



# *We've Got The Numbers – Mapping Data!*

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In the good ole' days...  
variables were  
visualized differently.

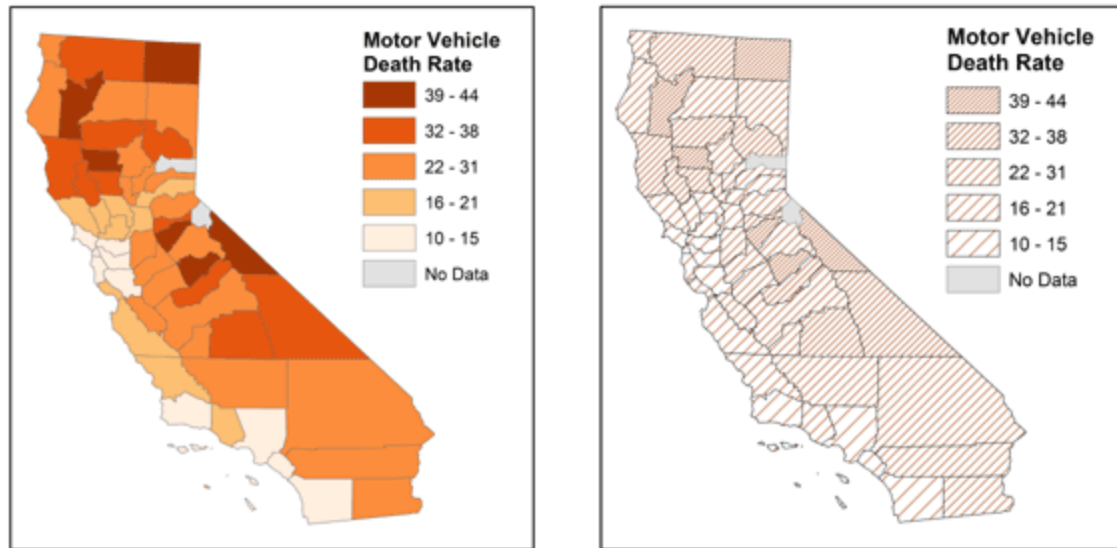


Figure 4.cg.4 Here, we map the same data variable with two different visual variables. Which variable do you think is more effective for showing varying intensities of motor vehicle accident mortality?

<https://www.e-education.psu.edu/geog486/node/1864>

# Will you map a percentage, rate or hard numbers?

*It will change the look of your map*

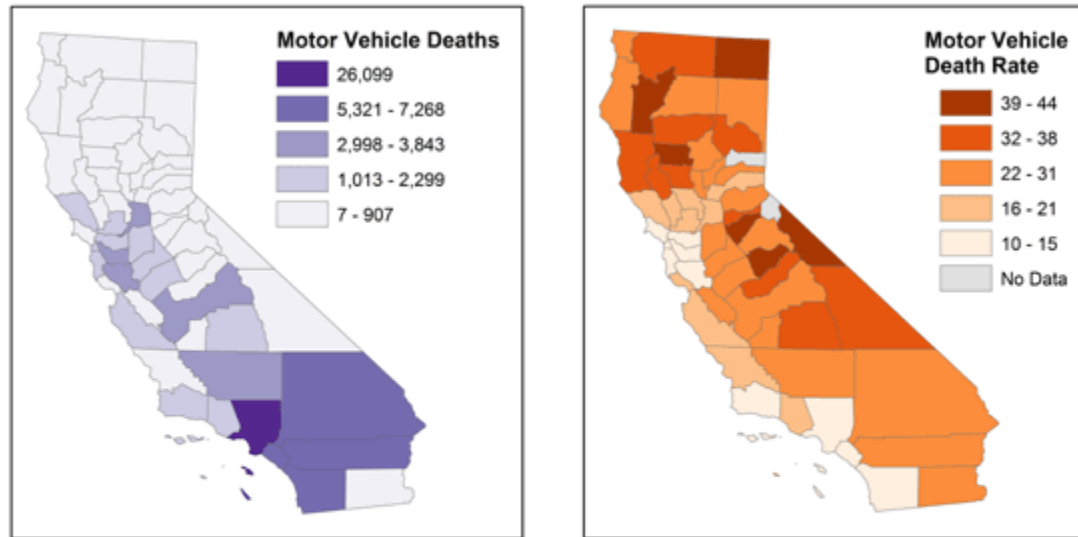
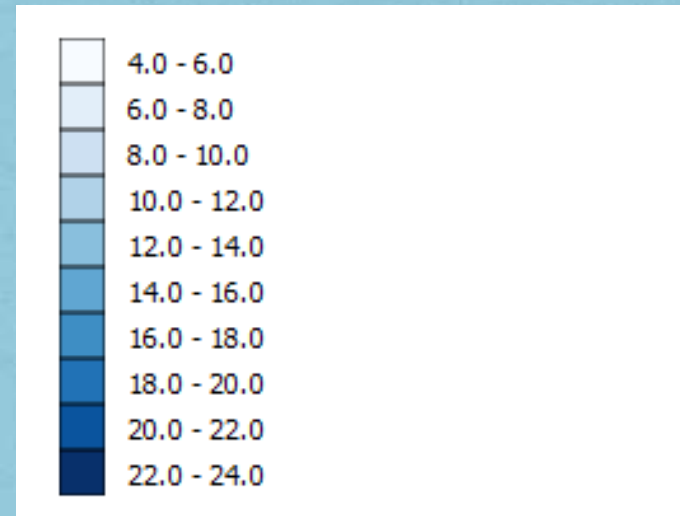
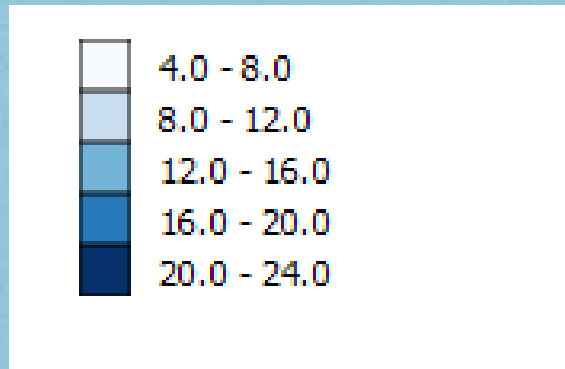


Figure 4.cg.5 The map at the left shows the count of motor vehicle deaths by county in California. As we would expect, the larger numbers of deaths occur in the more populous counties of the Los Angeles, San Francisco and San Diego metropolitan areas. The map of rates at the right shows a very different picture of risk of dying in a motor vehicle accident: the highest rates are in non-metropolitan California.

<https://www.e-education.psu.edu/geog486/node/1864>

# How Many Data Classes?

...it will affect the look of the map.

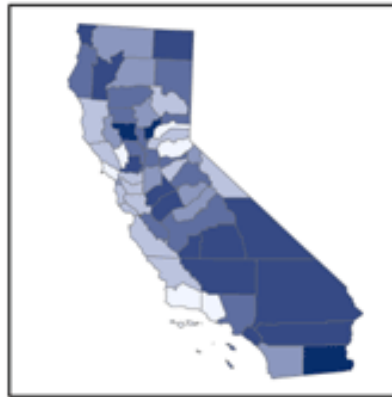


<http://gisgeography.com/choropleth-maps-data-classification/>

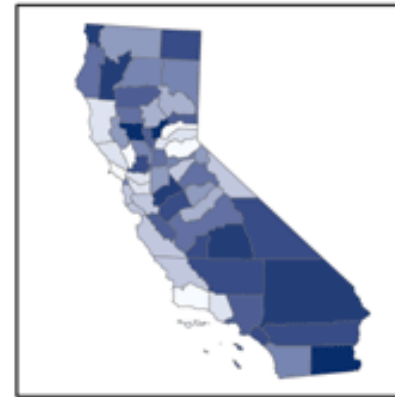
# How Many Data Classes?



4 classes



6 classes

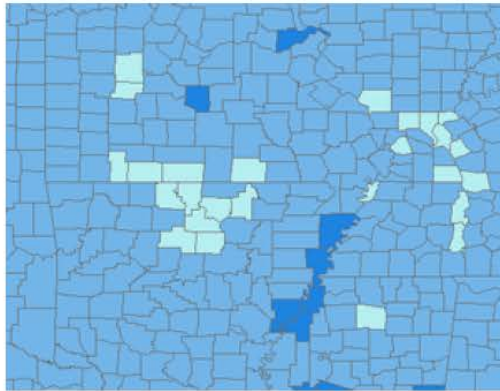


11 classes

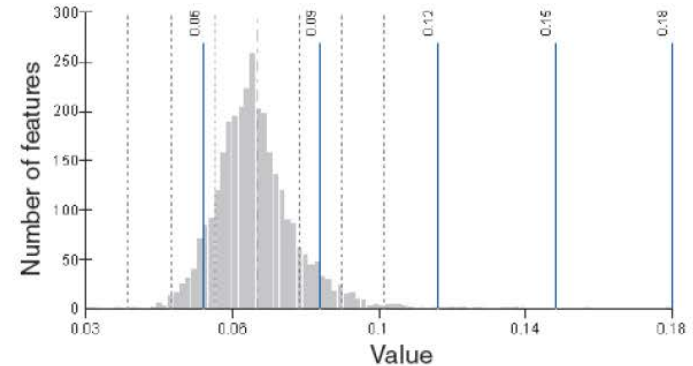
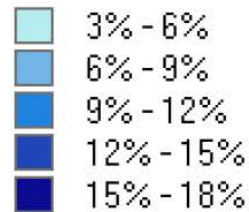
**Figure 4.cg.8** In the four-class map at the left, it should be quite easy to decide which observations are in the same class. Take a look at the six- and eleven-class maps and see if you can do the same. You will probably succeed in the six-class map (middle), but have difficulty with the eleven-class map. Although you should be able to tell if one county is lighter or darker than another in the eleven-class map in a pairwise comparison, it will probably be difficult to pick out all observations that fall in a given class.

<https://www.e-education.psu.edu/geog486/node/1865>

# Mapping Classifications “Equal Interval”



Percent Population  
Under 5

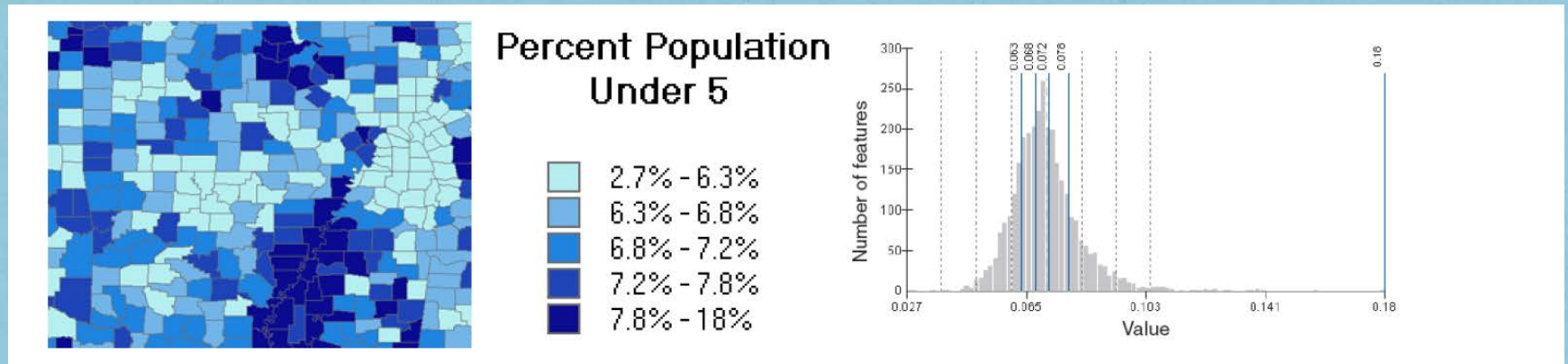


-Divides the attribute values in equal sized subranges.

-Easier to interpret, especially for non-technical audiences.

-Values may be clustered on histogram causing many features to be in one class.

# Mapping Classifications “Quantiles”

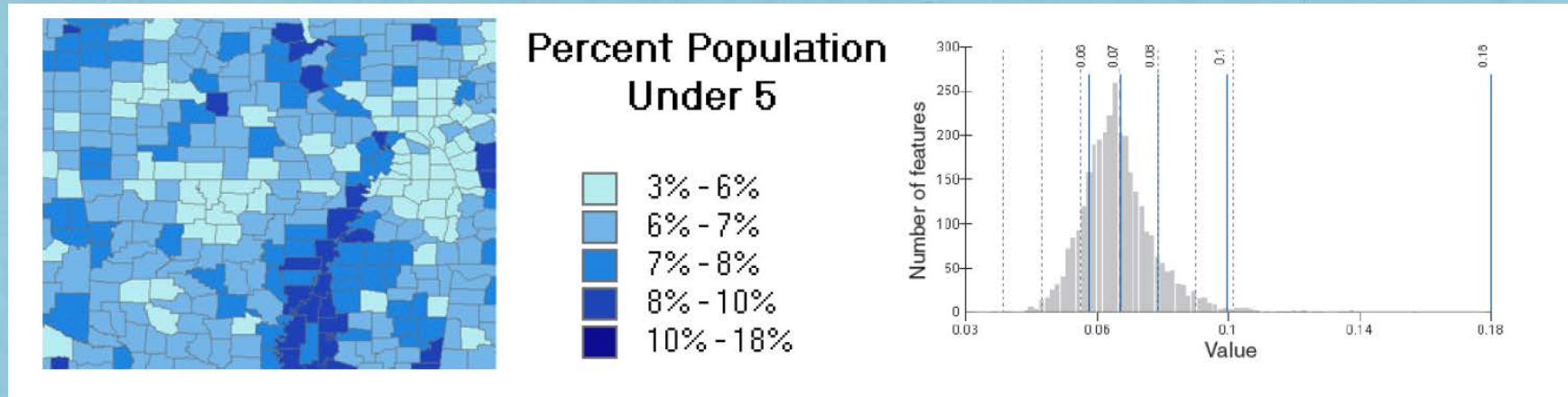


-Each class contains an equal number of features.

-Good for stressing the relative position: for example those in the highest 5 categories.

-However, features with similar values may end up in different classes, exaggerating their differences.

# Mapping Classifications “Natural Breaks”



-Classes are based on natural groupings.

-Good for mapping values that are not equally distributed along a histogram.

-Class ranges are tailored to one data set, so difficult to compare maps for different data sets.



# American Factfinder Tips



-Search by  
"Geographies"

# American Factfinder Tips

-The 4 main "tabs":

## List:

A drop-down method for finding your "area".

## Name:

A key word search (The "filter-basket" method).

## Address:

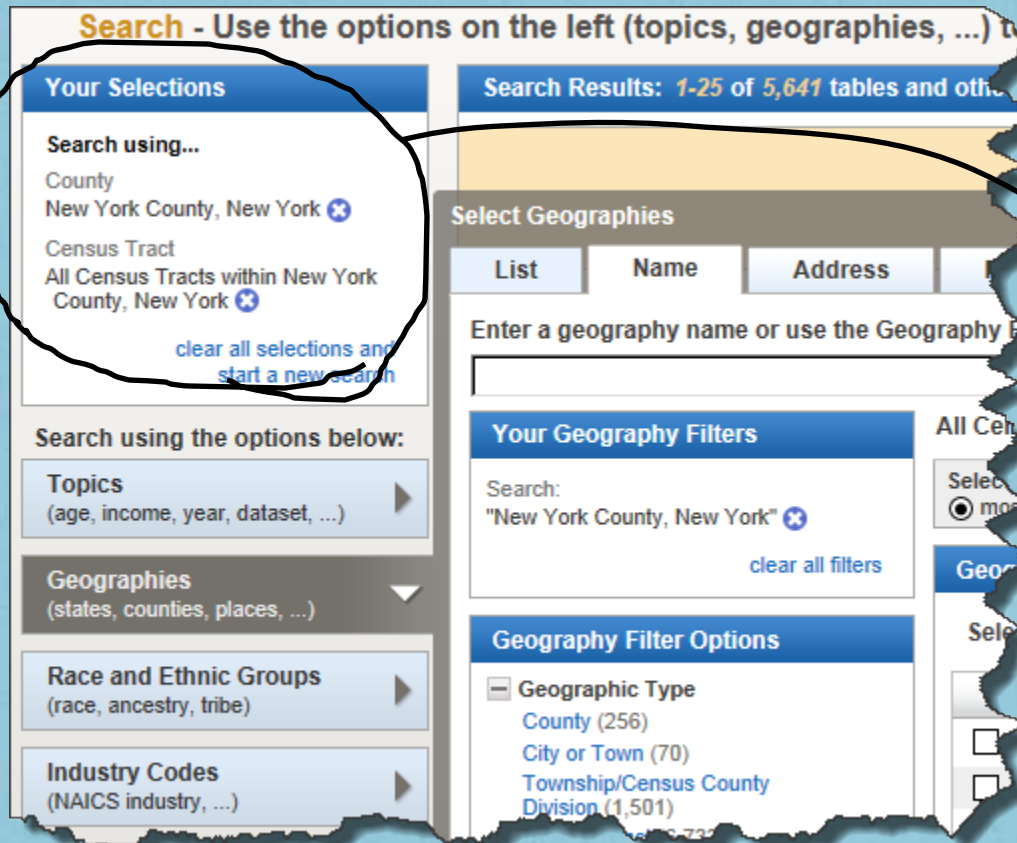
Look up a single address & its demographics

## Map:

See a map of the area you select

The screenshot shows the 'Select Geographies' window in American Factfinder. At the top, there is a search bar with the text 'Enter search terms and optional geography and click GO'. Below the search bar are four tabs: 'List', 'Name', 'Address', and 'Map'. The 'List' tab is currently selected. Below the tabs, the text reads 'Select geographies to add to Your Selections'. There are two radio buttons: 'most requested geographic types' (selected) and 'all geographic types'. Below that is a dropdown menu labeled 'Select a geographic type:' with the text '-- select a geographic type --'. At the bottom of the window, there is a note: 'Didn't find your geographic type? Click the 'all geographic types' radio button above, or try the Name, Address or Map geography search options instead.' Handwritten arrows point from the text descriptions above to the corresponding tabs in the screenshot. A yellow box with the number '2' is in the bottom left corner of the screenshot area, with the text 'Next, select Geographies (states, counties, cities, towns, etc.)' next to it.

# American Factfinder Tips



-Get items into your shopping basket!!

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