

So you want to be a Lonely Coder?

...

Join the club: <http://lcc-slack.herokuapp.com/>

Download these slides: <http://tiny.cc/LCC>

Scott Pham | Brent Jones | Alexandra Kanik | Lindsey Cook

Starting Out Lonely



The Lonely Coders Club

- 100ish digital journalists around the country
- Varying skill levels
- Primarily a Slack group
- Open signs-ups: <http://lcc-slack.herokuapp.com/>



What it means to be a Lonely Coder

Some possibilities:

- No peers
- Other responsibilities
- Trouble convincing/evangelizing
- You need resources: time, servers, admin access, paid online services, learning materials

A Disclaimer

“Lonely Coder” is a useful term, not a real-life under-class

- Most of us NICAR are probably lonely coders
- NICAR is actually very inviting to beginners
- We tend to over-estimate the skills of our peers

What we're going to do today

- Show you resources tools and techniques that get you started fast
- Show you how to leverage early wins to get buy-in and goodwill from your colleagues
- Encourage you to reach out to your Lonely colleagues on the internets

CensusReporter.org

...

One stop to make stories about places better

Profile

or



Find facts

Populations and dollar figures are broken down by category: Demographics, Economics, Families, Housing and Social.



Visualize

Our library of charts gives you insight into data from the places you research. Look for them on profile pages. You can even [embed the charts](#) on your own site.



Get context

Pre-computed statistics are presented alongside each data point, so you can see how each place fits into a larger context.

Explore



Explore

Census data is massive, and sometimes it's hard to find the table you're looking for. Search by table and column keywords.



Visualize

We want to help *you* tell great stories. Maps and distribution charts help uncover what's interesting, so you can take it from there.



Download

From any comparison, save the data you're viewing in CSV, Excel or a variety of geographic data formats.

Topics

Learn more about the concepts and tables covered by the Census and American Community Survey. We'll be adding more of these pages in the next few months, so [let us know](#) if there are topics you'd like to see us explain.

[Getting Started](#)

[Commute](#)

[Geography](#)

[Migration](#)

[Race and Hispanic Origin](#)

[Table Codes](#)

[Age and Sex](#)

[Employment](#)

[Health Insurance](#)

[Poverty](#)

[Same-Sex Couples](#)

[Veterans and Military](#)

[Children](#)

[Families](#)

[Income](#)

[Public Assistance](#)

[Seniors](#)

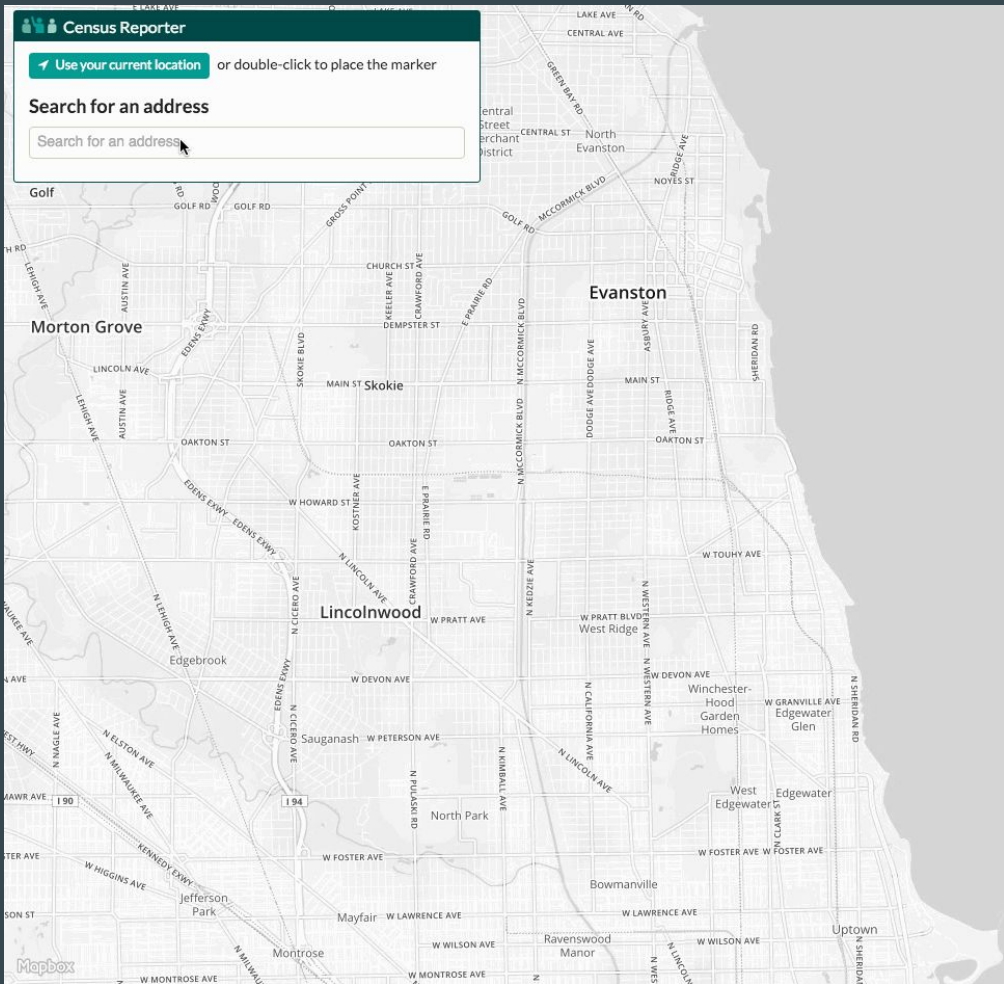


Census Reporter

📍 Use your current location or double-click to place the marker

Search for an address

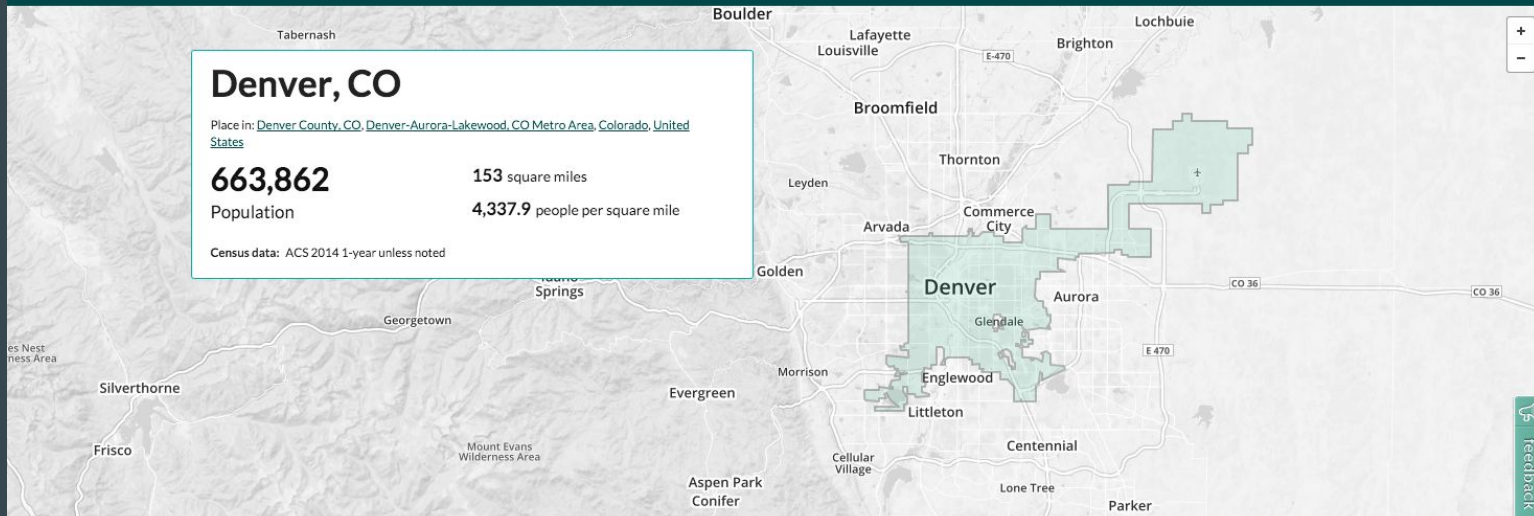
Search for an address



Mapbox

© Mapbox © OpenStreetMap Improve this map

Feedback



Find data for this place

Interact with charts and statistics for [margins of error](#) and additional information.

Demographics

Age

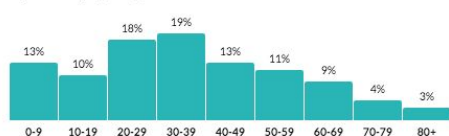
34.2

Median age

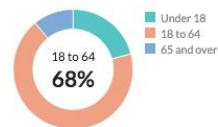
a little less than the figure in the
Denver-Aurora-Lakewood, CO Metro
Area: 36.1

a little less than the figure in
Colorado: 36.3

Population by age range

[Show data](#) / [Embed](#)

Population by age category

[Show data](#) / [Embed](#)

† Margin of error is at

Sex

Race & Ethnicity

Demographics

Age

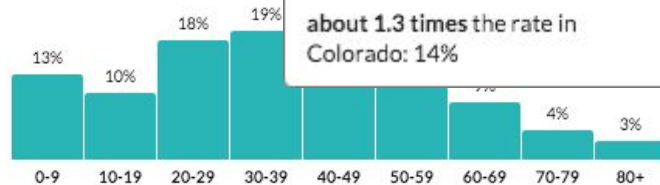
34.2

Median age

a little less than the figure in the Denver-Aurora-Lakewood, CO Metro Area: 36.1

a little less than the figure in Colorado: 36.3

Population by age range



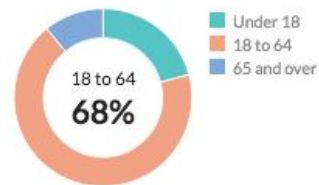
[Show data](#) / [Embed](#)

30-39: 19%

about 25 percent higher than the rate in the Denver-Aurora-Lakewood, CO Metro Area: 16%

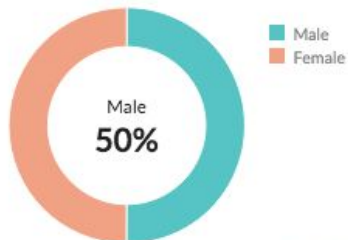
about 1.3 times the rate in Colorado: 14%

Population by age category



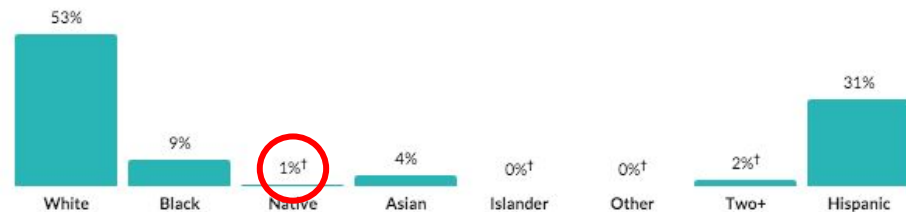
[Show data](#) / [Embed](#)

Sex



[Show data](#) / [Embed](#)

Race & Ethnicity



* Hispanic includes respondents of any race. Other categories are non-Hispanic.

[Show data](#) / [Embed](#)

† Margin of error is at least 10 percent of the total value. Take care with this statistic.

Find data for this place

Search by table or column name...

Interact with charts and statistics for margins of error and additional information.

Demographics

Age

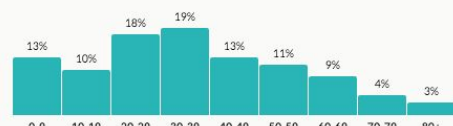
34.2

Median age

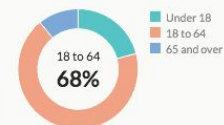
a little less than the figure in the
Denver-Aurora-Lakewood, CO Metro
Area: 36.1

a little less than the figure in
Colorado: 36.3

Population by age range

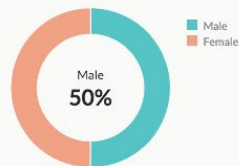
[Show data](#) / [Embed](#)

Population by age category

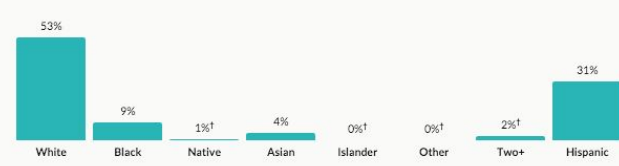
[Show data](#) / [Embed](#)

† Margin of error is at
least 10 percent of the
total value. Take care with
this statistic.

Sex

[Show data](#) / [Embed](#)

Race & Ethnicity



* Hispanic includes respondents of any race. Other categories are non-Hispanic.

[Show data](#) / [Embed](#)

Economics

Income

\$35,967

Per capita income

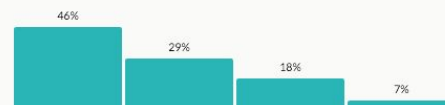
about the same as the amount in the
Denver-Aurora-Lakewood, CO Metro
Area: \$35,256

\$54,941

Median household income

about 80 percent of the amount in
the Denver-Aurora-Lakewood, CO
Metro Area: \$66,870

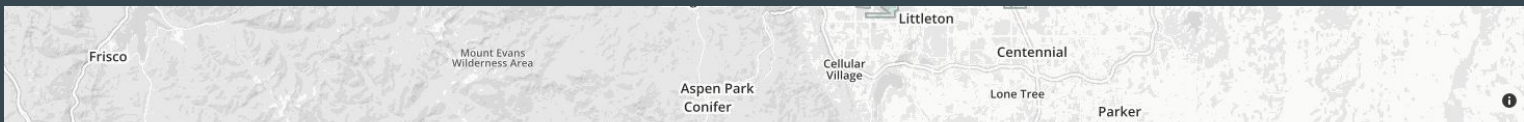
Household income



That's great...
but how do I use this?
...

Provide context for your audience

Embed this data as a chart



Find data for this place

Interact with charts and statistics for margins of error and additional information.

Demographics

Age

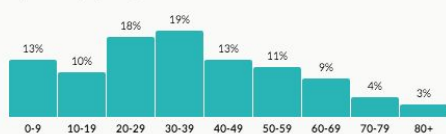
34.2

Median age

a little less than the figure in the Denver-Aurora-Lakewood, CO Metro Area: 36.1

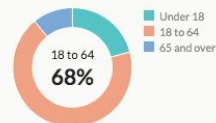
a little less than the figure in Colorado: 36.3

Population by age range



[Show the data](#) / [Embed](#)

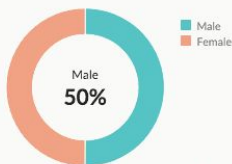
Population by age category



[Show the data](#) / [Embed](#)

† Margin of error is at least 10 percent of the total value. Take care with this statistic.

Sex



[Show data](#) / [Embed](#)

Race & Ethnicity



* Hispanic includes respondents of any race. Other categories are non-Hispanic.

[Show data](#) / [Embed](#)

Economics

Income

\$35,967

Per capita income

about the same as the amount in the

\$54,941

Median household income

about 80 percent of the amount in

Household income



feedback

Download the data, then...???

Denver, CO

Place in: [Denver County, CO](#), [Denver-Aurora-Lakewood, CO Metro Area](#), [CO Metro Area](#), [Colorado](#), [United States](#)

663,862

Population

153 square miles

4,337.9 people per square mile

Census data: ACS 2014 1-year unless noted

Find data for this place

Search by table or column name...

Interact with charts and statistics for margins of error and additional information.

Demographics

Age

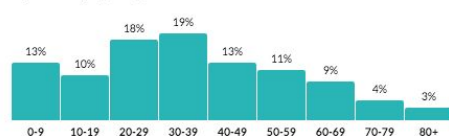
34.2

Median age

a little less than the figure in the
Denver-Aurora-Lakewood, CO Metro
Area: 36.1

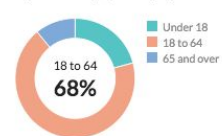
a little less than the figure in
Colorado: 36.3

Population by age range



[Show data](#) / [Embed](#)

Population by age category



[Show data](#) / [Embed](#)

† Margin of error is at

Sex

Race & Ethnicity

Find data for this place

Search by table or column name...

Interact with charts and statistics for margins of error and additional information.

Demographics

Age

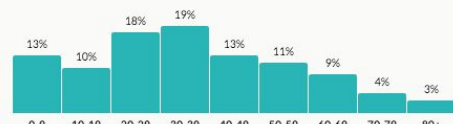
34.2

Median age

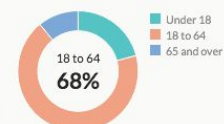
a little less than the figure in the
Denver-Aurora-Lakewood, CO Metro
Area: 36.1

a little less than the figure in
Colorado: 36.3

Population by age range

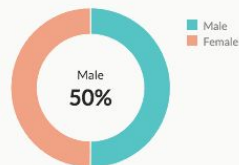
[Show data](#) / [Embed](#)

Population by age category

[Show data](#) / [Embed](#)

† Margin of error is at
least 10 percent of the
total value. Take care with
this statistic.

Sex

[Show data](#) / [Embed](#)

Race & Ethnicity



* Hispanic includes respondents of any race. Other categories are non-Hispanic.

[Show data](#) / [Embed](#)

Economics

Income

\$35,967

Per capita income

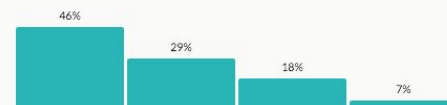
about the same as the amount in the
Denver-Aurora-Lakewood, CO Metro
Area: \$35,256

\$54,941

Median household income

about 80 percent of the amount in
the Denver-Aurora-Lakewood, CO
Metro Area: \$66,870

Household income



Sex by Age

[Table](#)
[Map](#)
[Distribution](#)
[Download data](#)

Table B01001 [Change](#)

Add data for more places below; visualize or download this data with controls at right.

Selected geographies

[Denver, CO](#) [Remove](#)
[Denver-Aurora-Lakewood, CO Metro Area](#) [Remove](#)
[Denver County, CO](#) [Remove](#)
[Colorado](#) [Remove](#)
[United States](#) [Remove](#)

Add a geography

Add all places in ...

[Denver County, CO](#)
[Denver-Aurora-Lakewood, CO Metro Area](#)
[Colorado](#)
[United States](#)

Divide Denver, CO into ...

[census tracts](#)
[block groups](#)
[ZIP codes](#)

ACS 2014 1-year

Table universe: Total Population

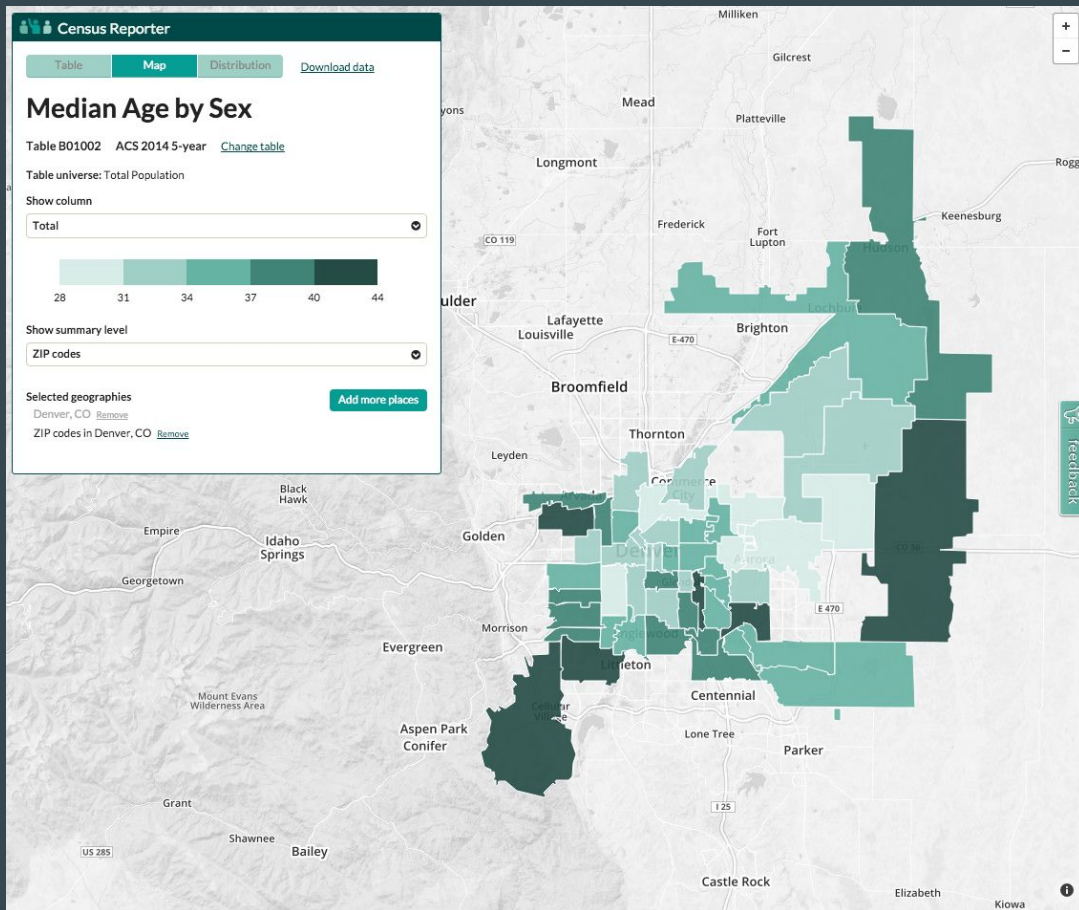
[Switch to totals](#) [Click a row to highlight](#)

Column →	Colorado	Denver County, CO	Denver, CO	Denver-Aurora-Lakewood, CO Metro Area	United States
Male:	50.3% ±0.1%	50% ±0.1%	50% ±0.1%	49.9% ±0.1%	49.2% ±0.1%
Under 5 years	3.2% ±0%	3.5% ±0.1%	3.5% ±0.1%	3.3% ±0%	3.2% ±0%
5 to 9 years	3.4% ±0.1%	3% ±0.2%	3% ±0.2%	3.6% ±0.1%	3.3% ±0%
10 to 14 years	3.4% ±0.1%	2.8% ±0.2%	2.8% ±0.2%	3.4% ±0.1%	3.3% ±0%
15 to 17 years	1.9% ±0%	1.3% ±0.1%	1.3% ±0.1%	1.9% ±0%	2% ±0%
18 and 19 years	1.4% ±0%	1% ±0.1%	1% ±0.1%	1.1% ±0%	1.4% ±0%
20 years	0.7% ±0.1%	0.6% ±0.2%	0.6% ±0.2%	0.5% ±0.1%	0.8% ±0%
21 years	0.7% ±0.1%	0.6% ±0.1%	0.6% ±0.1%	0.6% ±0.1%	0.7% ±0%
22 to 24 years	2.3% ±0.1%	2.1% ±0.2%	2.1% ±0.2%	2.1% ±0.1%	2.1% ±0%
25 to 29 years	3.9% ±0%	5.7% ±0%	5.7% ±0%	4% ±0%	3.5% ±0%
30 to 34 years	3.8% ±0%	5.5% ±0%	5.5% ±0%	4.1% ±0%	3.4% ±0%
35 to 39 years	3.5% ±0.1%	4.4% ±0.3%	4.4% ±0.3%	3.8% ±0.1%	3.1% ±0%
40 to 44 years	3.4% ±0.1%	3.7% ±0.3%	3.7% ±0.3%	3.6% ±0.1%	3.2% ±0%
45 to 49 years	3.2% ±0%	3.2% ±0%	3.2% ±0%	3.4% ±0%	3.2% ±0%
50 to 54 years	3.4% ±0%	2.9% ±0.1%	2.9% ±0.1%	3.5% ±0%	3.5% ±0%
55 to 59 years	3.2% ±0.1%	2.8% ±0.2%	2.8% ±0.2%	3.2% ±0.1%	3.2% ±0%
60 and 61 years	1.2% ±0.1%	1% ±0.2%	1% ±0.2%	1.1% ±0.1%	1.2% ±0%
62 to 64 years	1.7% ±0.1%	1.3% ±0.2%	1.3% ±0.2%	1.5% ±0.1%	1.6% ±0%
65 and 66 years	1% ±0.1%	0.8% ±0.1%	0.8% ±0.1%	1% ±0.1%	1% ±0%
67 to 69 years	1.2% ±0.1%	1% ±0.2%	1% ±0.2%	1.1% ±0.1%	1.3% ±0%
70 to 74 years	1.4% ±0.1%	1.1% ±0.1%	1.1% ±0.1%	1.3% ±0.1%	1.6% ±0%
75 to 79 years	1% ±0%	0.8% ±0.1%	0.8% ±0.1%	0.8% ±0.1%	1.1% ±0%
80 to 84 years	0.6% ±0%	0.5% ±0.1%	0.5% ±0.1%	0.5% ±0.1%	0.8% ±0%
85 years and over	0.5% ±0%	0.5% ±0.1%	0.5% ±0.1%	0.5% ±0%	0.6% ±0%
Female:	49.7% ±0.1%	50% ±0.1%	50% ±0.1%	50.1% ±0.1%	50.8% ±0.1%
Under 5 years	3% ±0%	3.3% ±0%	3.3% ±0%	3.1% ±0%	3% ±0%
5 to 9 years	3.2% ±0.1%	3% ±0.3%	3% ±0.3%	3.4% ±0.1%	3.2% ±0%
10 to 14 years	3.3% ±0.1%	2.6% ±0.3%	2.6% ±0.3%	3.3% ±0.1%	3.2% ±0%
15 to 17 years	1.8% ±0%	1.3% ±0%	1.3% ±0%	1.8% ±0%	1.9% ±0%
18 and 19 years	1.2% ±0%	1% ±0%	1% ±0%	1% ±0%	1.4% ±0%
20 years	0.6% ±0.1%	0.6% ±0.1%	0.6% ±0.1%	0.5% ±0.1%	0.7% ±0%

[Download data](#)
[CSV](#)
[Excel](#)
[GeoJSON](#)
[KML](#)
[Shapefile](#)

But that's not all...






- Easily navigate geographies
- Create choropleth maps and switch between data or geography easily
- Look at distributions
- Find tips on the blog (censusreporter.tumblr.com) like how to make embeddable maps from Census Reporter Data
- Follow Census Reporter on Twitter @CensusReporter
- There's an API!



Interactive Tables

...

Tables can be rad

Scale Rows by Population						
		Ted Cruz	Donald J. Trump	Marco Rubio	Ben Carson	John Kasich
Sex	Male <small>51% of voters</small>	42%	36%	14%	4%	3%
	Female <small>49% of voters</small>	38	29	21	4	4
Age	18-29 <small>10% of voters</small>	29	21	29	7	2
	30-44 <small>21% of voters</small>	41	35	17	5	2
	45-64 <small>42% of voters</small>	42	31	19	3	3
	65 and over <small>27% of voters</small>	39	35	12	3	6
Race and ethnicity	White <small>82% of voters</small>	41	34	16	3	3
	Black <small>3% of voters</small>	—	—	—	—	—
	Hispanic/Latino <small>10% of voters</small>	32	26	26	5	2

Easiest data viz to get off the ground

The majority of the data you encounter will be tabular:

	A	B	C	D	E
1	rank	name	description	address	phone
2		Asher Brewing 1 Company	This all-organic brewing company in Boulder has an outside patio that's bigger than its modest tasting room. Look for their 16-ounce cans in liquor stores, too.	4699 Nautilus Ct S, Ste 104, Boulder, CO 80301	(303) 530-1381
3		Avery Brewing 2 Company	Avery recently relocated to a bigger, better space with even more capacity for creating some of the country's best barrel-aged, sour beers.	4910 Nautilus Ct, Boulder, CO 80301	(303) 440-4324
4		Black Bottle 3 Brewery	Looking for one of the best beer lists in the state? Head to Black Bottle Brewing, and prepare to get a little weird.	1611 S College Ave Suite 1609, Fort Collins, CO 80525	(970) 493-2337
5		Black Shirt 4 Brewing Co.	This RiNo brewery focuses on red ales, and it has one of the more unique beer list displays in town.	3719 Walnut St, Denver, CO 80205	(303) 993-2799
6		Breckenridge 6 Brewery	Breckenridge Brewery, which originally opened in downtown Breckenridge 25 years ago, has grown to be one of the country's 50 largest breweries. Its new digs in Littleton are expansive, on a campus that includes the recently opened Farm House restaurant. Tours of the brewery must be booked online in advance.	2920 Brewery Lane Littleton, CO	
7		Boulder Beer 5 Company	Boulder Beer Company was the very first craft brewery in the state of Colorado.	2880 Wilderness Pl, Boulder, CO 80301	(303) 444-8448
8		Bristol Brewing 7 Company	This Colorado Springs brewery recently relocated to the old Ivywild School, where visitors can enjoy an onsite restaurant, butcher, bakery, cocktail bar, community gardens, and more.	1604 South Cascade Avenue, Colorado Springs, CO 80905	(719) 633-2555
9		Casey Brewing &	Move over Crooked Stave— Colorado has a newer cult-followed brewery famous for its barrel-aged sour beers. Expect long lines (that are well worth the wait) when Casey releases his new		

Pretty it up

Eater.com's list of 38 essential Denver breweries

Name	Description	Address	Phone
Fate Brewing Company	World-class Kölsch and finger-lickin' barbecue has quickly put Fate on the map as a must-visit Boulder brewery.	1600 38th St, Ste 100, Boulder, CO 80301	(303)449-3283
Wit's End Brewery	Wit's End is another brewery that began brewing one barrel at a time. This humble and comfortable watering hole is well-known for its flagship blonde ale, Jean-Claude Van Blonde.	2505 W 2nd Ave Unit 13, Denver, CO 80219	(303) 359-9119
Upslope Brewery	Upslope is quickly making a name for itself in the brewing world. With award-winning beers and a fantastic taproom in North Boulder, this is one spot that is not to be missed.	1898 S Flatiron Ct, Boulder, CO 80301	(303) 396-1898
Tivoli Brewing Company	Tivoli Brewing is almost back in action. Brewing will continue in this historic building as early as the end of this month.	900 Auraria Parkway, Denver, CO 80204	(303) 582-6039
Black Shirt Brewing Co.	This RiNo brewery focuses on red ales, and it has one of the more unique beer list displays in town.	3719 Walnut St, Denver, CO 80205	(303) 993-2799
Prost Brewing	This LoHi brewery produces traditional German styles of beer on a classic copper brewhouse imported from Europe.	2540 19th St, Denver, CO 80211	(303) 729-1175

Sample Code

```
1  <table class="table table-striped table-responsive">
2    <thead>
3      <tr>
4        ...
5      </tr>
6    </thead>
7    <tbody>
8      ...
9    </tbody>
10 </table>
```

Make that table sortable

State	▼ # Religious day cares	Federal funding received**
🏔 Virginia	994	\$23,148,122
🏠 Alabama	916	\$123,437,846
🏡 Indiana	662	\$111,969,297
🏘 Missouri	522	\$35,626,304
🌴 Florida	407	\$28,554,835
🏡 North Carolina*	373	Data not available

tSorter

<https://github.com/terrilident/tSorter>

```
1 <table id="sixStates" class="sortable">
2   <thead>
3     <tr class="header">
4       <th data-tsorter="spans">Column 1</th>
5       <th data-tsorter="numeric" class="descend">Column 2</th>
6       <th data-tsorter="currency">Column 3</th>
7     </tr>
8   </thead>
9   <tbody>
10    <tr>
11      <td>..</td>
12    </tr>
13    ...
14  </tbody>
15 </table>
```

Make it sortable, searchable AND paginated

Eater.com's list of 38 essential Denver breweries

Show

10

entries

Search:

downtown

Name	Description	Address	Phone
Great Divide Brewing Company	Downtown Denver wouldn't be Downtown Denver without the Great Divide tasting room, where if you're lucky you might spot a Yeti— or the adult version of the ice cream truck.	2201 Arapahoe St, Denver, CO 80205	(303) 296-9460
Breckenridge Brewery	Breckenridge Brewery, which originally opened in downtown Breckenridge 25 years ago, has grown to be one of the country's 50 largest breweries. Its new digs in Littleton are expansive, on a campus that includes the recently opened Farm House restaurant. Tours of the brewery must be booked online in advance.	2920 Brewery Lane Littleton, CO	

Showing 1 to 2 of 2 entries (filtered from 38 total entries)

Previous

Next

Credit: [Scott Pham/Reveal](#)

Put everything in the cloud

- [Chris Keller's Tabletop to Datatables](#)
- [Lisa William's Illustrated Guide](#)
- [My Tabletop to Datatables Fork](#)

Part of your toolset

Who Gets the Most Clean Energy Subsidies?

By Scott Pham

[View Comments \(\)](#) | [Email](#) | [Print](#)



Since 2007, Bloom Energy has received the lion's share of ratepayer subsidies for its Bloom Boxes, which are largely fueled by natural gas.

Page: 1



[Prev](#)

[Next](#)







Manufacturer	Total Subsidy ▼	Percent Projects Using Natural Gas	Percent of All Funds
Bloom Energy	\$399,178,265	81%	49%
Tesla	\$125,847,666	0%	15%
GE Energy	\$57,519,303	0%	7%
Fuel Cell Energy	\$50,215,000	26%	6%
Green Charge Networks	\$22,274,640	0%	2%
UTC Power	\$21,952,000	80%	2%
Stem Inc	\$12,478,222	0%	1%
Capstone Turbine Corp	\$9,616,708	57%	1%
Guascor	\$9,580,500	0%	1%
CODA Energy	\$6,598,545	0%	~0%
Doosan	\$6,534,400	100%	~0%

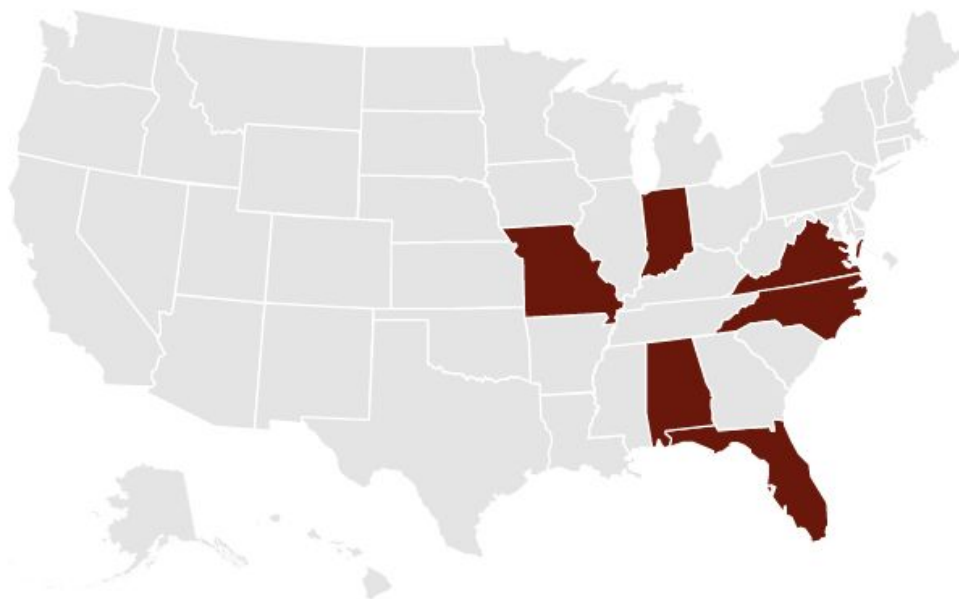
Select an option below to filter the map.

 Return to overview map

 Little to no regulation 

Church day care facilities face few rules in these states. At some religious day cares, workers don't need to have any child safety training or follow any staff-to-child ratios. In Alabama, Indiana, Missouri and North Carolina, religious day cares can use corporal punishment to discipline children. Freedom from state regulations does not prevent religious day cares from collecting millions of dollars in federal funding.

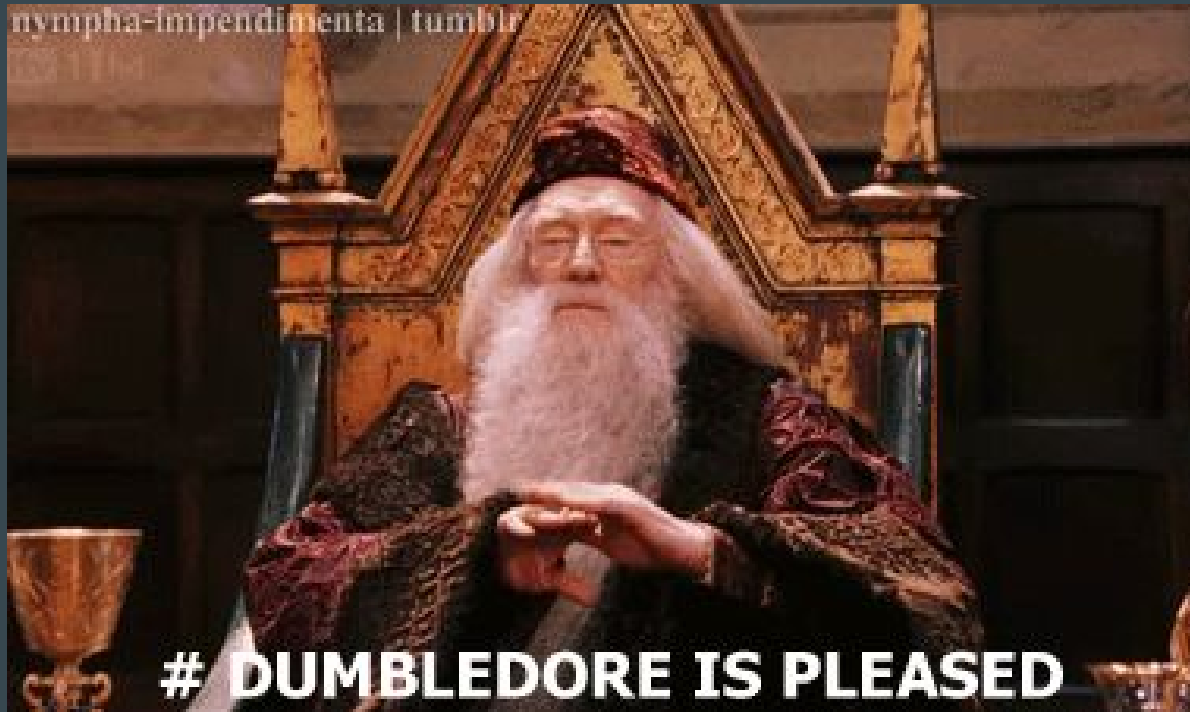
State	▼ # Religious day cares	Federal funding received**
 Virginia	994	\$23,148,122
 Alabama	916	\$123,437,846
 Indiana	662	\$111,969,297
 Missouri	522	\$35,626,304
 Florida	407	\$28,554,835
 North Carolina*	373	Data not available



Credits: [Scott Pham](#)/Reveal
Research and reporting by [Amy Julia Harris](#)/Reveal



Getting buy-in



Getting buy-in

- Small wins build demand
- Demand can help with roadblocks
- Build incrementally to stay productive while you learn

Why so lonely?



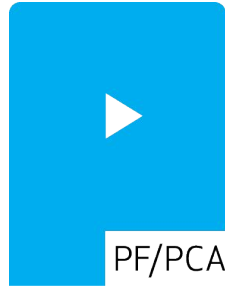
Alexandra Kanik

Graphic Design



2006 - 2010

Web design



PITTSBURGH
FILMMAKERS

2010 - 2011

Design, development, data, +++



2011 - 2015

Development, data, editing/writing

METRIC*SHIFT* + 

2015 - current

The lonely coder's cocktail

github
browser developer tools
LCC/NICAR-L
Google

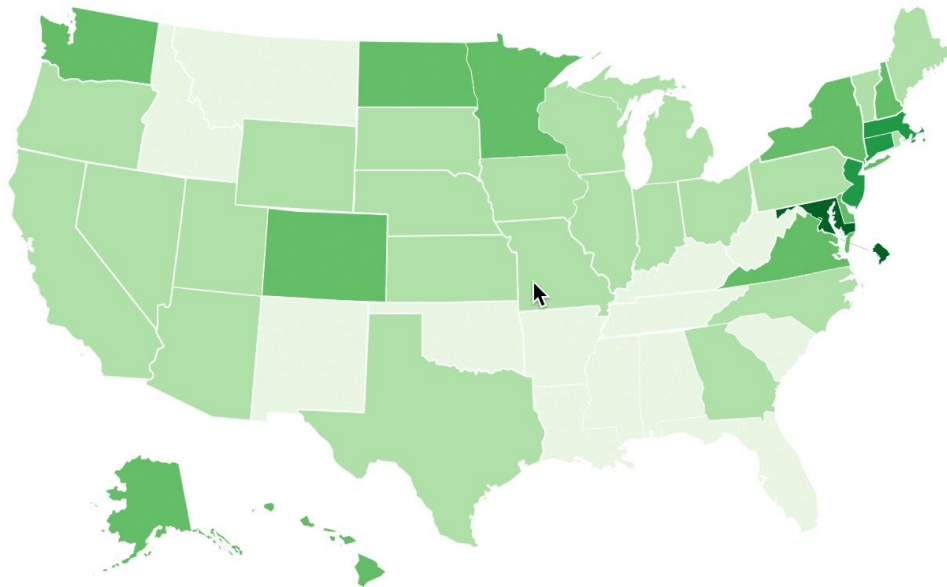
The importance of Github



I cannot overstate the importance of Github as a learning tool. The ability to “Frankenstein” projects, or take projects that you know to be functional and replace bits and pieces to customize them, is a great way to **learn on the job**.

Landline / Stateline / Topline

Have state/county data that you need to visualize quickly?



Saturday Github sessions

GitHub 101

Independence

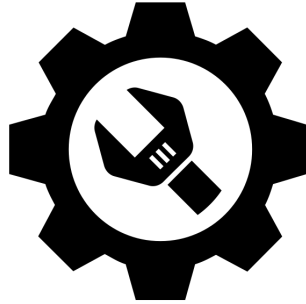
2:15 p.m. - 3:15 p.m.

GitHub 201

Independence

4:45 p.m. - 5:45 p.m.

Browser developer tools



Browser developer tools are some of the strongest diagnostic tools that you'll come across when trying to fix web-based issues. Browser developer tools are also a great way to get a look at dynamically-generated CMS code so you can manipulate it with CSS or javascript.

Opening developer tools

Community: LCC / NICAR-L

“Lonely, but not alone”

Joining online coder communities is essential if you're trying to go it alone.

When you're on deadline and you're just not understanding the problems you're up against, it's invaluable to know that you've got a support system of more experienced coders.

You can and should also use these communities as a way of sharing ideas and expanding your knowledge of how others are solving data journalism problems with code.

Let me google that for you...

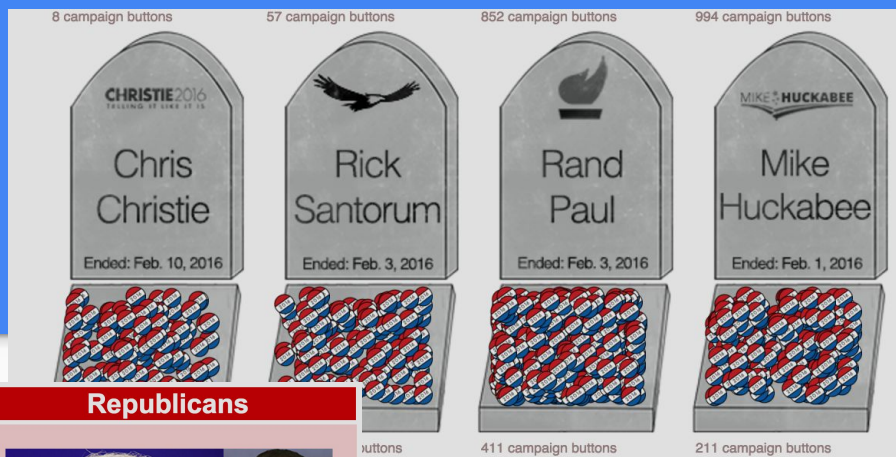


Learn how to ask the Google questions. Not all questions are created equal. Having good google skills will save you a lot of time when trying to find answers to questions that you're pretty sure others have had. I'm pretty close to believing that there are no issues that Google can't find an answer to.

Lindsey Cook

Data Editor, U.S. News & World Report

Big Projects



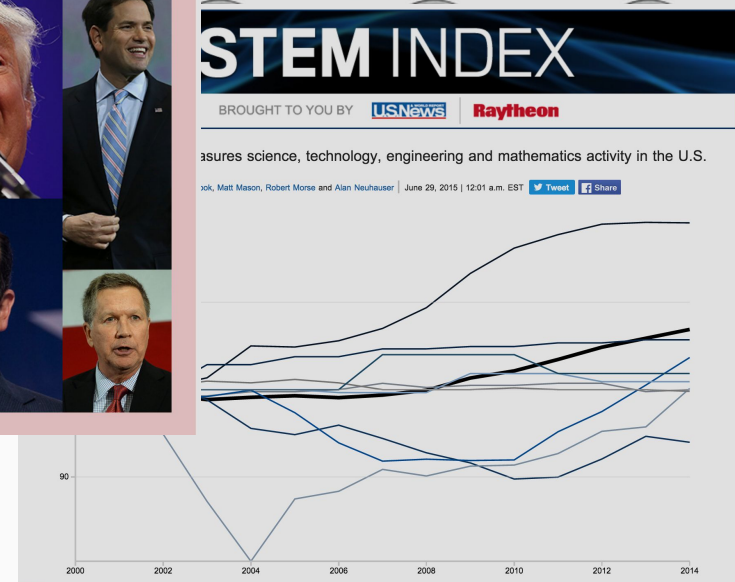
Trump vs. You

What is your net worth?

\$ →

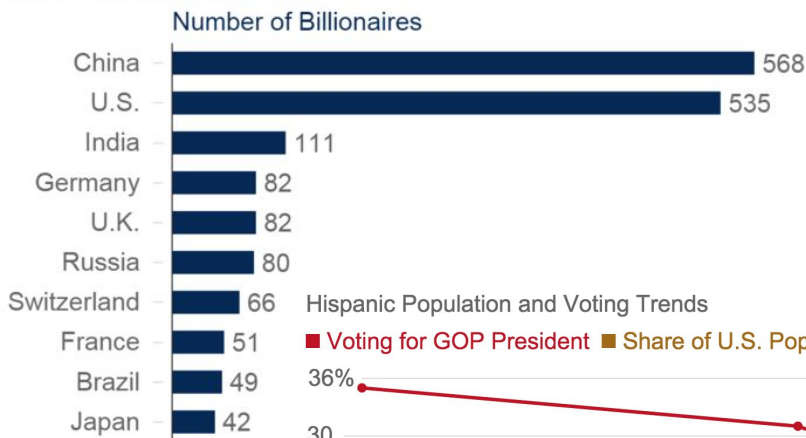
[Tweet](#) [Share](#)

According to the paperwork he filed announcing his presidential candidacy, Trump is worth \$8.7 billion. Photos: Getty Images. Graphic: Lindsey Cook and Ethan Rosenberg for USN&WR



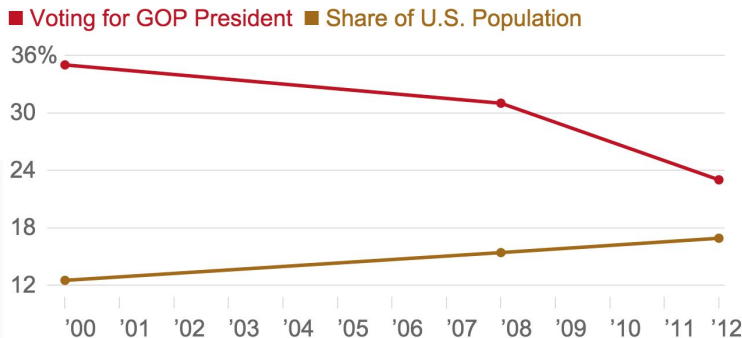
Everyday Charting

Where Do Billionaires Live?



Andrew Soergel for USN&WR

Hispanic Population and Voting Trends

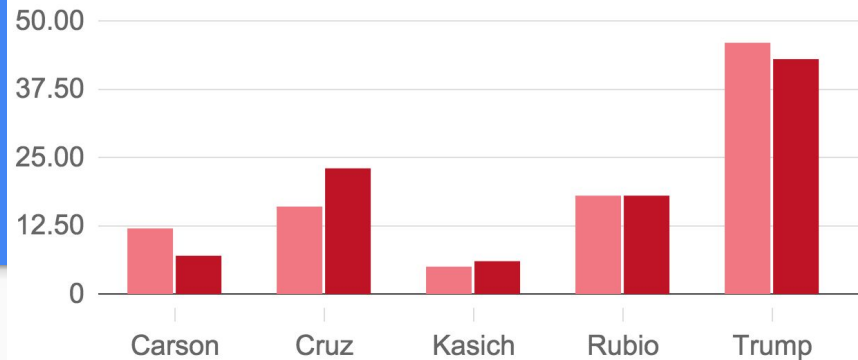


Lindsey Cook for USN&WR

Data: Pew Research Center and voting estimates

Alabama Primary Results, by Income

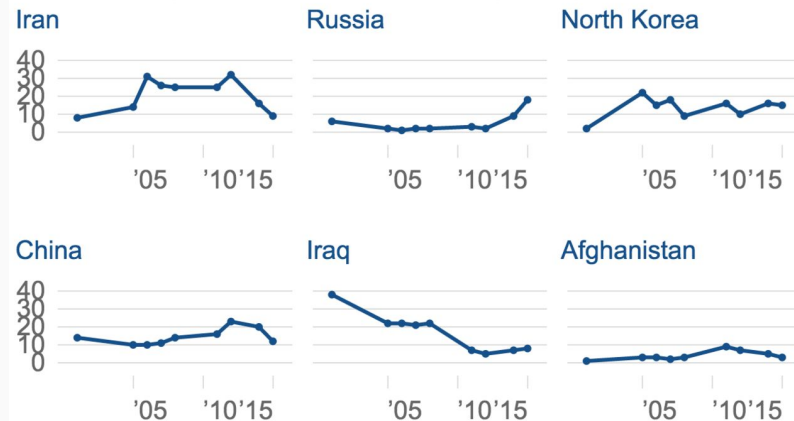
■ Under \$50K ■ Over \$50K



Lindsey Cook for USN&WR

Data: CNN Exit Polls

Which Country Is the U.S.' Greatest Enemy Today?



Lindsey Cook for USN&WR

Data: Gallup

Quartz's Chartbuilder

<https://quartz.github.io/Chartbuilder/>

Make it Yours and Host it Free on Github

<http://lindseycook.io/chartbuilder2/>

See the tipsheets for the step-by-step details