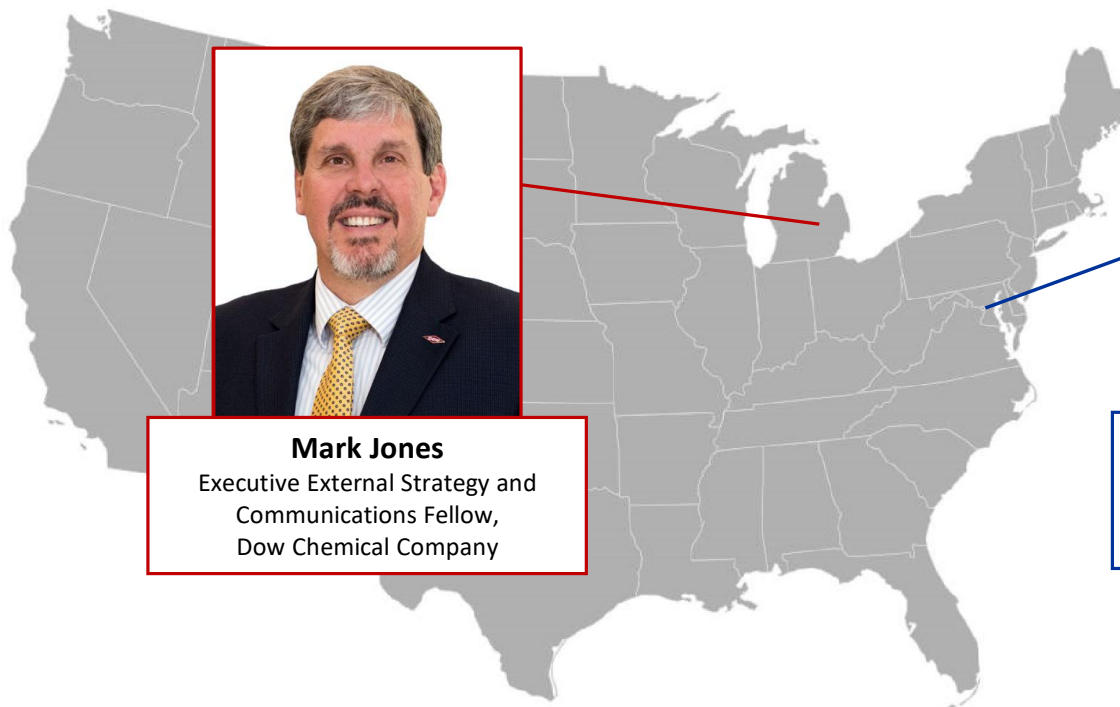


## *“Exceptional Presentations In Spite of PowerPoint: The Sequel”*



**Mark Jones**  
Executive External Strategy and  
Communications Fellow,  
Dow Chemical Company



**Bryan Tweedy**  
Senior Manager,  
ACS Learning and Career Development  
and Professional Resources

*Slides available now and an invitation to view the recording will be sent when available.*

[www.acs.org/acswebinars](http://www.acs.org/acswebinars)



# Exceptional Presentations

in spite of

# PowerPoint: The Sequel

Featuring **Mark Jones**

*Executive External Strategy and Communications Fellow at Dow Chemical*



**Watch Live** | Thursday, May 17 at 2pm ET



**ACS Webinars**  
CLICK • WATCH • LEARN • DISCUSS





## Lorem Ipsum

lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.



- Make yourself the focus when giving a presentation
  - when you have a live audience in front of you, act like it
  - slides as chorus



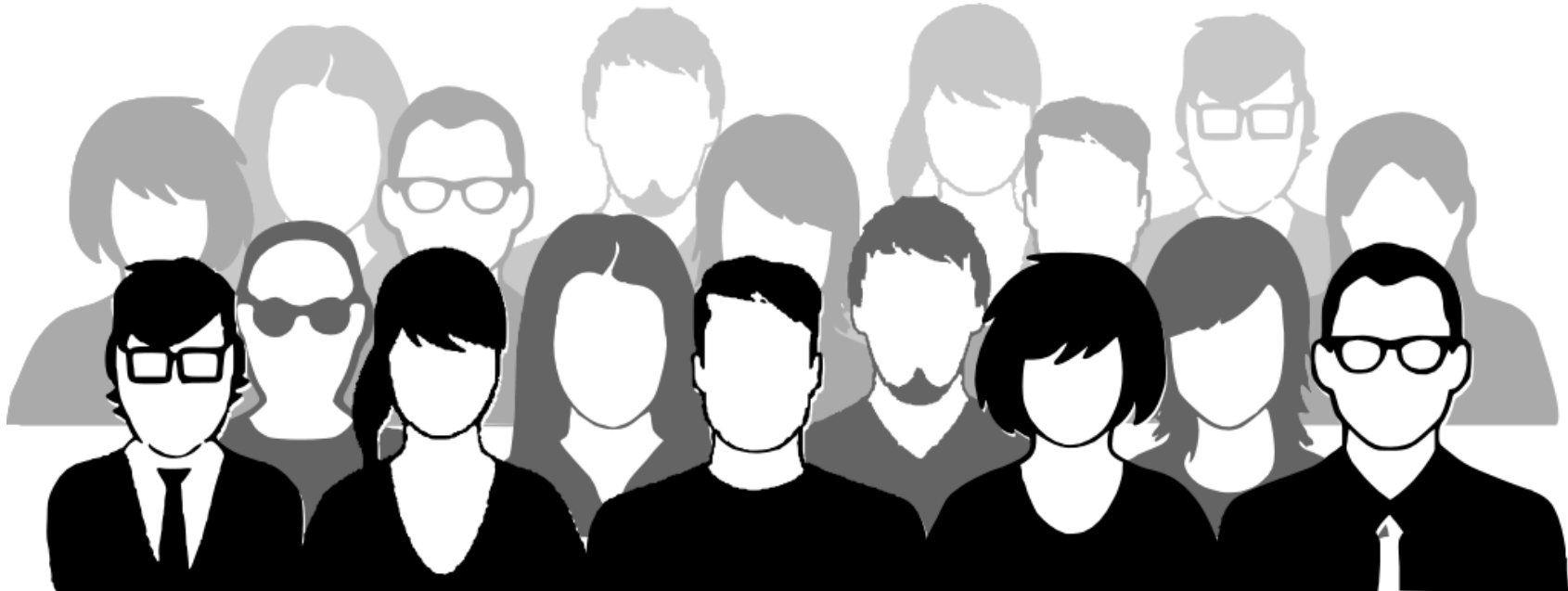


- Be prepared
- practice





- Know your audience and craft the presentation for them
  - focus on your key message(s)



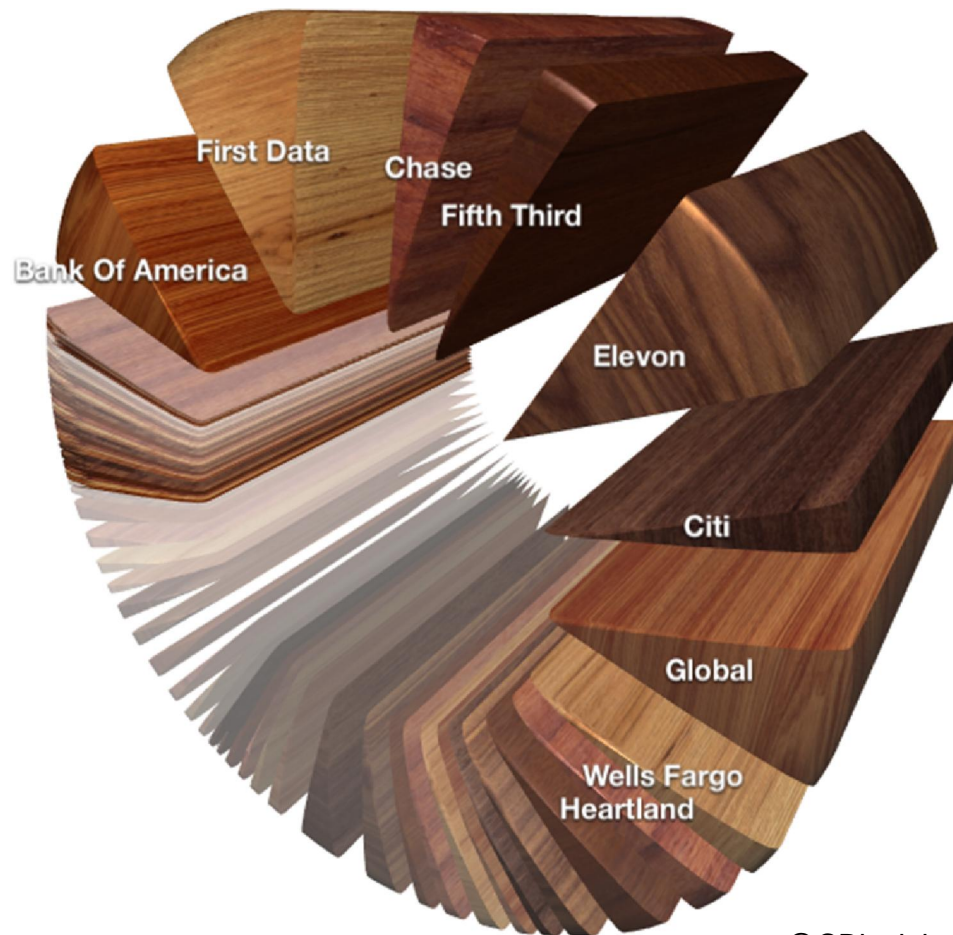


- memorable is better than forgettable
- make graphics *mind ready*





The top 10 Payment Card Processors account for 57% of the total number of Merchant Outlets in 2010.



curated bad graphics






*Distribution of the top 100 Payment Card Processors*

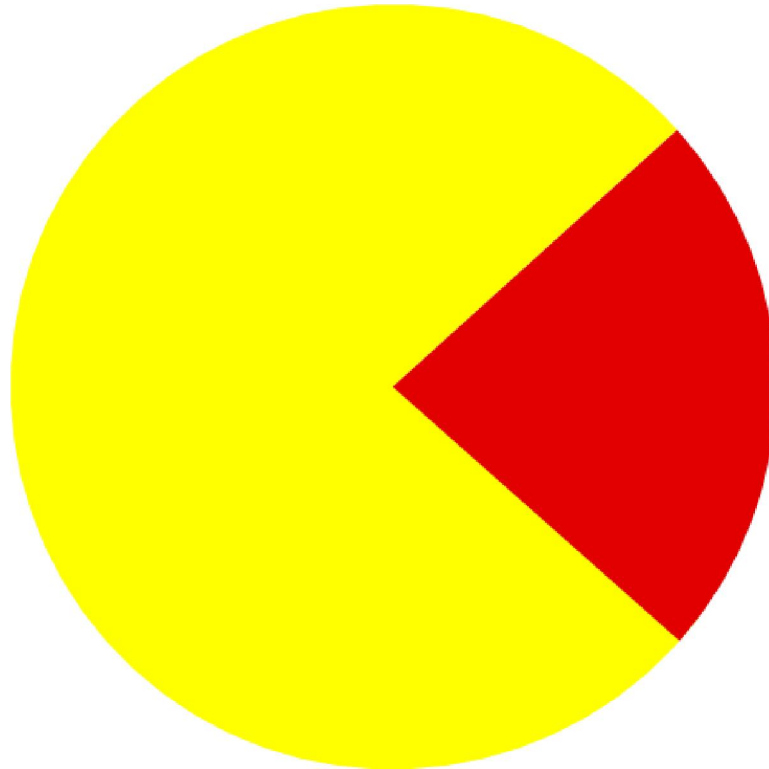
@CBinsights 28 Jun 2017





-  sky
-  sunny side of pyramid
-  shaded side of pyramid





 doesn't look like Pacman

 looks like Pacman



## Five Principles of Data Presentation



- *Tell the truth*
- *Get to the point*
- *Pick the right tool*
- *Highlight what is important*
- *Keep it ~~simple~~*

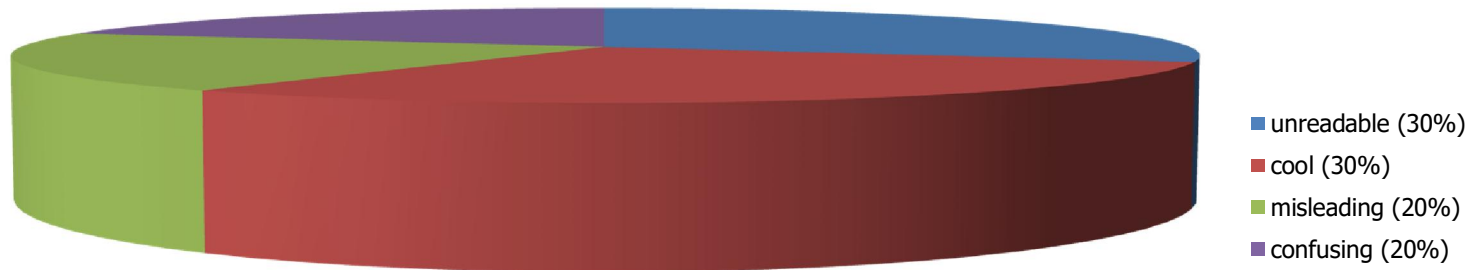
***appropriate***

*Nancy Duarte in Slideology*

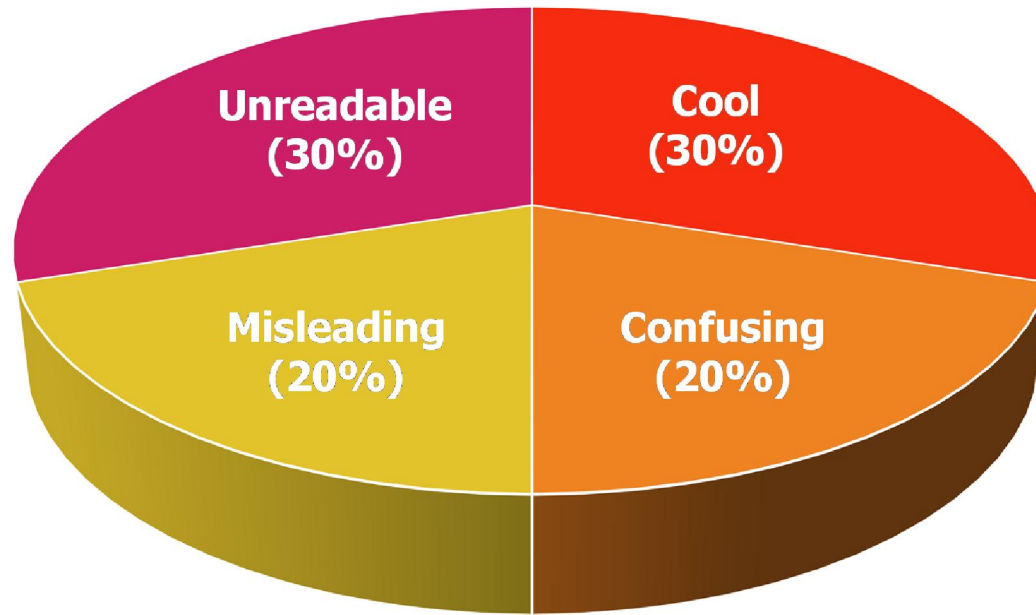


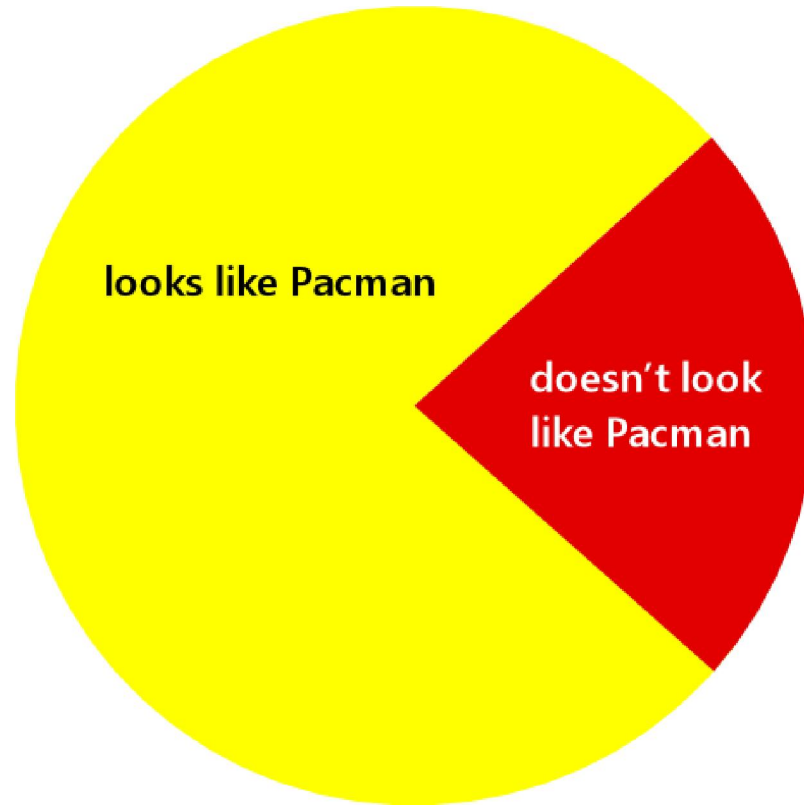


## Perception of 3D Pie Charts



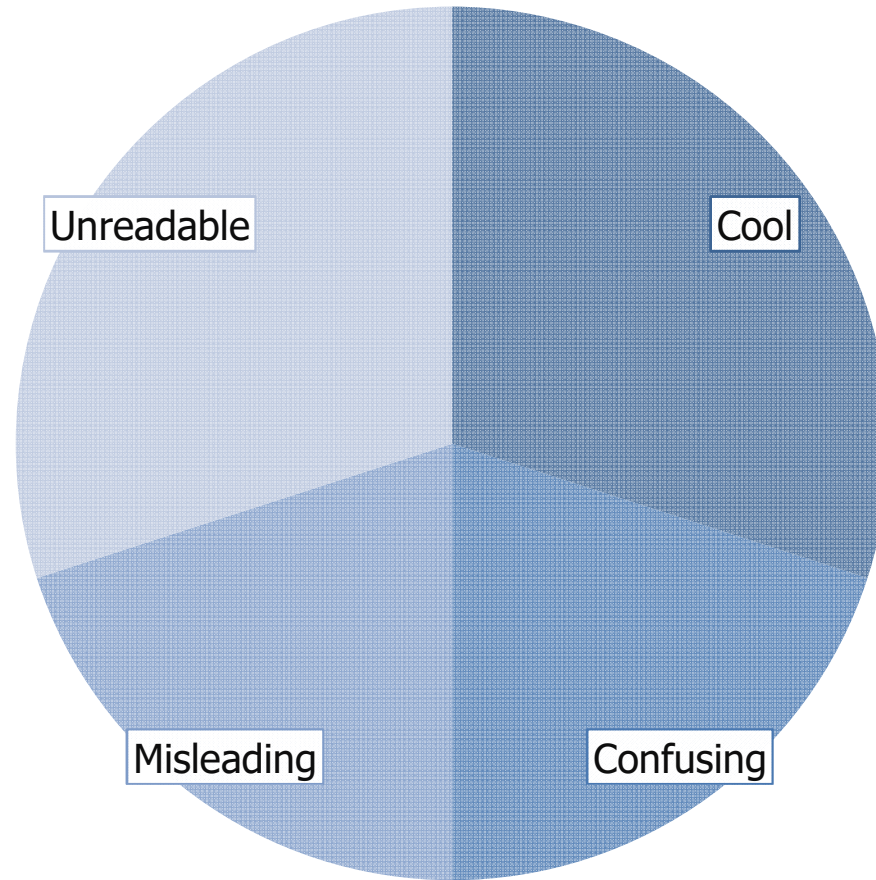








## PERCEPTION OF 3D PIE CHARTS



# Audience Challenge Question

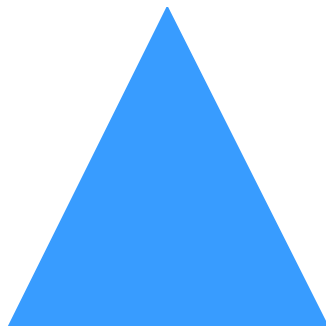
ANSWER THE QUESTION ON BLUE SCREEN IN ONE MOMENT



**Which is bigger?**



Rectangle  
1



Triangle



Square

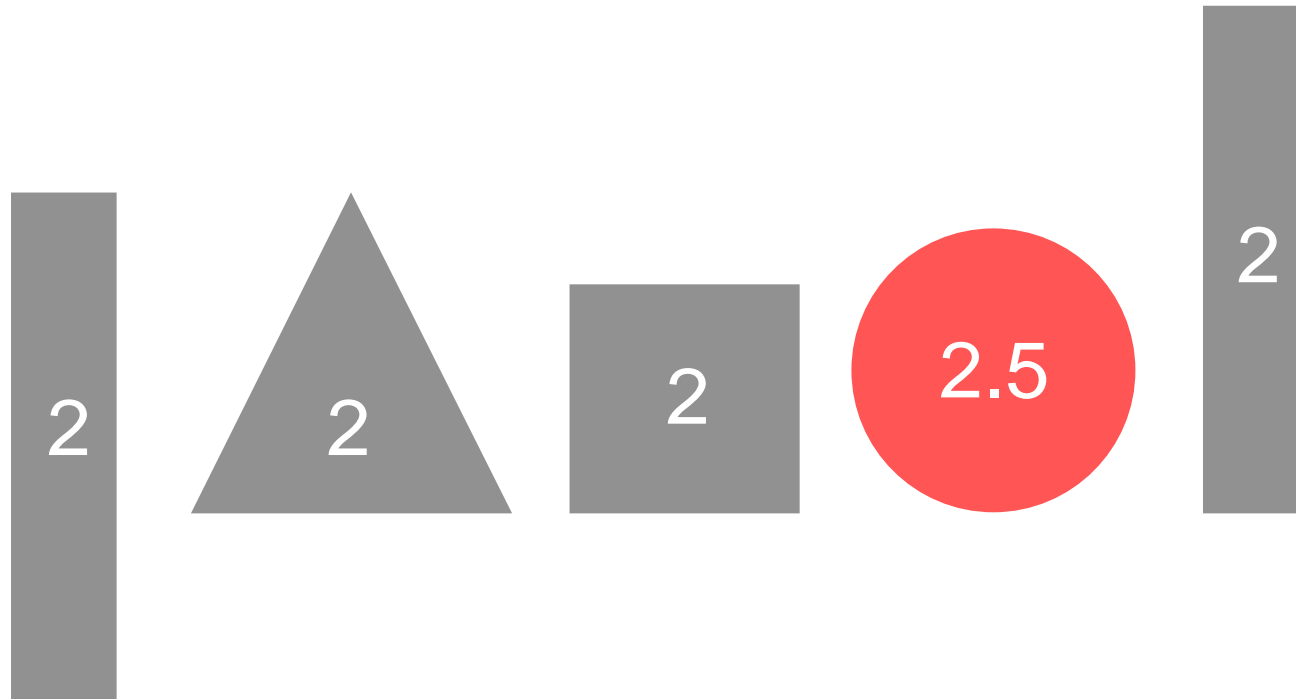


Circle

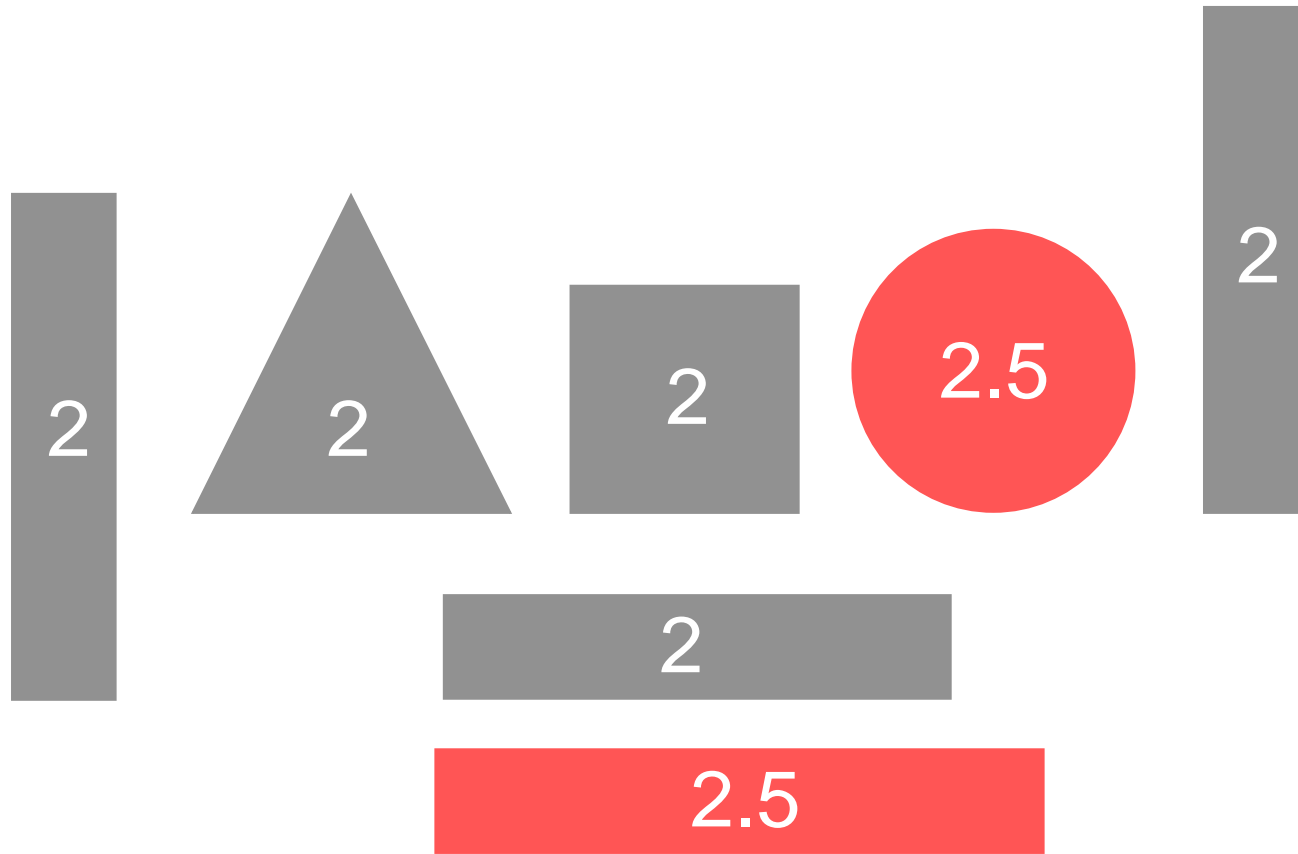


Rectangle  
2



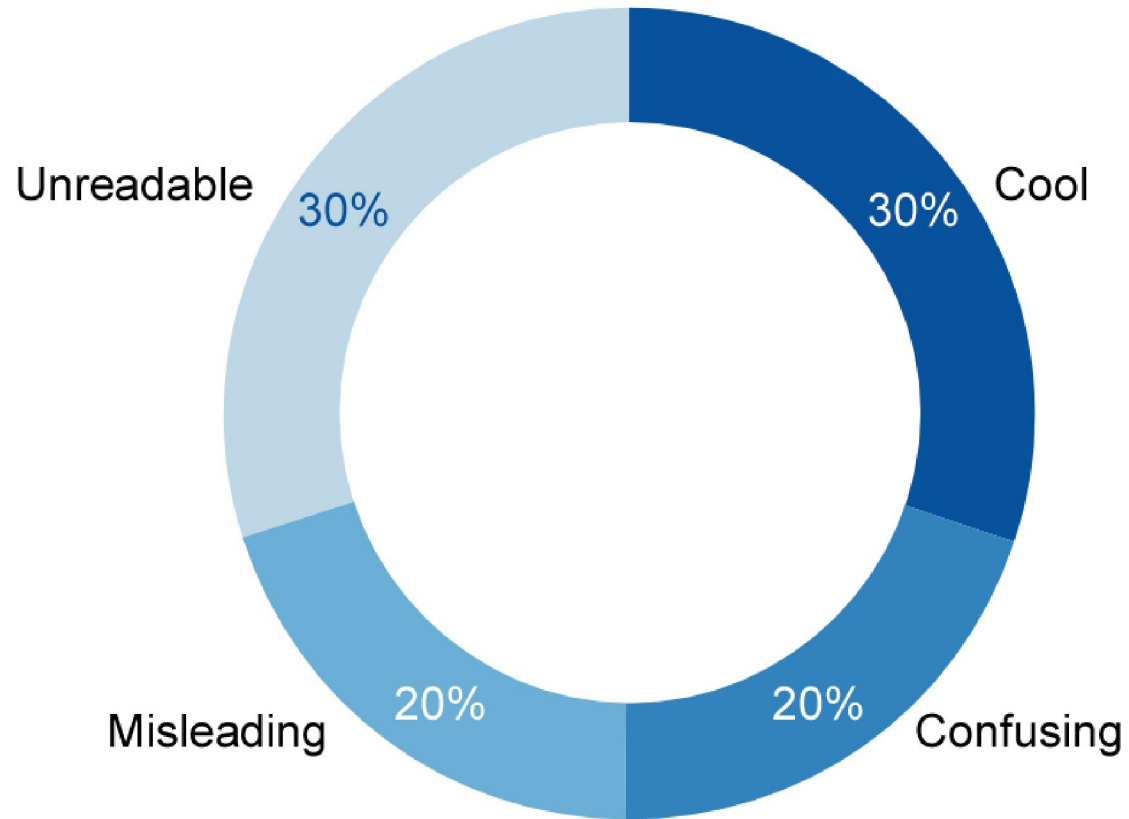








## Perception of 3D Pie Charts





Number of data classes: 4 how to use | updates | downloads | credits

**COLORBREWER 2.0**  
color advice for cartography

Nature of your data:  
 sequential  diverging  qualitative

Pick a color scheme:  
Multi-hue: Single hue:

Only show:  
 colorblind safe  
 print friendly  
 photocopy safe

Context:  
 roads  
 cities  
 borders

Background:  
 solid color  terrain  
color transparency

4-class BuGn  
EXPORT  
HEX  
#edf8fb  
#b2e2e2  
#66c2a4  
#238b45

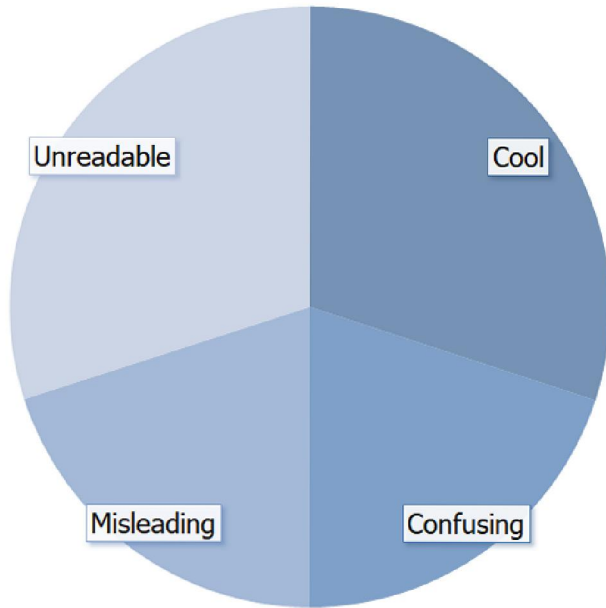
© Cynthia Brewer, Mark Harrower and The Pennsylvania State University  
[Source code and feedback](#)  
[Back to Flash version](#)  
[Back to ColorBrewer 1.0](#)

axismaps

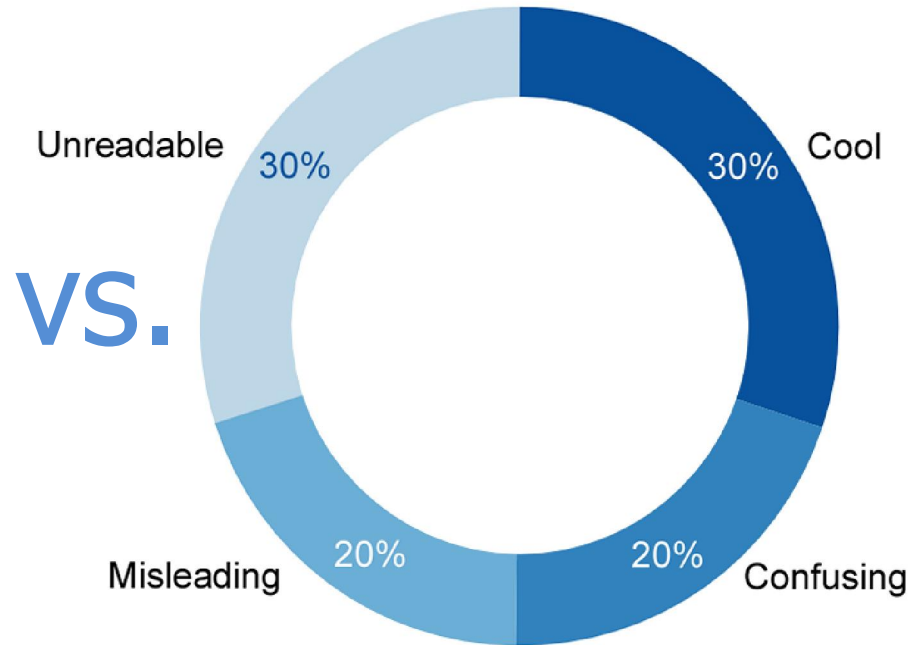




PERCEPTION OF 3D PIE CHARTS

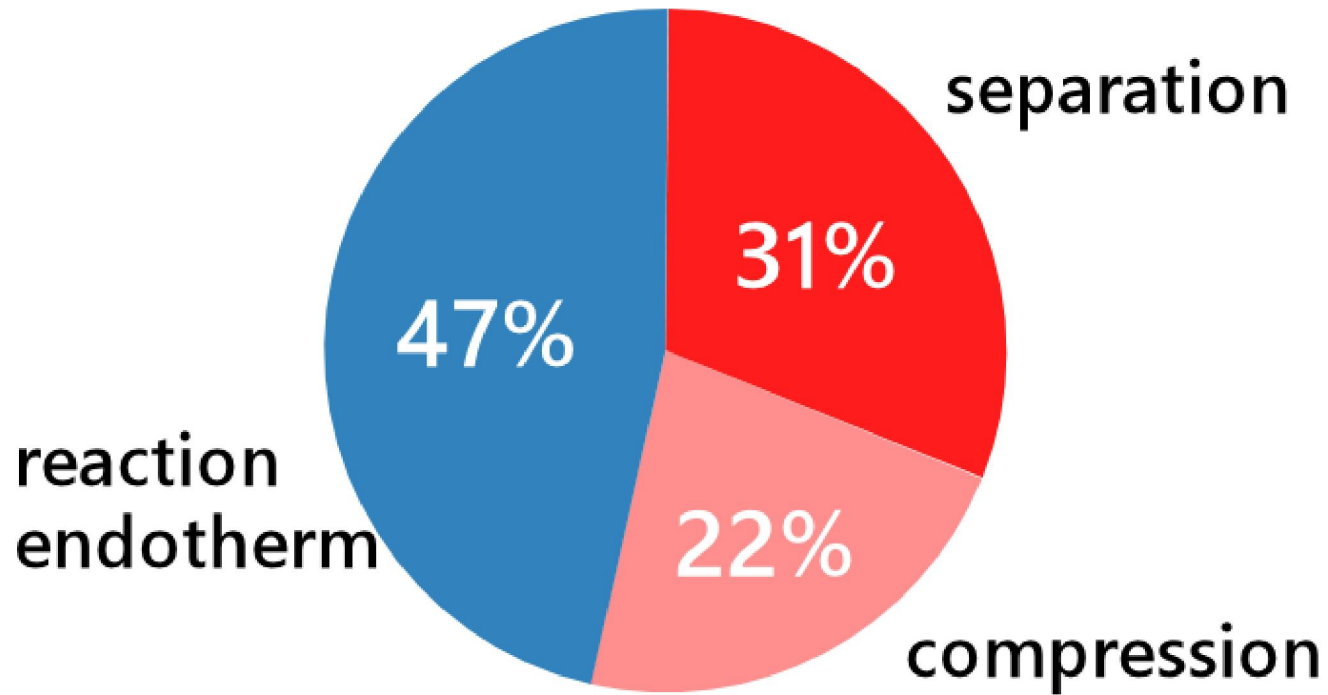


Perception of 3D Pie Charts





## When Is A Pie Chart The Right Choice?







## Anatomy of a Winning TED Talk

● 1%

### Sophisticated Visual Aids

We're not sure who puts the D in TED—most of the best presentations favor tepid PowerPoint slide shows (sorry, Brené Brown). Pictionary-quality drawings (really, Simon Sinek?), or no props at all.

● 5%

### Opening Joke

Remember the one about the shoe salesman who went to Africa in the 1900s? That's how Benjamin Zander opened his talk—which turned out to be about classical music.

● 5%

### Spontaneous Moment

Don't overprepare. Tease the guy in the front row ("You could light up a village with this guy's eyes"). Commend the stagehand who handles the human brain you brought.

● 5%

### Statement of Utter Certainty

People come for answers—give 'em what they want, as Shawn Achor did: "By training your brain ... we can reverse the formula for happiness and success."

● 12%

### Snappy Refrain

The TED equivalent of "I have a dream." Example: "People don't buy what you do; they buy why you do it." Repeat 7x.

● 23%

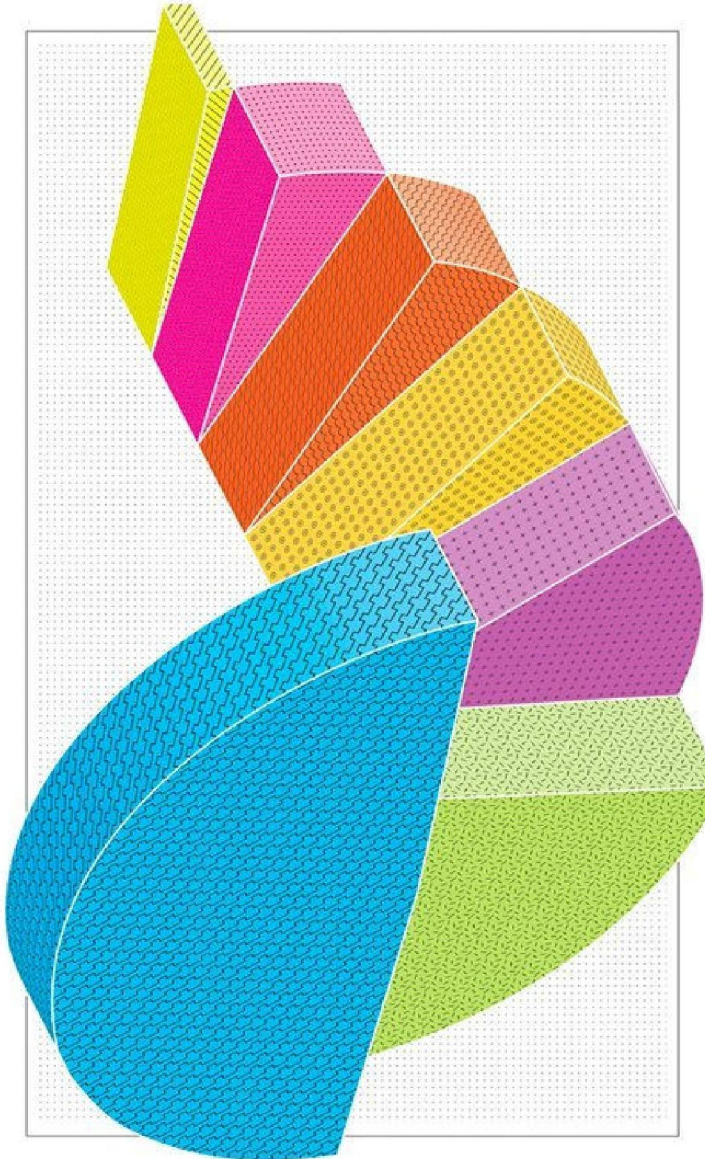
### Personal Failure

Be relatable. We want to know about that nervous breakdown. Or at least the time you didn't fit in at summer camp.

● 49%

### Contrarian Thesis

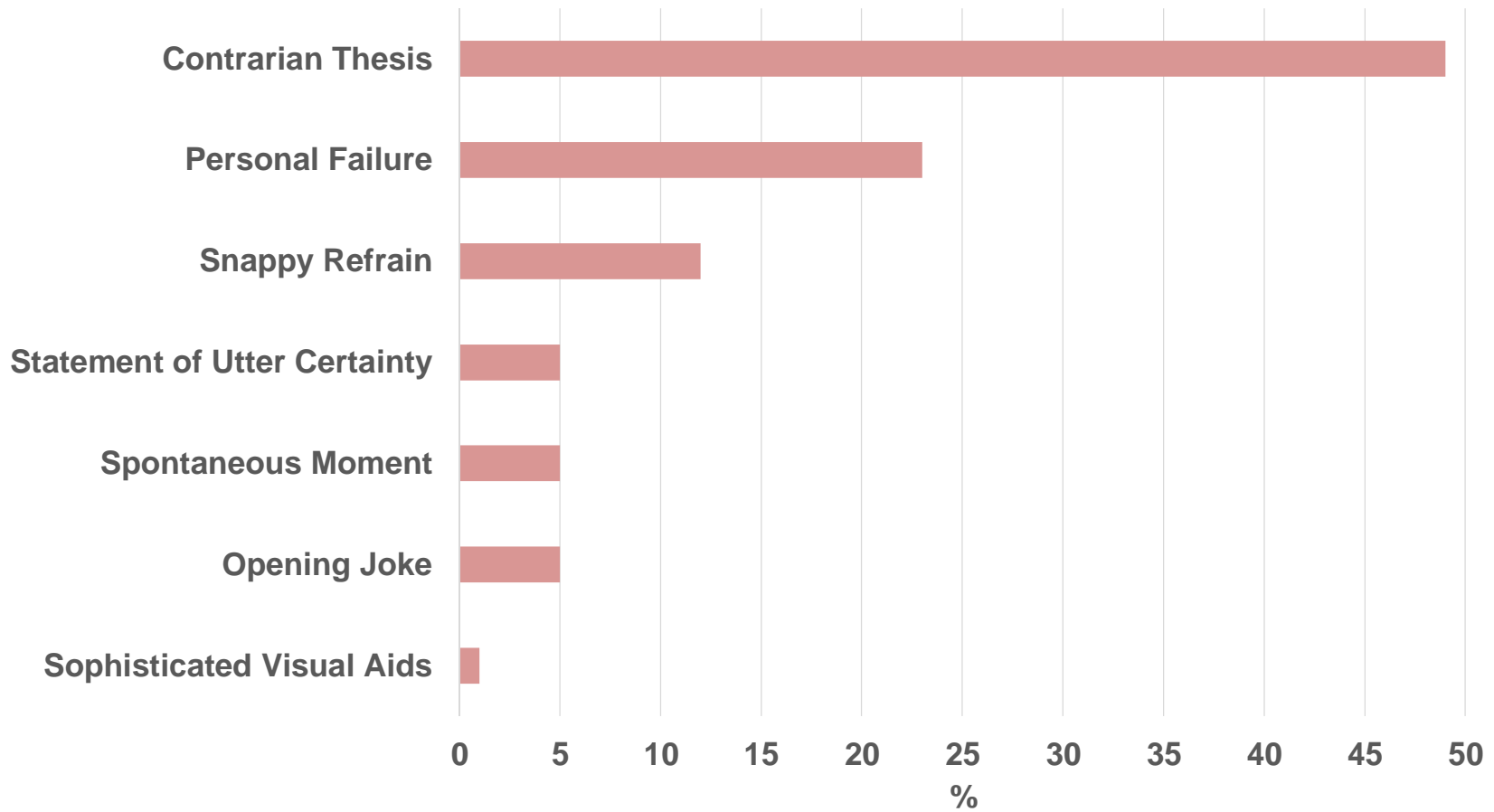
Wait a sec—we should be playing *more* videogames? The more choices we have, the worse off we are? TED is where conventional wisdom goes to die.

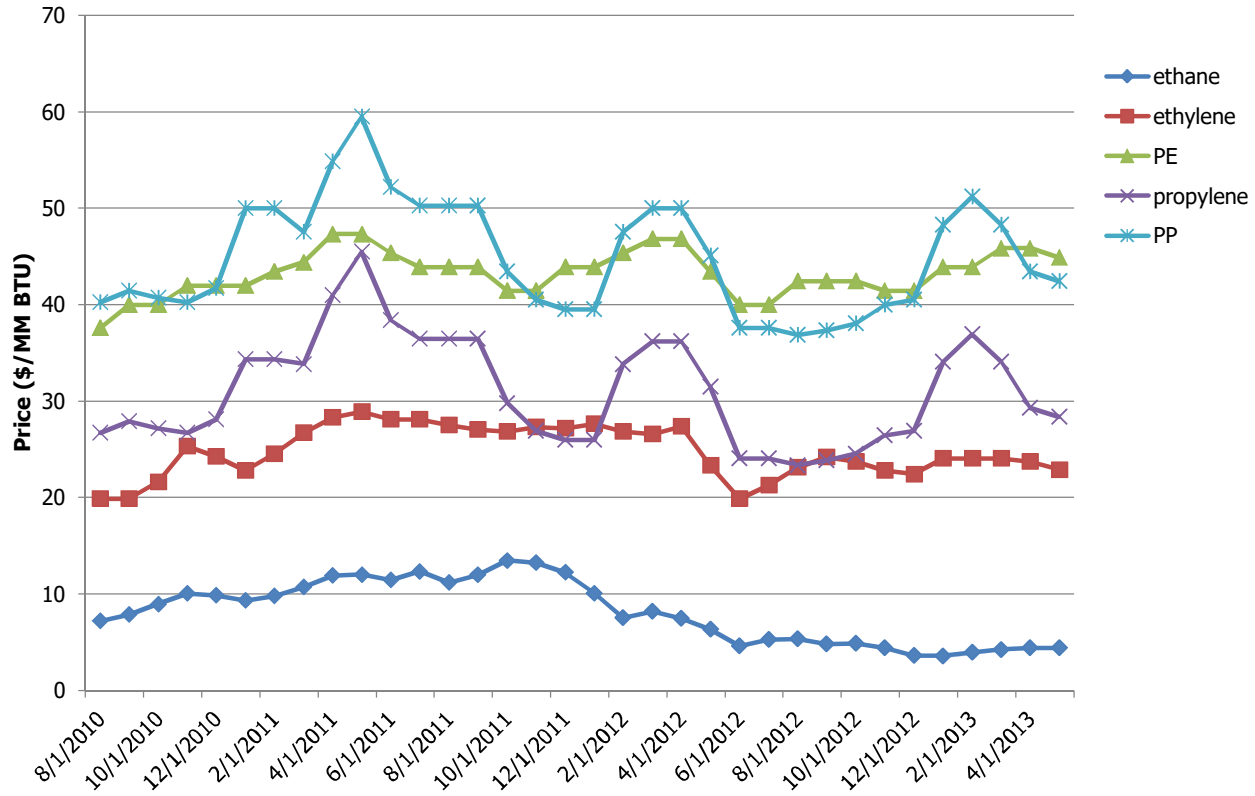


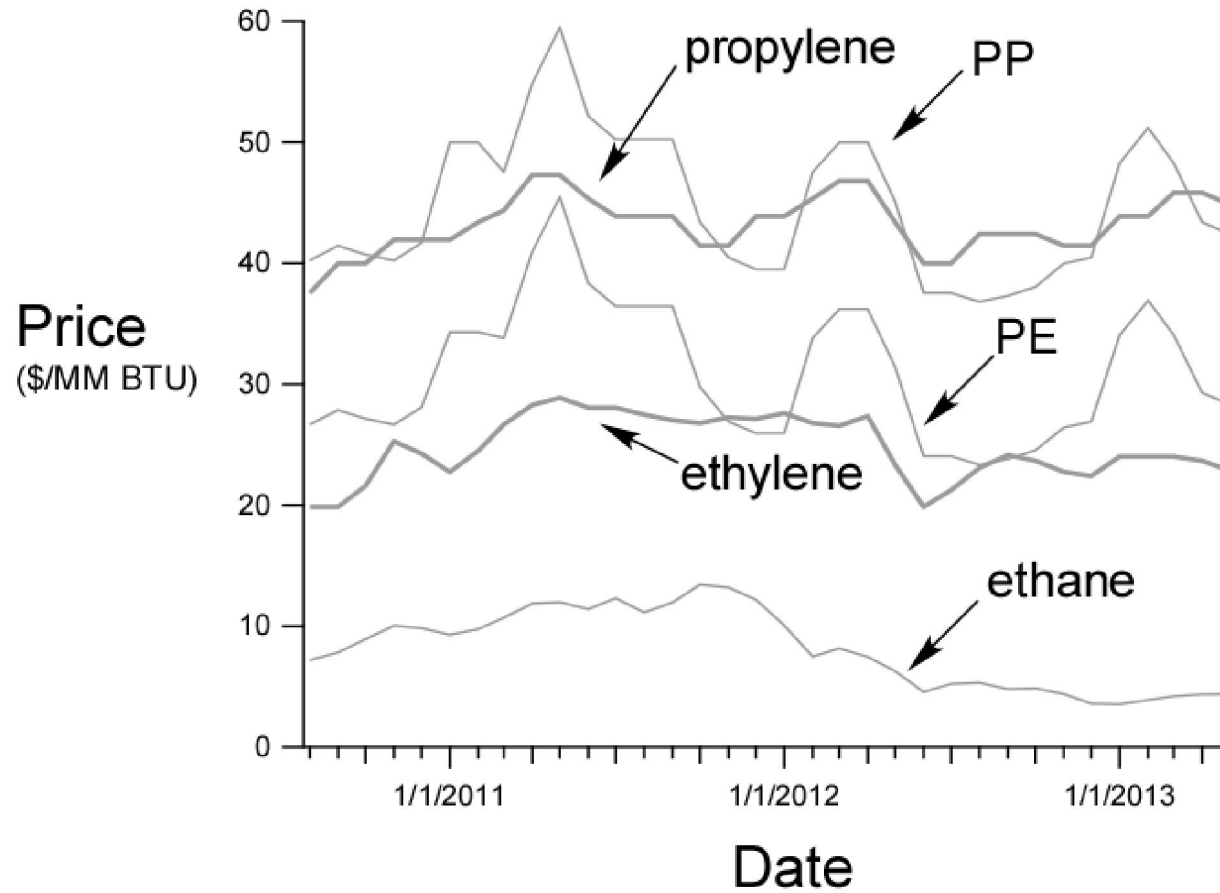


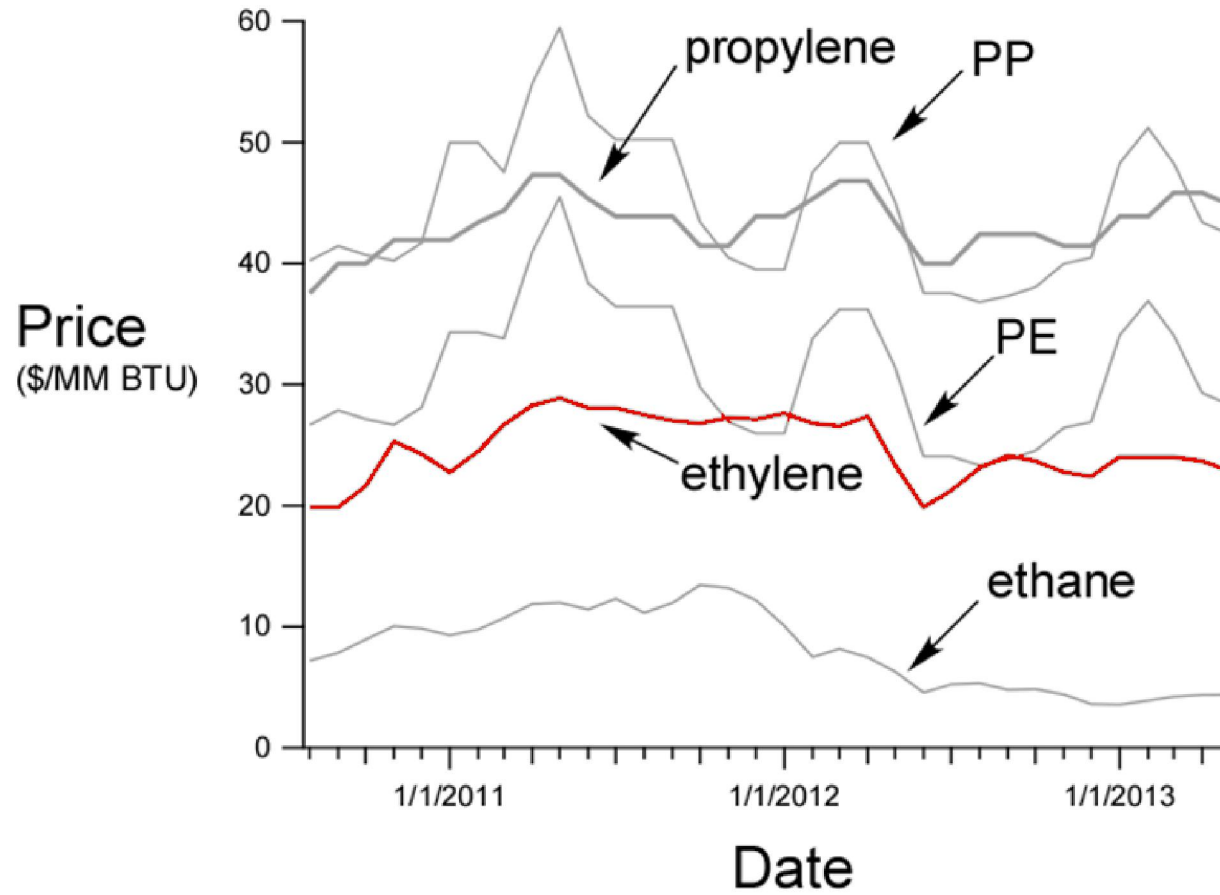


## Anatomy of a Winning TED Talk



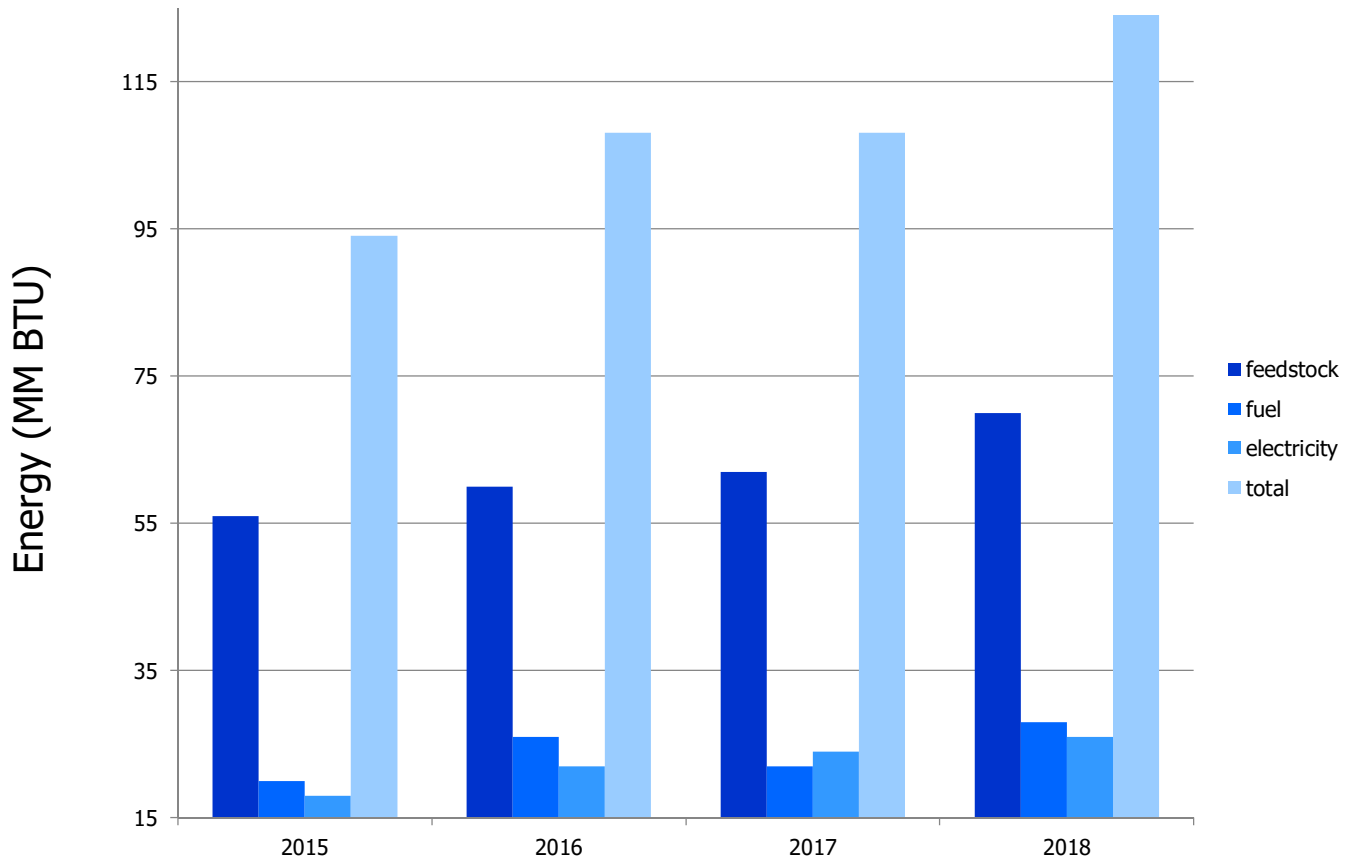


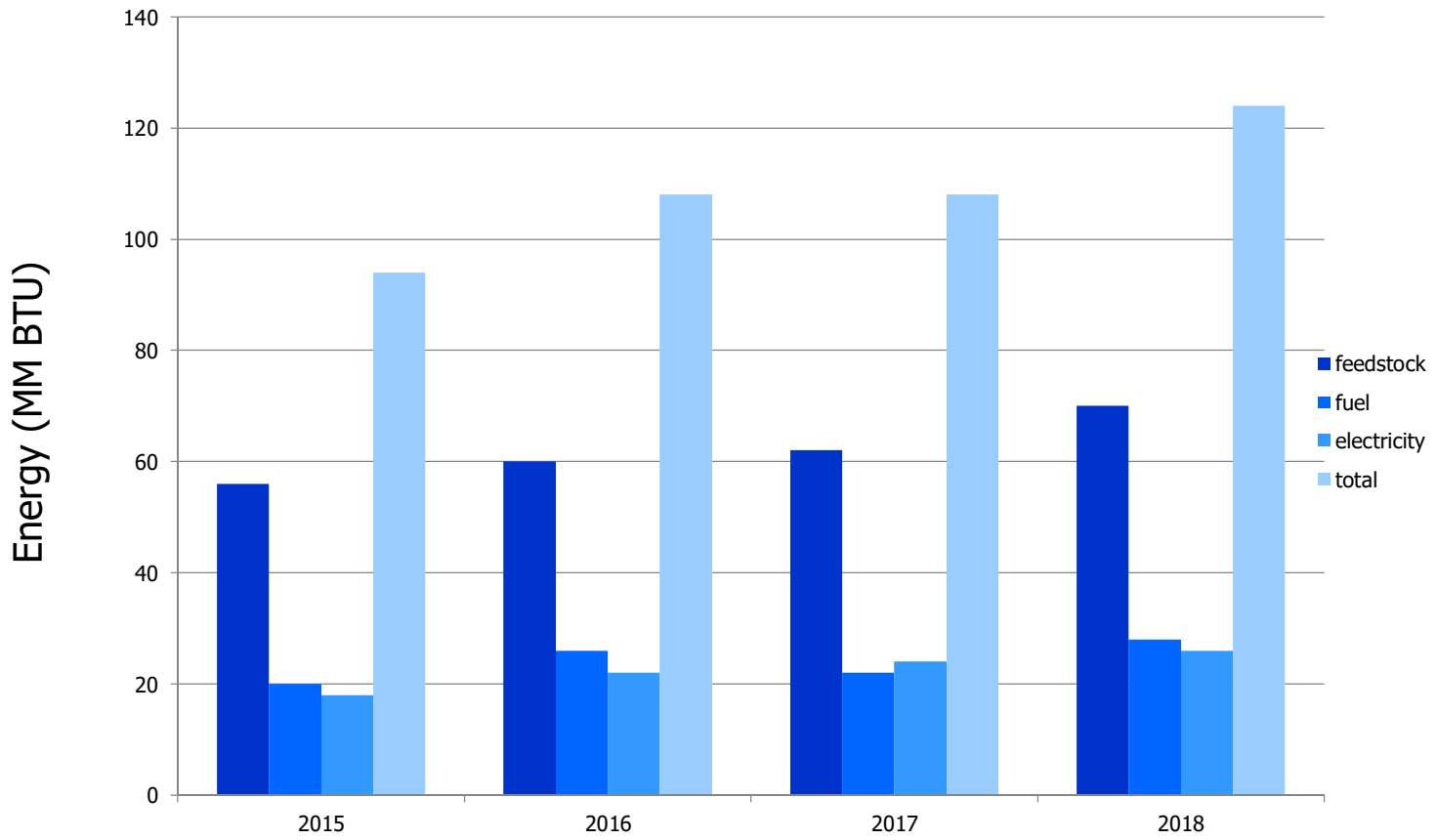


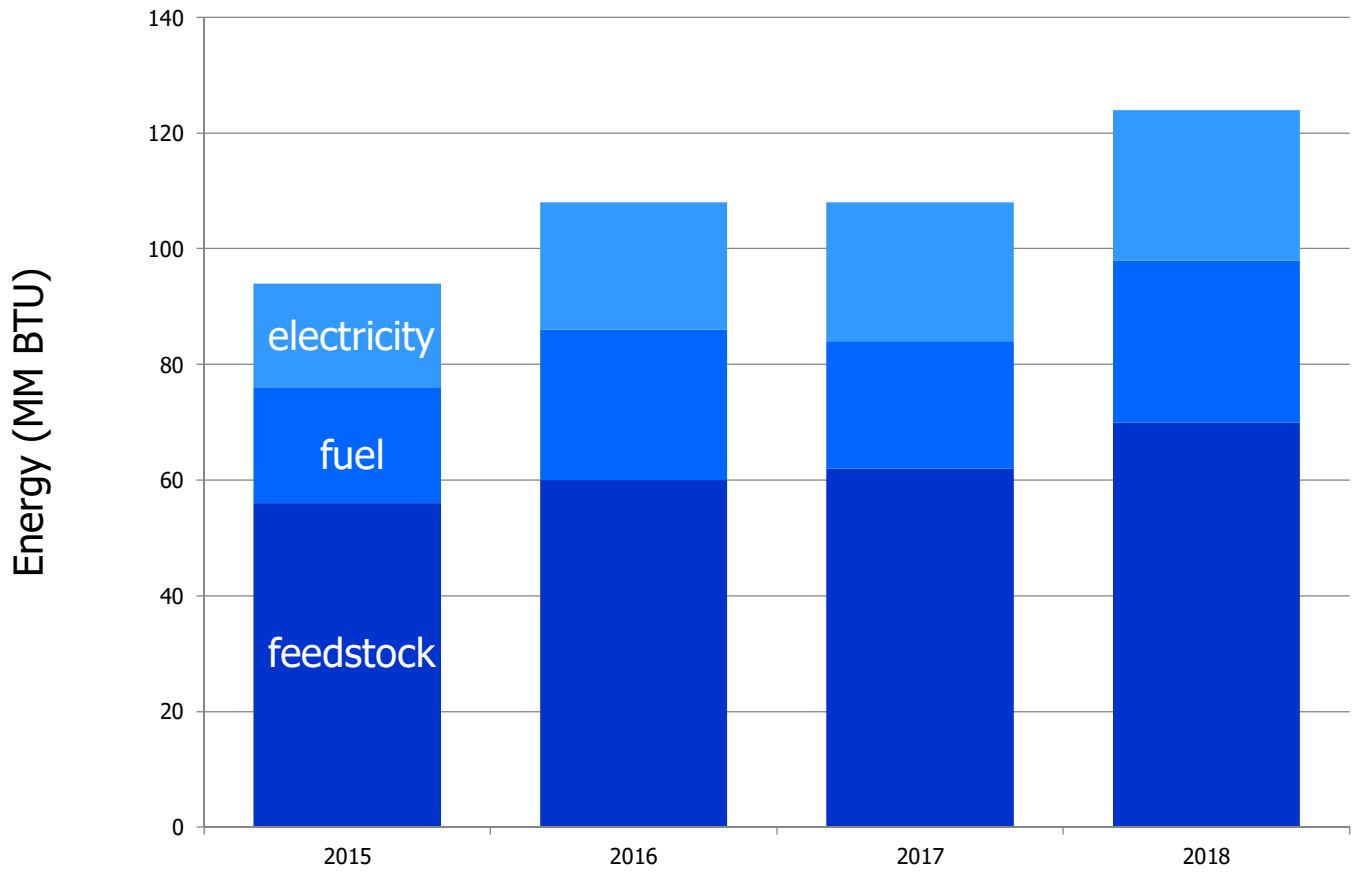


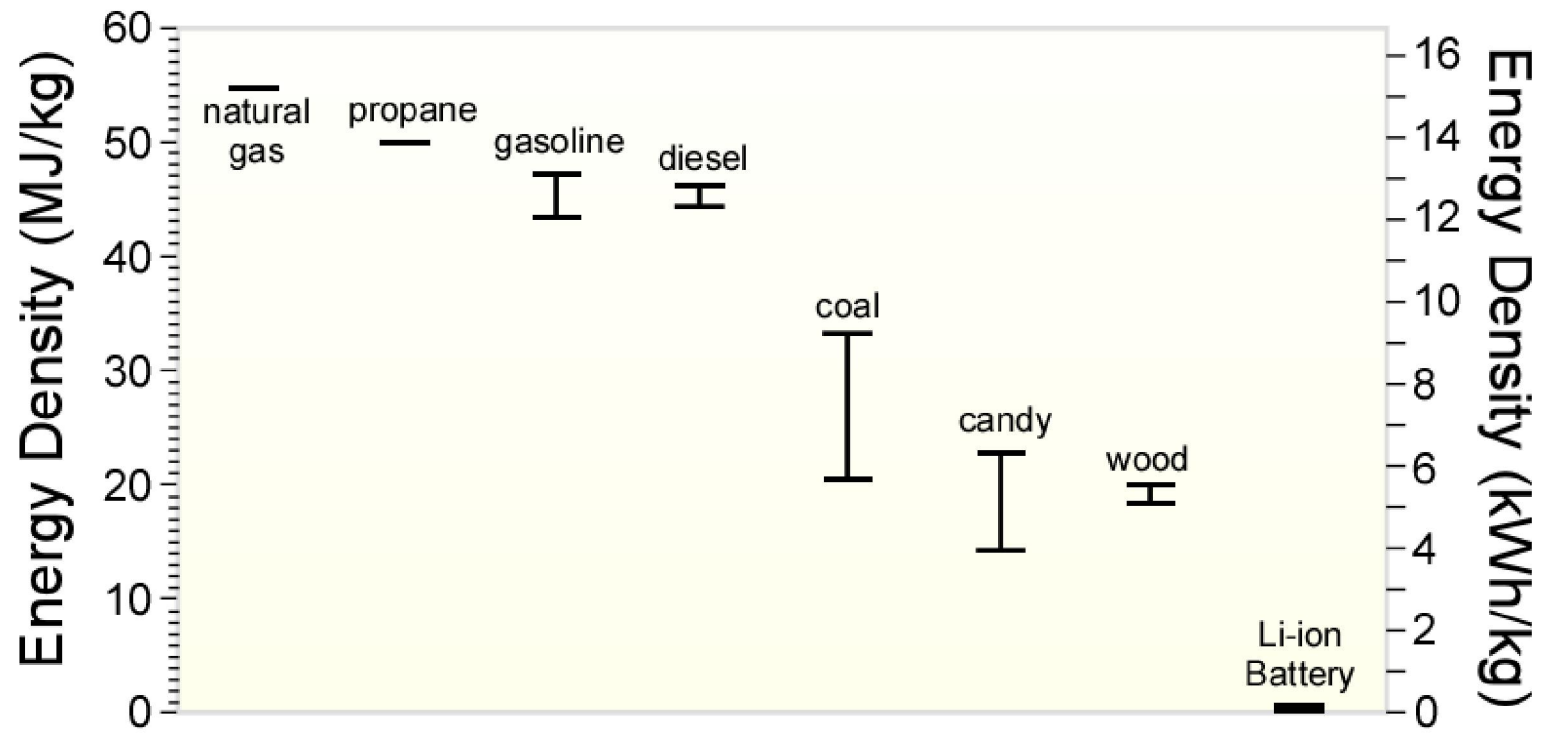


## Redundant Data; Non-zero Baseline



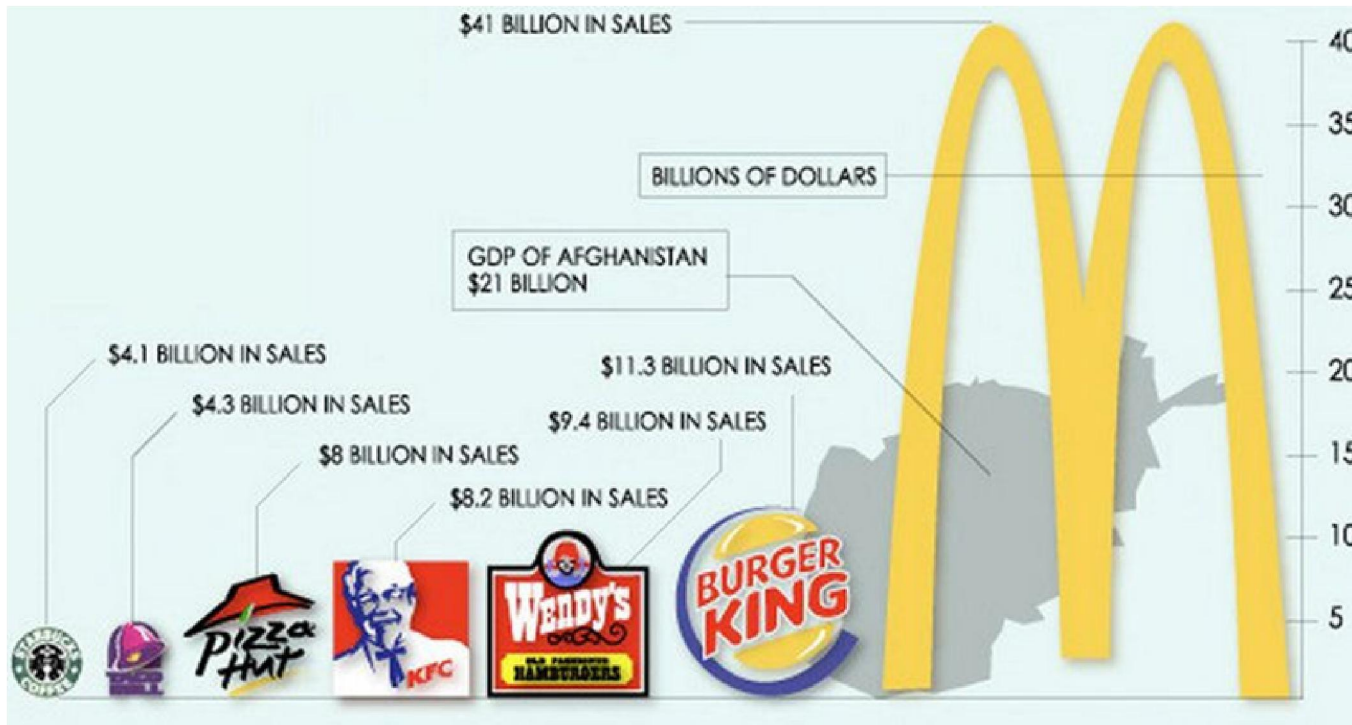






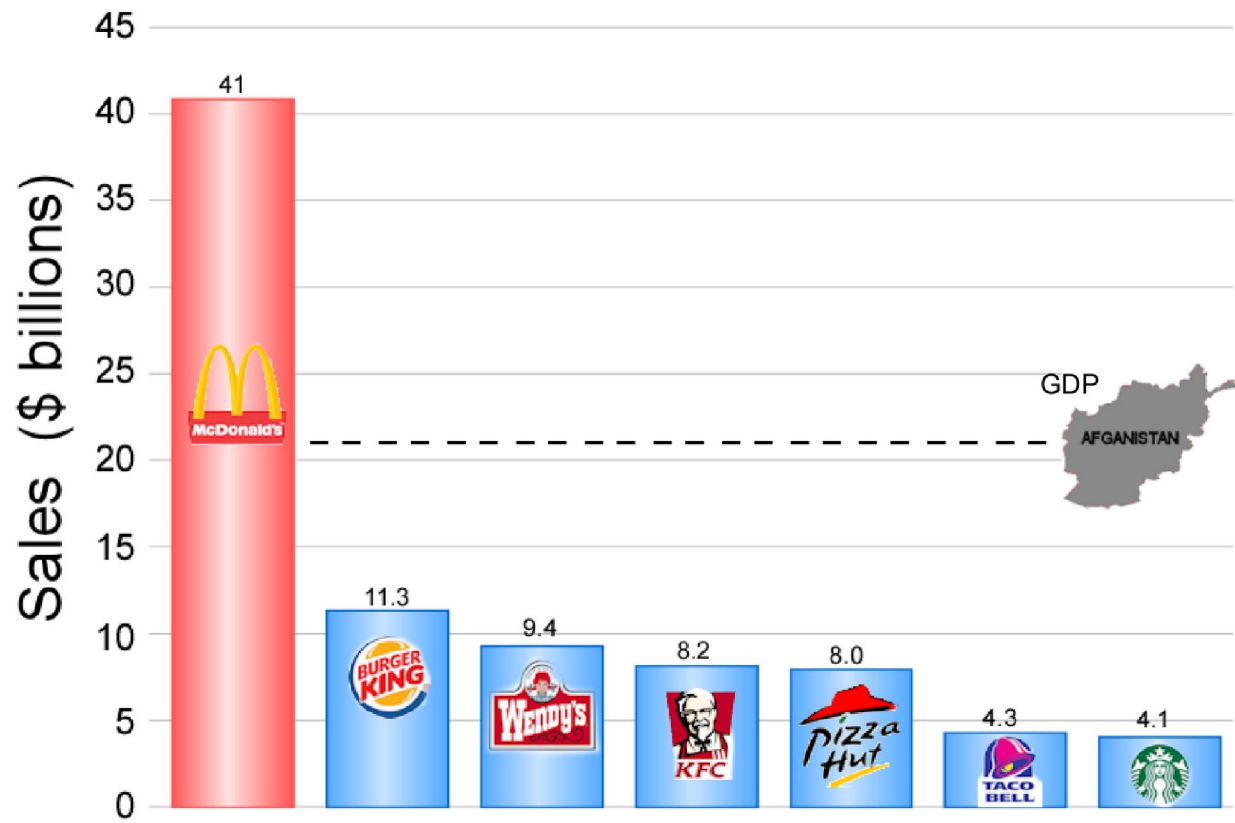


# Chart Junk



<http://www.businessinsider.com/the-27-worst-charts-of-all-time-2013-6>

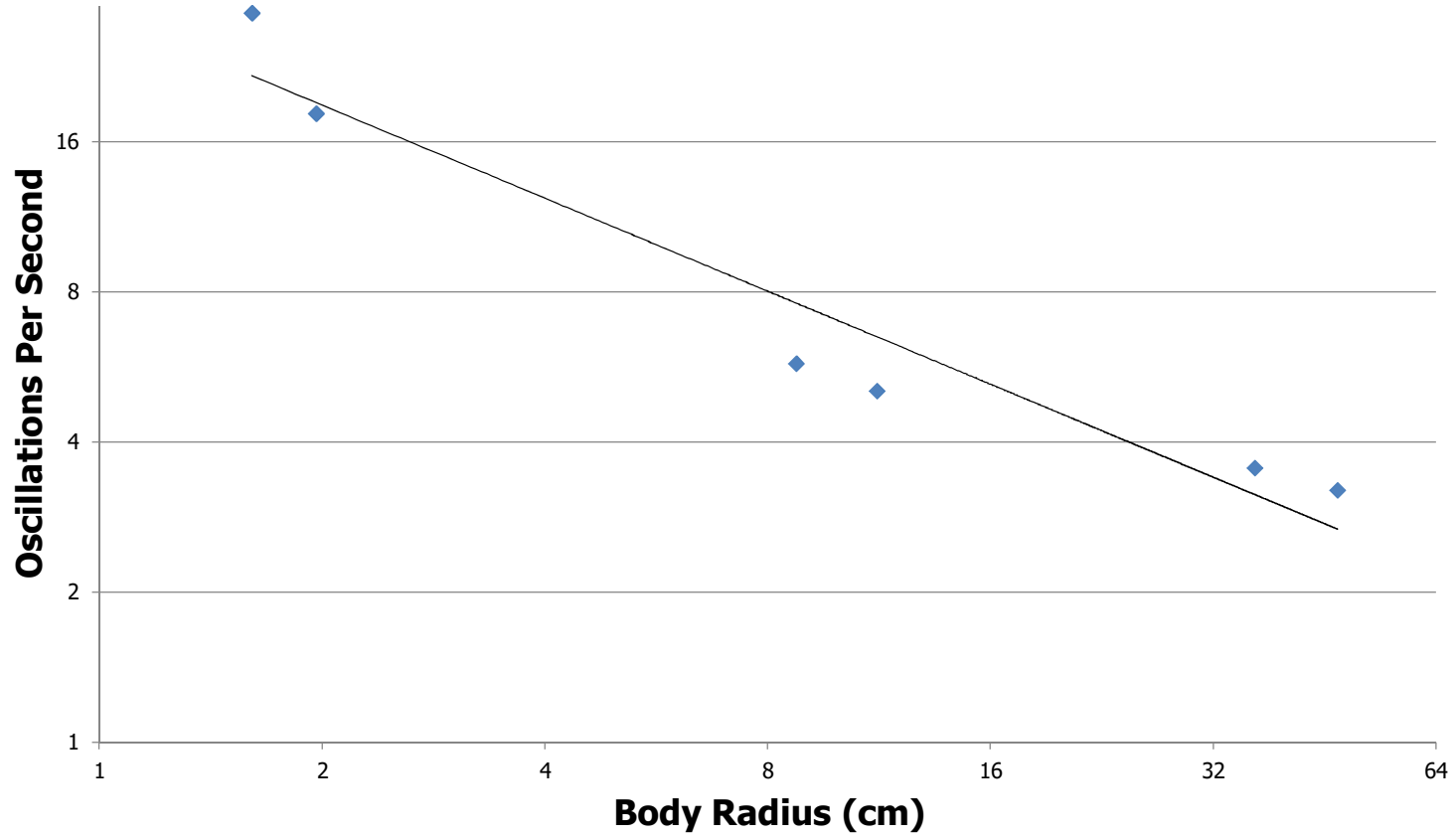


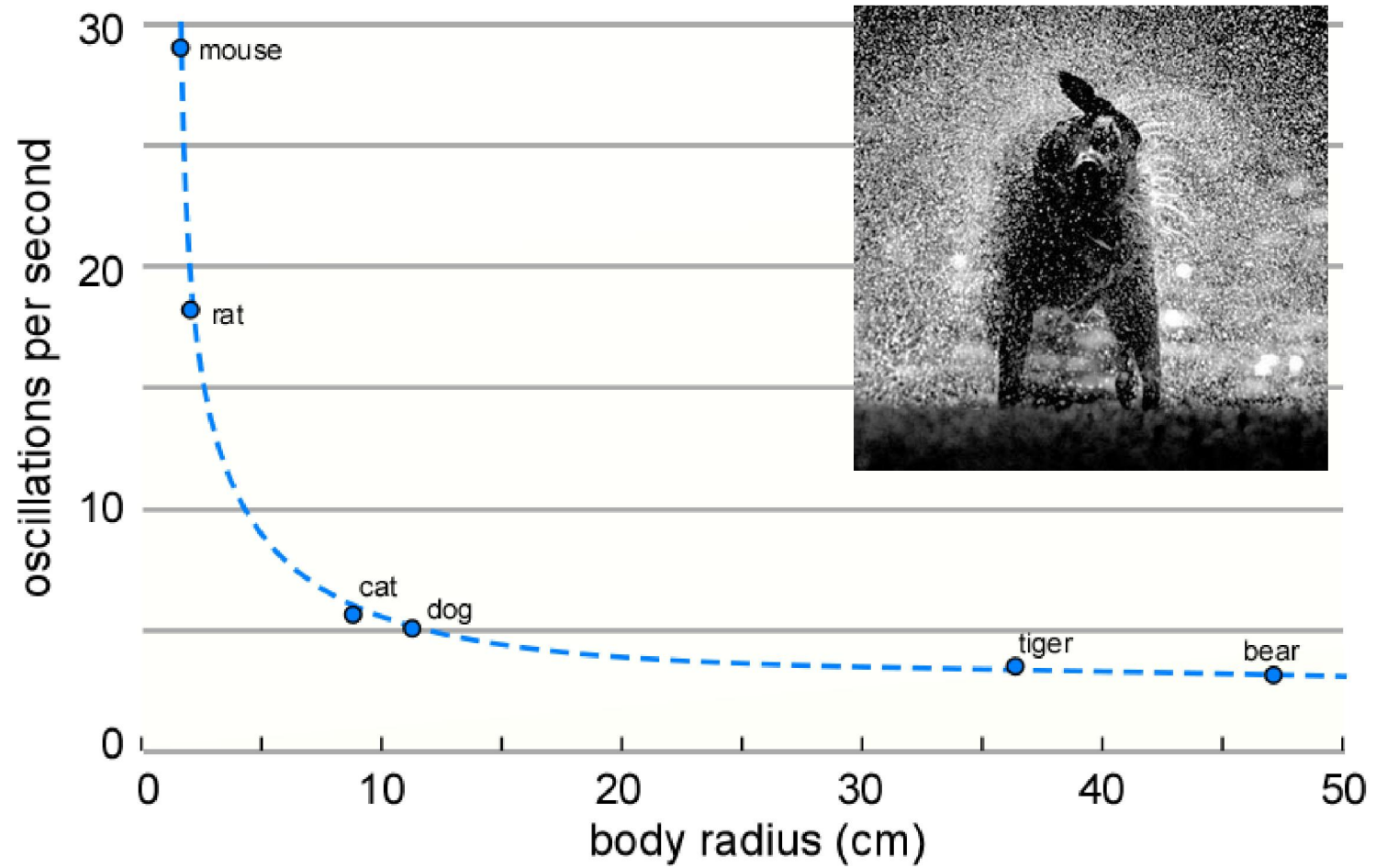






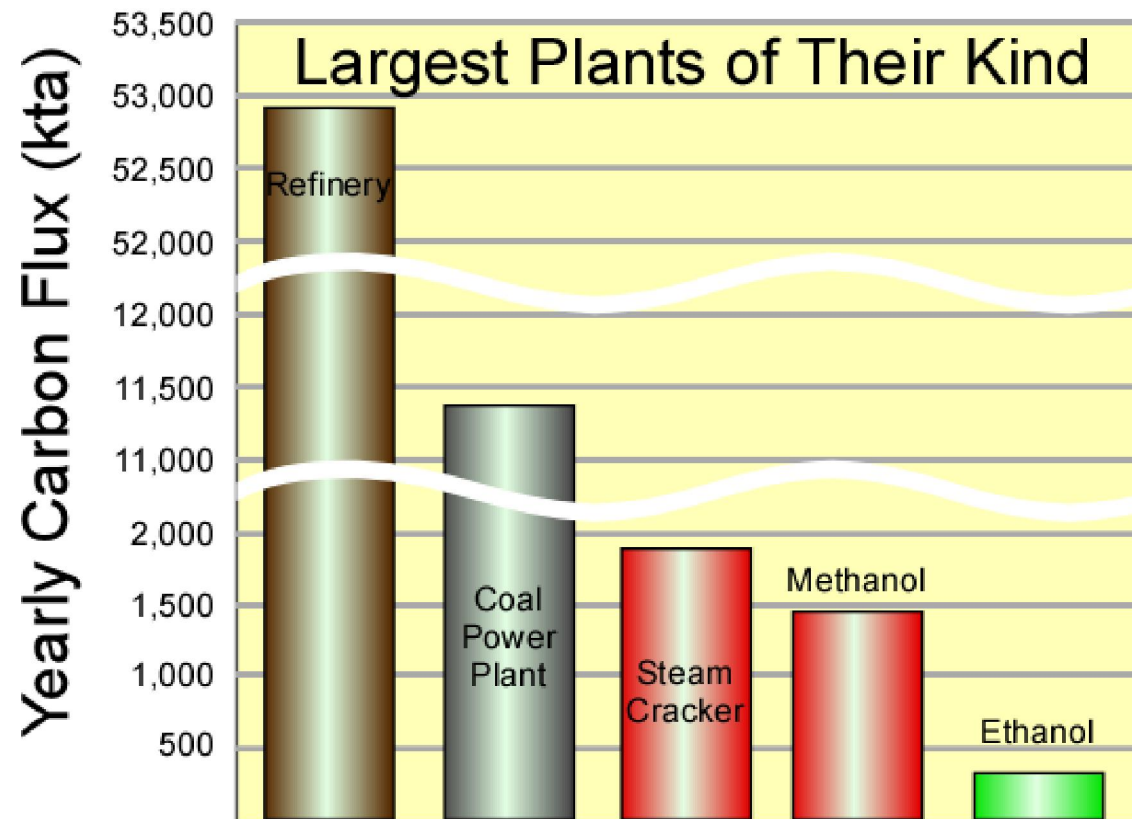
## Wet Animal Oscillation





Andrew Dickerson, Grant Mills, Jay Bauman, Young-Hui Chang, David Hu, *The Wet-Dog Shake*, *Fluid Dynamics*, 15 October 2010.





c.2011



# Audience Challenge Question

ANSWER THE QUESTION ON BLUE SCREEN IN ONE MOMENT



## Which one of these is NOT one of the Five Principles of Graphical Design:

- Above all else show the data
- Maximize the data-ink ratio
- Erase non-data ink
- Consider how the graph will look printed only in black and white
- Erase redundant data



## Edward Tufte's Five Principles

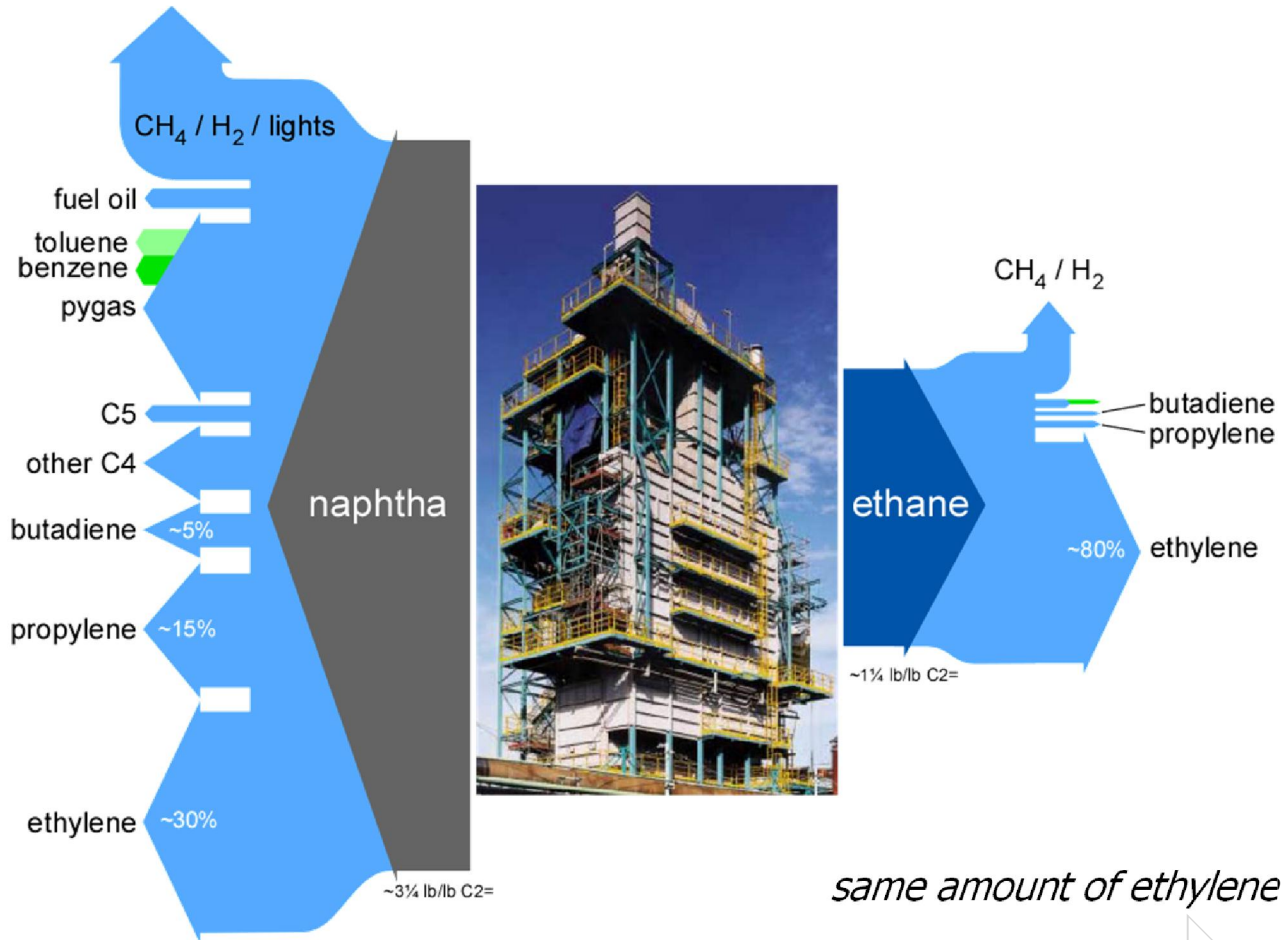
1. Above all else show the data
2. Maximize the data-ink ratio
3. Erase non-data ink
4. Erase redundant data
5. Revise and Edit







# Sankey Diagram = Arrow Diagram



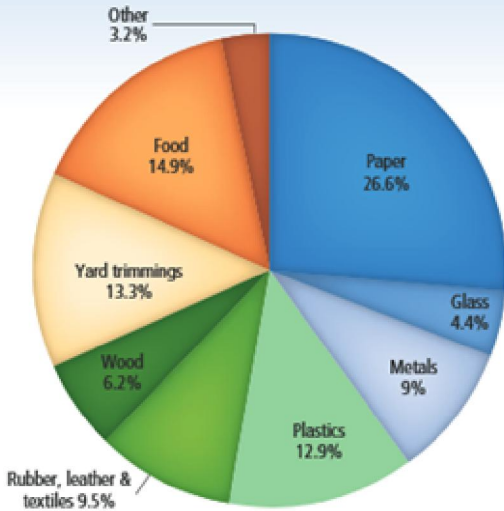
*same amount of ethylene*



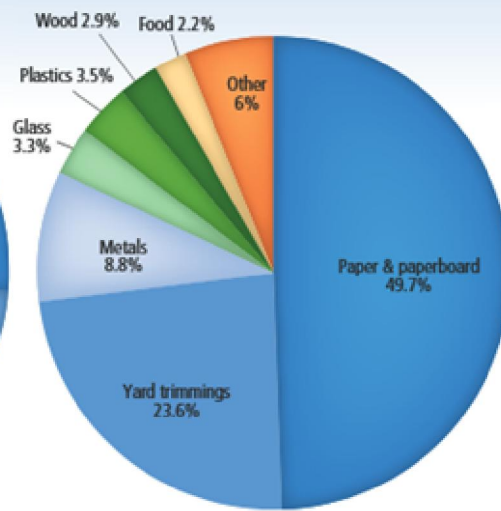
# Real Example



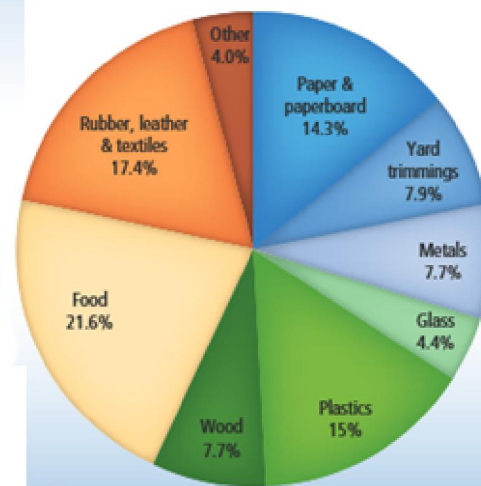
**Figure 5. Total MSW Generation (by material), 2014**  
258 Million Tons



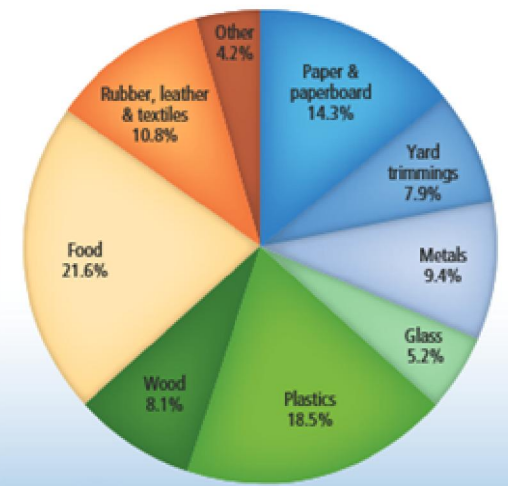
**Figure 6. Total MSW Recycling and Composting (by material), 2014**  
89 Million Tons



**Figure 7. Total MSW Combusted with Energy Recovery (by material), 2014**  
33 Million Tons



**Figure 8. Total MSW Landfilled (by material), 2014**  
136 Million Tons



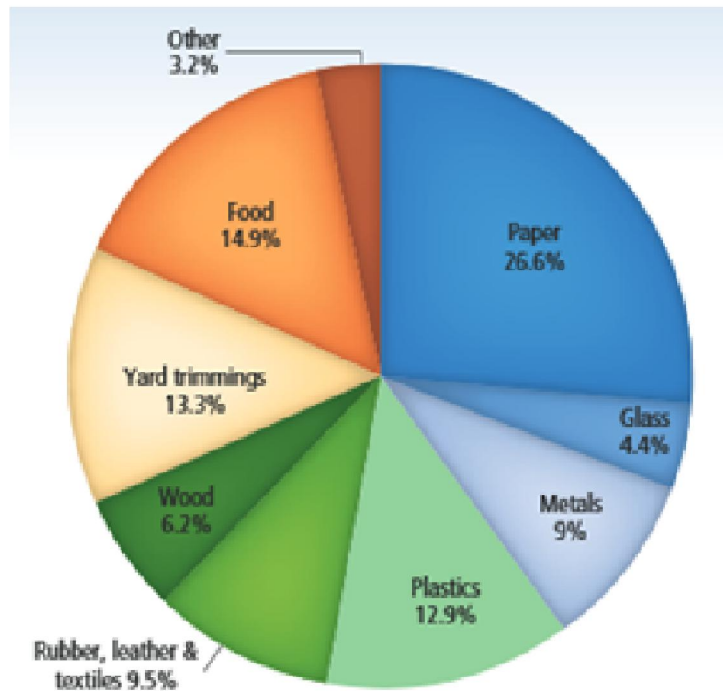
[https://www.epa.gov/sites/production/files/2016-11/documents/2014\\_smmfactsheet\\_508.pdf](https://www.epa.gov/sites/production/files/2016-11/documents/2014_smmfactsheet_508.pdf)



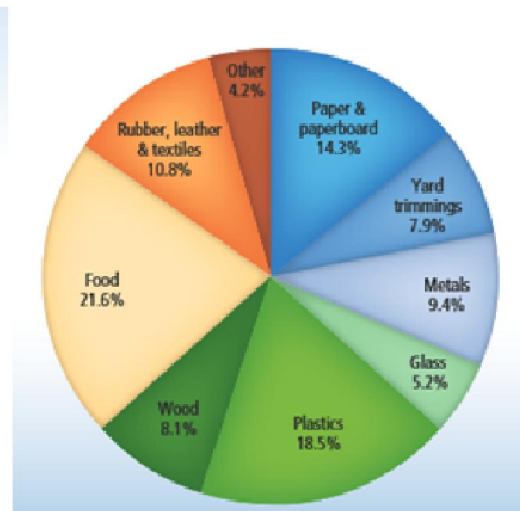


## Real Example

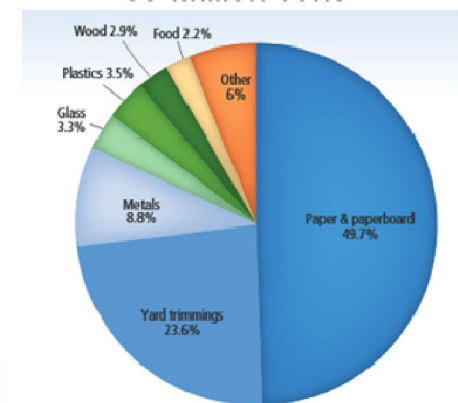
Total MSW Generation  
258 Million Tons



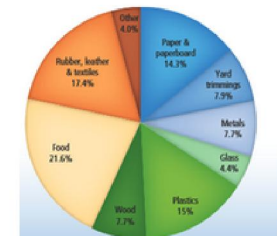
Total MSW Landfilled  
136 Million Tons



Total MSW Recycling and Composting  
89 Million Tons

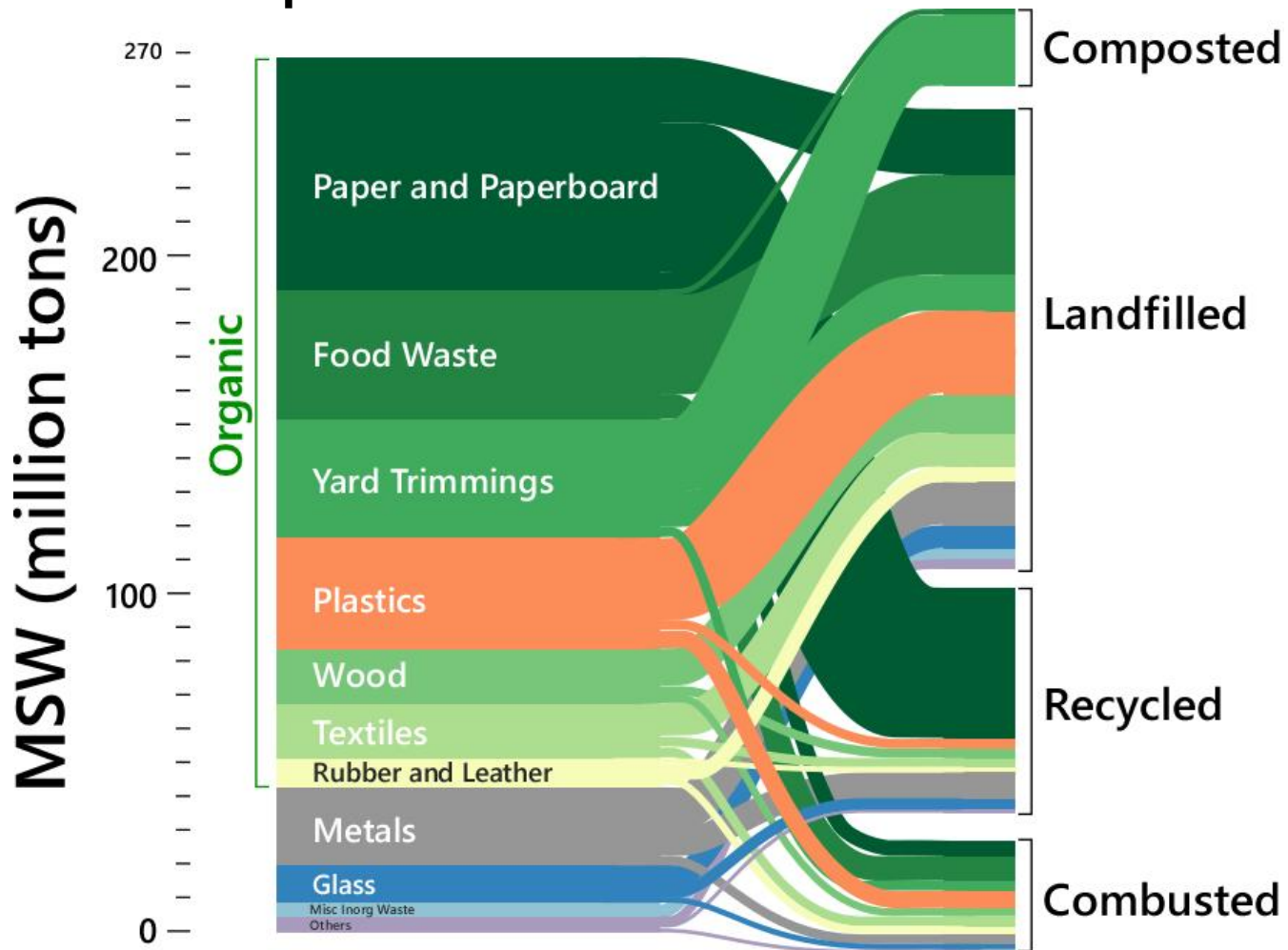


Total MSW Combusted with Energy Recovery  
33 Million Tons





## Composition of Municipal Solid Waste

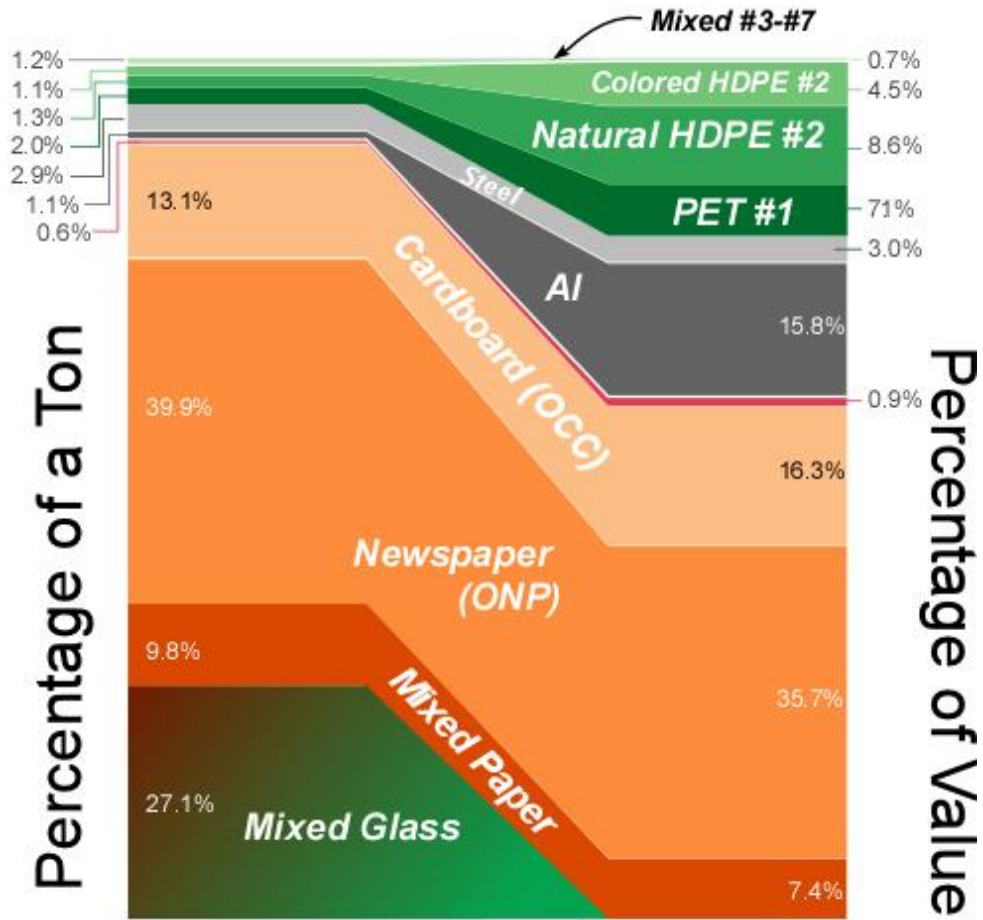


[https://www.epa.gov/sites/production/files/2016-11/documents/2014\\_smmfactsheet\\_508.pdf](https://www.epa.gov/sites/production/files/2016-11/documents/2014_smmfactsheet_508.pdf)





# Value of Recycled Materials

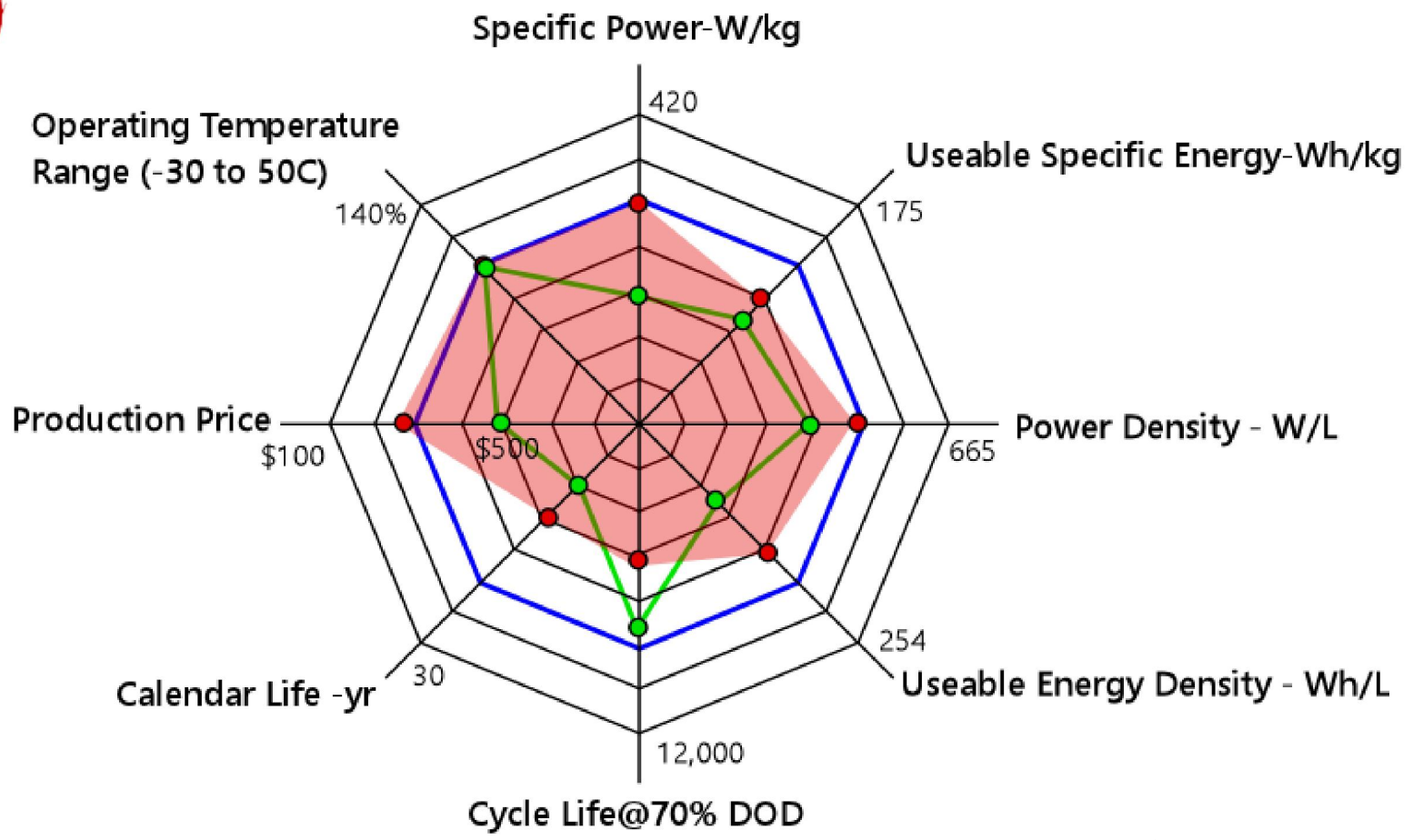


source: RRS from recycling.com and published in November 2015 Resource Recycling









Battery A Battery B





Showing Additional Dimensions

# Which is better for the environment?

*A MEAT-EATER IN A PRIUS*



*A VEGAN IN A HUMMER*





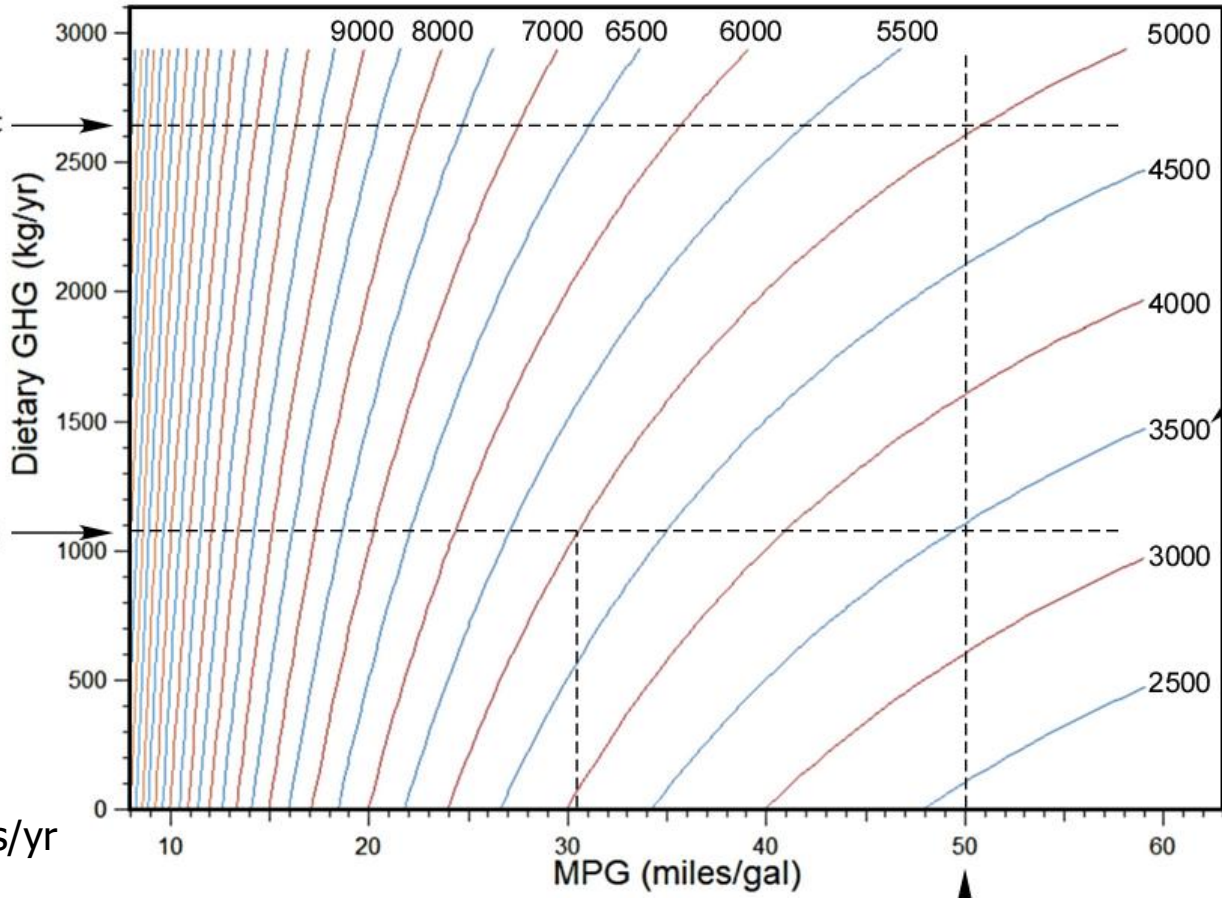


# Vegan/Meat-eater Driving Comparison



high meat →

vegan →



total yearly GHG (kg/yr)

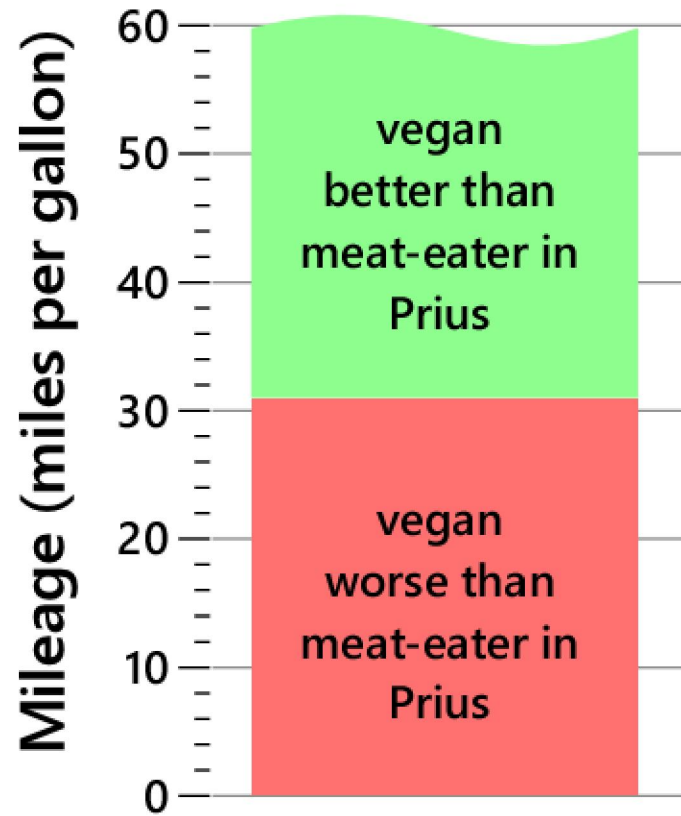
assumes 13,476 miles/yr



Scarborough, Peter, et al. "Dietary greenhouse gas emissions of meat-eaters, fish-eaters, vegetarians and vegans in the UK." Climatic Change 125.2 (2014): 179-192.



## Vegan/Meat-eater Driving Comparison



assumes 13,476 miles/yr



Scarborough, Peter, et al. "Dietary greenhouse gas emissions of meat-eaters, fish-eaters, vegetarians and vegans in the UK." *Climatic Change* 125.2 (2014): 179-192.



SANFORD AND SELNICK

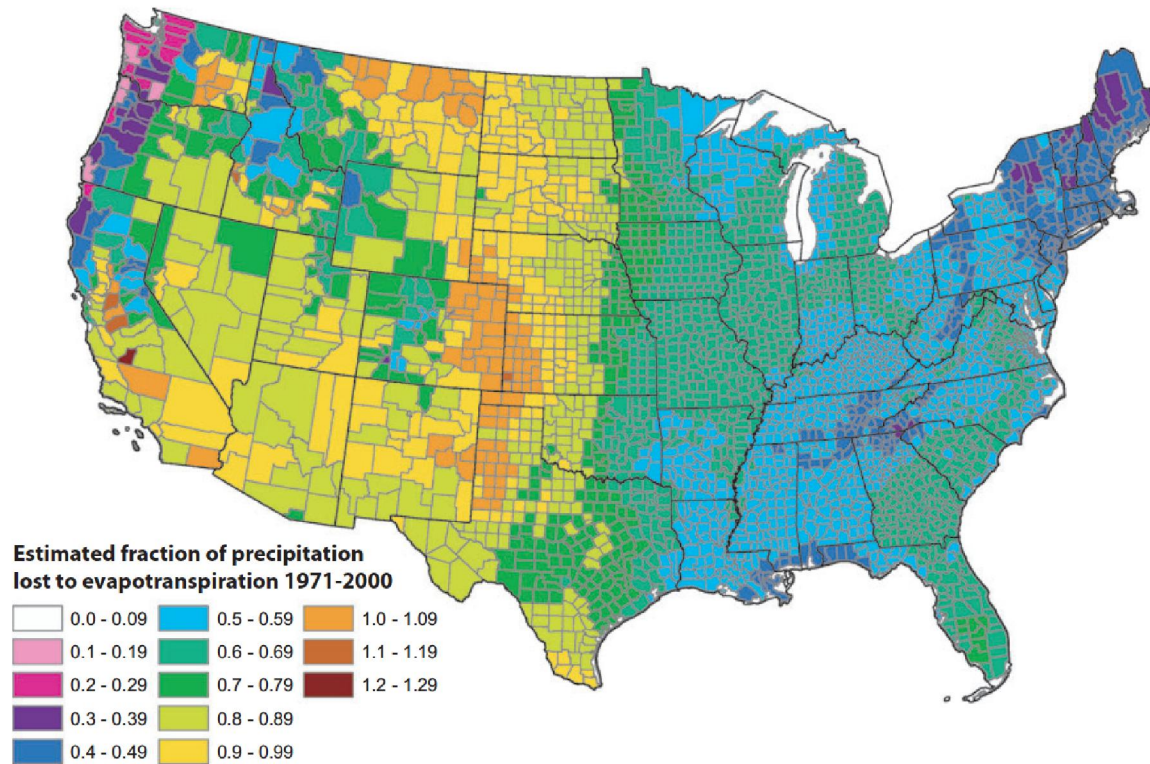


FIGURE 13. Estimated Mean Annual Ratio of Actual Evapotranspiration (ET) to Precipitation (P) for the Conterminous U.S. for the Period 1971-2000. Estimates are based on the regression equation in Table 1 that includes land cover. Calculations of ET/P were made first at the 800-m resolution of the PRISM climate data. The mean values for the counties (shown) were then calculated by averaging the 800-m values within each county. Areas with fractions >1 are agricultural counties that either import surface water or mine deep groundwater.

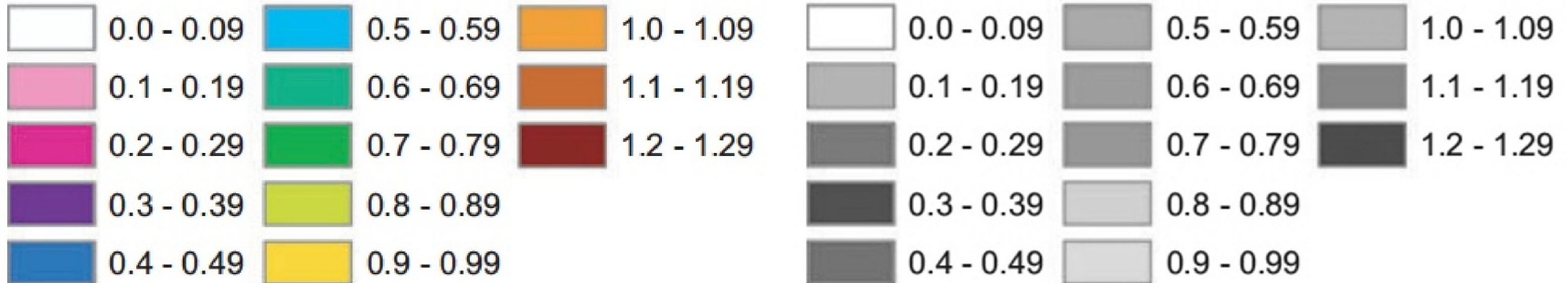
Sanford, W.E. and Selnick, D.L., 2013. Estimation of Evapotranspiration Across the Conterminous United States Using a Regression With Climate and Land-Cover Data. *JAWRA Journal of the American Water Resources Association*, 49(1), pp.217-230.

<https://eagereyes.org/basics/rainbow-color-map>





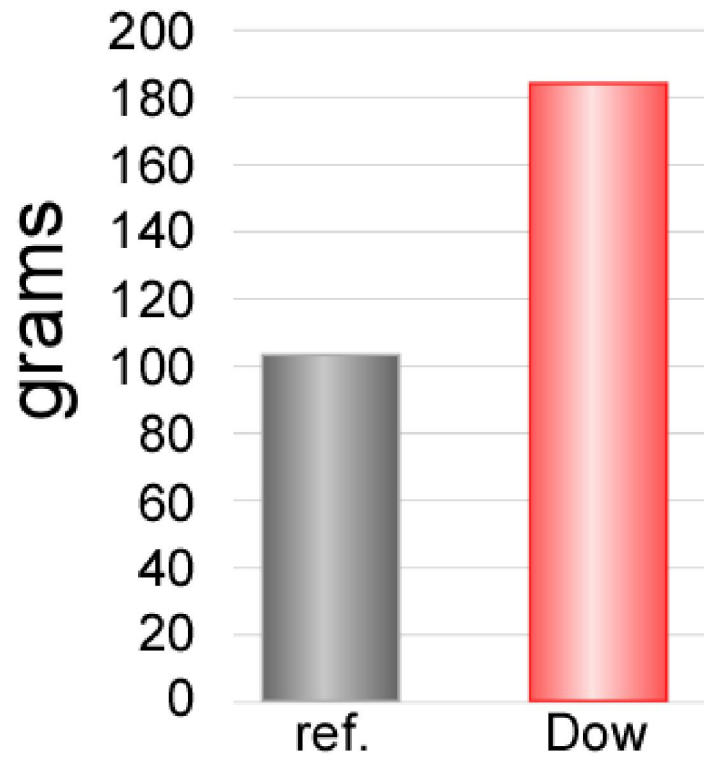
## ■ Abrupt Change In Luminance



Live Demo



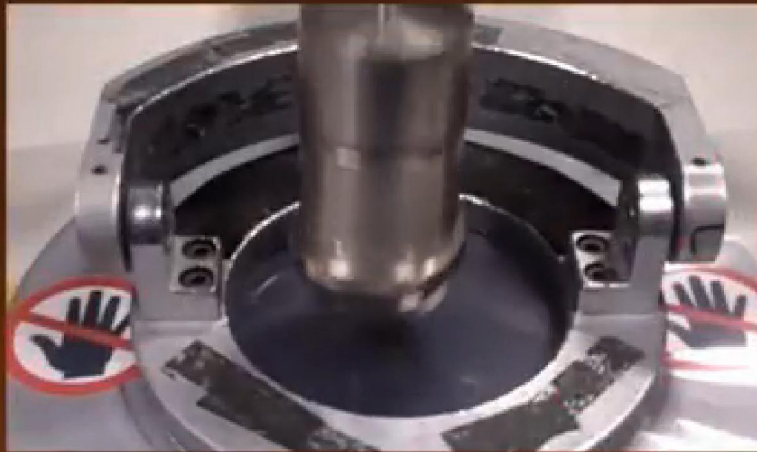
**Dart Impact Data**







## Dart Impact Data



BENCHMARK FILM



For video, go to <https://www.youtube.com/watch?v=Mt9O3E2VNss>



**TIPS**



graphs used to gain  
understanding are unlikely  
to be good for explaining





**TIPS**



- make your graphics mind-ready
- make the information density right for your audience
- revise and refine





- animation is almost always bad

**TIPS**

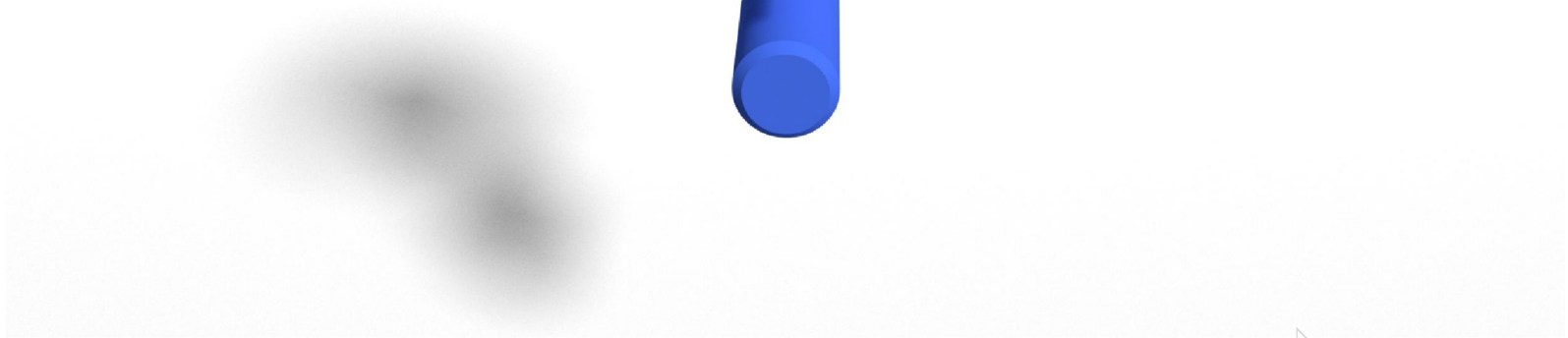
- video  $\neq$  animation
- video <sup>sometimes</sup> = best way to show data



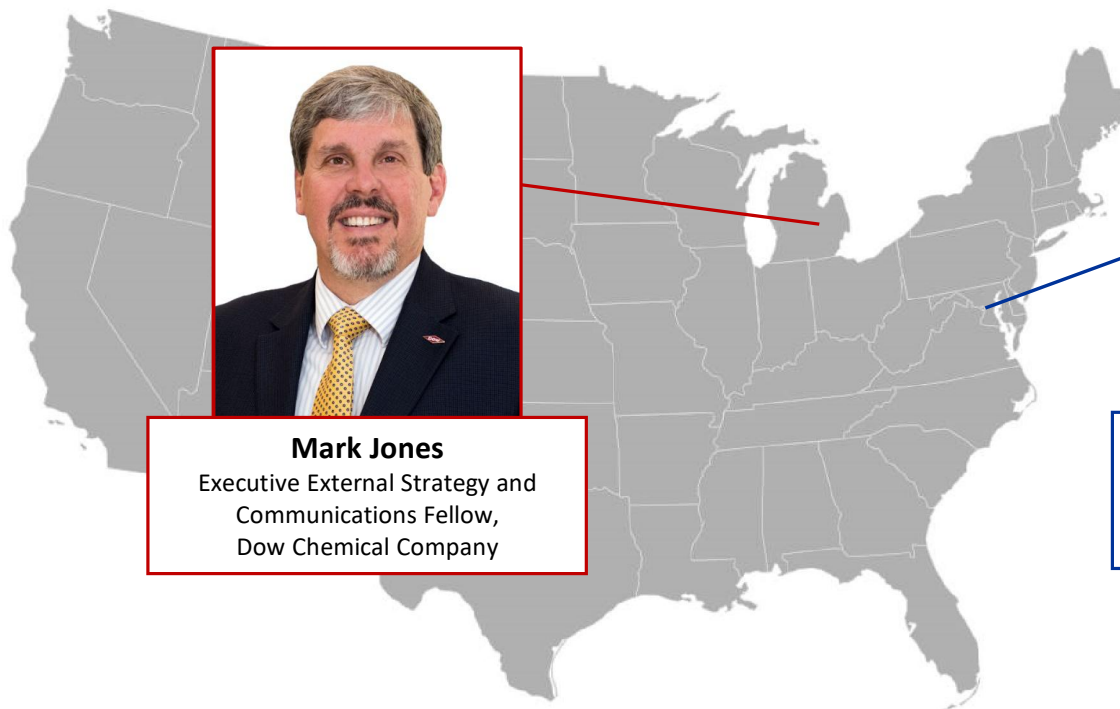


## Favorite References – Display of Information





## *“Exceptional Presentations In Spite of PowerPoint: The Sequel”*



**Mark Jones**  
Executive External Strategy and  
Communications Fellow,  
Dow Chemical Company



**Bryan Tweedy**  
Senior Manager,  
ACS Learning and Career Development  
and Professional Resources

*Slides available now and an invitation to view the recording will be sent when available.*

[www.acs.org/acswebinars](http://www.acs.org/acswebinars)