



## STAT696 Discussion

Andrew Bates, Josh Gloyd

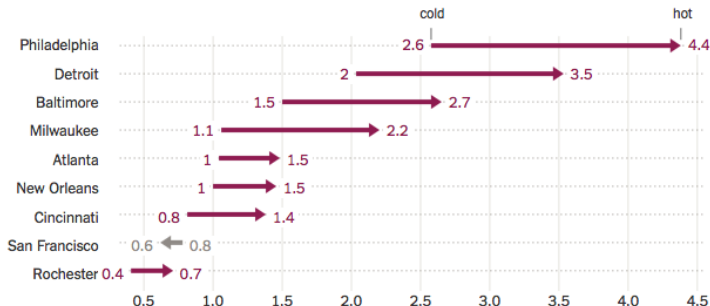


# How to Display Data Badly

## Rise in Shooting Victims on Hot Days

The average number of shooting victims per cold day (defined here as under 50 degrees Fahrenheit) and per hot day (85 and up) in nine cities in recent years.

Shooting victims per day, based on weather



Fatal and nonfatal shooting victim data for Cincinnati (2008-present), Rochester (2000-present), San Francisco (2012–2017), Baltimore (2011–present), Philadelphia (2015–present), New Orleans (2010–present), Atlanta (2012–17) and Chicago (below, 2014–present). Nonfatal shooting victim data for Detroit (2014–2016) and Milwaukee (2011–May 2016).



- Why display data?



## Discussion Points

- ▶ Why display data?
- ▶ What can go wrong?



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- ▶ What can go wrong?
  - ▶ Actually display the data



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  - ▶ Don't be deceptive
  - ▶ Be consistent



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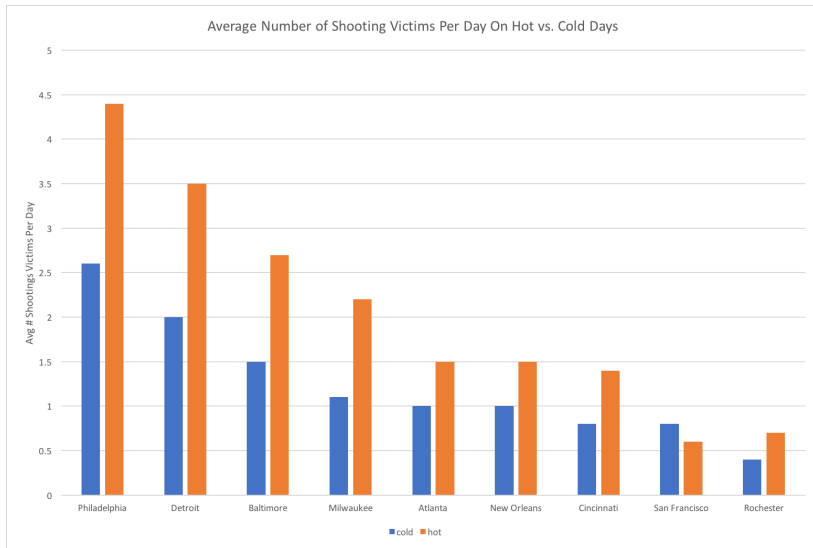
- ▶ Why display data?
- ▶ What can go wrong?
  - ▶ Actually display the data
  - ▶ Don't be deceptive
  - ▶ Be consistent
- ▶ Keep it simple



# How to Display Data Well



SAN DIEGO STATE  
UNIVERSITY





## References

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- ▶ Wainer, Howard. *How to Display Data Badly*. The American Statistician Vol. 38, No. 2, (1984), pp. 137-147
- ▶ Asher, Jeff. *A Rise in Murder? Let's Talk About the Weather*. New York Times Online, Sep. 21, 2018.