

## Better Communication in the Digital Age



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# BETTER COMMUNICATION IN THE DIGITAL AGE

MARK JONES

*EXECUTIVE EXTERNAL STRATEGY AND COMMUNICATIONS FELLOW*

THE DOW CHEMICAL COMPANY

*29 April 2020*

# DATA PRESENTATION OF CURRENT EVENTS



# COMMUNICATION IS FOR YOUR AUDIENCE

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



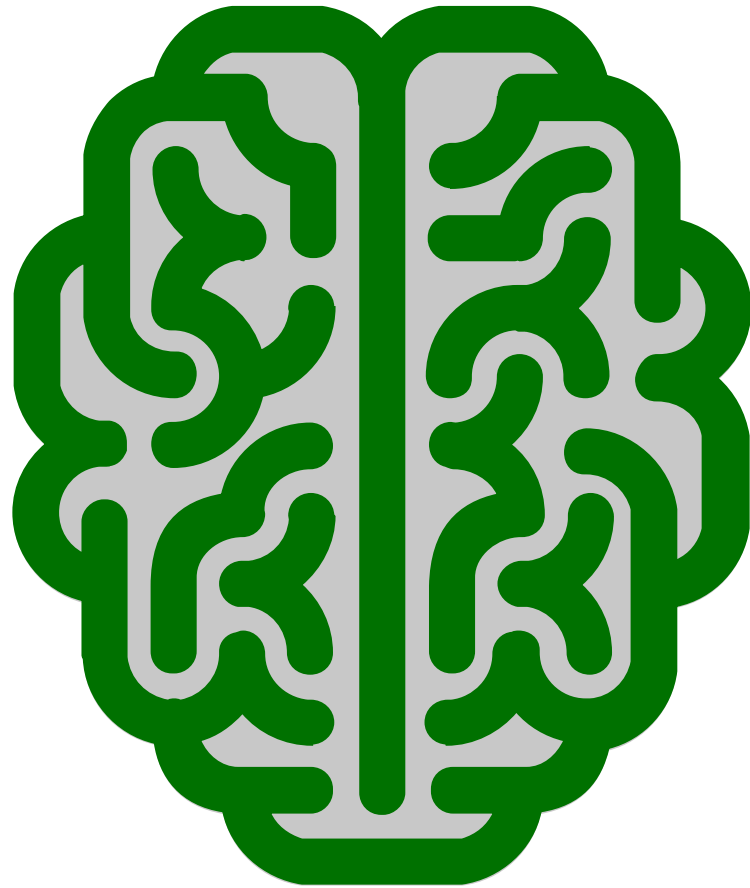


*any communication*  
Designing a presentation  
without an audience in mind  
is like writing a love letter  
and addressing it 'to whom  
it may concern'.



Ken Haemer  
Presentation Research Manager,  
AT&T

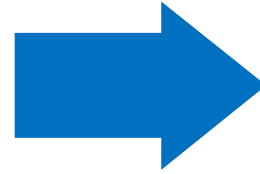
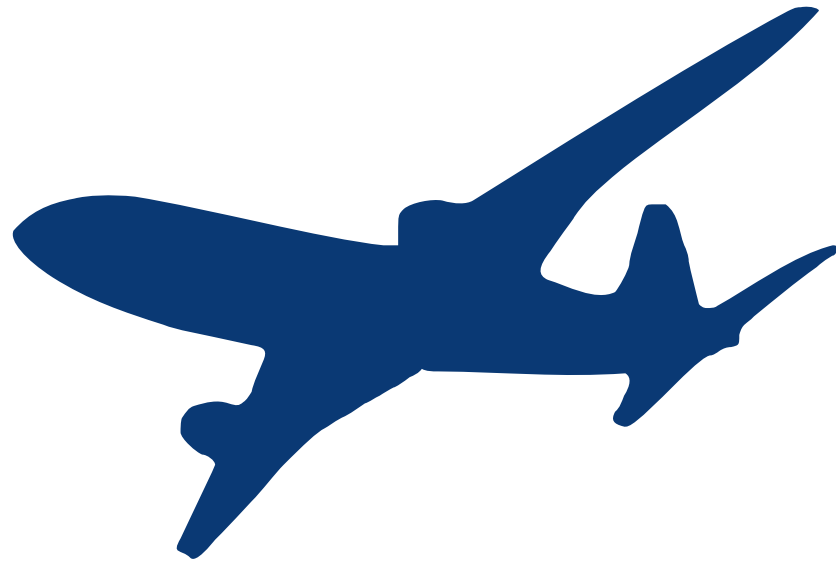




ready



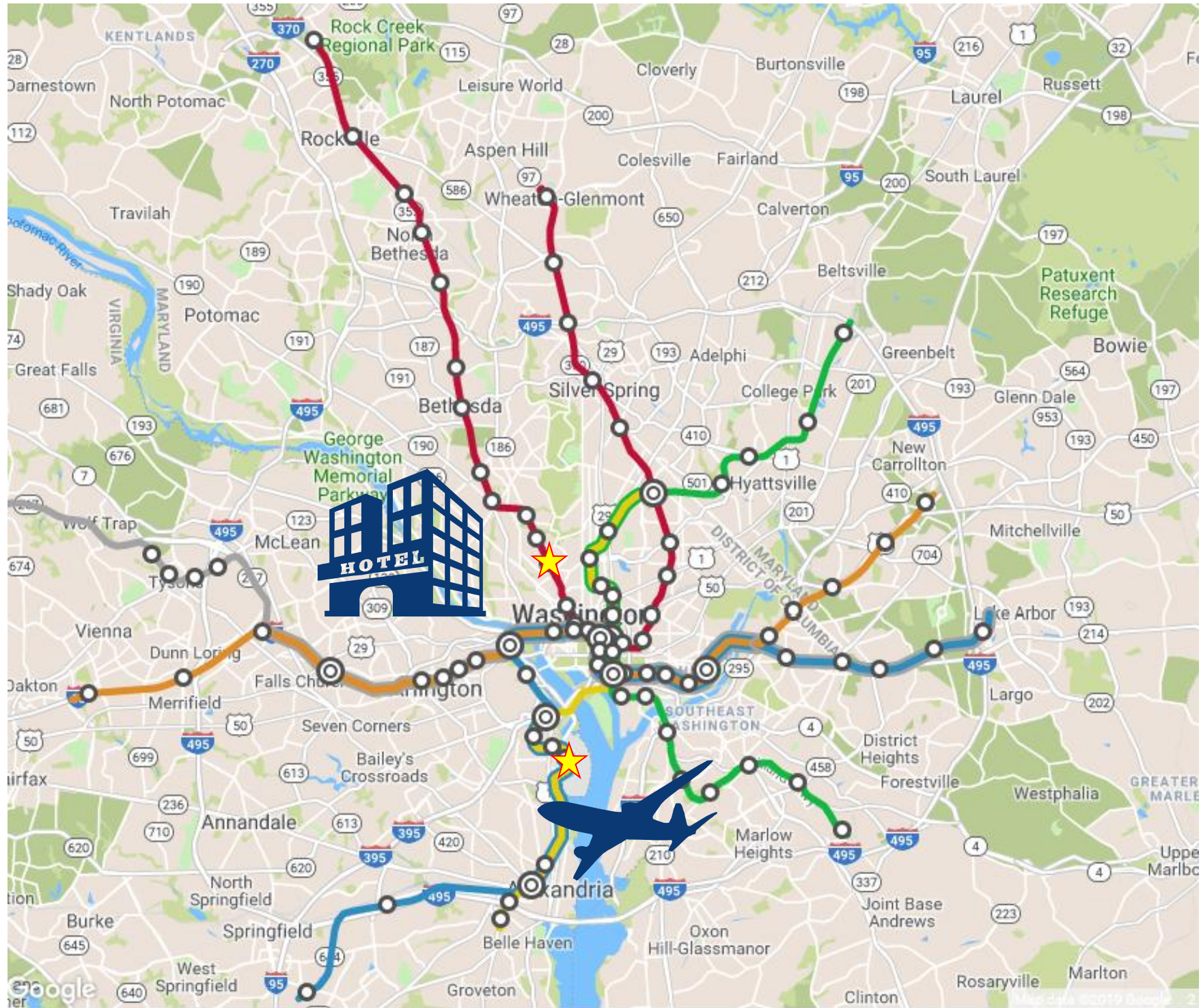
Washington, D.C.



Reagan National Airport

Marriott Woodley Park







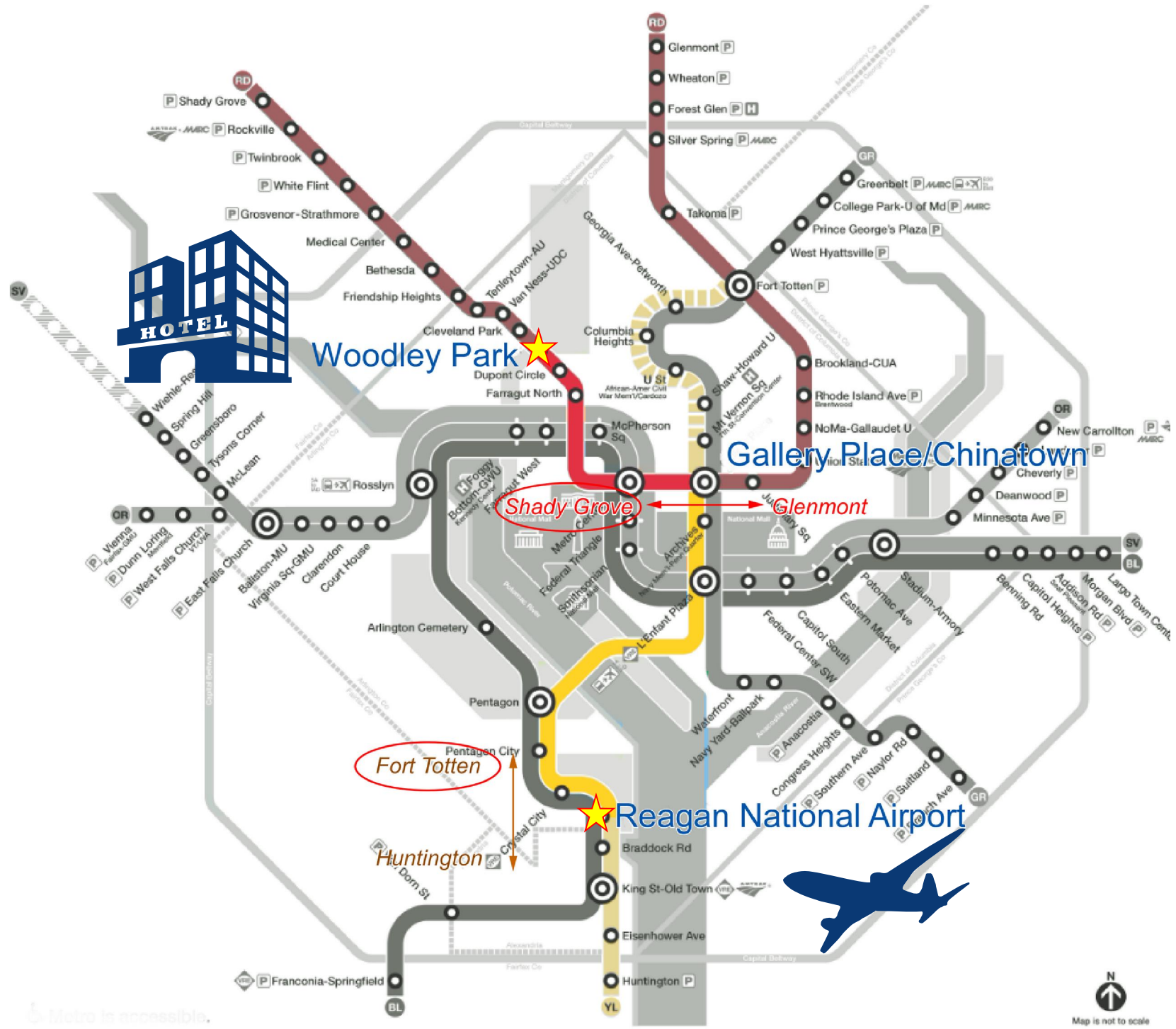




 Metro is accessible.

WASHINGTON METRO SYSTEM, INC. (WMATA) © 2011

N  
↑  
Map is not to scale



Metro is accessible.  
www.wmata.com

N  
↑  
Map is not to scale



# FIVE PRINCIPLES OF DATA PRESENTATION



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

Everything should be made as simple as possible, but not simpler.



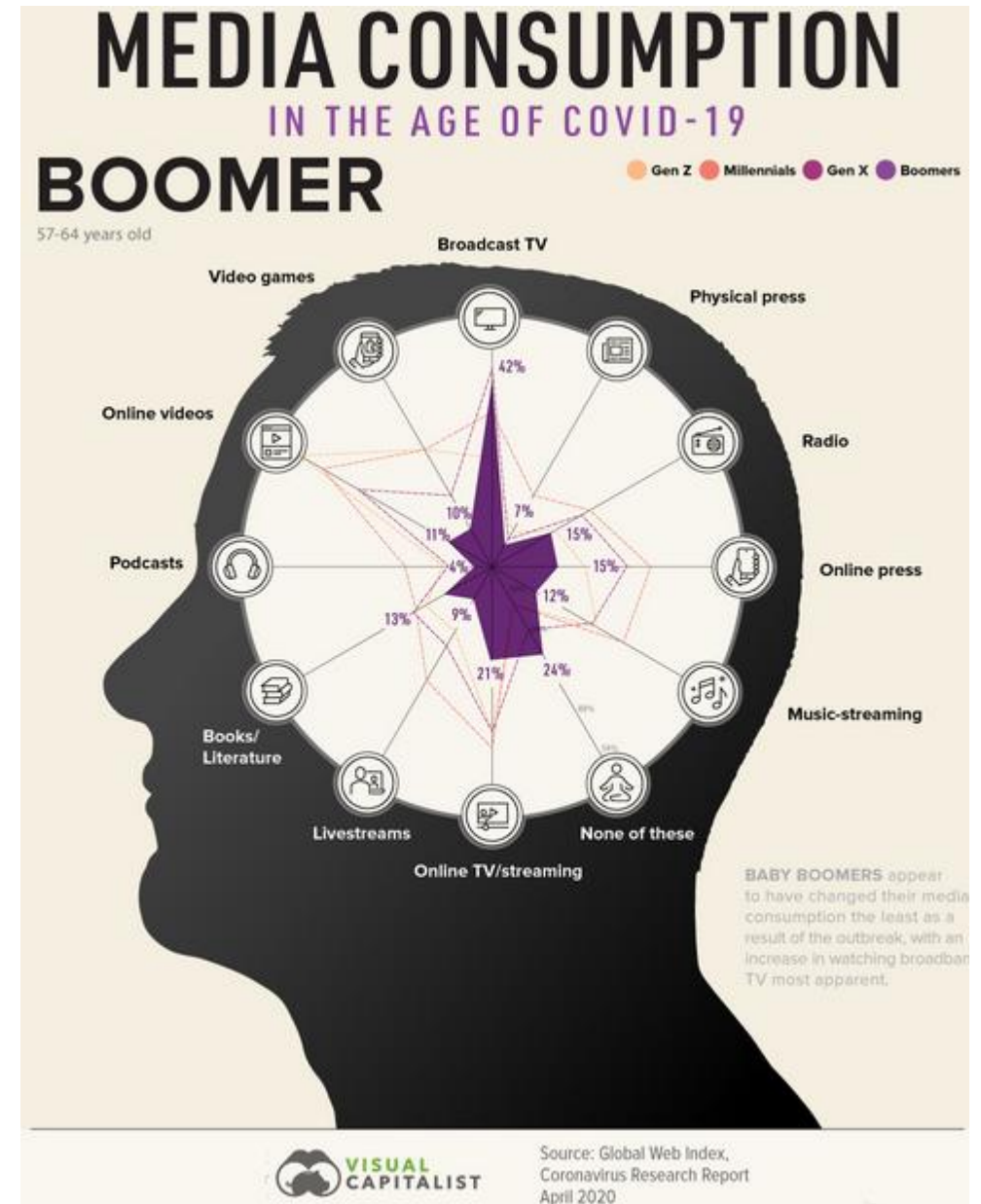
Nancy Duarte in Slideology

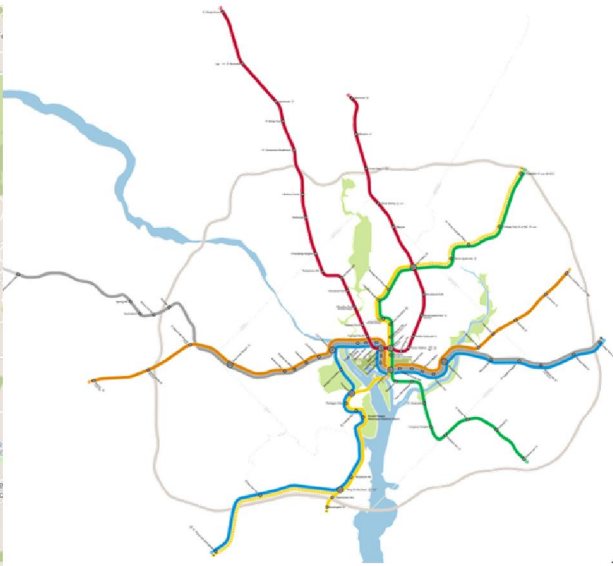
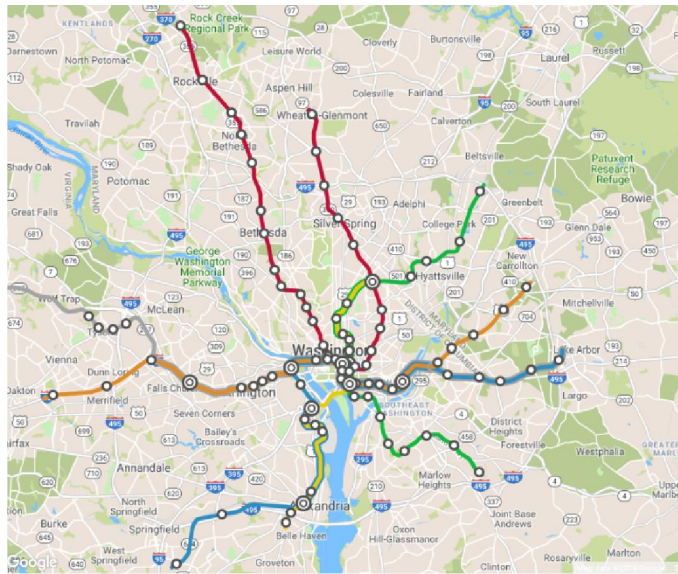


# EDWARD TUFTE'S FIVE PRINCIPLES OF DATA PRESENTATION



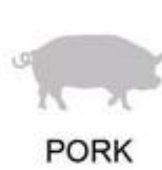
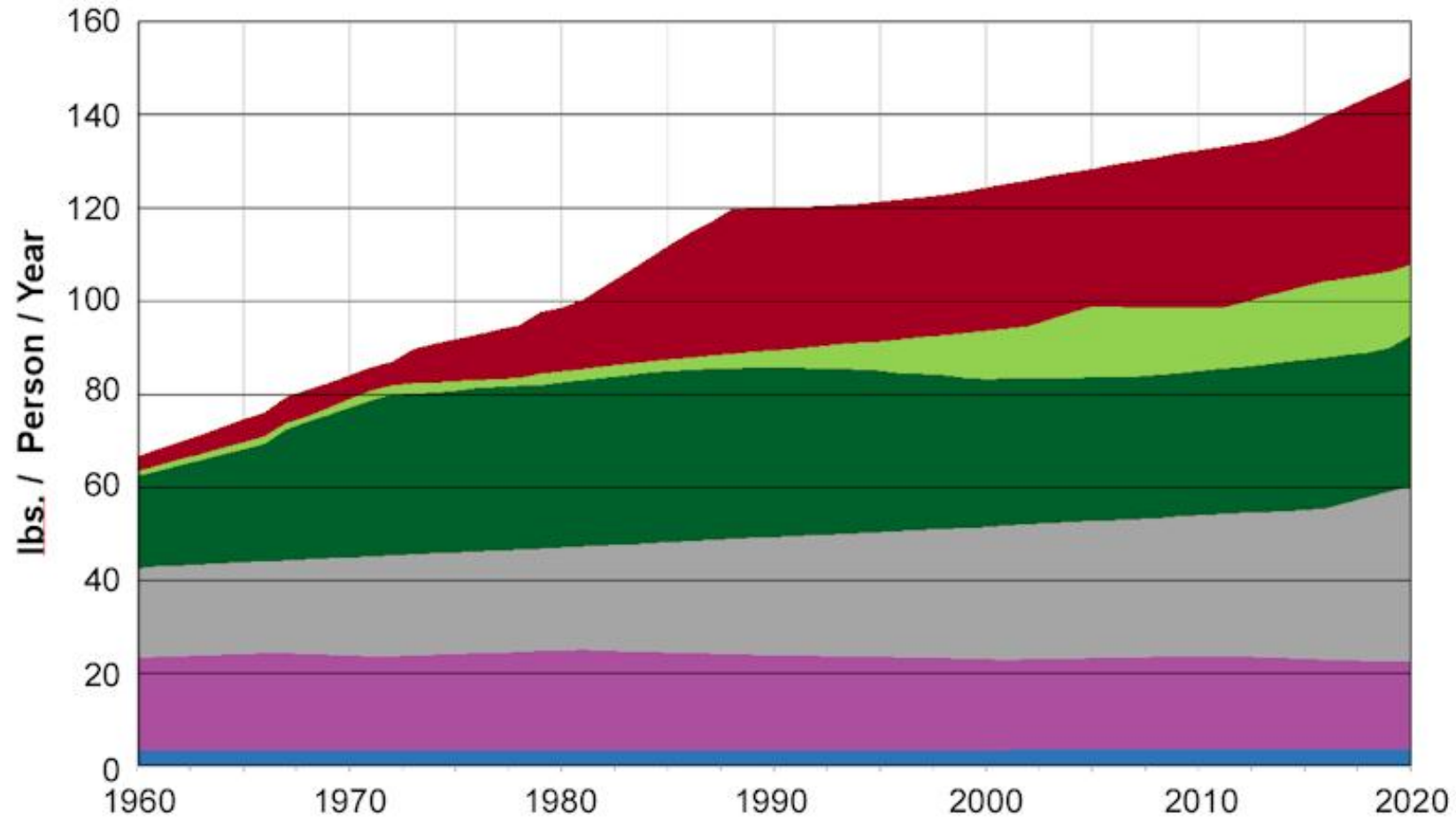
1. Above all else show the data
2. Maximize the data-ink ratio
3. Erase non-data ink
4. Erase redundant data
5. Revise and Edit.







# MEAT CONSUMPTION



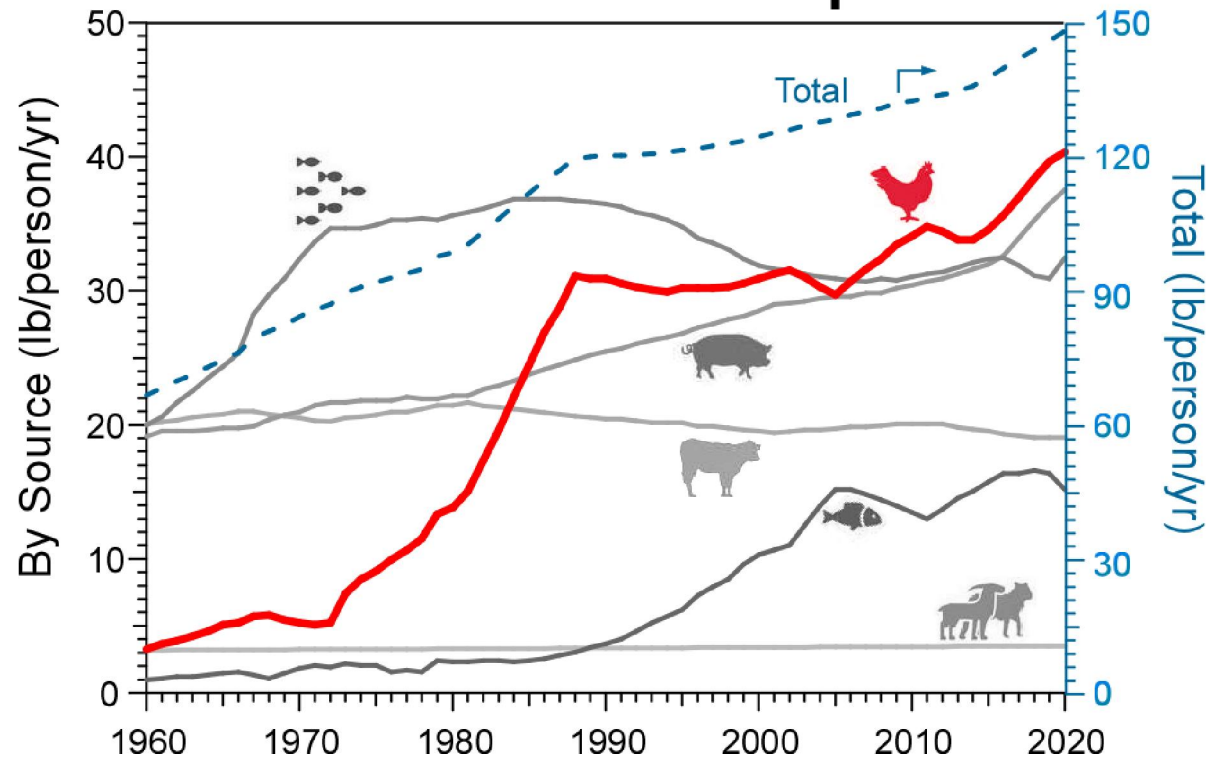
[www.ethanolproducer.com/articles/16179/opportunities-in-high-protein-feed](http://www.ethanolproducer.com/articles/16179/opportunities-in-high-protein-feed)



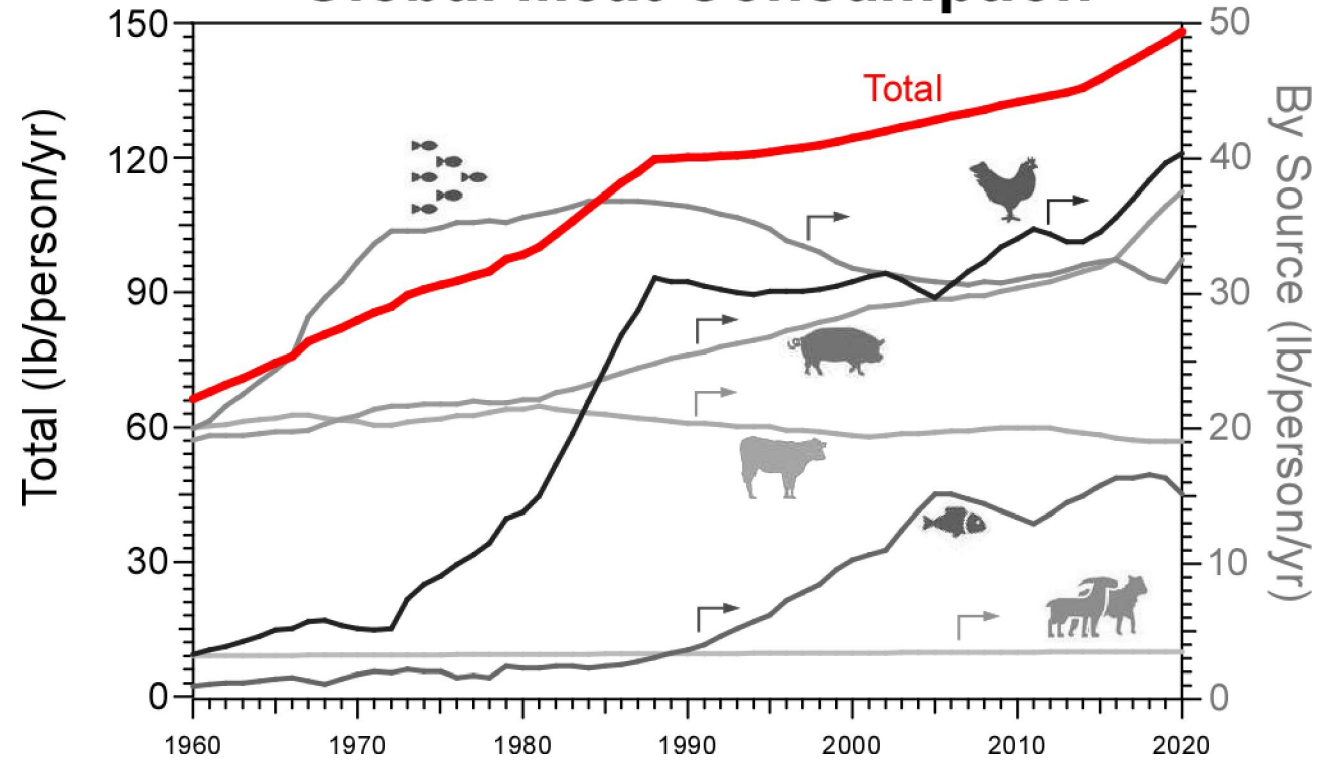




## Global Meat Consumption



## Global Meat Consumption

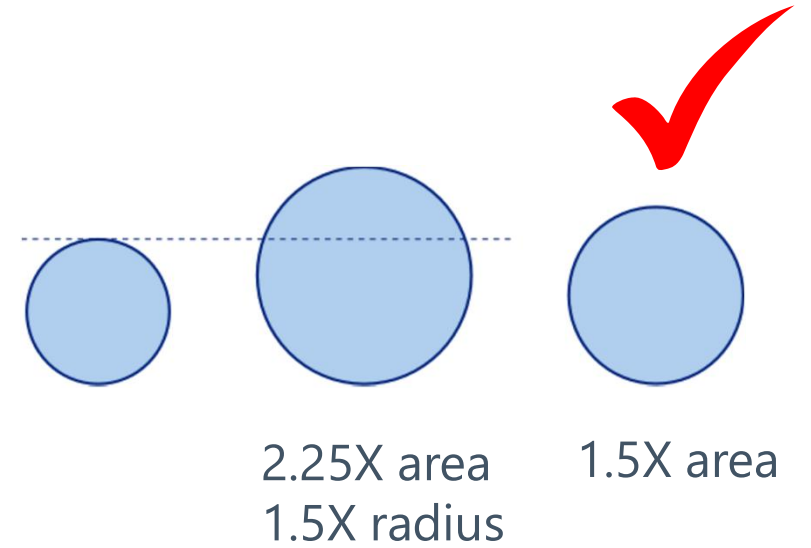
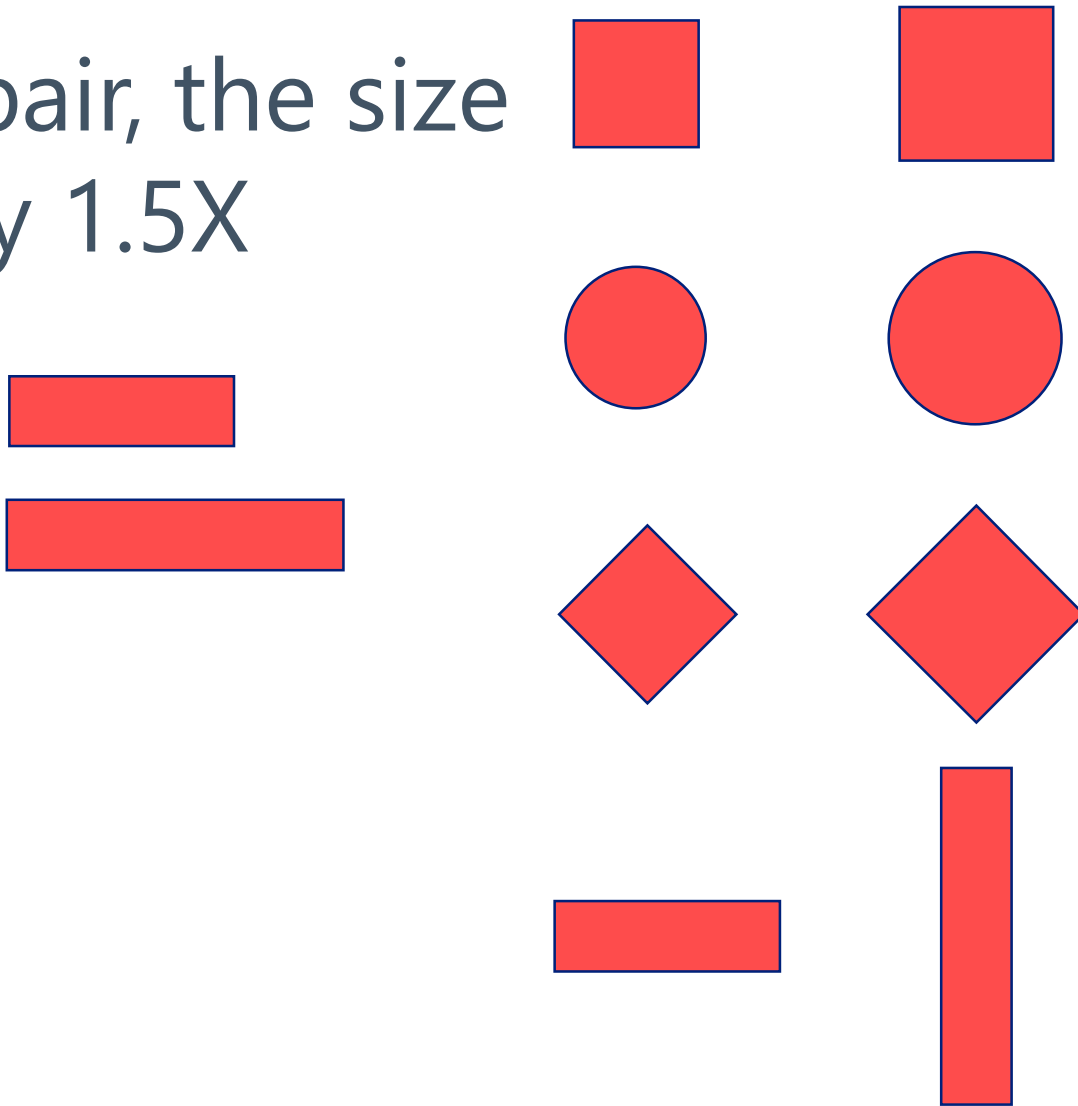




# PERCEPTION



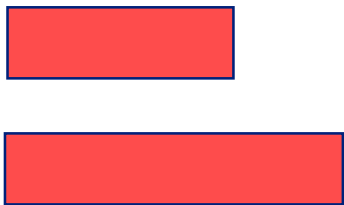
in each pair, the size differs by 1.5X



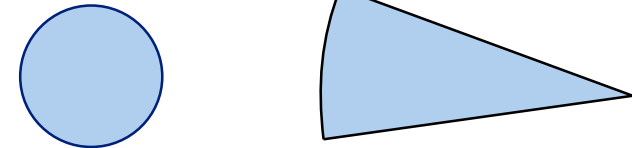


# Audience Challenge Question

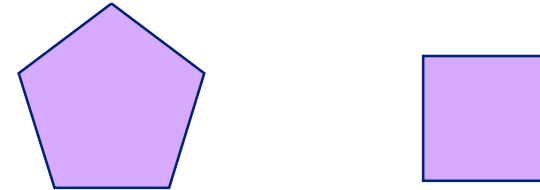
**Each group contains one shape that is 1.5 times bigger than the other, except one. Which one?**



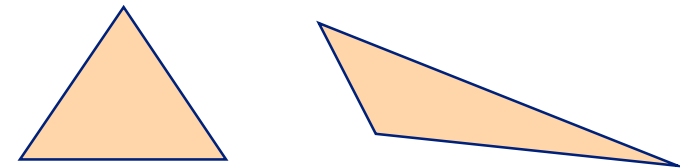
• A



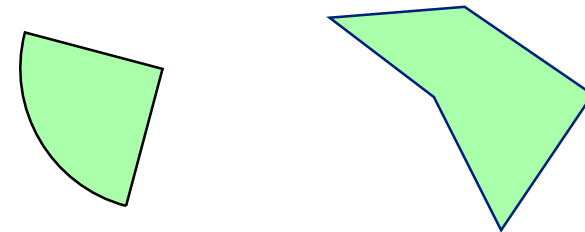
• B



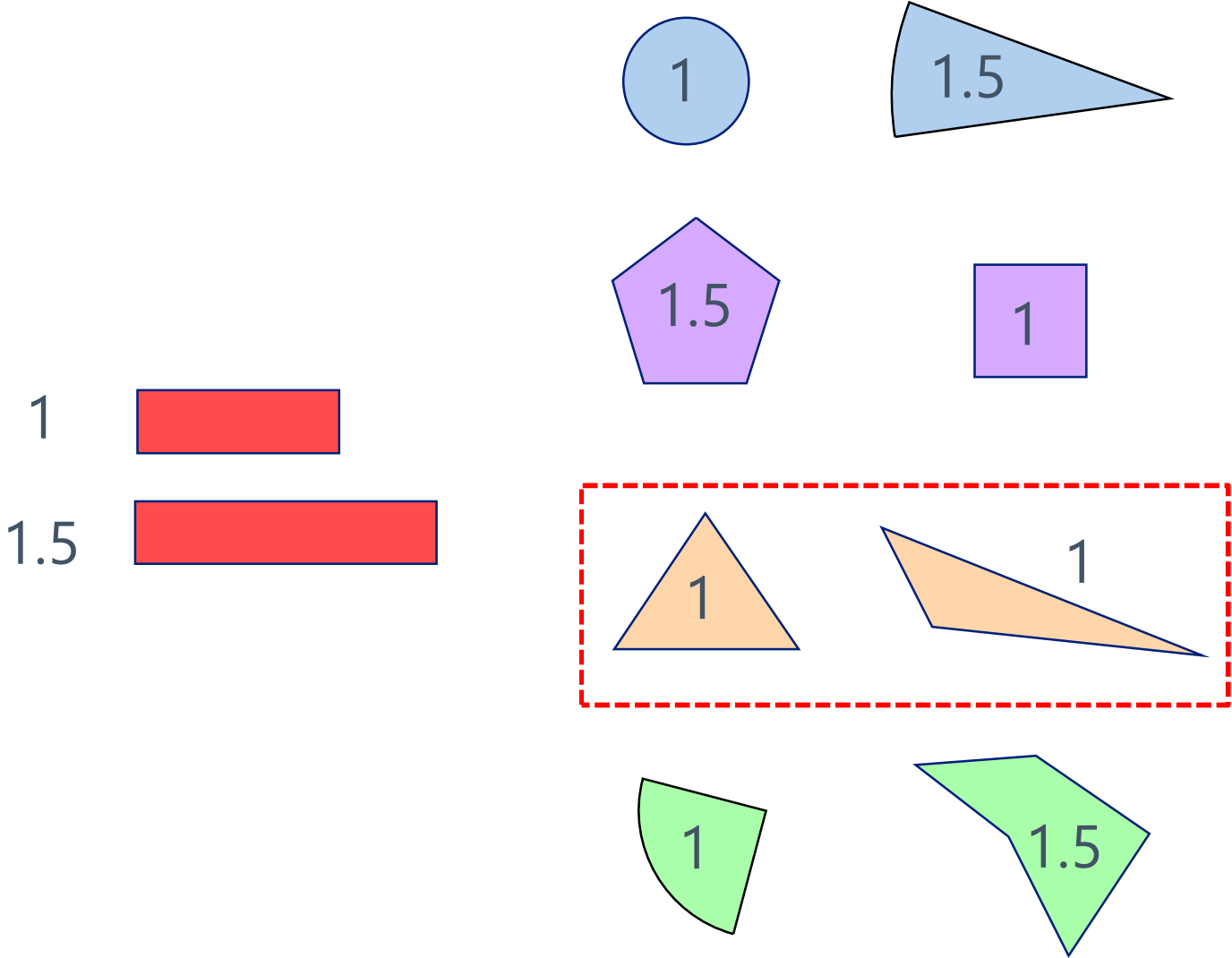
• C



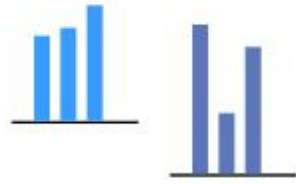
• D



# AREA PERCEPTION



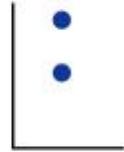
# HUMAN PERCEPTION



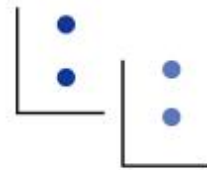
slope



volume



position  
(aligned)



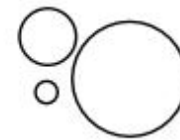
position  
(unaligned)



length



angle



area



color intensity



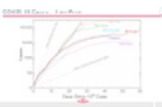
color hue

more  
accurate

human perception

less  
accurate

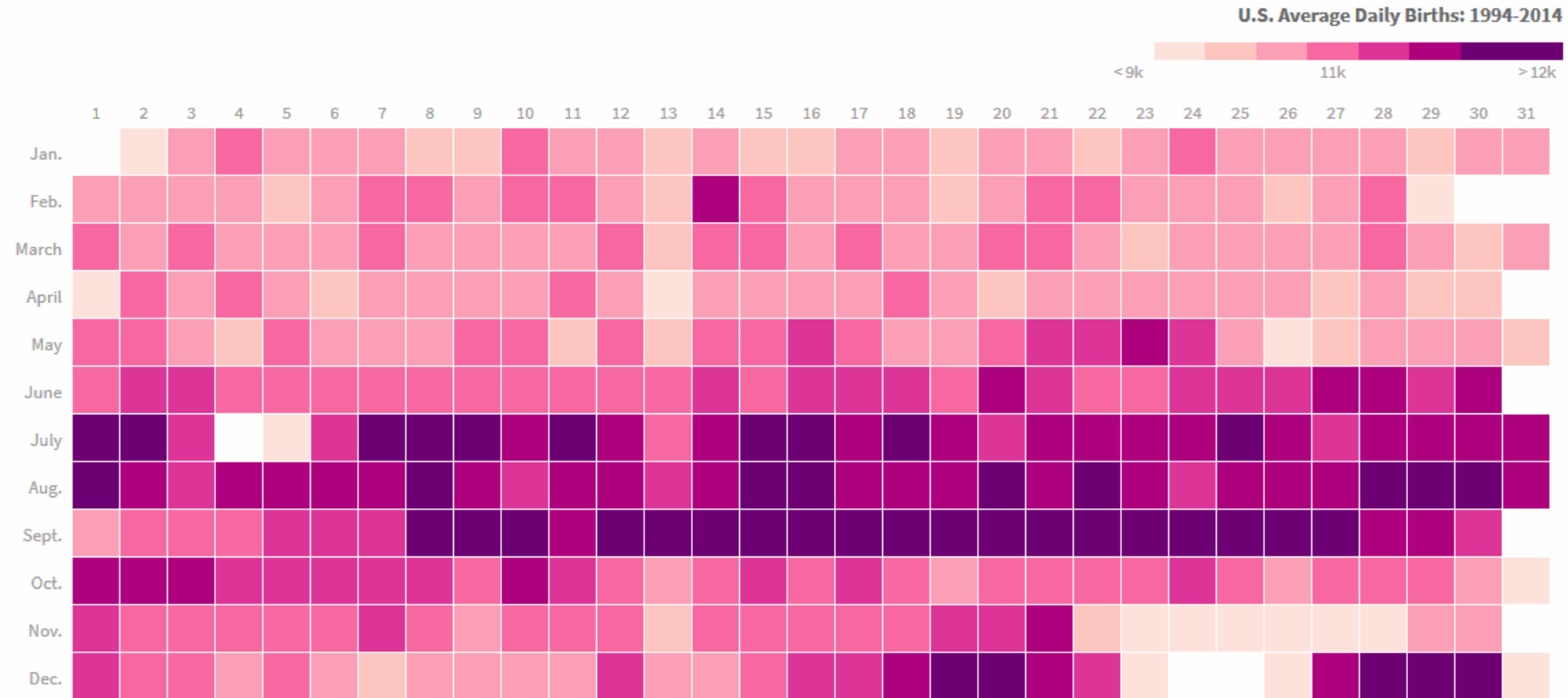
Cleveland, W.S. and McGill, R., 1984. Graphical perception: Theory, experimentation, and application to the development of graphical methods. *Journal of the American statistical association*, 79(387), pp.531-554.





## HOW POPULAR IS YOUR BIRTHDAY?

Two decades of American birthdays, averaged by month and day.



Notes: The conception date, purely for illustration, is 266 days prior to birth. It represents a hypothetical "moment of conception" based on the normal gestation period for humans, 280 days, minus the average time for ovulation, two weeks.

Data: U.S. National Center for Health Statistics (1994-2003); U.S. Social Security Administration (2004-2014) — via FiveThirtyEight

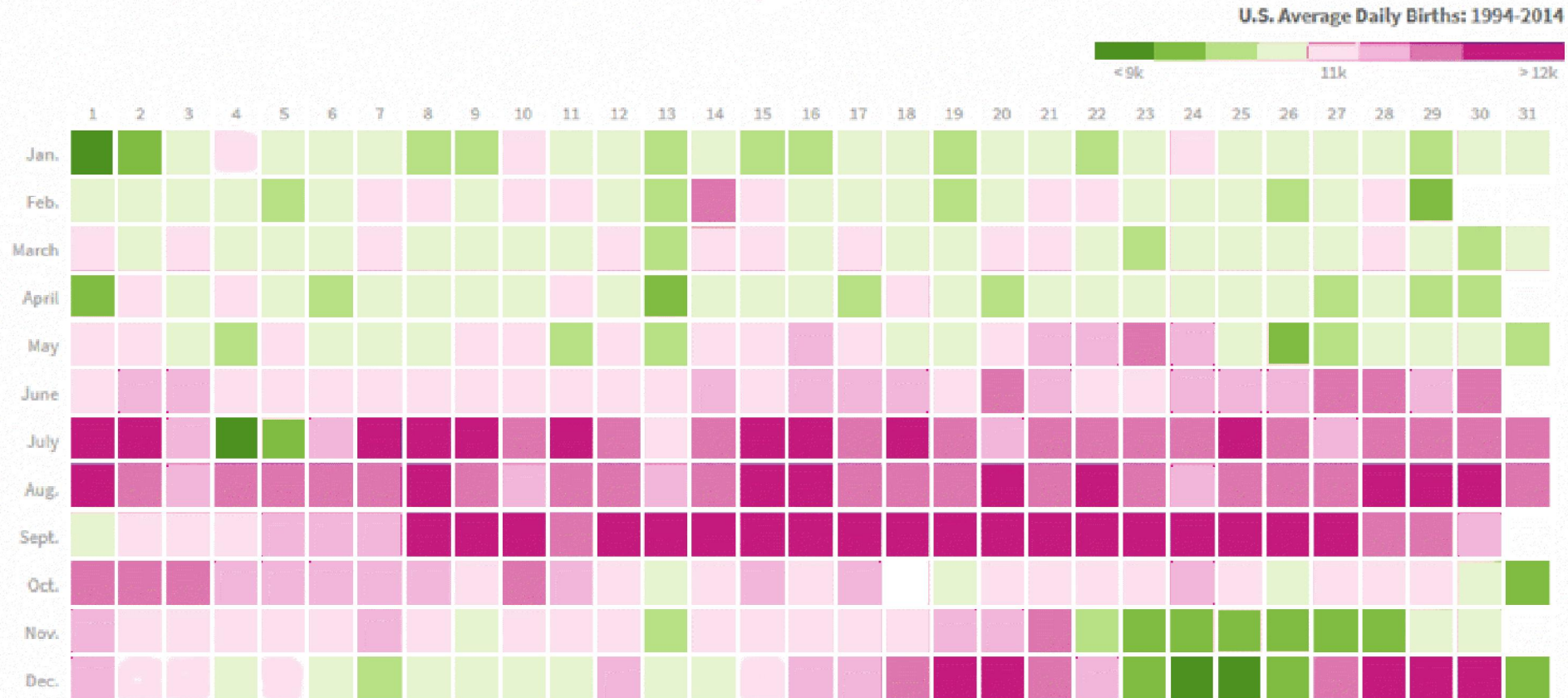
Credit: Matt Stiles/The Daily Viz





## HOW POPULAR IS YOUR BIRTHDAY?

Two decades of American birthdays, averaged by month and day.



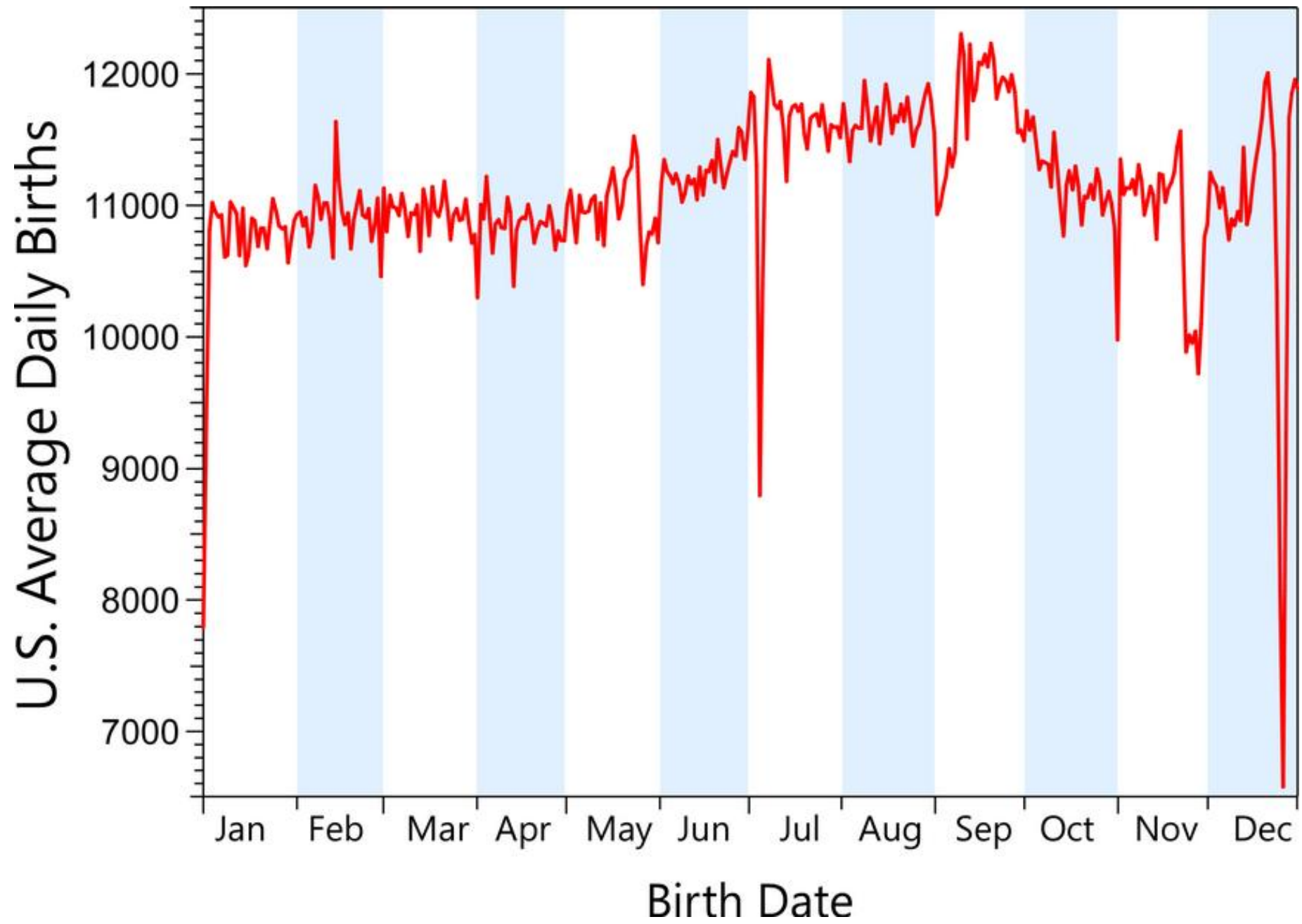
Notes: The conception date, purely for illustration, is 266 days prior to birth. It represents a hypothetical "moment of conception" based on the normal gestation period for humans, 280 days, minus the average time for ovulation, two weeks.

Data: U.S. National Center for Health Statistics (1994-2003); U.S. Social Security Administration (2004-2014) — via FiveThirtyEight

Credit: Matt Stiles/The Daily Viz

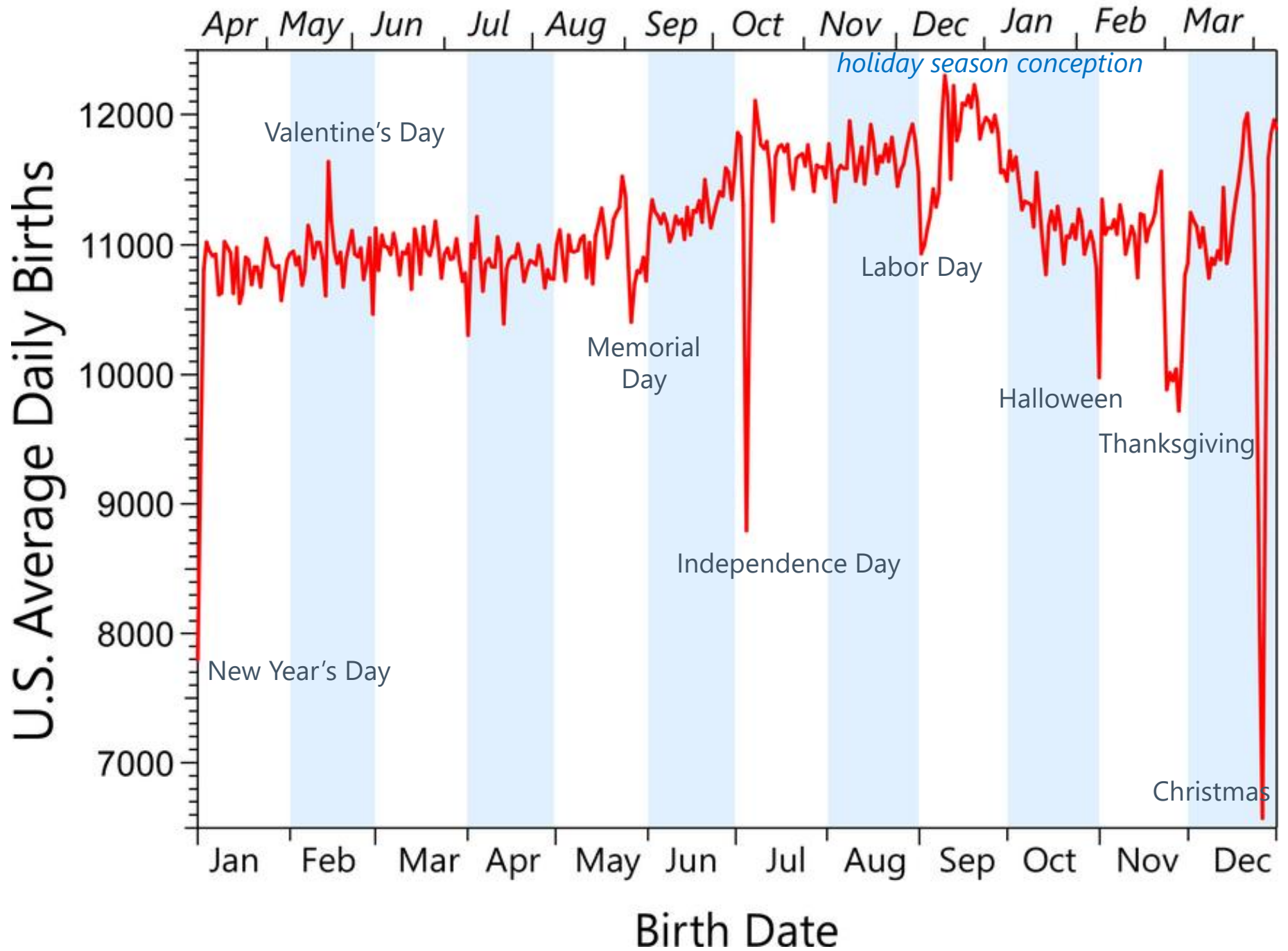




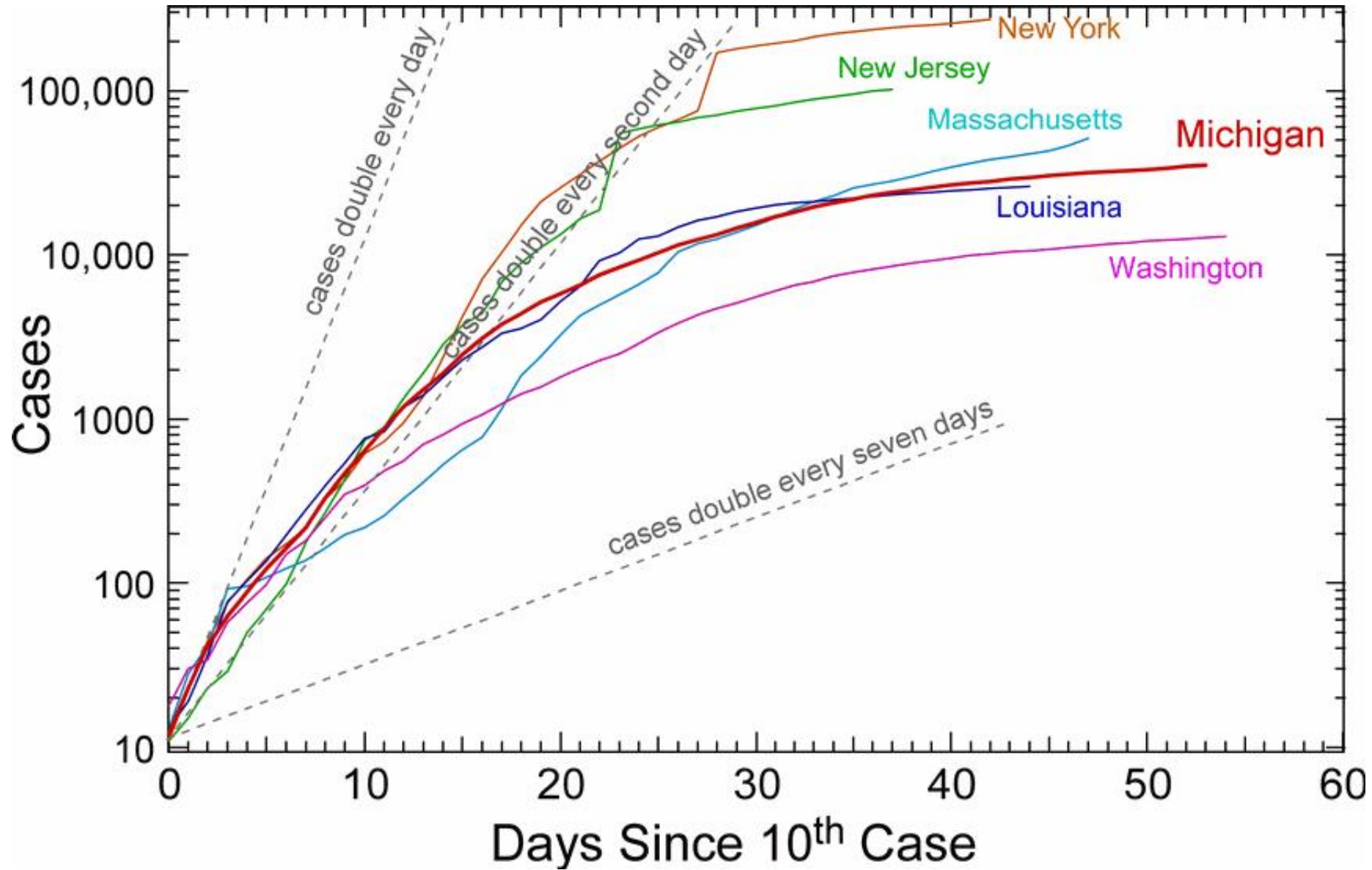




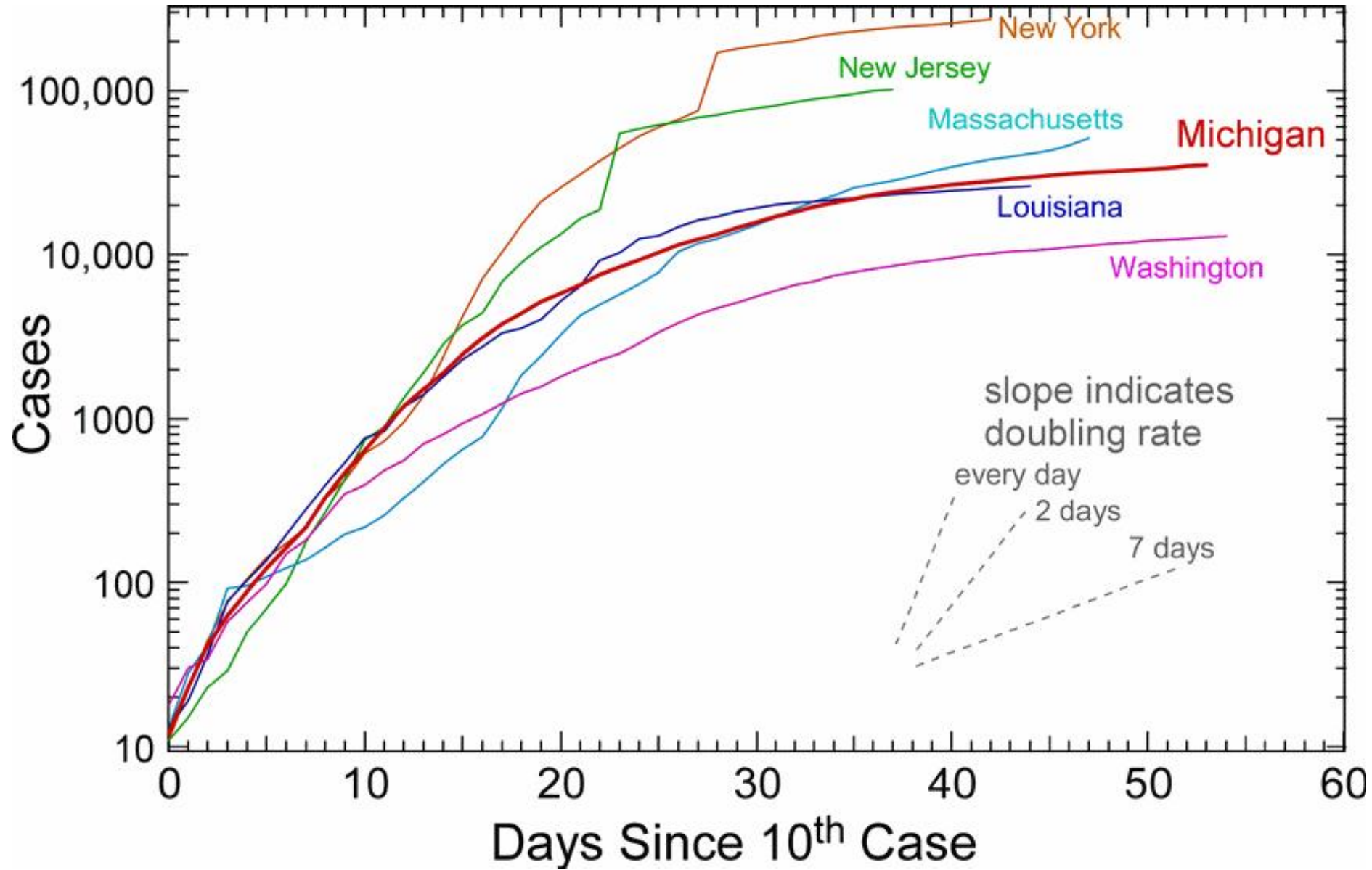
# Approximate Conception Date



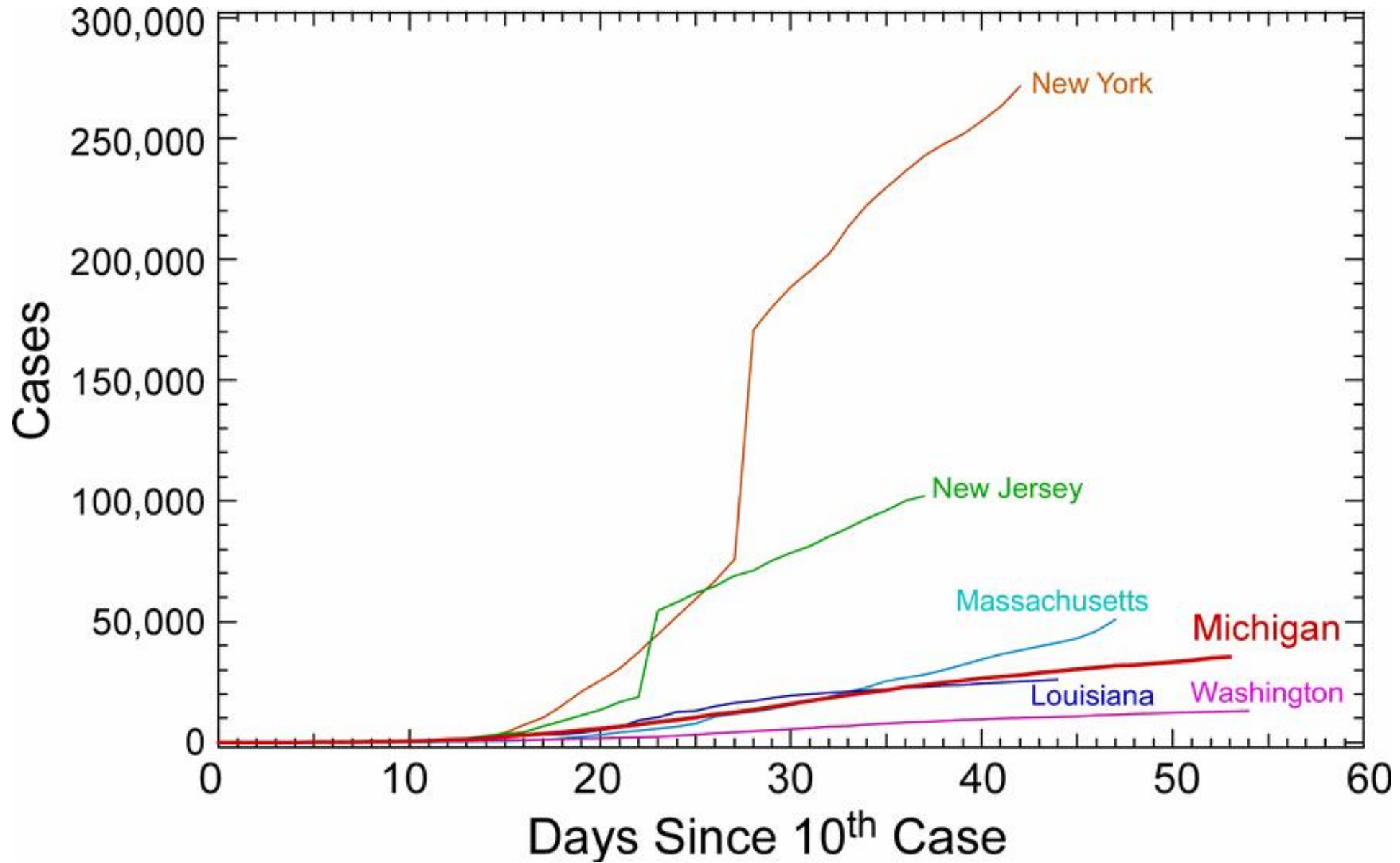
# COVID-19 CASES – LOG PLOT



# COVID-19 CASES – LOG PLOT



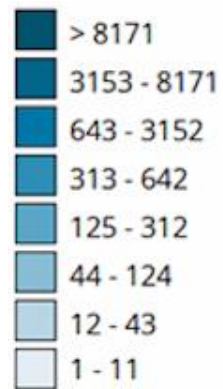
# COVID-19 CASES – LINEAR PLOT



# MICHIGAN CORONAVIRUS CASES

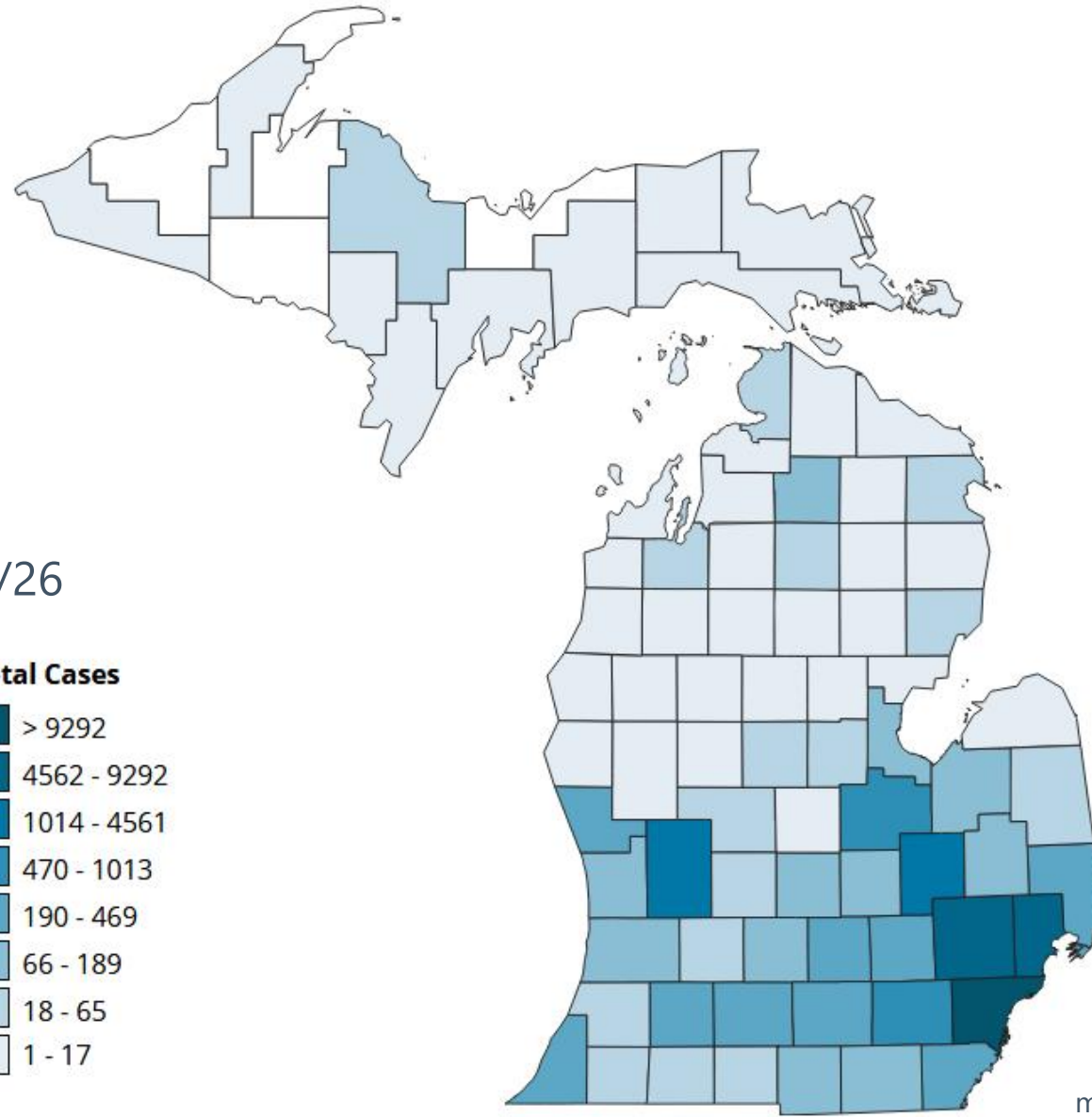
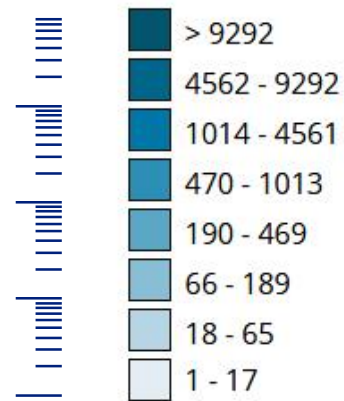


4/23



4/26

**Total Cases**



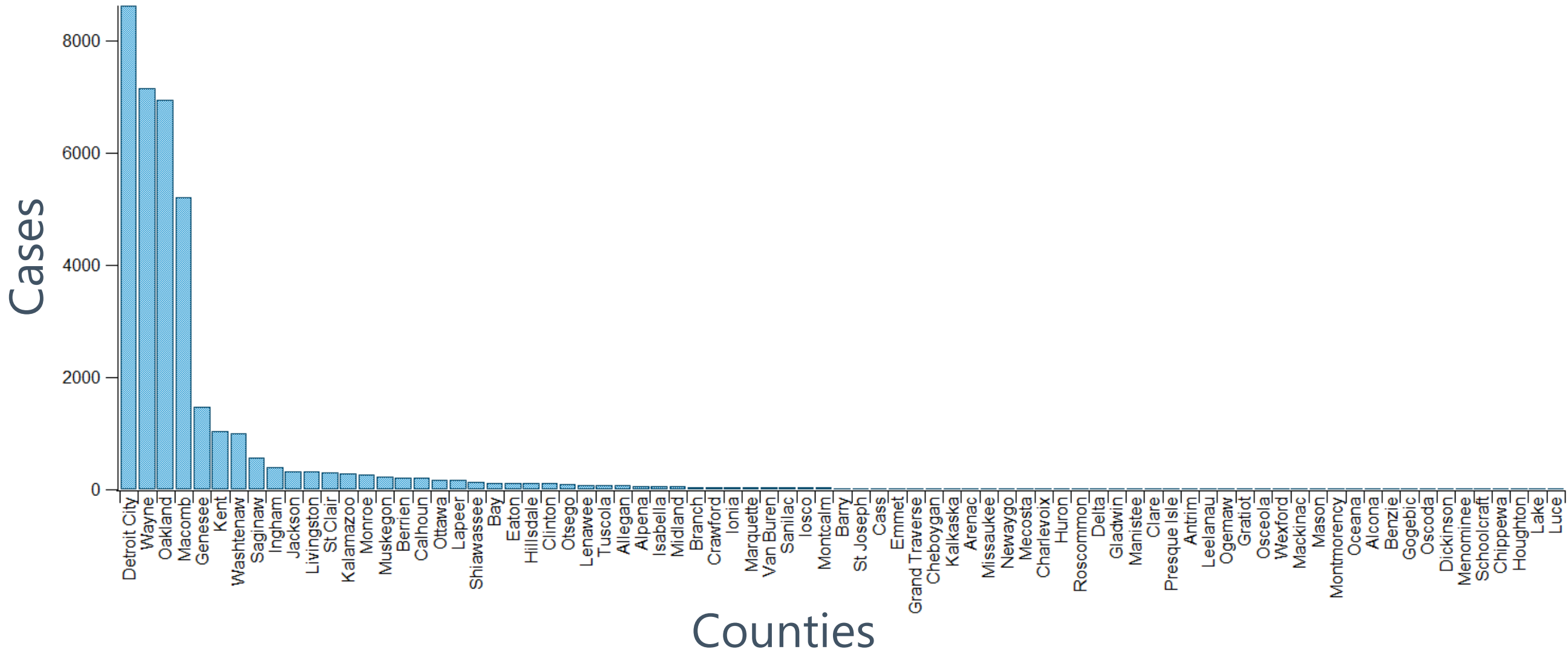
[michigan.gov/coronavirus/](https://michigan.gov/coronavirus/)



# MICHIGAN CORONAVIRUS CASES

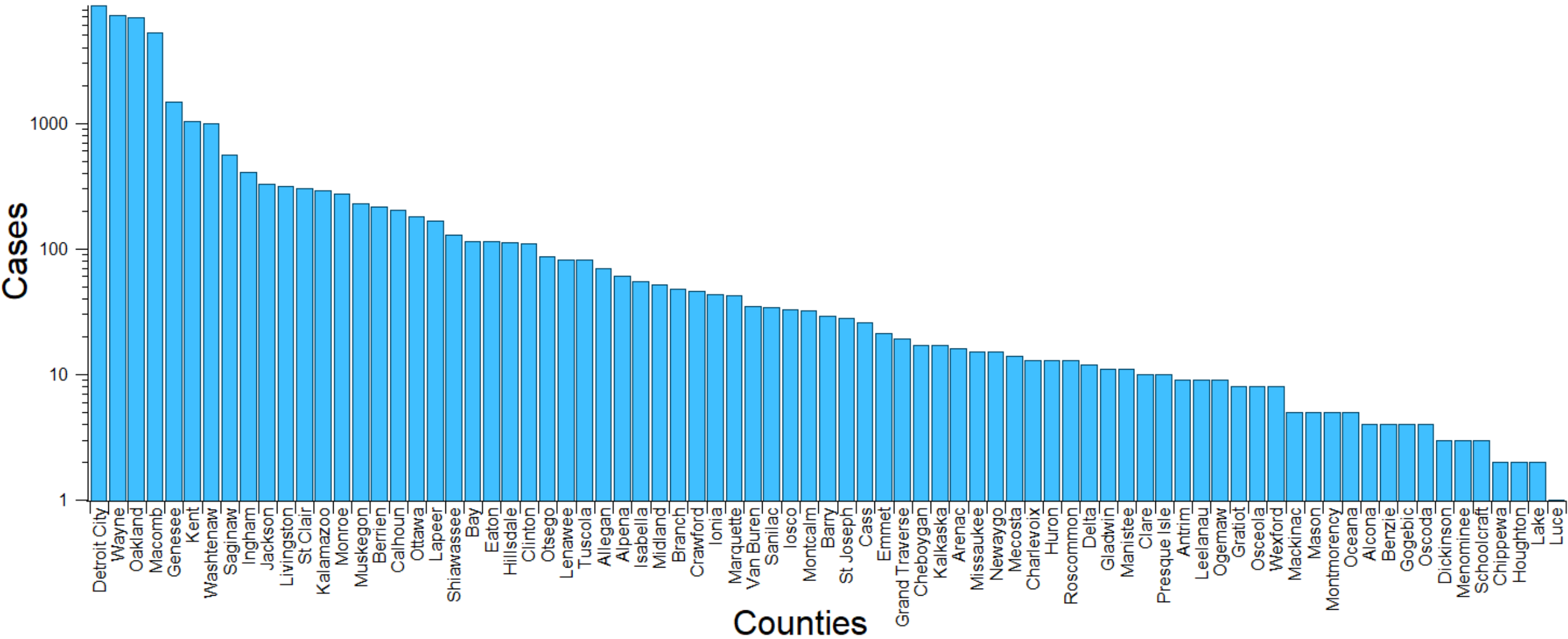


# MICHIGAN CORONAVIRUS CASES

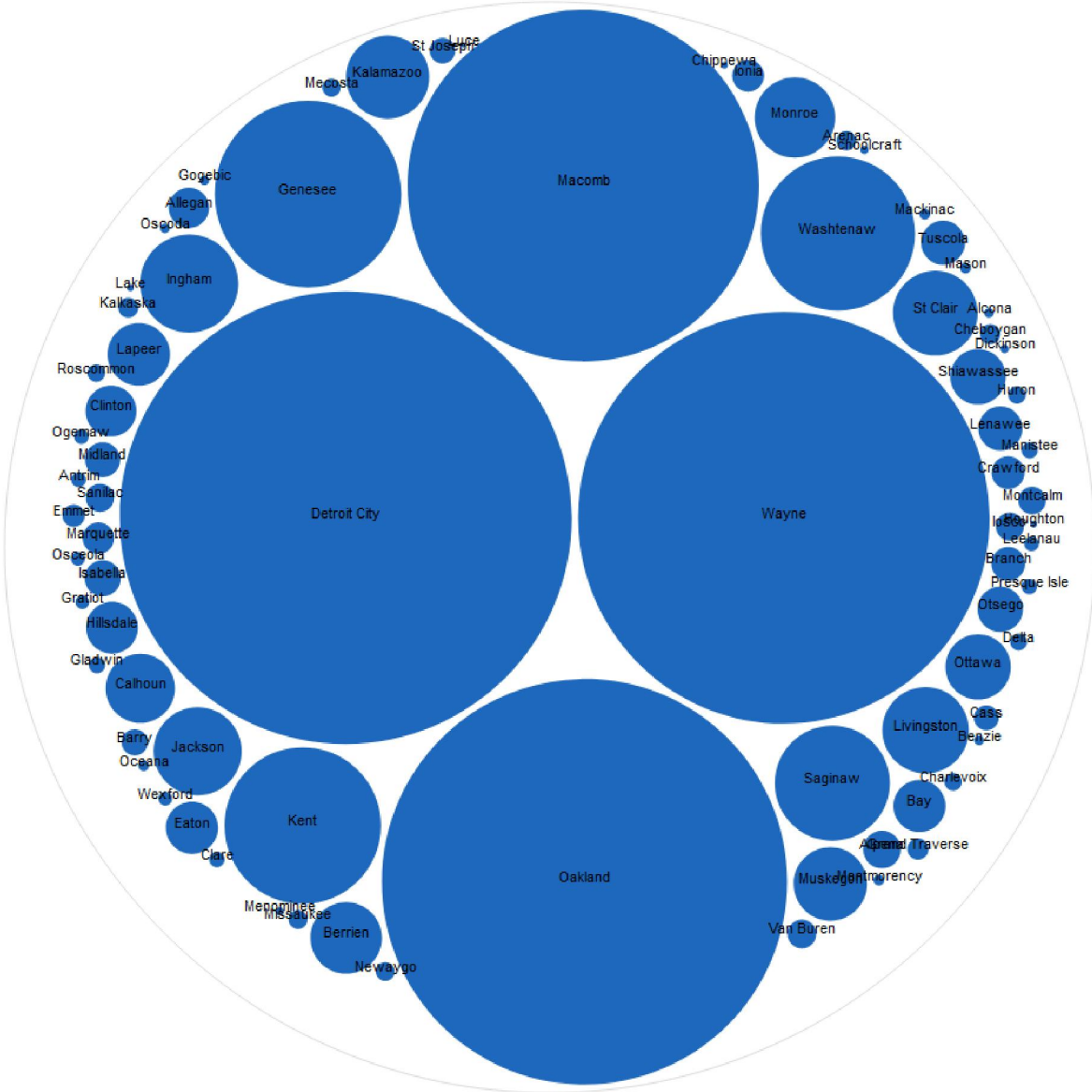


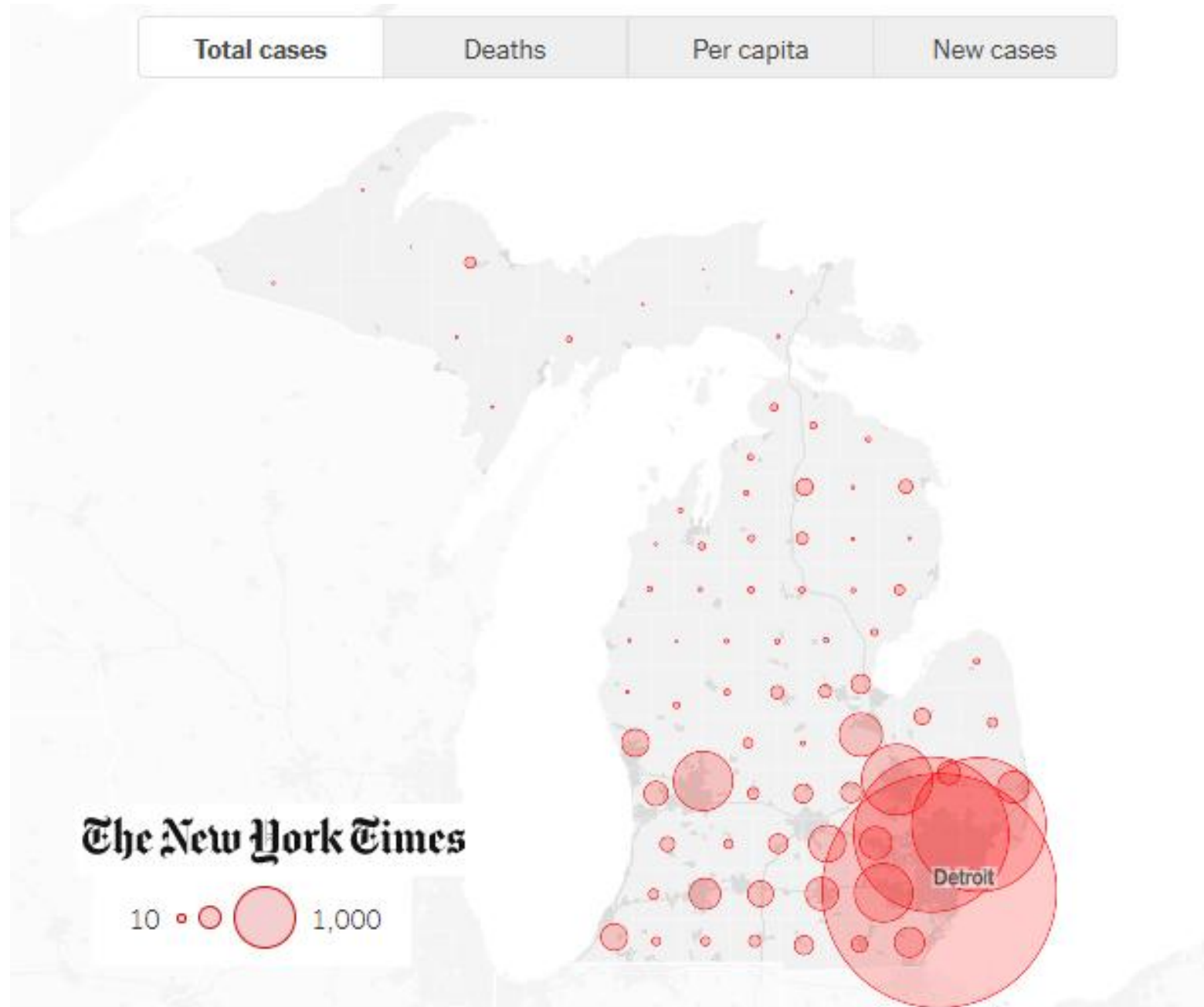


# MICHIGAN CORONAVIRUS CASES

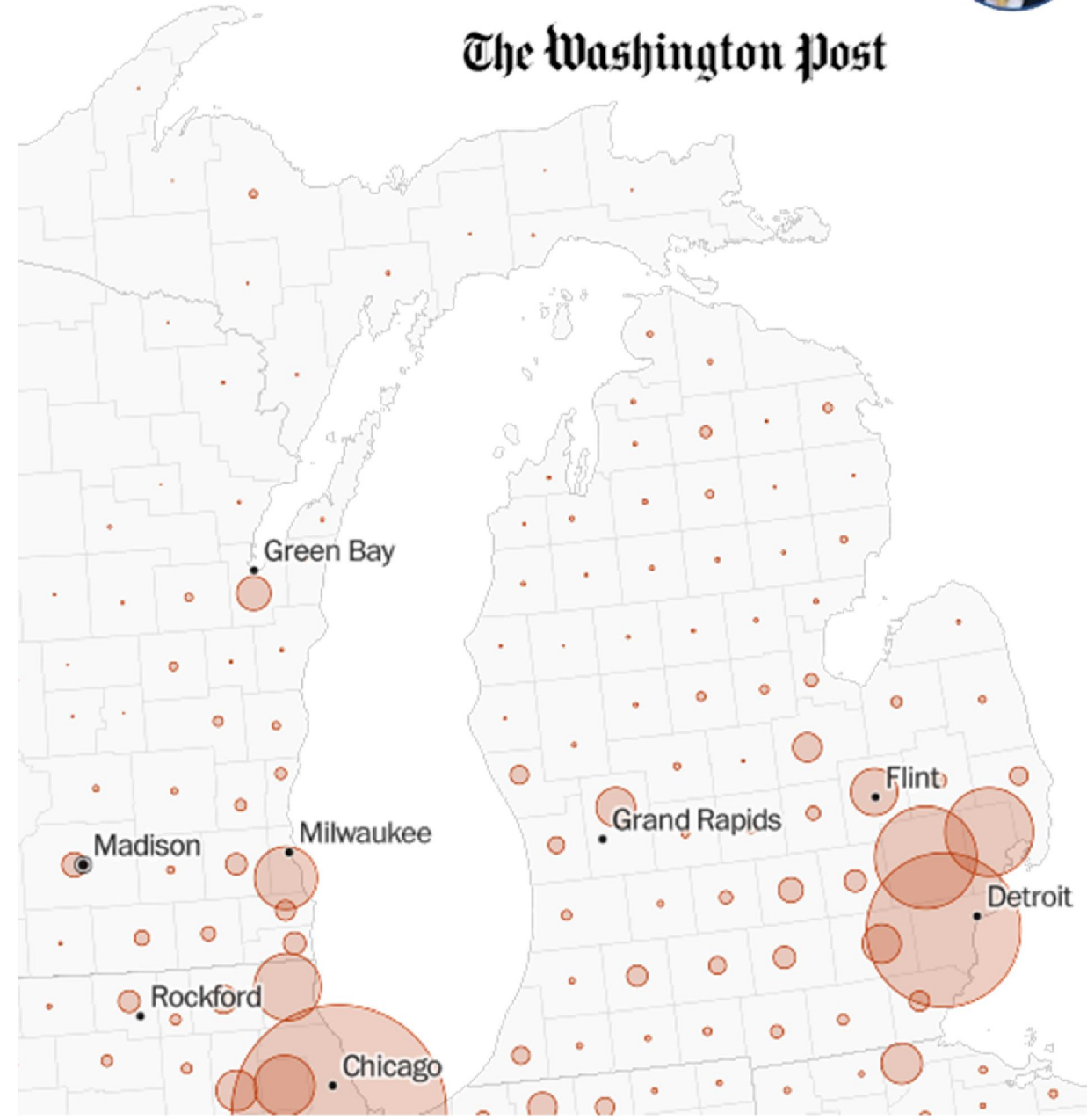
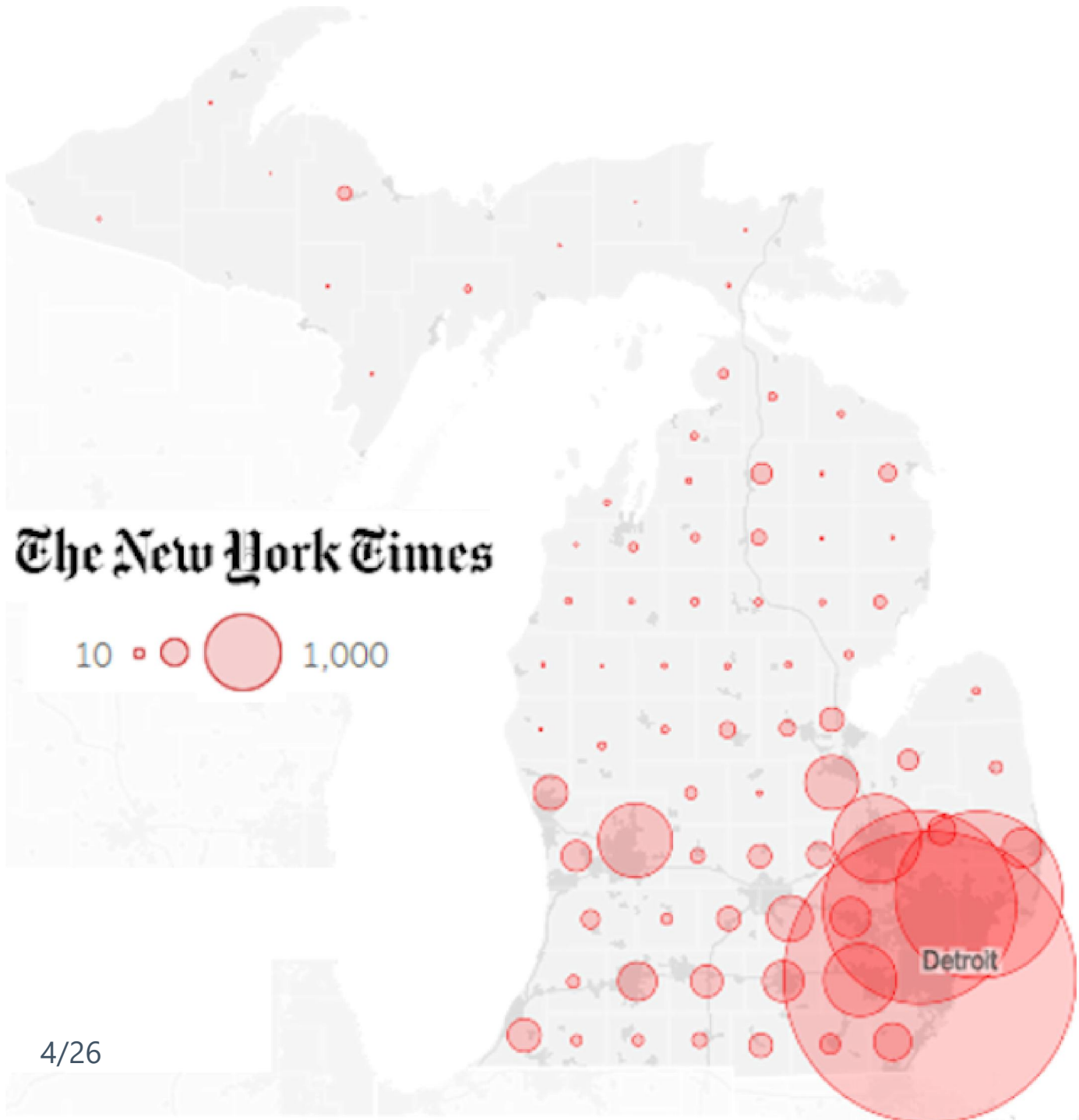


# MICHIGAN CORONAVIRUS CASES

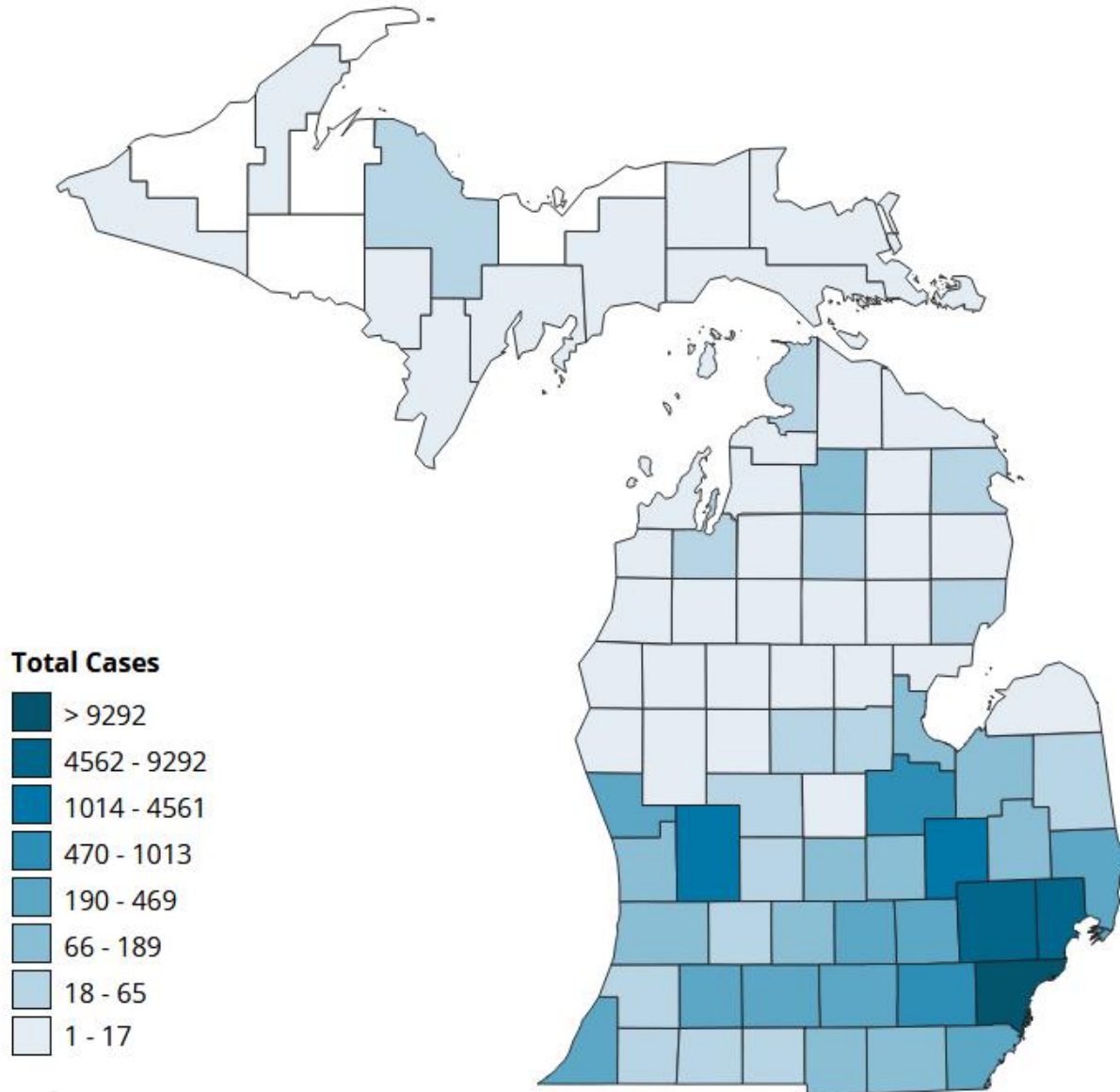




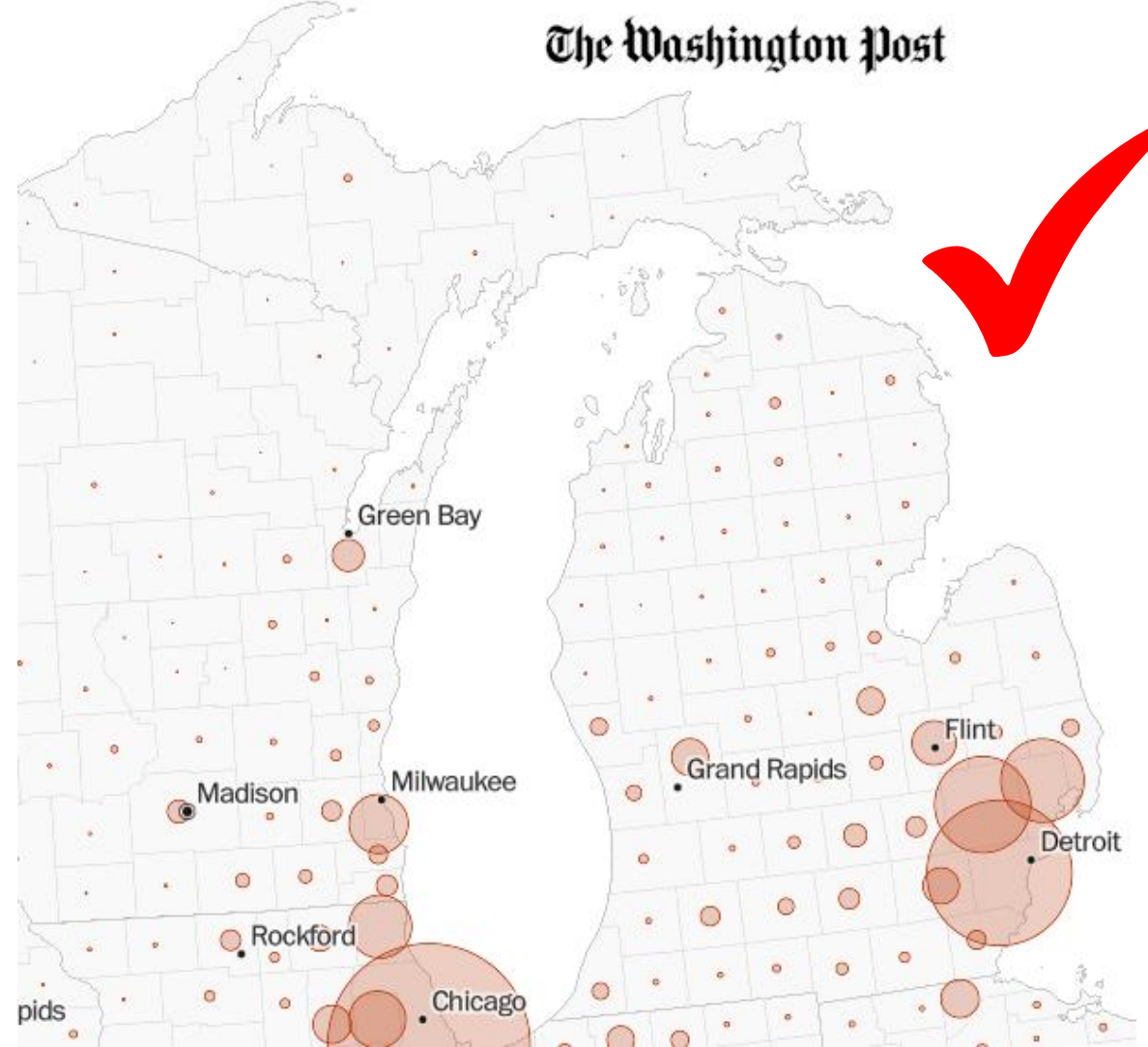
Note: The map shows the known locations of coronavirus cases by county. For total cases and deaths: Circles are sized by the number of people there who have tested positive, which may differ from where they contracted the illness. For new cases: Doubling time is calculated for the last week of cases. Sources: State and local health agencies and hospitals.



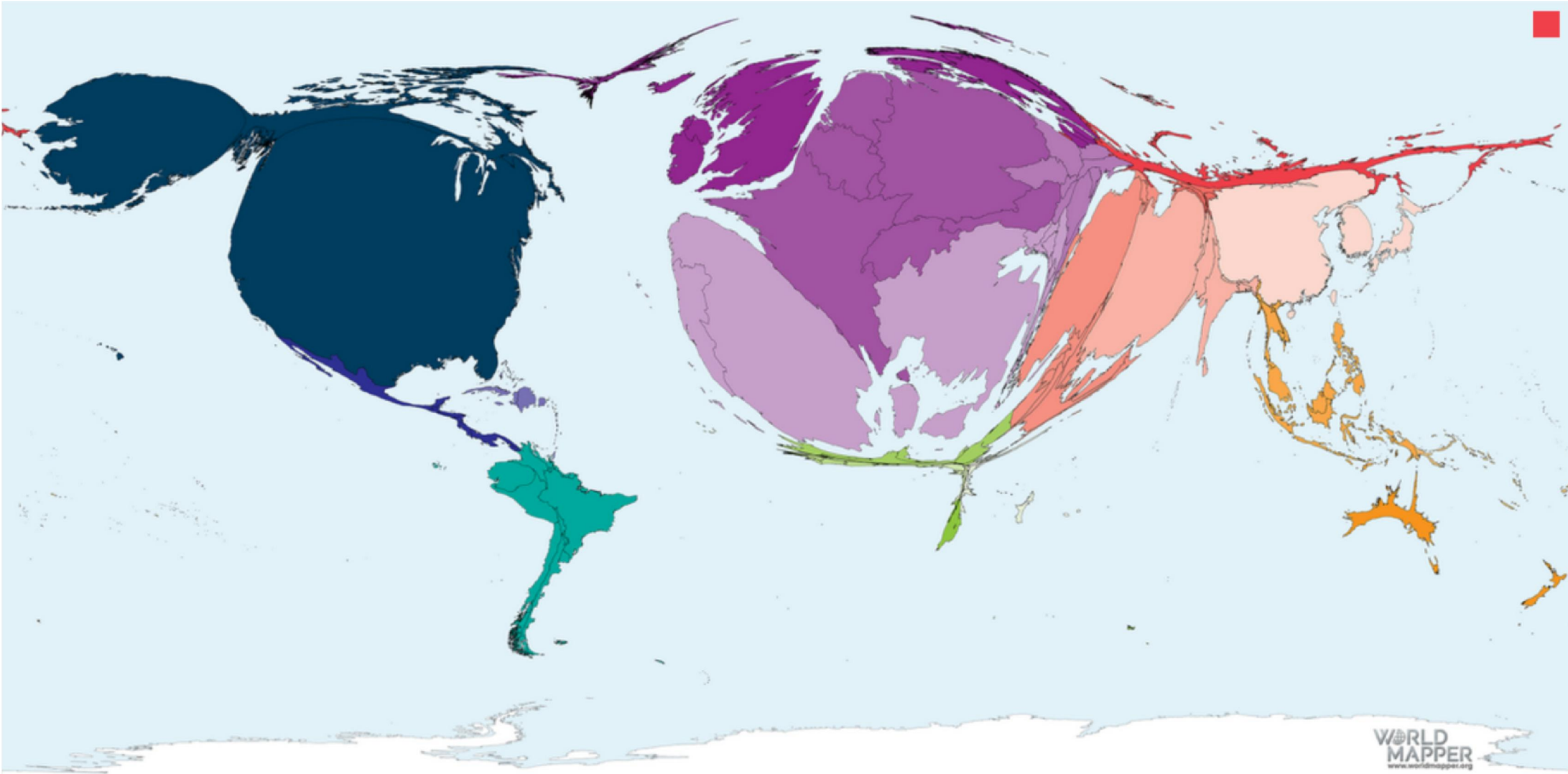
# MICHIGAN CORONAVIRUS CASES



[michigan.gov/coronavirus/](https://michigan.gov/coronavirus/)



# COVID-19/CORONAVIRUS CASES



WORLD MAPPER  
www.worldmapper.org  
from 22 April 2020

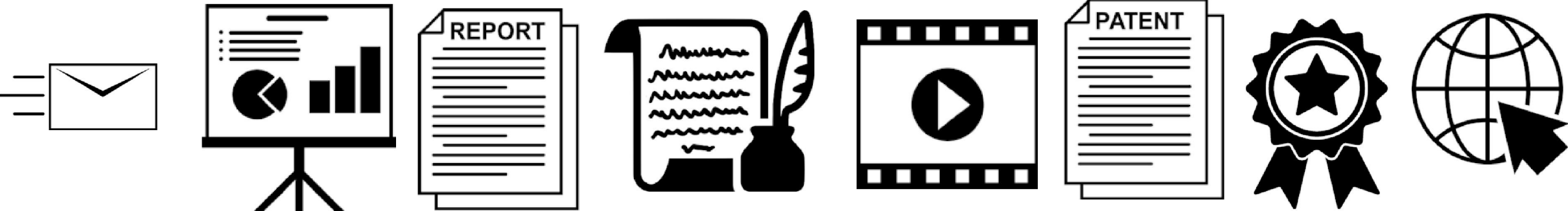


# COMMUNICATION: DIFFERENT AUDIENCES

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# COMMUNICATION: DIFFERENT TOOLS

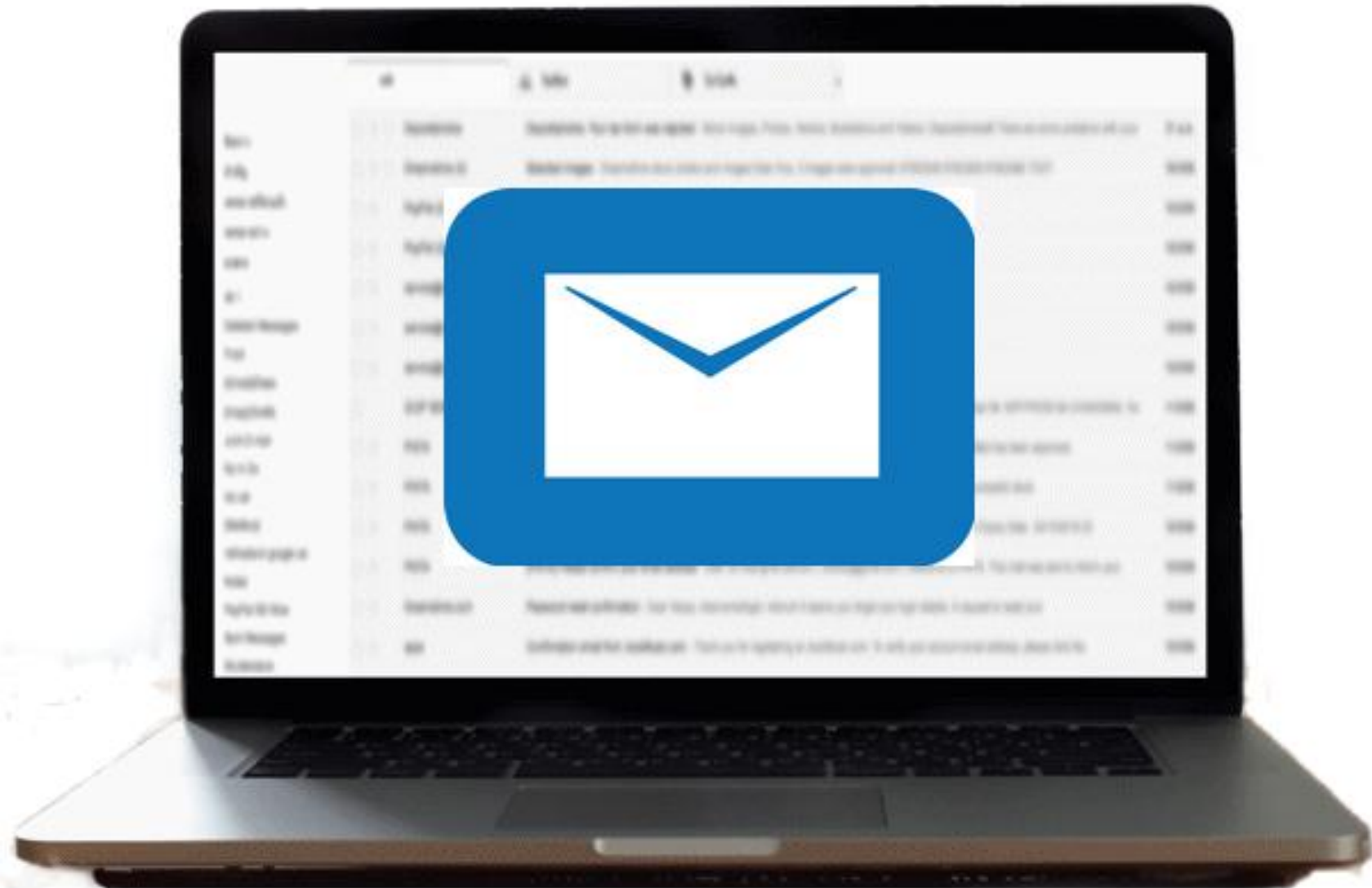






Tools  
Tactics  
Strategy  
Audience  
Goal







# Audience Challenge Question

## What should you assume as you send an email?

- it is a secure way to communicate and all contents will be viewed only by the intended recipient
- the content will be yelled in the hallway for all to hear
- spelling and formatting are a waste of time and prompt response is most important
- it will be ignored and will disappear without a trace

# WHAT YOU SHOULD ASSUME WHEN SENDING EMAIL

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# EMAIL'S FLAWS



- You can't assume only the reader will see it.
- You can't assume all of any message will be read.
  - Spam filters aren't reliable.
  - Too much email!
- Over-analysis is possible, even likely.
- Autocorrect and spelling checkers.
  - Madan → Madman
  - attempt at inconsistency → incontinence

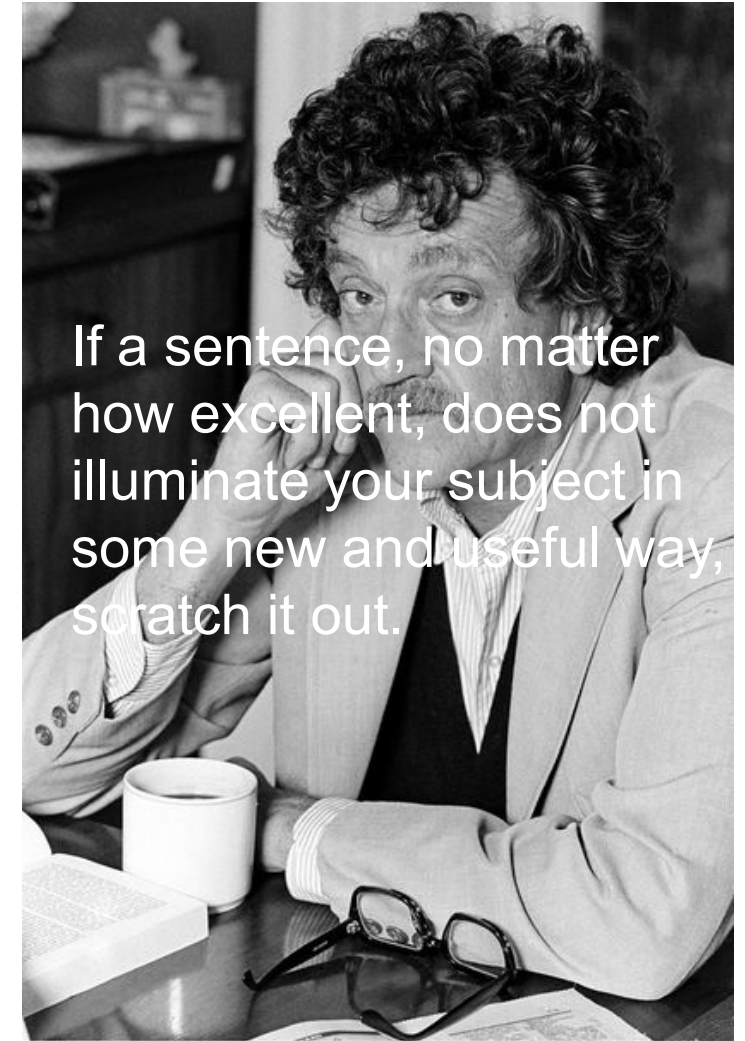


# VONNEGUT'S *HOW TO WRITE WITH STYLE*\*



*edit*

- Do not ramble
- Keep it simple
- Have the guts to cut
- Sound like yourself
- Say what you mean to say
- Read *Strunk and White*



If a sentence, no matter how excellent, does not illuminate your subject in some new and useful way, scratch it out.

\* excerpted

from chicagotribune.com attributed to Marty Reichenhal, AP



# DAVID OGILVY'S 10 WRITING HINTS



1. Read the *Writing That Works*. Read it three times.
2. Write the way you talk. Naturally.
3. Use short words, short sentences and short paragraphs.
4. Never use jargon words like *reconceptualize*, *demassification*, *attitudinally*, *judgmentally*. They are hallmarks of a pretentious ass.
5. Never write more than two pages on any subject.
6. Check your quotations.
7. Never send *an important email* on the day you write it. Read it aloud the next morning —and then edit it.
8. If it is something important, get a colleague to improve it.
9. Before you send your *email*, make sure it is crystal clear what you want the recipient to do.
10. If you want ACTION, don't write. Go and tell the guy what you want.

edit

edit

edit

\* paraphrased for brevity and clarity









# LAYERED SCIENTIFIC COMMUNICATION



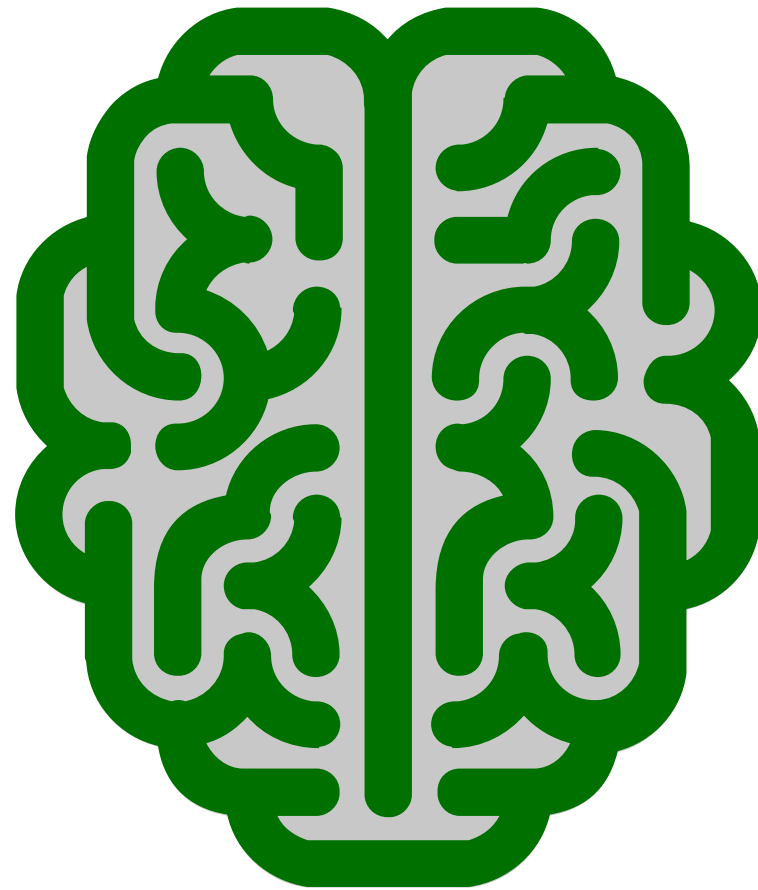
Chest CT imaging of COVID-19 patients demonstrates common imaging abnormalities, even in asymptomatic patients, with rapid evolution from unilateral to bilateral interstitial pneumonia.

*versus*

Interstitial tissue supports the air sacs, or alveoli, where oxygen transport occurs in the lungs. The tissue surrounding air sacs in both lungs get irritated in bilateral interstitial pneumonia. Three-dimensional X-ray techniques, commonly called CT scans, detect interstitial pneumonia, even in asymptomatic patients, and allow doctors to monitor disease progression.

“Everything should be made as simple as possible, but not simpler.”





# ready

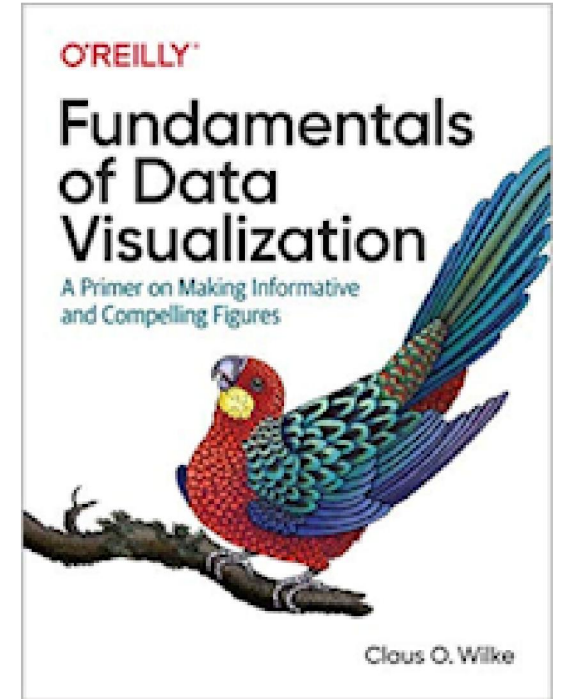
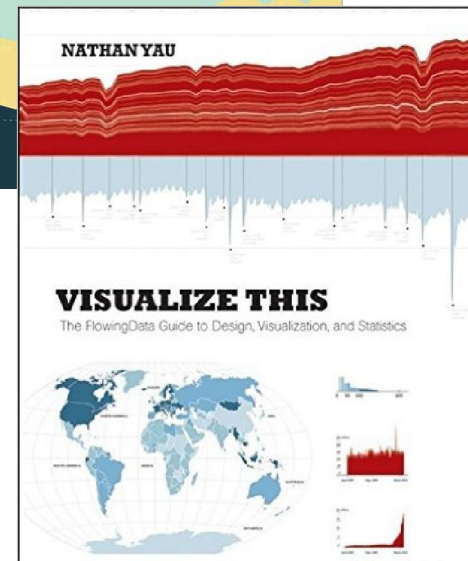
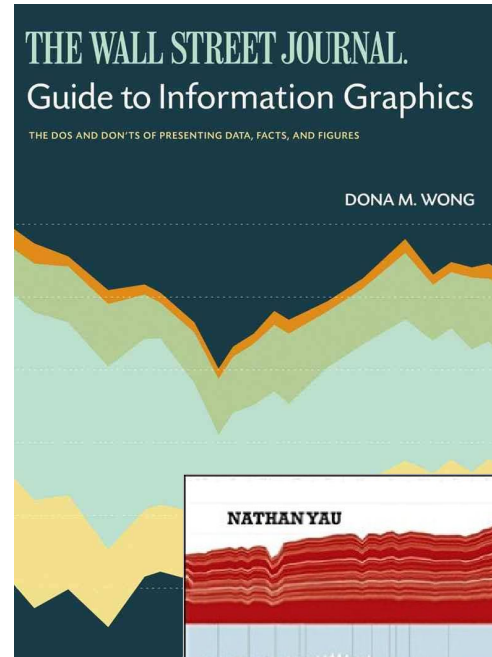
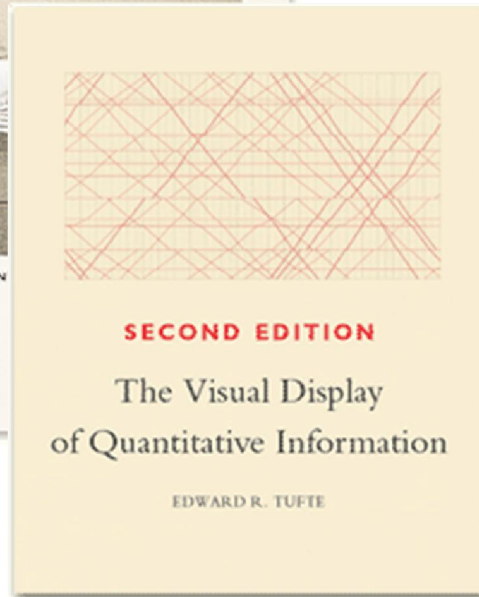
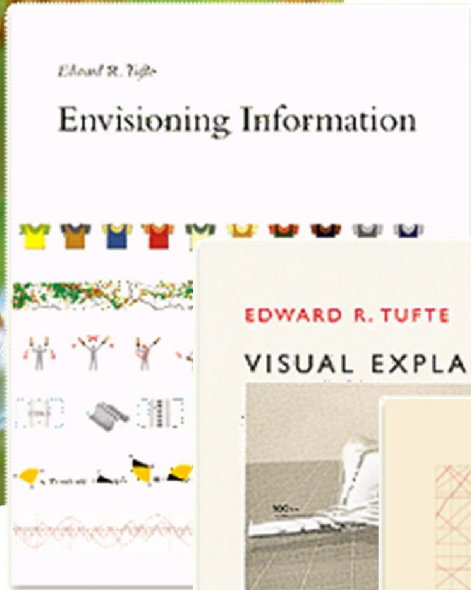
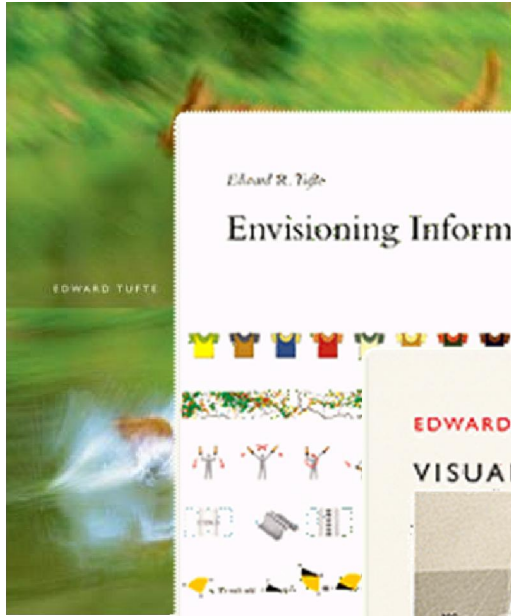
- memorable is better than forgettable (pics memorable)
- make graphics *mind ready*
- info density right for material and audience



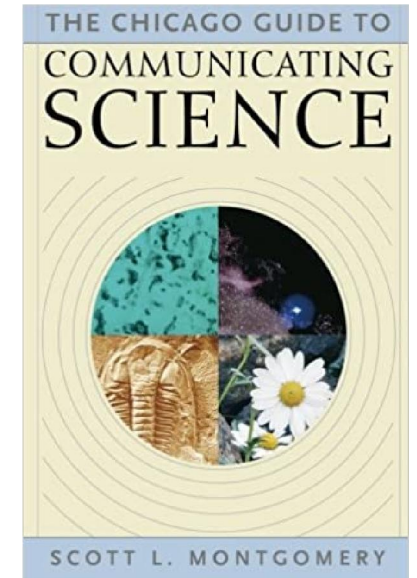
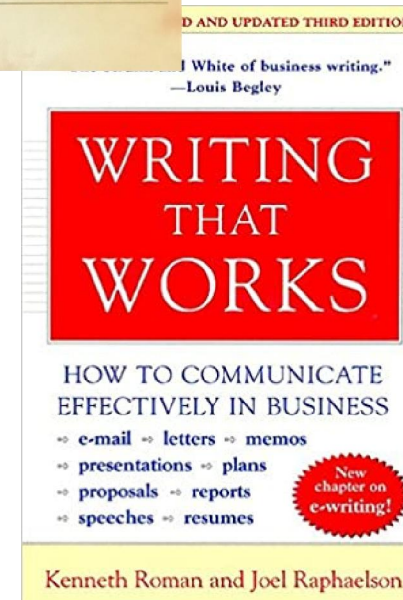
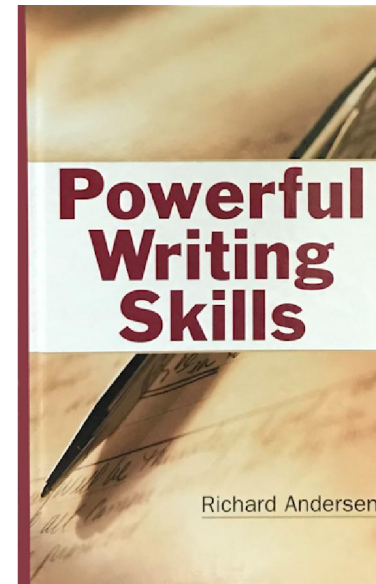
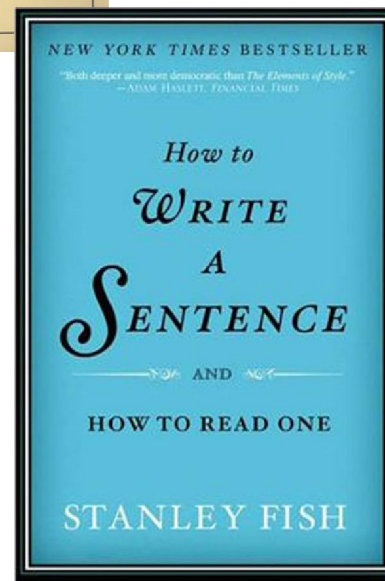
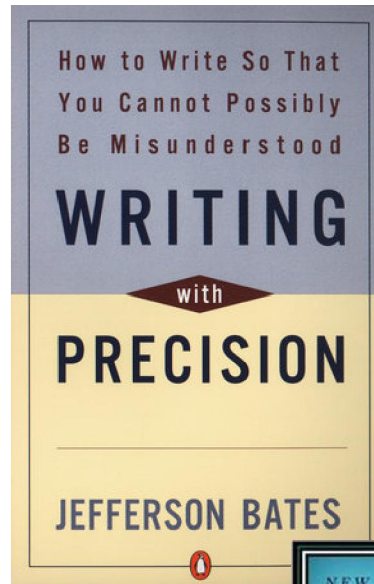
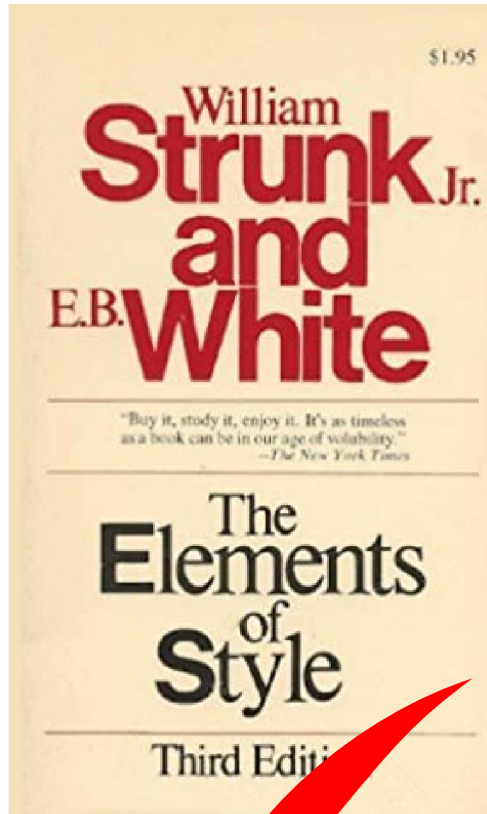
Tools  
Tactics  
Strategy  
Audience  
Goal



# FAVORITE REFERENCES – DISPLAY OF INFORMATION



# FAVORITE REFERENCES - WRITING



# FAVORITE DATA VISUALIZATION WEBSITES - SAMPLES



howmuch.net  
Understanding Money

Visualizations Remodeling Loans

## Understanding Money

Helping you make all the right money moves

Visualizations Remodeling Loans Insurance

[howmuch.net](https://www.howmuch.net)

Junk charts Welcome Twitter About

[junkcharts.typepad.com](https://junkcharts.typepad.com)

## JUNK CHARTS

Recycling chart junk as junk art

VISUAL CAPITALIST

HOME MARKETS TECHNOLOGY MONEY HEALTHCARE ENERGY MINING GREEN POLITICS

**LATEST**

### How COVID-19 Consumer Spending is Impacting Industries

COVID-19 / 3 hours ago

### The COVID-19 Oil Crash

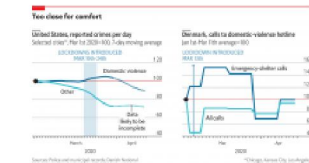
Why Prices Went Negative, and Getting Out of the Glut

COVID-19 / 1 day ago

[visualcapitalist.com](https://www.visualcapitalist.com)

The Economist Topics Current edition More

## Graphic detail



## Daily Chart

Domestic violence has increased during coronavirus lockdowns

In American cities, reports rose after shutdowns while other crimes fell



## Daily chart

Americans take an ever more negative view of China

[economist.com/graphic-detail/](https://www.economist.com/graphic-detail/)



# FAVORITE DATA VISUALIZATION WEBSITES - TOOLS



flourish.studio

developers.google.com/chart/  
interactive/docs/gallery

sankeymatic.com





# DUARTE'S GOLDEN RULE

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*Never give a presentation you  
wouldn't want to sit through.*

*Nancy Duarte in HBR Guide*



