

Lecture 5

Infographics

- Definition and Overview
- Relationship to Information Visualization
- Isotype and Infographics Examples
- Using Information Design & Infographics to Advocate

New York Times Visual DataStories

- 2020 Coronavirus Outbreak
- 2017 – 2019
- 2010 – 2016
- 2008 – 2009

Infographics

Graphic Representation of Data, Information, Knowledge

using

Lines, Boxes, Arrows

Symbols, Pictograms

Text, Color, Labels

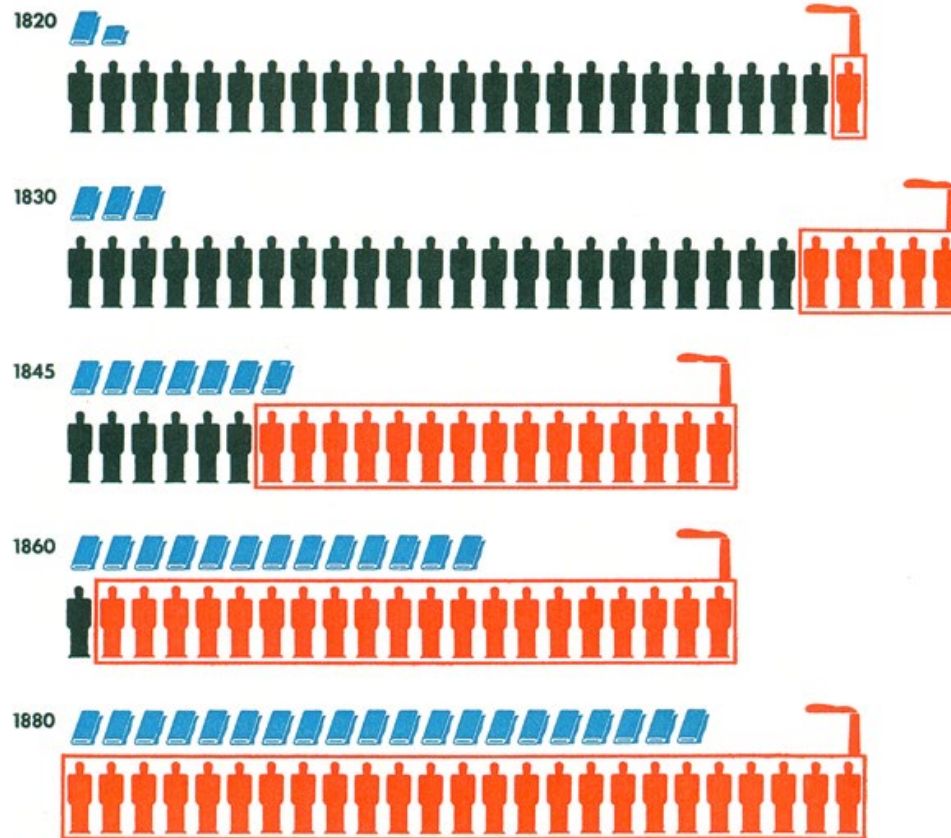
http://en.wikipedia.org/wiki/Information_graphics

Infographics vs. Information Visualization

	Infographics	InfoVis
Content	Data Information Knowledge	Data Information
Visualizations	Standard Charts Symbols Diagrams Color Text	Novel Charts InfoVis Principles
Interactivity	Mostly Static	Sliders & Controls Dynamic Queries Animations
Narrative Structure	Medium - High	Low - Medium
Data-Ink Ratio	Medium	Medium - High
Data Size & Data Dimensions	Low - Medium	Medium - High

Isotype (International System of TYpographic Picture Education)

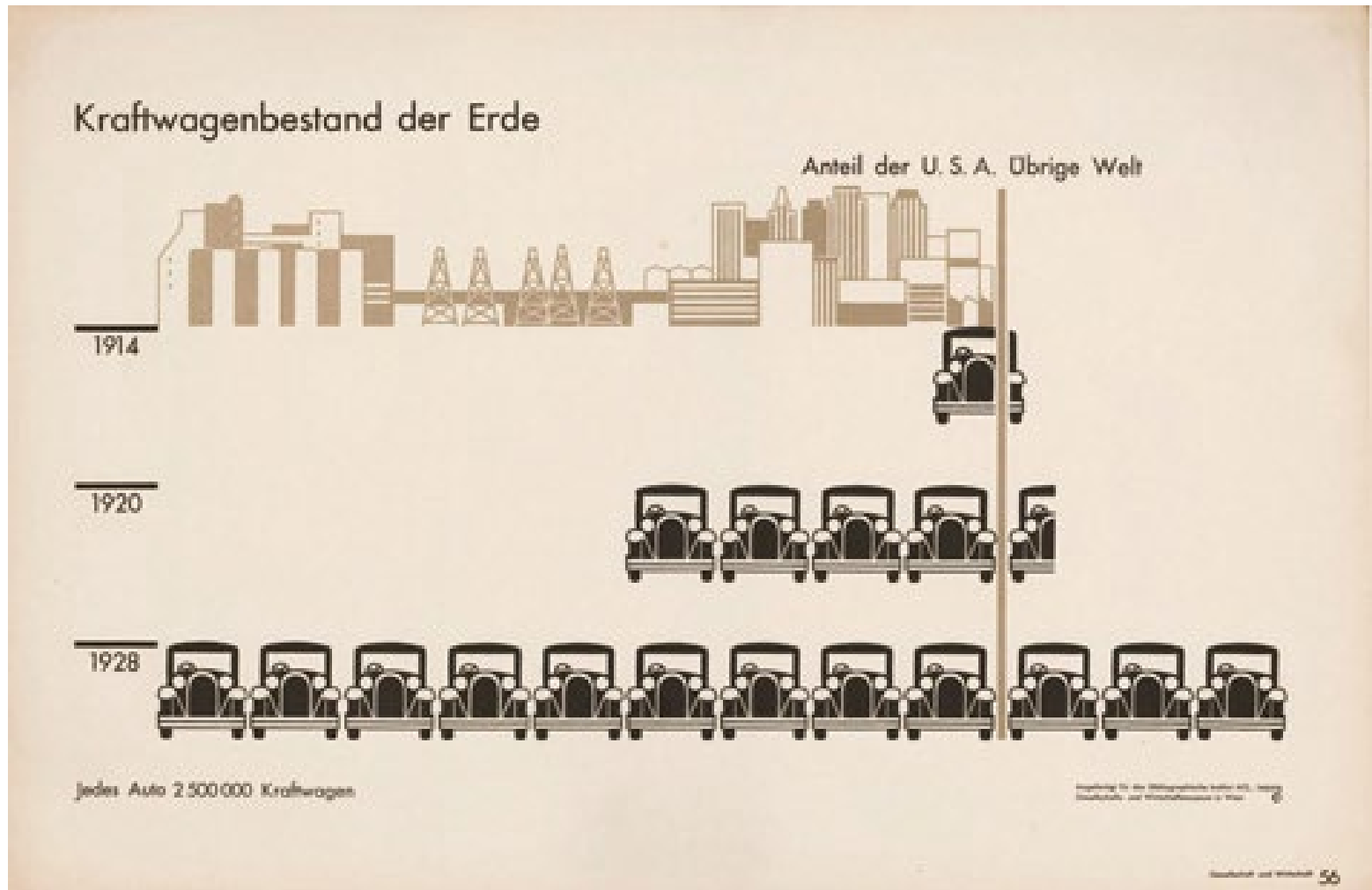
Home and Factory Weaving in England



Each blue symbol represents 50 million pounds total production
Each black man symbol represents 10,000 home weavers
Each red man symbol represents 10,000 factory weavers

<http://en.wikipedia.org/wiki/Isotype> (picture language)

Isotype (International System of TYpographic Picture Education)



<http://www.isotyperevisited.org/>

Infographics – Some Resources

Cool Infographics

<http://coolinfographics.blogspot.com/>

Smashing Magazine

<http://www.smashingmagazine.com/2008/01/14/monday-inspiration-data-visualization-and-infographics/>

Six Revisions

<http://sixrevisions.com/graphics-design/40-useful-and-creative-infographics/>

New York Times Visualizations

New York Times has Visualization Team

<http://www.nytimes.com/2009/01/19/business/media/19askthetimes.html>

- **Leading adopter** of visualization tools in the news media
- At the forefront of enhancing new stories with interactive content
- **Community API** <http://open.blogs.nytimes.com/2008/10/30/announcing-the-new-york-times-community-api/>

Combining Static Infographics and Interactive Visualization

Beginning to Develop “DataStories”

- **Remade in America** <http://projects.nytimes.com/immigration/>
- **Debt Trap** <http://nytimes.com/interactive/2008/07/20/business/20debt-trap.html>
- **Election 2008** <http://elections.nytimes.com/2008/results/president/map.html>

Visualizations – 2020 – **Coronavirus Outbreak**
COVID-19 Dashboard Johns Hopkins University

<https://coronavirus.jhu.edu/map.html>



NYTimes Visualizations – 2020 – Coronavirus Outbreak

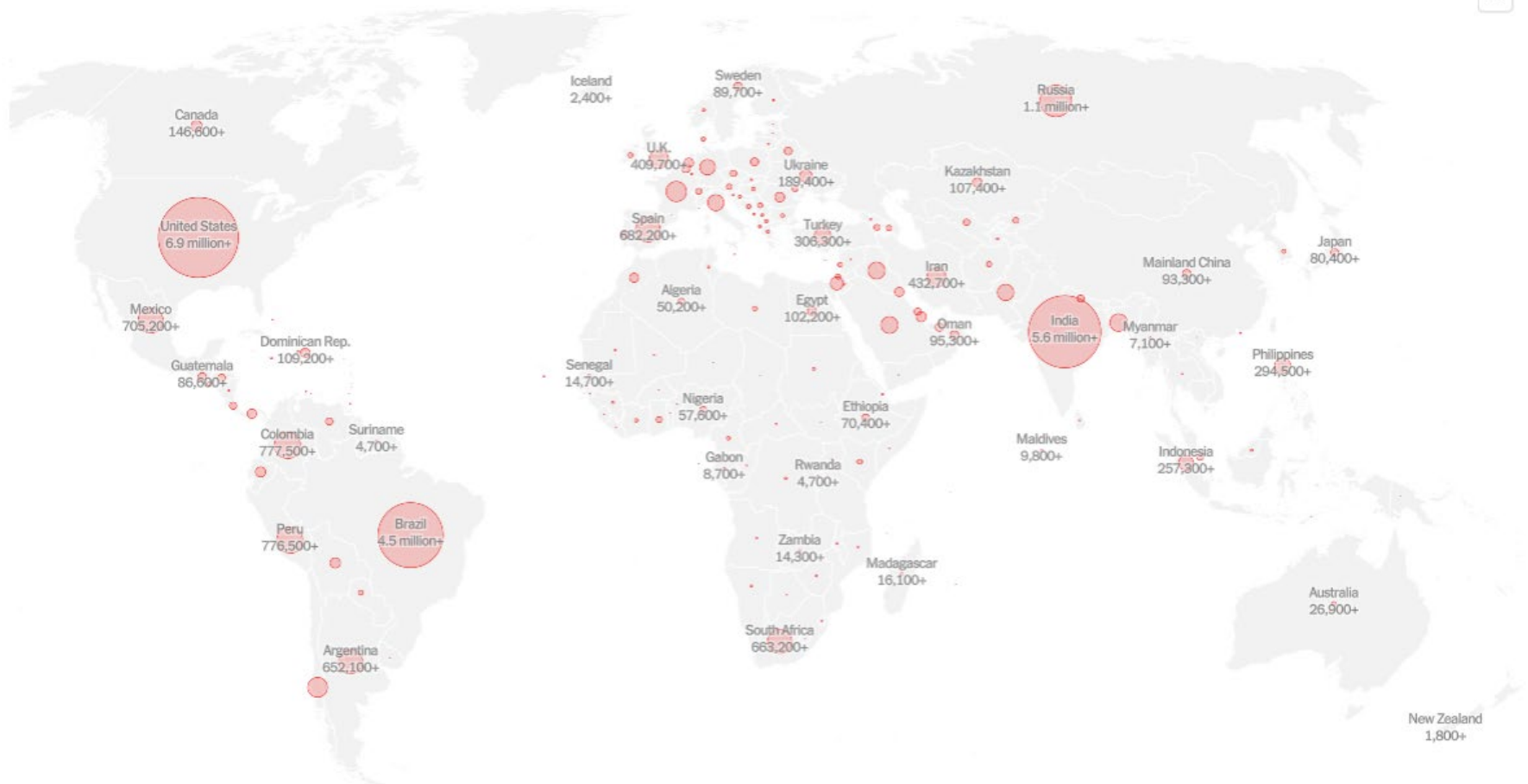
Covid World Map: Tracking the Global Outbreak

<https://www.nytimes.com/interactive/2020/world/coronavirus-maps.html>

Hot spots Total cases Deaths Per capita

10,000 1,000,000

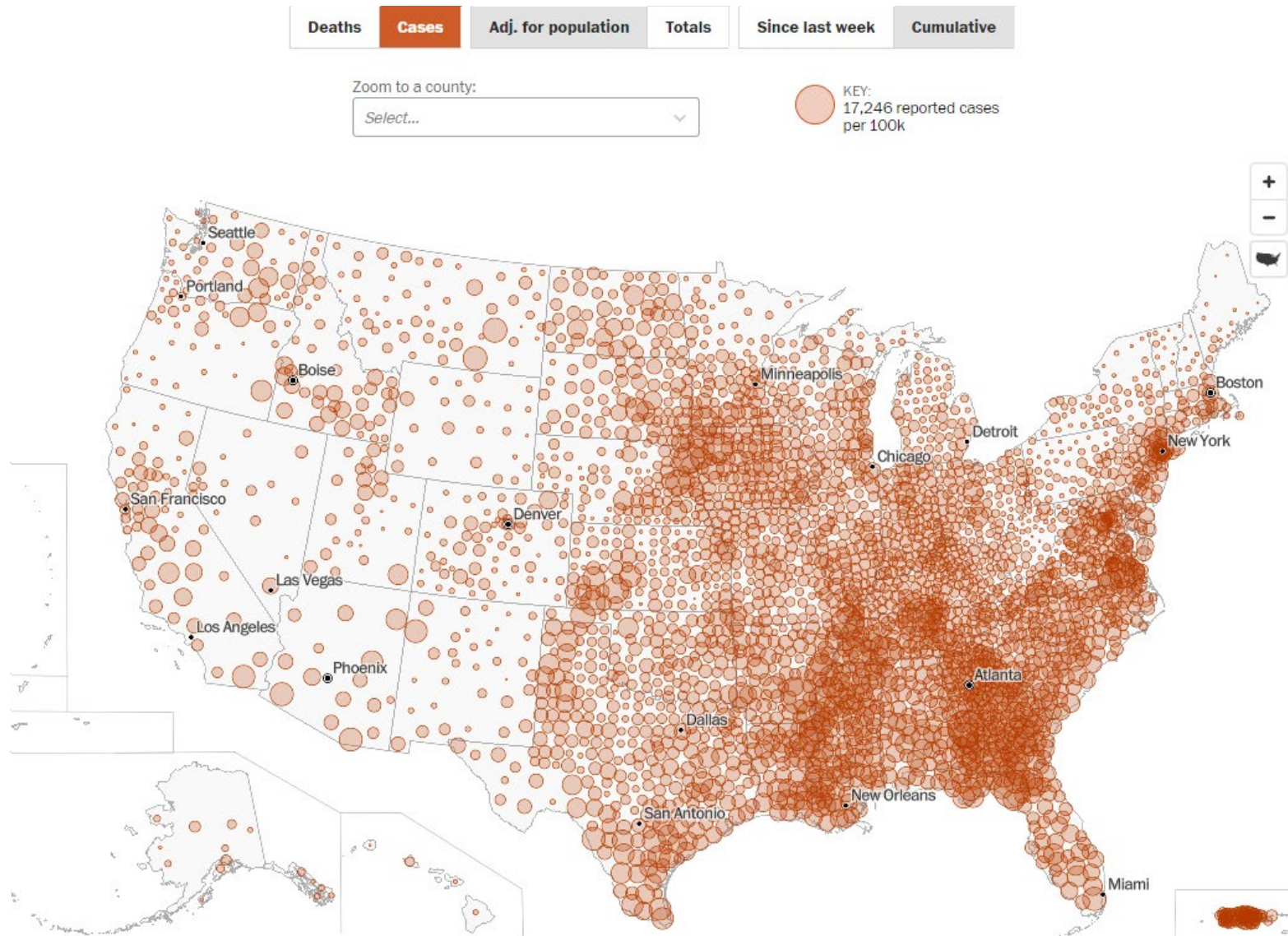
Double-click to zoom into the map.



WashPost Visualizations – 2020 – Coronavirus Outbreak

Covid World Map: Tracking the Global Outbreak

<https://www.washingtonpost.com/graphics/2020/national/coronavirus-us-cases-deaths/>



NYTimes Visualizations – 2020 – Coronavirus Outbreak

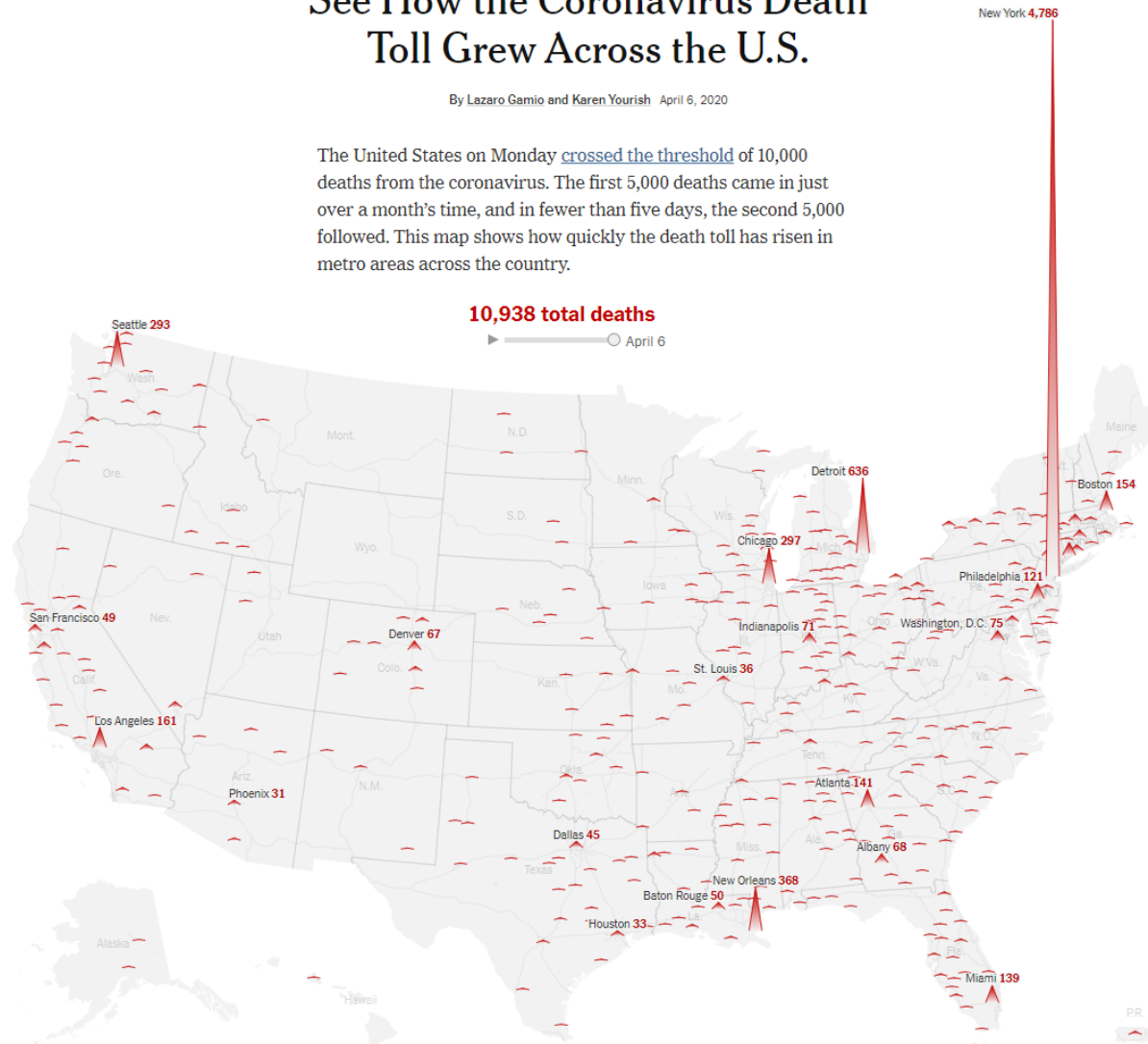
See How the Coronavirus Death Toll Grew Across the U.S.

<https://www.nytimes.com/interactive/2020/04/06/us/coronavirus-deaths-united-states.html>

See How the Coronavirus Death Toll Grew Across the U.S.

By Lazaro Gamio and Karen Yourish April 6, 2020

The United States on Monday [crossed the threshold](#) of 10,000 deaths from the coronavirus. The first 5,000 deaths came in just over a month's time, and in fewer than five days, the second 5,000 followed. This map shows how quickly the death toll has risen in metro areas across the country.

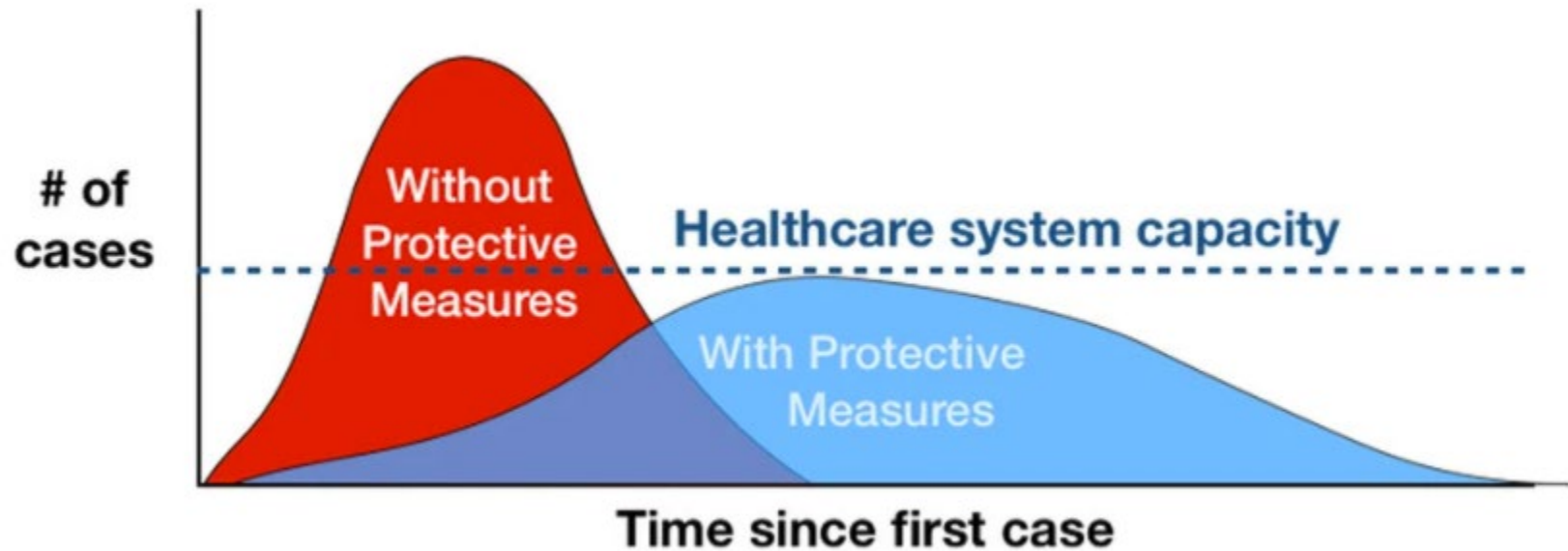


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NYTimes Visualizations – 2020 – **Coronavirus Outbreak**

Flattening the Coronavirus Curve

<https://www.nytimes.com/article/flatten-curve-coronavirus.html>

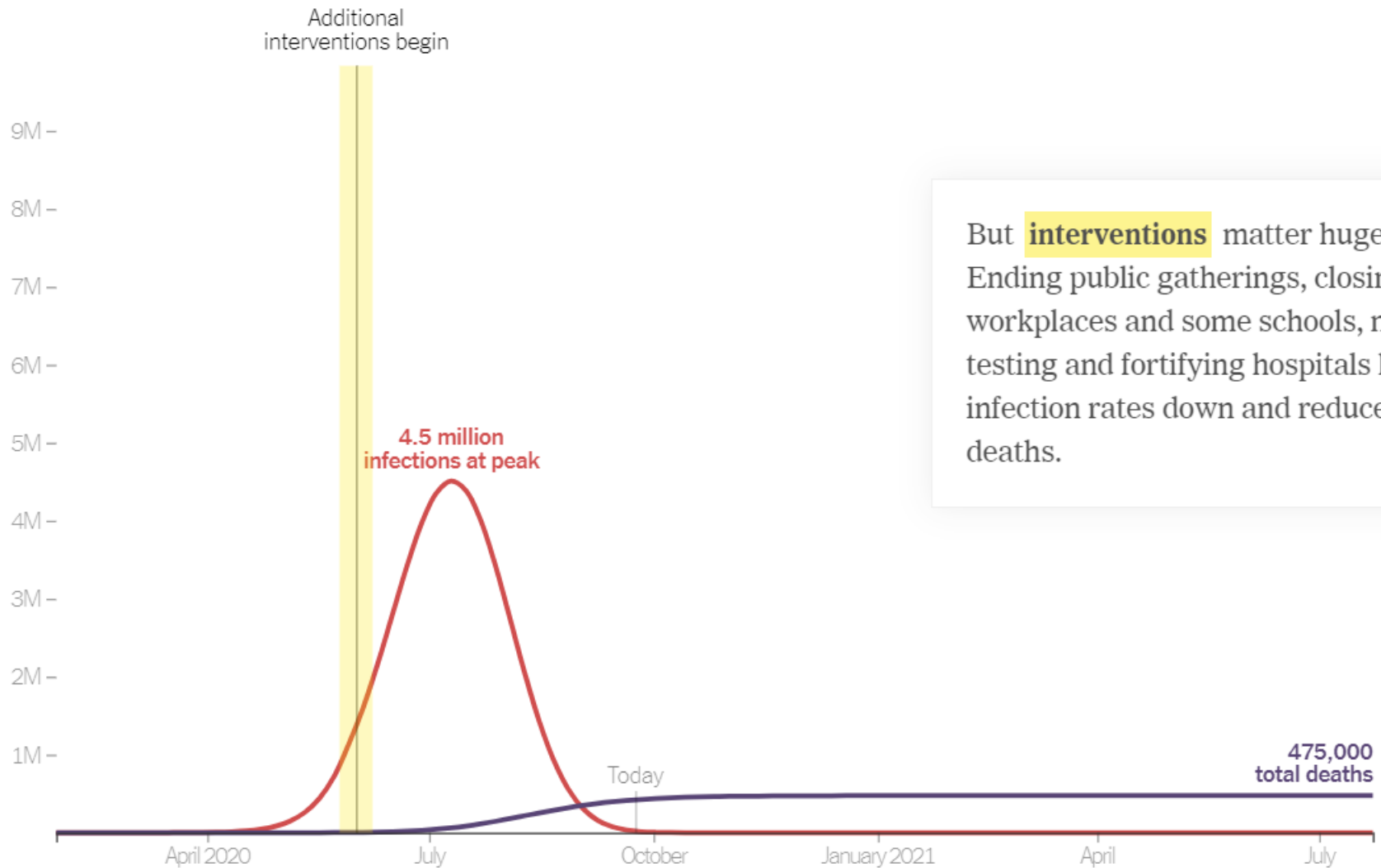


Adapted from CDC / The Economist

NYTimes Visualizations – 2020 – **Coronavirus Outbreak**

How Much Worse the Coronavirus Could Get, in Charts

<https://www.nytimes.com/interactive/2020/03/13/opinion/coronavirus-trump-response.html>

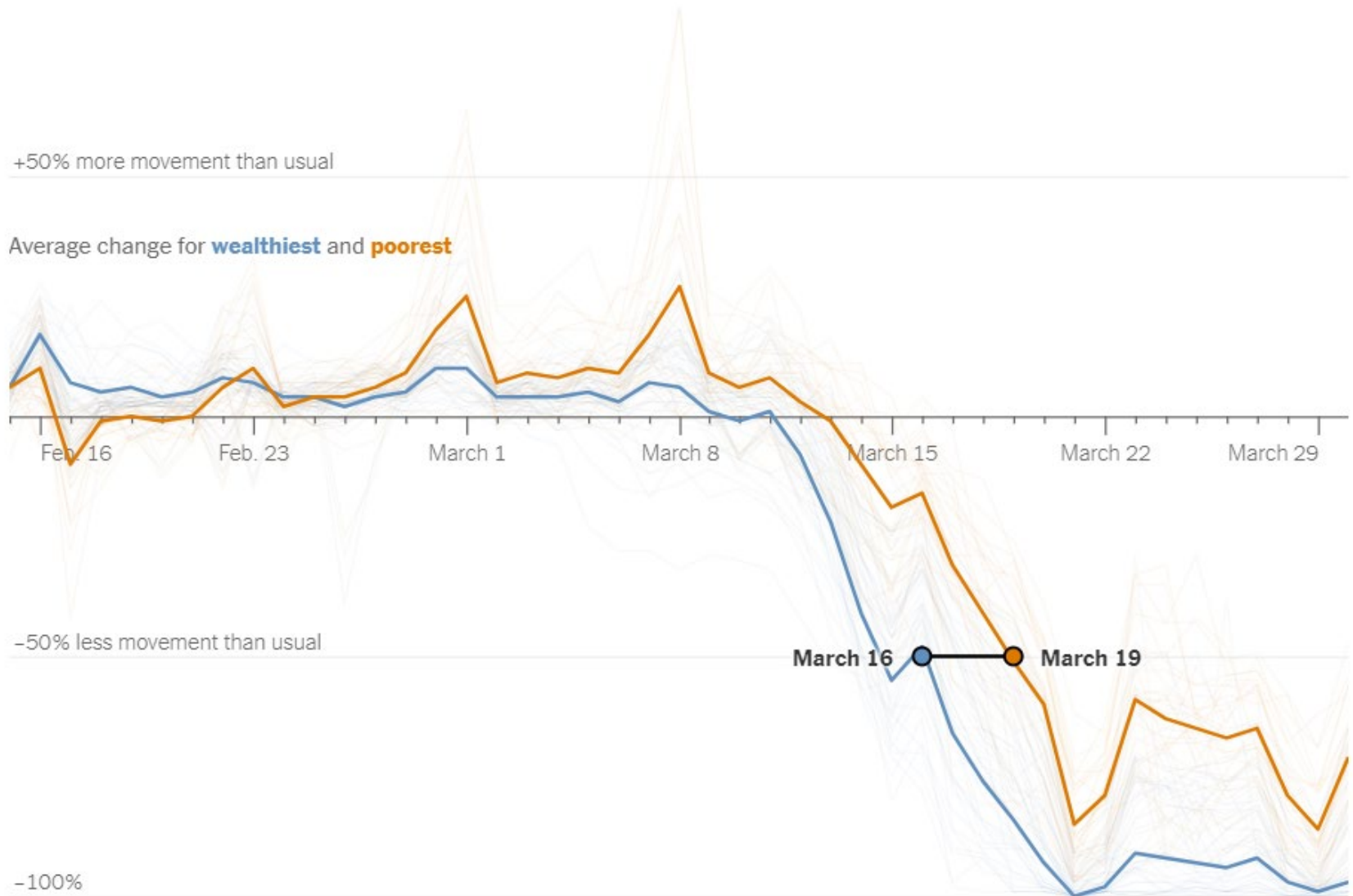


But **interventions** matter hugely. Ending public gatherings, closing workplaces and some schools, mass testing and fortifying hospitals keep infection rates down and reduce deaths.

NYTimes Visualizations – 2020 – Coronavirus Outbreak

Location Data Says It All: Staying at Home During Coronavirus Is a Luxury

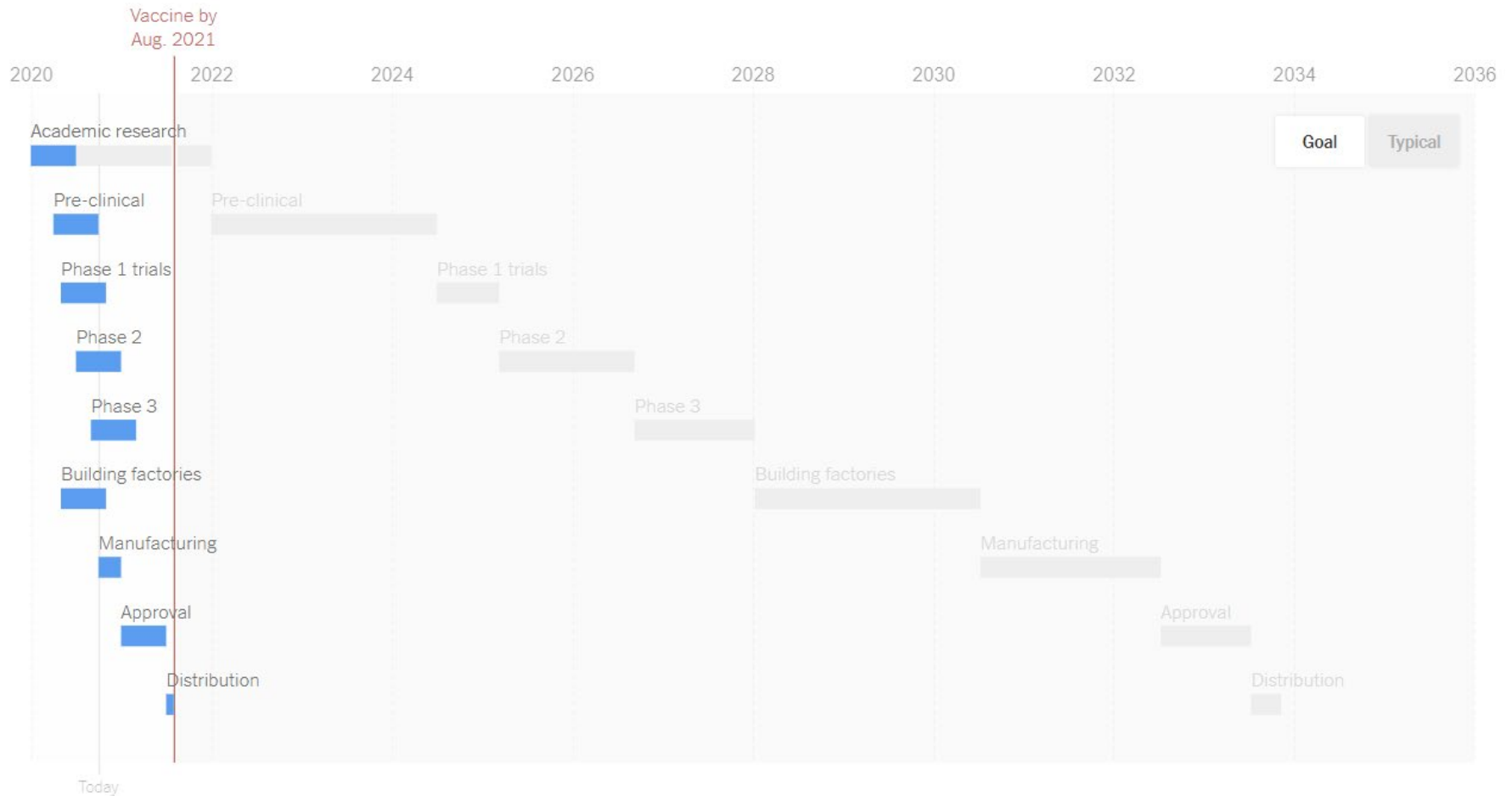
<https://www.nytimes.com/interactive/2020/04/03/us/coronavirus-stay-home-rich-poor.html>



NYTimes Visualizations – 2020 – Coronavirus Outbreak

How Long Will a Vaccine Really Take?

<https://www.nytimes.com/interactive/2020/04/30/opinion/coronavirus-covid-vaccine.html>

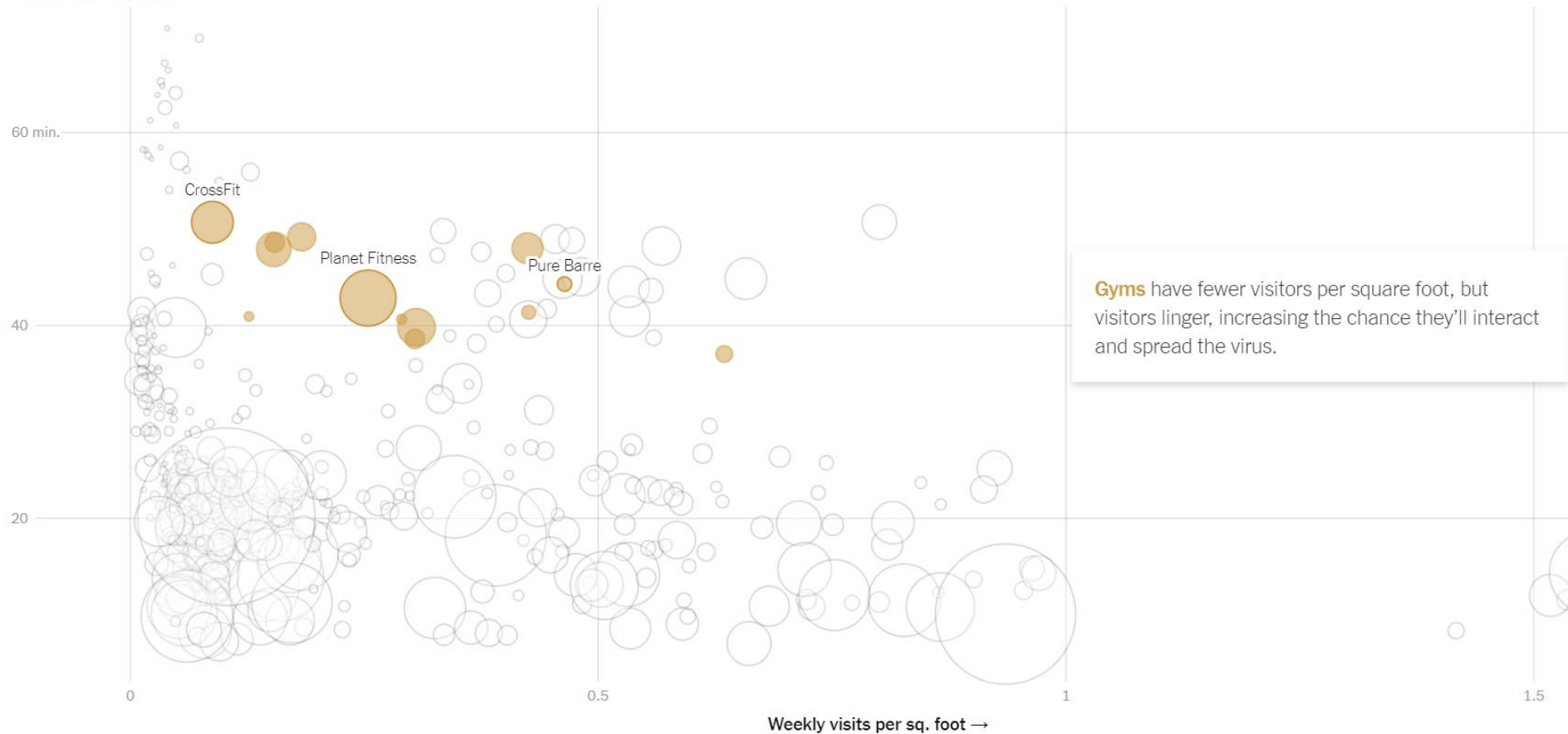


NYTimes Visualizations – 2020 – Coronavirus Outbreak

Is It Safer to Visit a Coffee Shop or a Gym?

<https://www.nytimes.com/interactive/2020/05/06/opinion/coronavirus-us-reopen.html>

↑ Average visit length

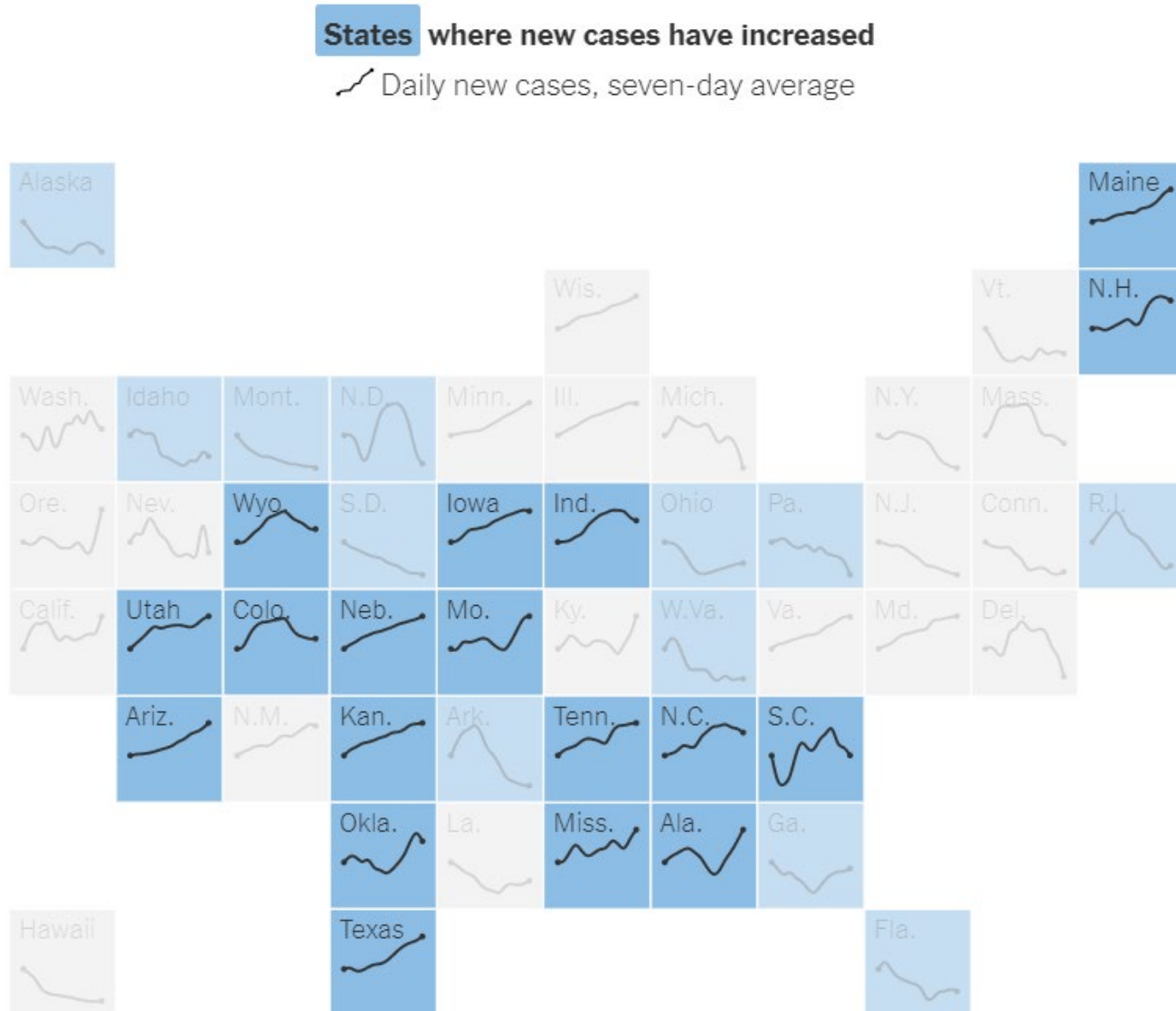


Gyms have fewer visitors per square foot, but visitors linger, increasing the chance they'll interact and spread the virus.

NYTimes Visualizations – 2020 – **Coronavirus Outbreak**

Most States That Are Reopening Fail to Meet White House Guidelines

<https://www.nytimes.com/interactive/2020/05/07/us/coronavirus-states-reopen-criteria.html>

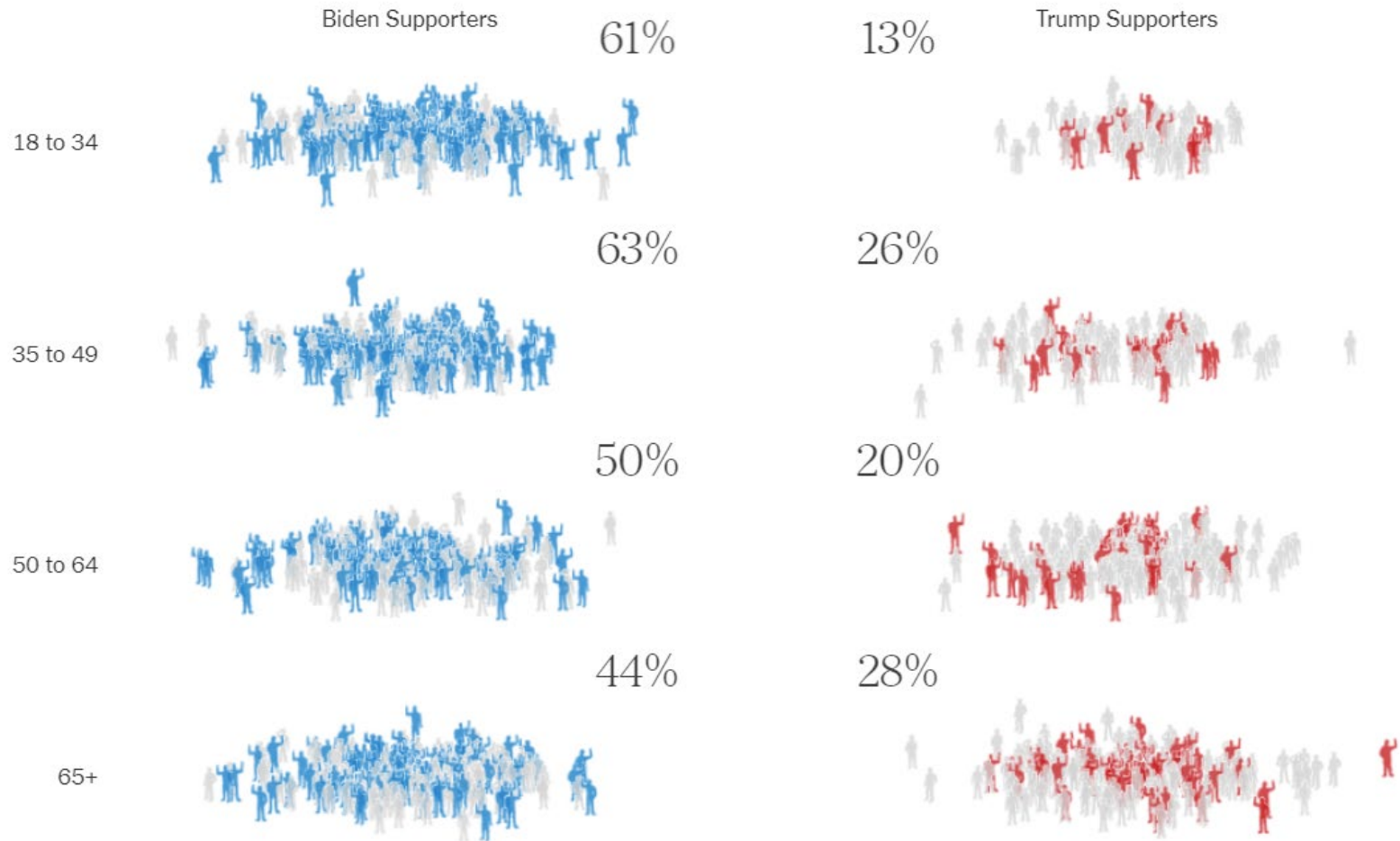


NYTimes Visualizations – 2020 – **Coronavirus Outbreak**

How Americans Feel About the Country Right Now: Anxious. Hopeful.

<https://www.nytimes.com/2020/06/27/us/politics/coronavirus-trump-mood-poll.html>

◀ ▶ Scared and angry

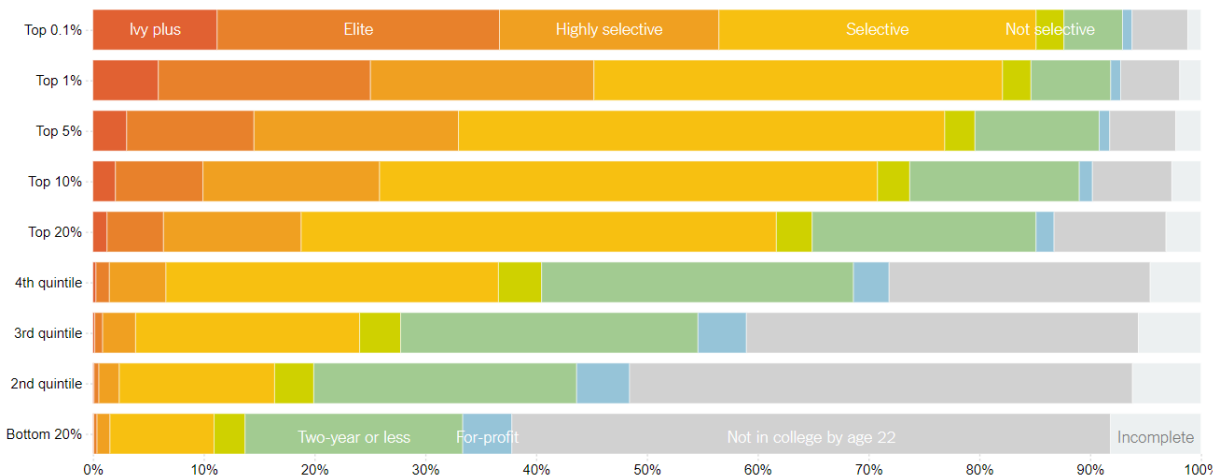
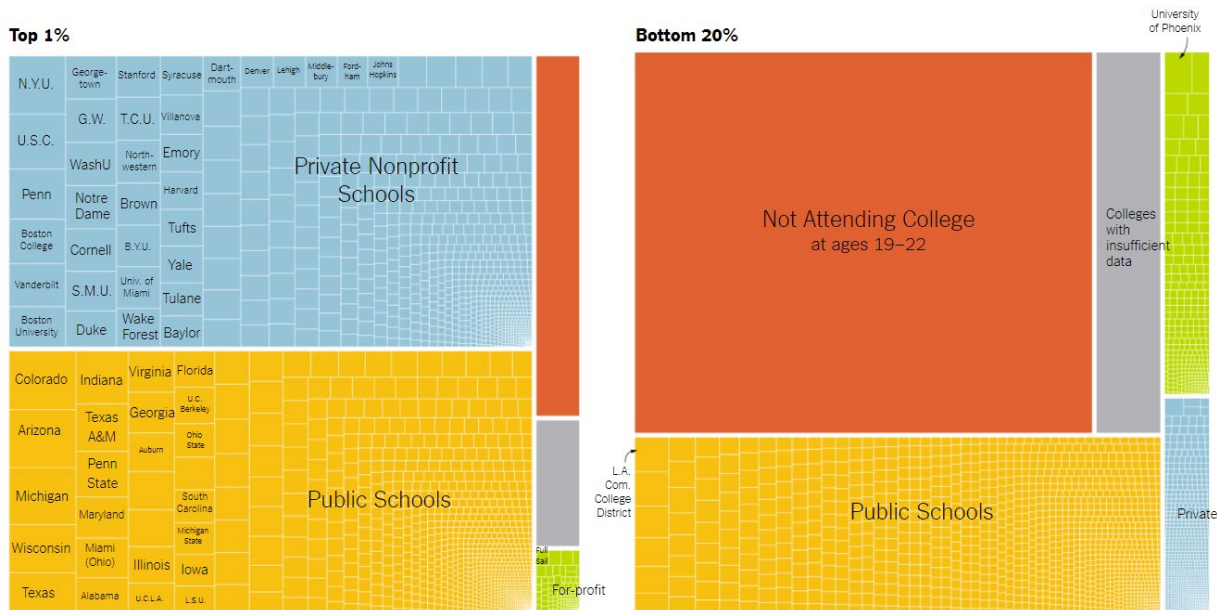


Each figure represents one poll respondent.

NYTimes Visualizations – 2017 to 2019

Some Colleges Have More Students From the Top 1 Percent Than the Bottom 60

<https://www.nytimes.com/interactive/2017/01/18/upshot/some-colleges-have-more-students-from-the-top-1-percent-than-the-bottom-60.html>

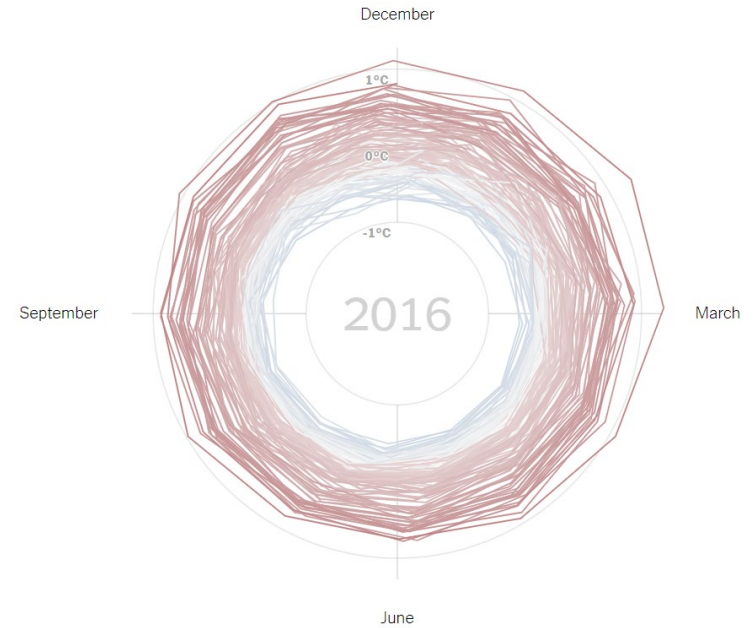
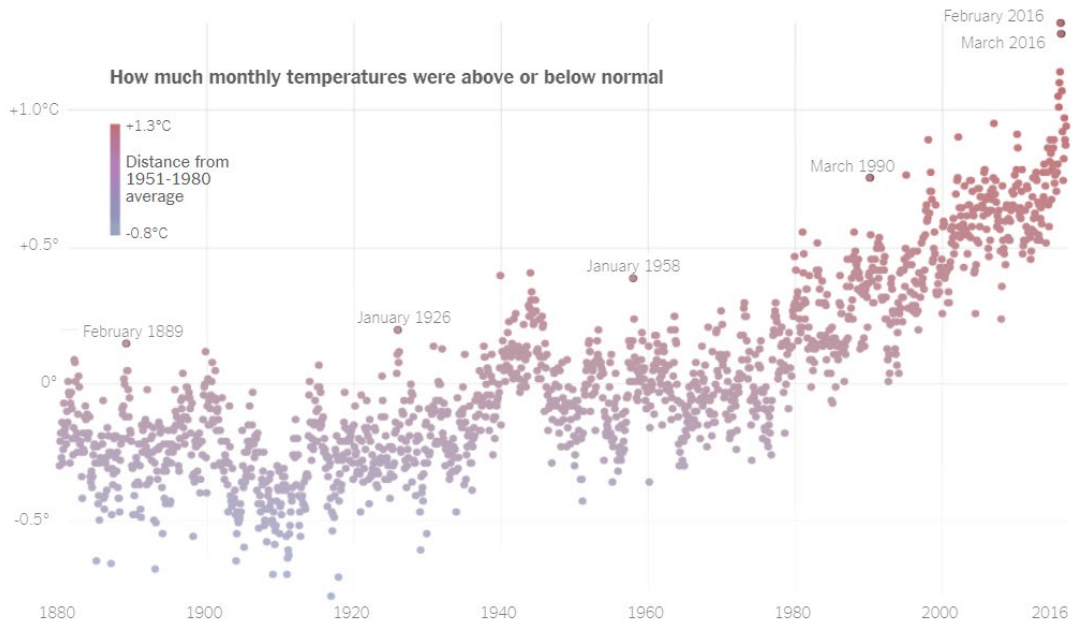


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NYTimes Visualizations – 2017 to 2019

How 2016 Became Earth's Hottest Year on Record

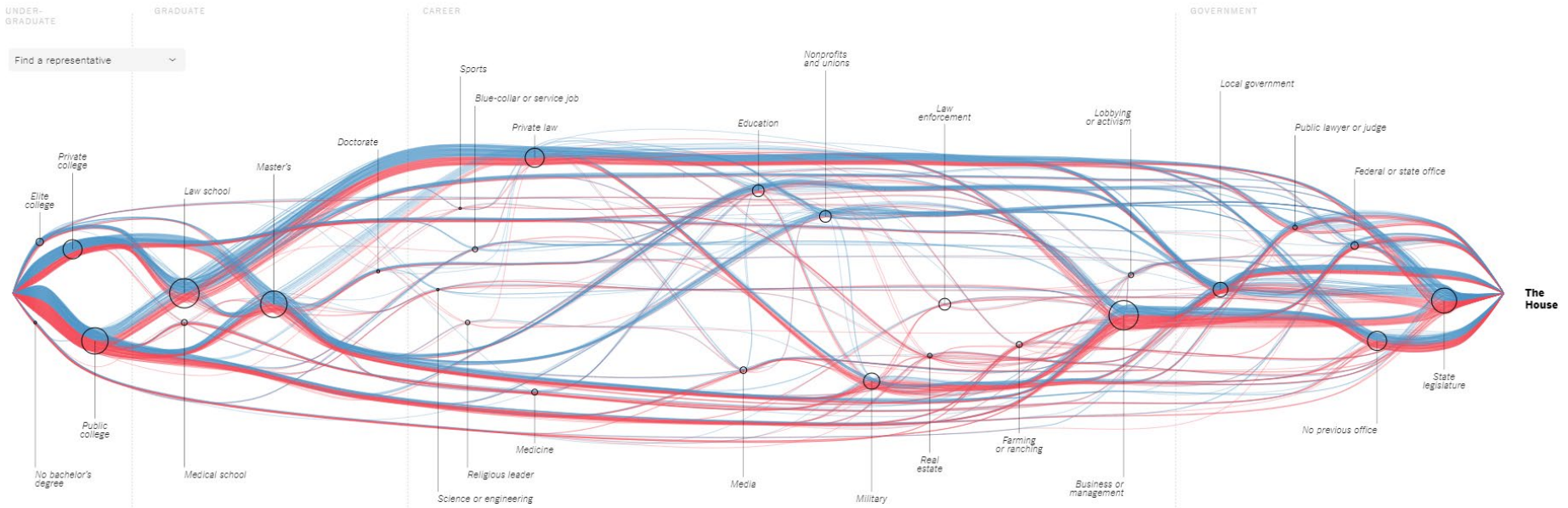
<https://www.nytimes.com/interactive/2017/01/18/science/earth/2016-hottest-year-on-record.html>



NYTimes Visualizations – 2017 to 2019

How Every Member Got to Congress

<https://www.nytimes.com/interactive/2019/01/26/opinion/sunday/paths-to-congress.html>

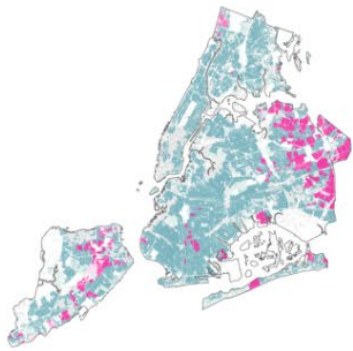


NYTimes Visualizations – 2017 to 2019

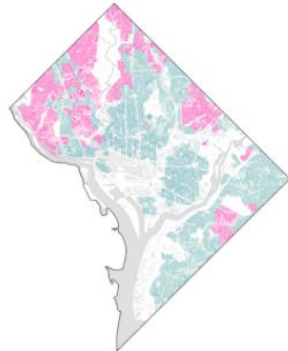
Cities Start to Question an American Ideal: A House With a Yard on Every Lot

<https://www.nytimes.com/interactive/2019/06/18/upshot/cities-across-america-question-single-family-zoning.html>

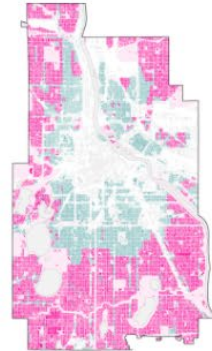
Residential land zoned for: ■ detached single-family homes ■ other housing



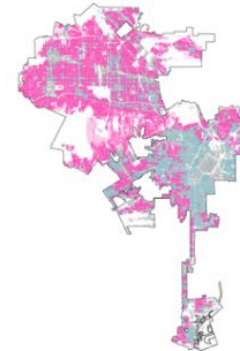
New York **15%**



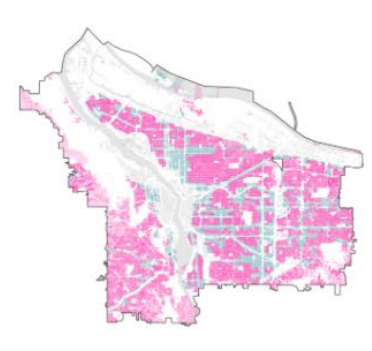
Washington **36%**



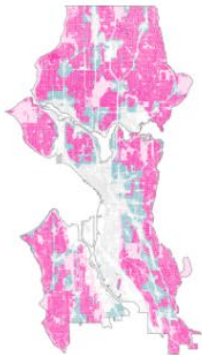
Minneapolis **70%**



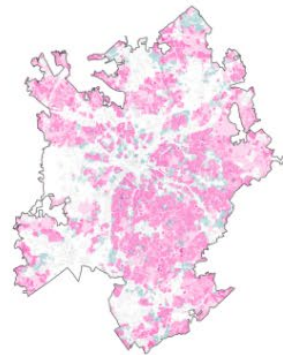
Los Angeles **75%**



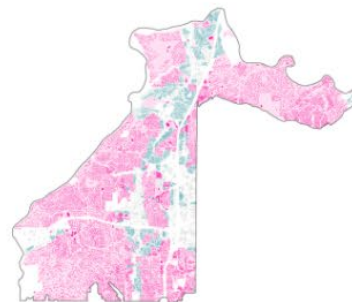
Portland, Ore. **77%**



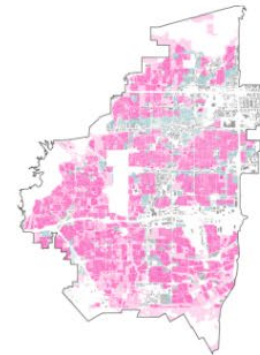
Seattle **81%**



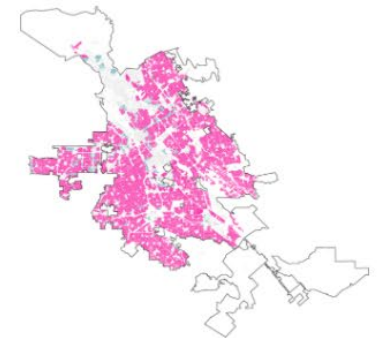
Charlotte, N.C. **84%**



Sandy Springs, Ga. **85%**



Arlington, Tex. **89%**



San Jose, Calif. **94%**

Cities not shown to scale. Source: Zoning data for individual cities from UrbanFootprint

NYTimes Visualizations – 2010 to 2016

A Peek Into Netflix Queues

<http://www.nytimes.com/interactive/2010/01/10/nyregion/20100110-netflix-map.html>

How Different Groups Spend Their Day

<http://www.nytimes.com/interactive/2009/07/31/business/20080801-metrics-graphic.html>

Degrees of Debt

<http://www.nytimes.com/interactive/2012/05/13/business/student-debt-at-colleges-and-universities.html>

Mapping Migration in US

<http://www.nytimes.com/2014/08/16/upshot/mapping-migration-in-the-united-states-since-1900.html>

NYTimes Visualizations – 2010 to 2016

Keys to Victory

<http://www.nytimes.com/interactive/2011/09/30/us/politics/keys-to-victory.html>

Paths to the White House

<http://elections.nytimes.com/2012/results/president/scenarios>

Very Detailed Map of 2016 Election

<https://www.nytimes.com/interactive/2018/07/25/upshot/precinct-map-highlights.html>

NYTimes Visualizations – Budget Visualizations

- **Compare Two Approaches**

- 2011 Proposal

<http://www.nytimes.com/interactive/2010/02/01/us/budget.html>

- 2013 Proposal

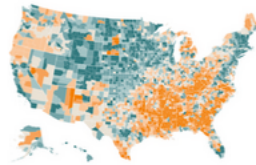
<http://www.nytimes.com/interactive/2012/02/13/us/politics/2013-budget-proposal-graphic.html>

- Which visualization is easier to use?
- What type of questions are easy to answer?
- What different Perceptual Properties are used?

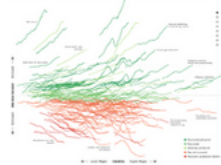
NYTimes Visualizations – 2010 to 2016



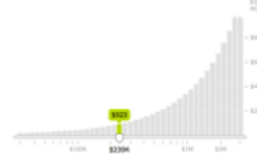
Maps and charts, updated weekly, show the **extent of drought** in the U.S. JULY 25



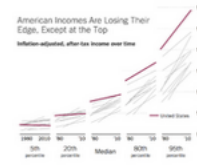
An interactive map of the **hardest places to live** in the U.S. JUNE 26



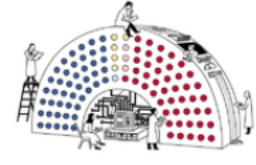
255 charts show how **the recession reshaped the economy**. JUNE 05



Is it better to rent or buy? Our interactive calculator helps you decide. MAY 21



The American middle class, once the world's richest, **no longer is**. APRIL 22

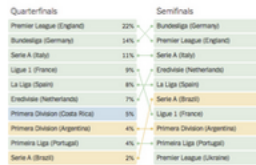


Who will win the Senate? Our model predicts the answer every day. APRIL 22

We also like sports. Here's some of our best stuff on that topic:



An analysis of Facebook activity reveals **how fan support changed** during the tournament. JULY 14



England, Italy and Spain were eliminated from the World Cup early — but **their professional leagues** still did very well. JULY 07



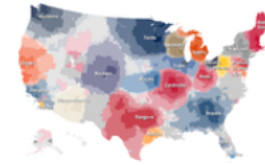
The World Cup draw was unfair to several teams, including the United States. We simulate a better way. JUNE 03



An interactive map lets you explore **N.B.A. fan boundaries**. MAY 12



A thought experiment imagines what **the Premier League standings** would be without any non-English players. MAY 11



This interactive map takes you up close on **baseball's borders**. APRIL 24

[How Different Groups Spend Their Day](#) | [Where We Came From and Where We Went](#)

[2014 US Senate Maps](#) | [US Demographics](#) | [Voting Habits of Americans](#) | [Money, Race, Success](#)

New York Times Visualizations – 2008 to 2009

New York Times has Visualization Team

<http://www.nytimes.com/2009/01/19/business/media/19askthetimes.html>

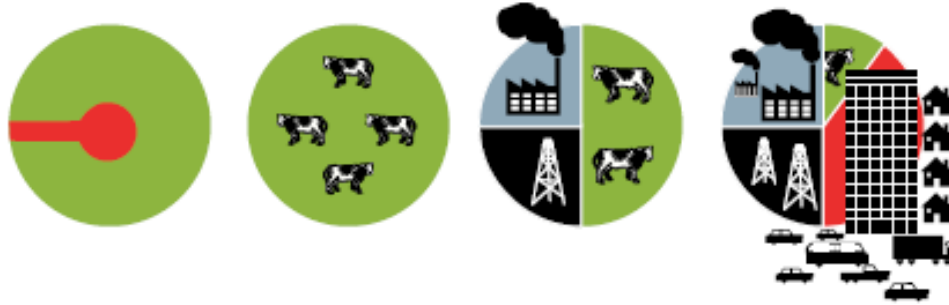
- **Leading adopter** of visualization tools in the news media
- At the forefront of enhancing new stories with interactive content
- Designers
 - **Matthew Ericson** – <http://www.ericson.net/content/>
 - **Michael Bostock** – <http://bost.ocks.org/mike/> developer of d3

Combining Static Infographics and Interactive Visualization

Beginning to Develop “DataStories”

- **Debt Trap** <http://nytimes.com/interactive/2008/07/20/business/20debt-trap.html>
- **Toxic Waters** <http://projects.nytimes.com/toxic-waters>

Using Information Design & Infographics to Advocate



Visualizing Information for Advocacy

An Introduction to Information Design

http://upload.wikimedia.org/wikipedia/commons/a/a7/Visualizing_Information_for_Advocacy_-_An_Introduction_to_Information_Design.pdf