful for seeing individual instances and looking for clusters, for instance a map of prospective student street addresses.
- What is the best scale for your map? Is it more useful to see lots of detail or just get a general impression over a large area?
- What projection is appropriate for your map? Certain distortions are necessary so that we can portray the round earth on a flat map. All projections involve some kind of distortion and there are different projections that are appropriate for different kinds of maps. (I often use Albers or Lambert Conical projections for maps of the entire country. These projections give the USA a recognizable shape and are commonly used by the USGS and others.)
- How should your data be classified? Do you want to determine the ranges that are shown based on your own knowledge of the subject, or do you want to find natural breaks in your data (Natural Breaks method, the default in ArcMap)? You can also use equal area, equal interval based on your data, or standard deviation in your maps depending on what you want to analyze. Also, how many classes do you want?
- Should your map present normalized data to show proportion? Consider whether your data is better as a proportion of population, land area, or some other variable, or if raw counts are best. Maps can be misleading if they do not provide appropriate context.
- Is your map going to be accessible to all audiences? Can a person with color blindness distinguish differences on your map?
- Does the map print well in grey scale?
- Do your maps have any unintended connotations? Avoid using skin tones as colors to illustrate race and ethnicity data. Be aware of the use of maps historically for exclusionary purposes, such as redlining on mortgage lending or insurance maps.
- Does your map include the sources of data, the author of the map, and when it was created? This information can be important for a stand-alone map that is published outside of a specific report.
- Are your map legends and labels clear and understandable? (A common error is in the listing of classes of data on your map legend.)

Resources for Maps

Books and Articles

Brewer, Cynthia A. (2005) Designing Better Maps: A Guide for GIS Users. Redlands, CA: ESRI Press.

Teodorescu, Daniel. January 2004. *Using Geographic Information Systems in Institutional Research: New Directions for Institutional Research*, No. 120.

Listservs and Websites

GIS in IR Listserv

Association for Institutional Research

(Doesn't receive a lot of use, but it's there to join and e-mail colleagues with questions!)

E-mail Jenni Minner – minnerj@evergreen.edu

Color Brewer

A website to assist with creating accessible maps.

www.colorbrewer.org

ESRI website

ESRI is the company that developed ArcView and ArcInfo software. Look particularly at the Training and Events page for training information and for information about the annual ESRI Education User Conference and International Users Conference. Your local ESRI regional office can also be a resource for open houses.

www.esri.com

Harvard Design School GIS Information

This is a great information source on cartography, normalizing data, etc.

www.gsd.harvard.edu/gis/manual/

USGS Map Projections

<http://erg.usgs.gov/isb/pubs/MapProjections/projections.html>

Considerations for Photographs

- Why are you using the photograph? Does it illustrate a point? Does it provide context?
- Have you included captions to help the audience use the photograph as information?
- Do you have permission to use the photograph? You should have a photo release for any photograph in which an individual can be recognized.
- Is the photograph at a resolution that is appropriate to the presentation? Print publications require a higher resolution than photographs for web or print.
- Does your institution have professional photographs that you can purchase? Would it be better for you to take your own photographs?