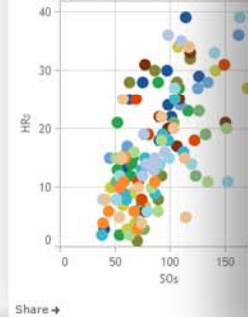


# 10 Tips to Create Useful and Beautiful Visualizations

## American League Pe

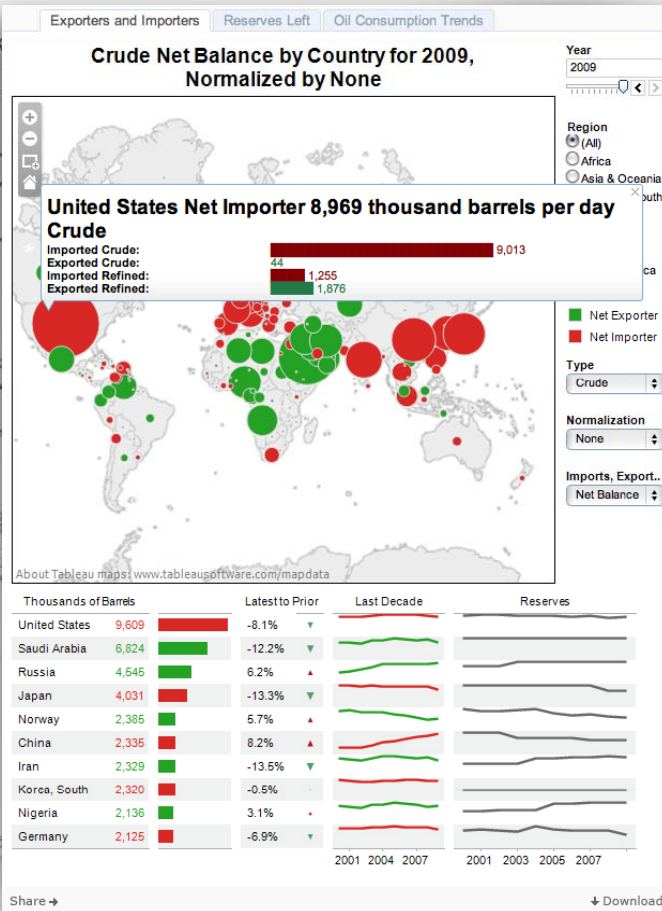
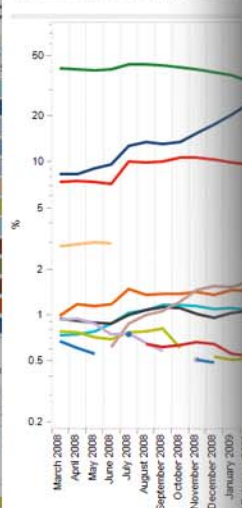


## Home Runs vs. Strike Outs



## Top 10 Social Network

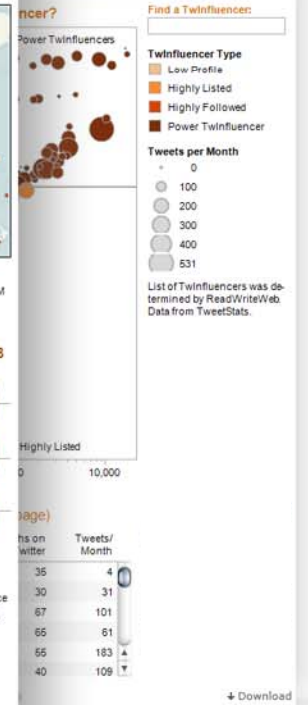
U.S. Market Share of Visits (Prit Kallas)



## 48-2008

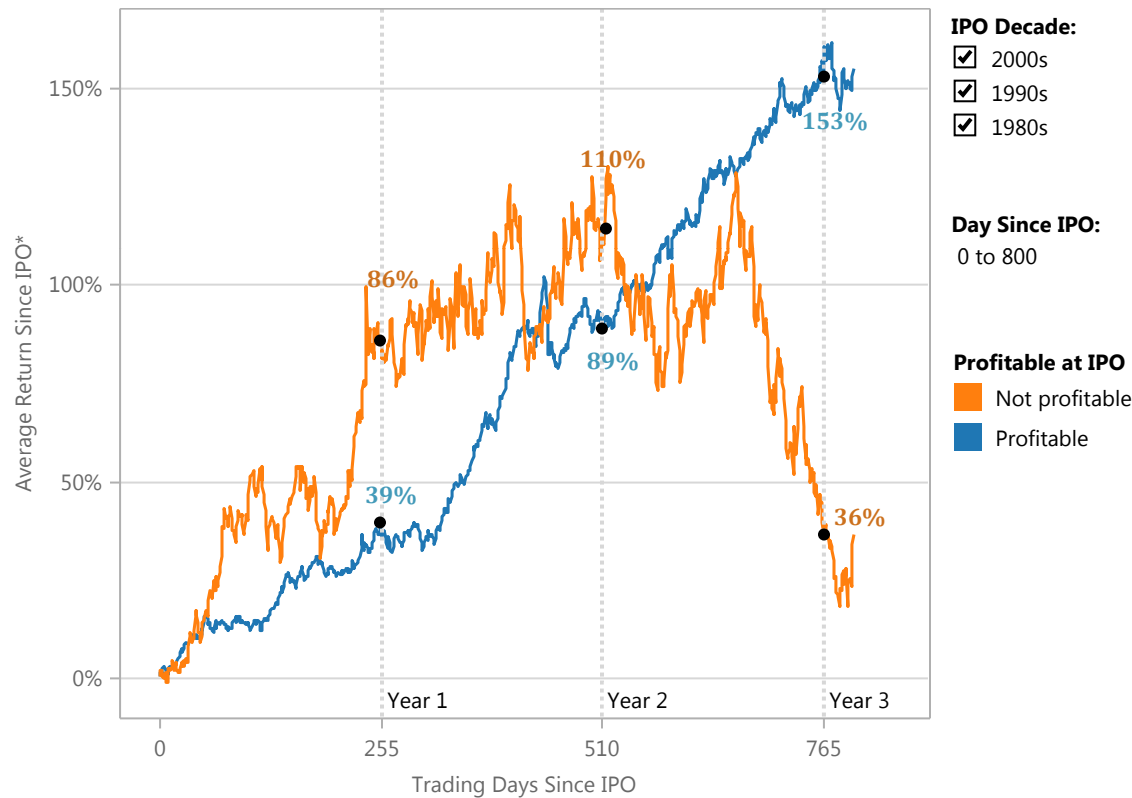


## Power Twitters



# 1 Tell a story!

## Profitable vs. Unprofitable IPOs

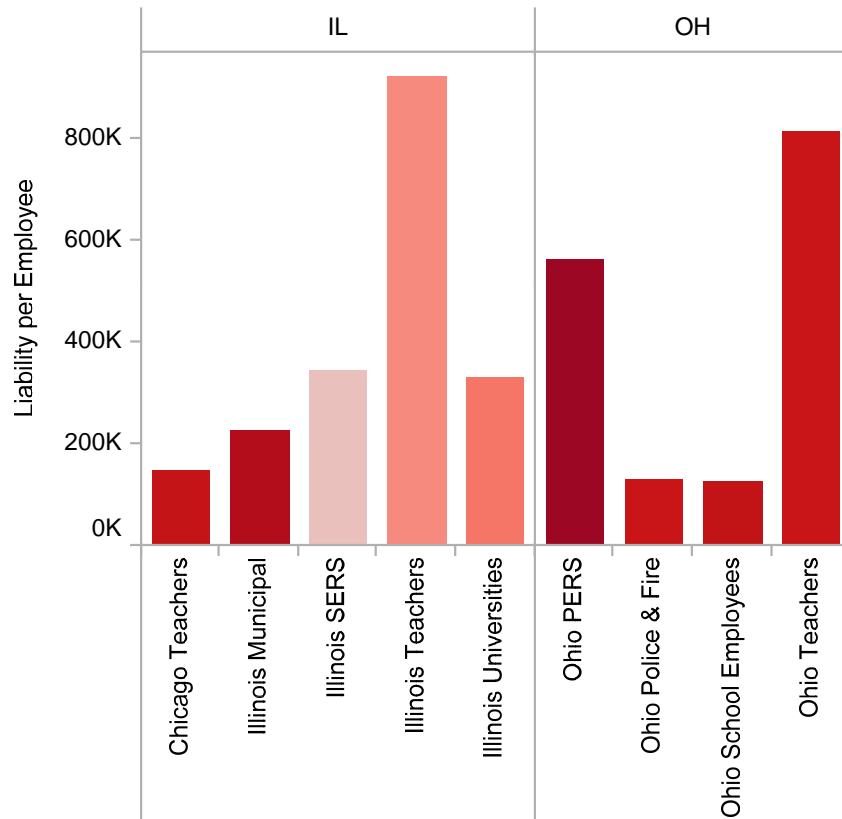


Every viz should tell a story. As you create your visualization, make sure to continually ask, “What story does this tell?”

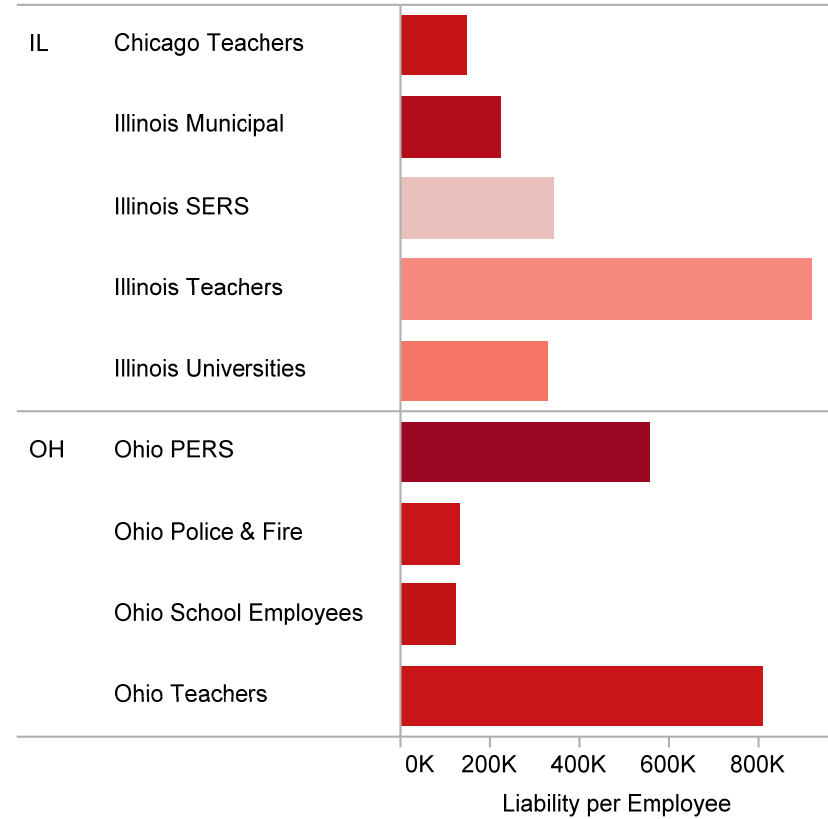
This viz shows us that companies that IPO'd after reaching profitability were far more successful in the long run.

# 2 Orient text horizontally

Unfunded Pension Liability by State



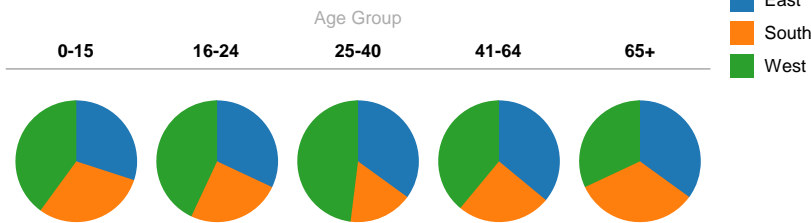
Unfunded Pension Liability by State



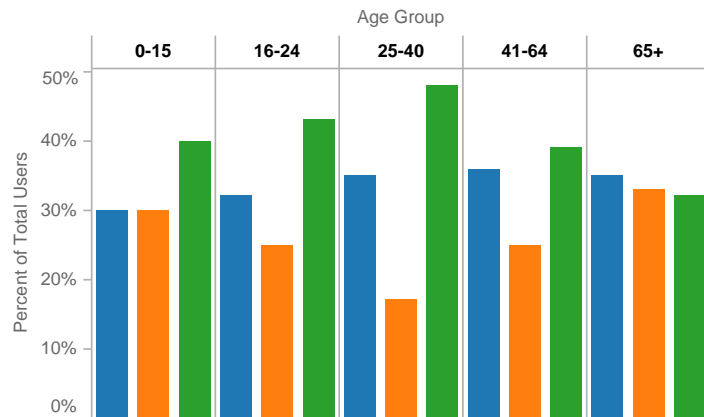
Sometimes the small changes make all the difference in understanding

# 3 Avoid pies! Except on maps...

Can you tell which slice is largest?

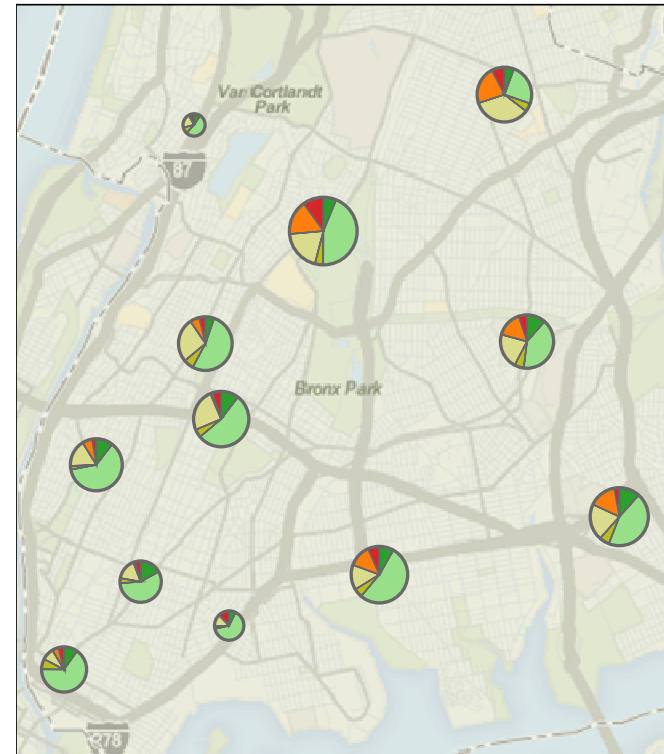


This is the same information represented as bars.  
**Comparisons are much easier.**



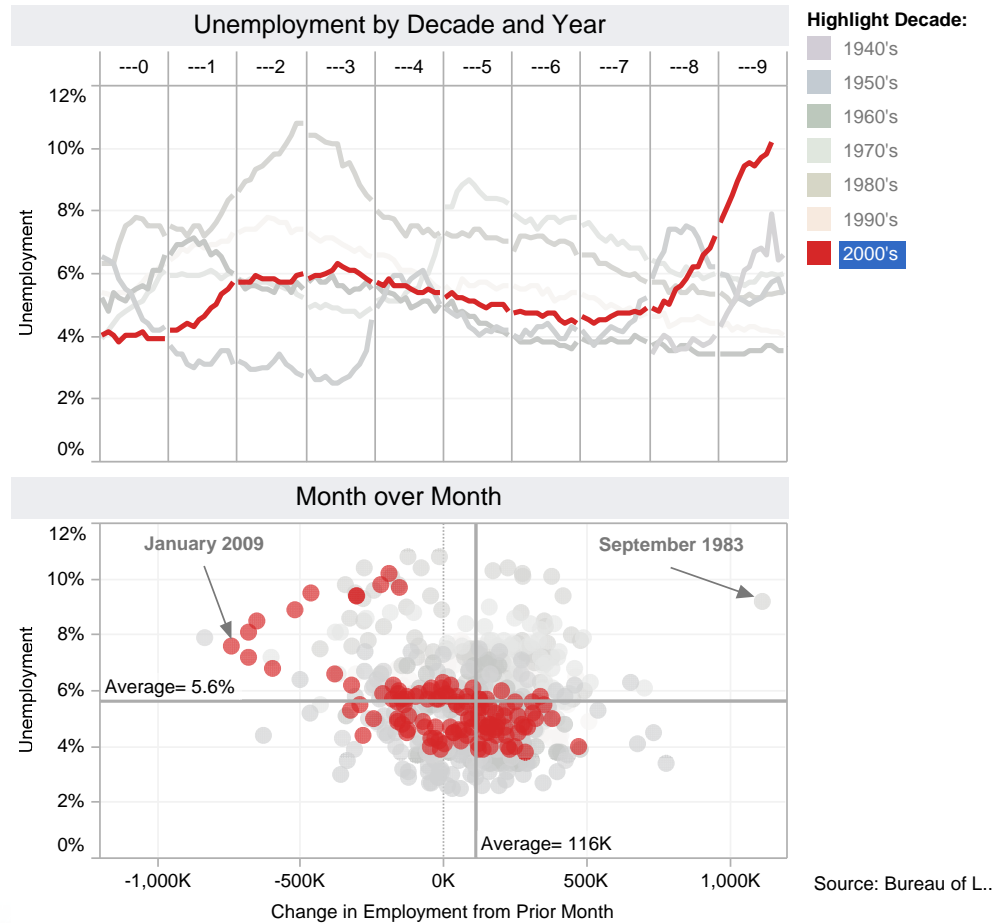
Bar charts beat pies every time!  
The human eye can compare height  
much easier than area.

Graffiti by Precinct and Resolution



But... pies *can* be effective on maps.  
The same comparison problem exists,  
but pies allow analysis in small spaces.

# 4 Use multiple views



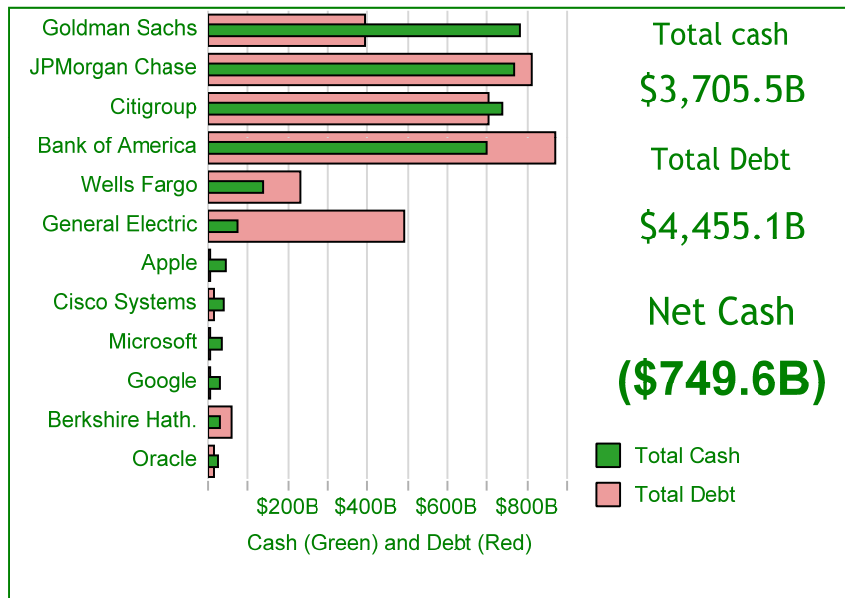
Use two coordinated views to show depth,  
rather than trying to place everything into one view.



# 5 Bullets beat Gauges

## Cash on Hand

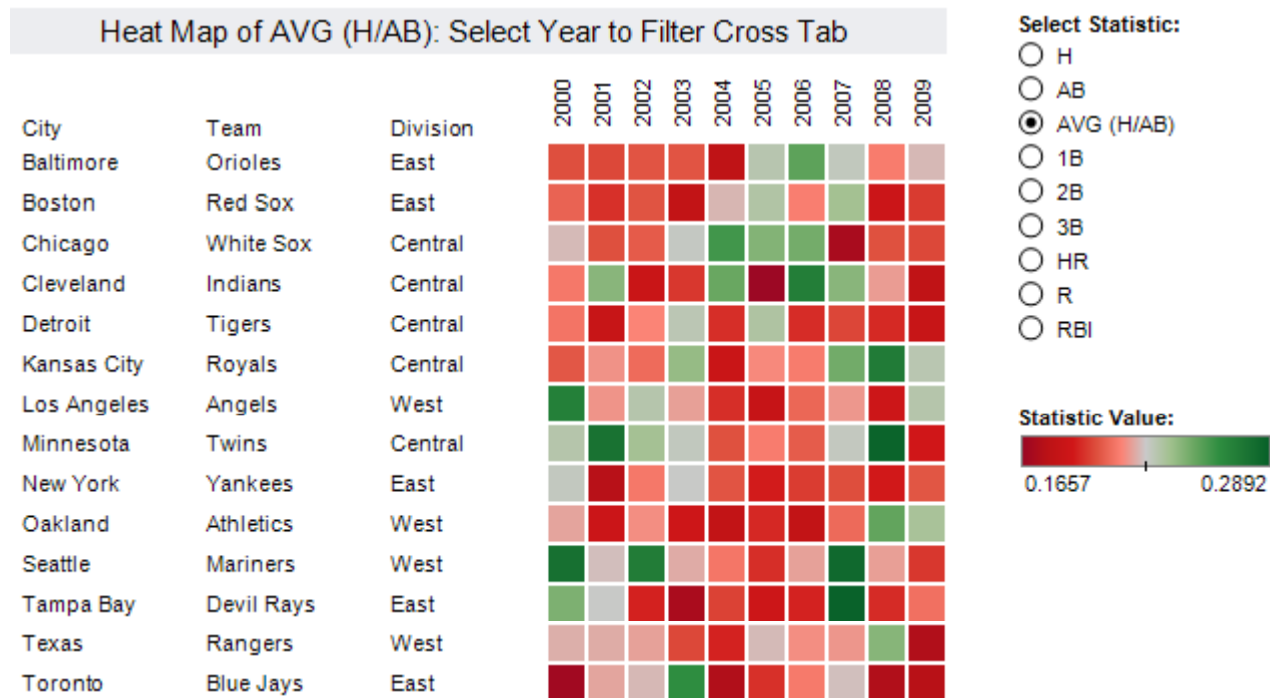
Among the Top US Companies by Market Cap



Besides being difficult to read, gauges take up tons of space. Use bullets charts!

# 6 Increase effectiveness with color

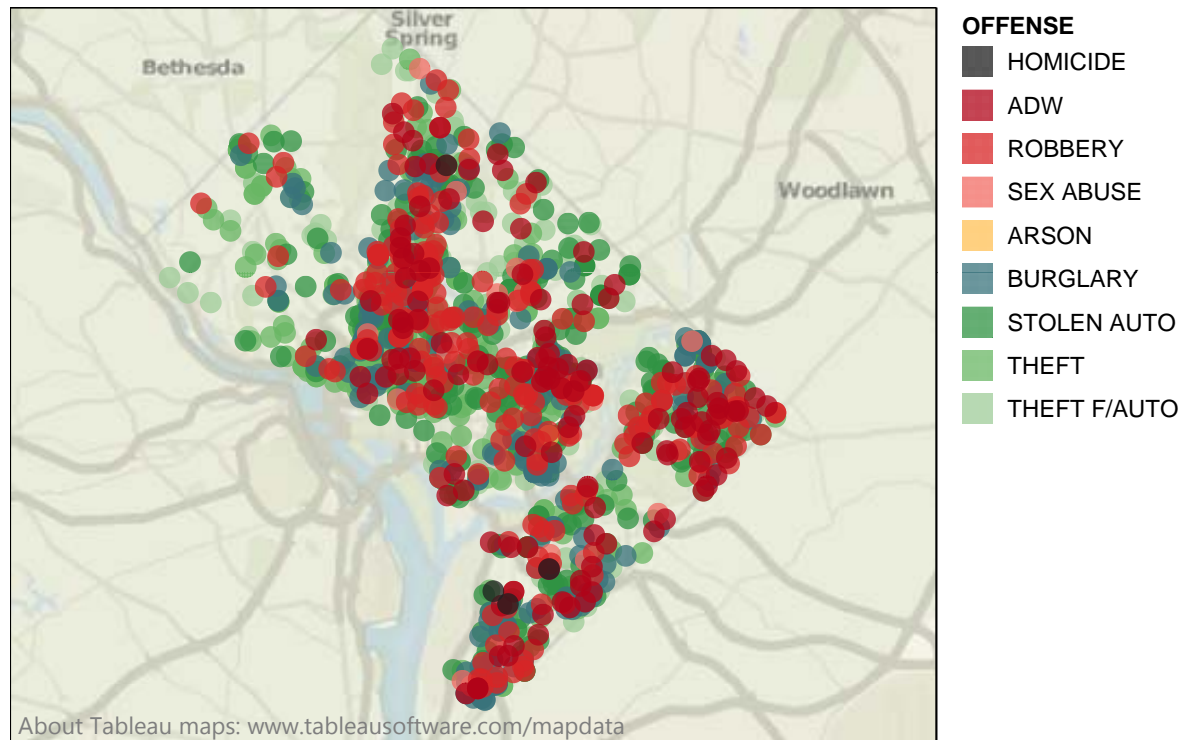
## American League Statistics



The human eye can detect subtle differences in color much faster than it can read subtle differences in text. Using color saves on space too!

# 7 But not too many colors at once

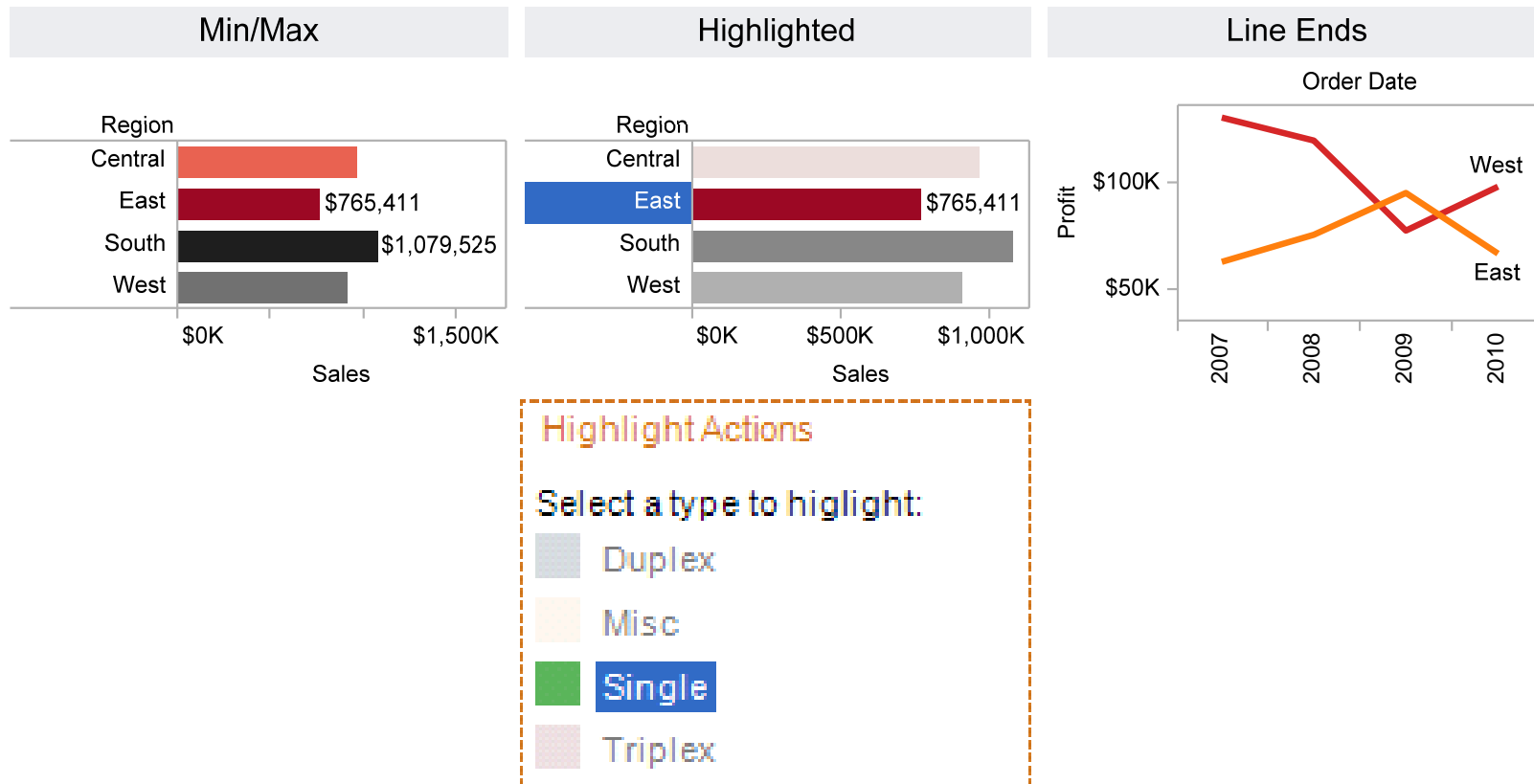
## District of Columbia Crimespotting



Using more than 10 colors can cause them to blend together and confuse. This view is only using 8 colors, but it is still difficult to differentiate the greens.



# 8 Labels make it clear



Labels are wonderful for calling out key data points and actions

# 9

## Make it interactive!

### Major contributors to obesity by county

Eat your vegetables, go for a run and don't smoke, while you're at it!

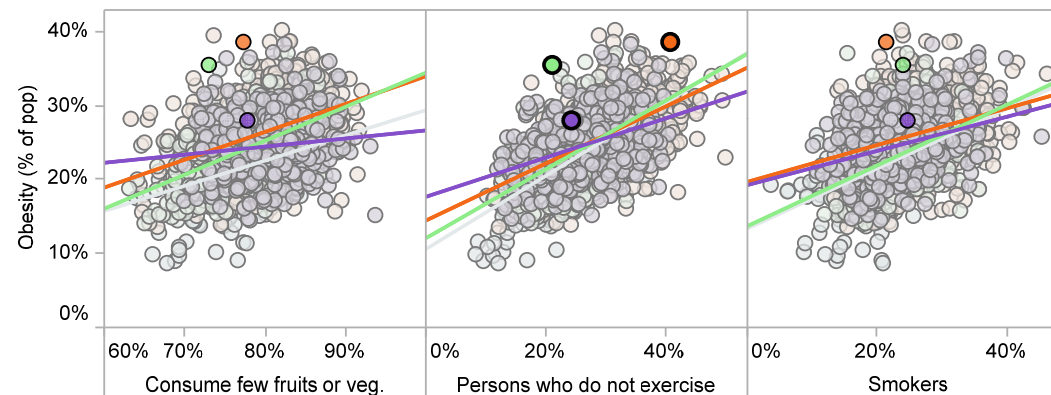
Click to highlight region:

Midwest  Northeast  South  West

Select a state:

(All)

Select point(s) to view details in chart below:



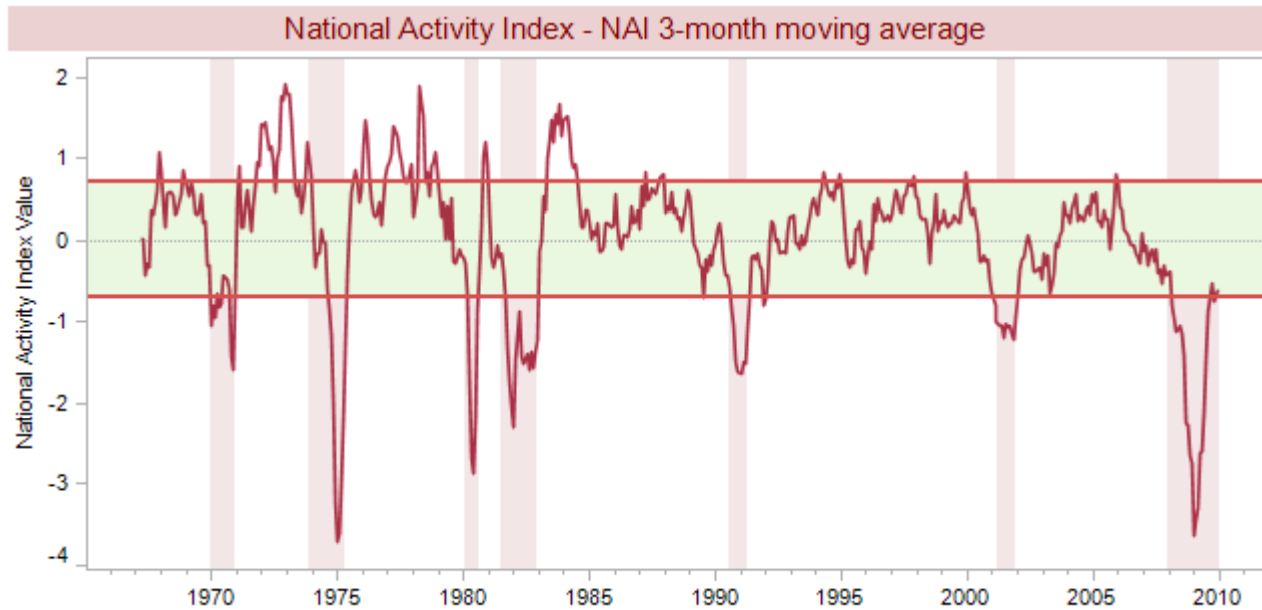
State	County	Obesity	Consume few fruits or veg.	Persons who do not exercise	Smokers
Georgia	Burke	39%	77%	41%	21%
Illinois	Madison	28%	78%	24%	25%
Ohio	Clark	36%	73%	21%	24%

Enable filters, highlighting and clicking for more detail to supercharge the usefulness of your visualization

# 10 No ornamentation necessary

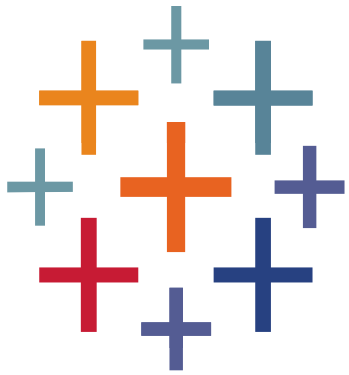
## Chicago Fed National Activity Index

Going beyond GDP and Unemployment



The economy is most healthy when the NAI is inside the horizontal green band. Vertical red bands indicate recessions.

This viz shows the National Activity Index. Not exactly exciting stuff. Yet, this simple visualization tells a story and does it without ornamentation or added presentation layers.  
Let the data tell the story!



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S O F T W A R E

