

# What are the political leanings of the top 100 cities in the USA?

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Group project Due 05/16/2016



**The question to answer:** What would be the leading places to move to in the USA for people wanting to leave the expensive coastal regions (California, New York City) but were concerned about the political environment as well?

## Data sources:

### Election results from the 2016 Presidential election:

<https://www.kaggle.com/joelwilson/2012-2016-presidential-elections>

### Best Places to Live:

Top 100 best places to live - <http://livability.com/best-places/top-100-best-places-to-live/2017>

**Raman Kannan**to Mark, Harshita, Jay 

Apr 1



approved..

how are you planning to scrape data?

...

# Project Approval:

On Sat, Apr 1, 2017 at 10:37 PM, Mark Thomas Jaggers <[mark.jaggers@nyu.edu](mailto:mark.jaggers@nyu.edu)> wrote:

Professor Kannan,

This email is to get your approval for our group project (Harshita, Jay, Mark).

**The question that we want to answer is:**

What would be the leading places to move to in the USA for people wanting to leave the expensive coastal regions (California, New York City) but were concerned about the political environment as well?

To answer this question, we will pull data from the following sources:

**Election results from the 2016 Presidential election:**

<https://www.kaggle.com/joelwilson/2012-2016-presidential-elections>

**Best Places to Live:**

100 Best Places to Live - [realestate.usnews.com](http://realestate.usnews.com)

Best Cities to live in the USA - <https://www.niche.com/places-to-live/rankings/cities/best-cities/>

Top 100 best places to live - <http://livability.com/best-places/top-100-best-places-to-live/2017>

Our plan is to merge/sort the different rankings of places and then join the election results to that dataset.

Please let us know if we have your approval to proceed or if you have further questions.

Cheers,

## Dataset facts:

Best Cities Dataset - HTML web scraping from the mentioned url, using python and loaded data into .csv file <http://livability.com/best-places/top-100-best-places-to-live/2017>

Election results from the 2016 Presidential election – Data already available in csv format

<https://www.kaggle.com/joelwilson/2012-2016-presidential-elections>

Using file **US\_County\_Level\_Presidential\_Results\_12-16.csv**

## Dataset facts:

But we also needed a way to cross reference city / state data to FIPS, which is issued by county (which wasn't part of the original data set)

FIPS County code download:

<https://www.census.gov/geo/reference/codes/cou.html>

Postal ZIP Codes – which contain Cities within counties on a state-by-state basis:

Free version - <https://www.unitedstateszipcodes.org/zip-code-database/>

**Data Required to answer the question:  
City, County, State, FIPS, Voting Data (Dem, Rep)**

**But not all located in one place:**  
**City, State – came from "Top 100" cities listing**  
**City, County, State – came from ZIP code listing**  
**County, State, FIPS – came from County/FIPS listing<sup>+</sup>**  
**FIPS, Voting Data – came from Voting records\***

<sup>+</sup> FIPS = five-digit Federal Information Processing Standards(FIPS) code

\* except Alaska – which has a different system for voting than county-based

## Uploaded Data IBM Cloud MariaDB...

```
CREATE TABLE mtj248.`2016results` (
  `entry-no` double DEFAULT NULL,
  votes_dem double DEFAULT NULL,
  votes_gop double DEFAULT NULL,
  total_votes double DEFAULT NULL,
  per_dem double DEFAULT NULL,
  per_gop double DEFAULT NULL,
  diff double DEFAULT NULL,
  per_point_diff double DEFAULT NULL,
  state_abbr varchar(50) DEFAULT NULL,
  county_name varchar(50) DEFAULT NULL,
  combined_fips int(11) DEFAULT NULL
)
```



## Uploaded Data IBM Cloud MariaDB...

```
CREATE TABLE mtj248.best_cities_state (
    city_name varchar(50) DEFAULT NULL,
    state_name varchar(50) DEFAULT NULL,
    population varchar(50) DEFAULT NULL,
    rank int(11) DEFAULT NULL
)
```



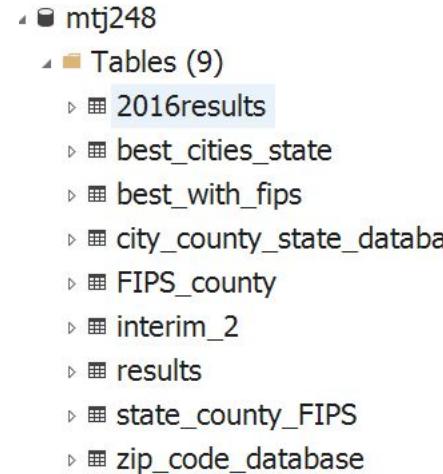
## Uploaded Data IBM Cloud MariaDB...

```
CREATE TABLE mtj248.city_county_state_database (
    primary_city varchar(50) DEFAULT NULL,
    state varchar(50) DEFAULT NULL,
    county varchar(50) DEFAULT NULL
)
```



## Uploaded Data IBM Cloud MariaDB...

```
CREATE TABLE mtj248.FIPS_county (
    State varchar(50) DEFAULT NULL,
    FIPS_State int(11) DEFAULT NULL,
    FIPS_County int(11) DEFAULT NULL,
    County_name varchar(50) DEFAULT NULL,
    type_code varchar(50) DEFAULT NULL
)
```



## Uploaded Data IBM Cloud MariaDB...

```
CREATE TABLE mtj248.state_county_FIPS (
    State varchar(50) DEFAULT NULL,
    `County Name` varchar(50) DEFAULT NULL,
    `Status Code` varchar(50) DEFAULT NULL,
    `Combined FIPS` int(11) DEFAULT NULL
)
```



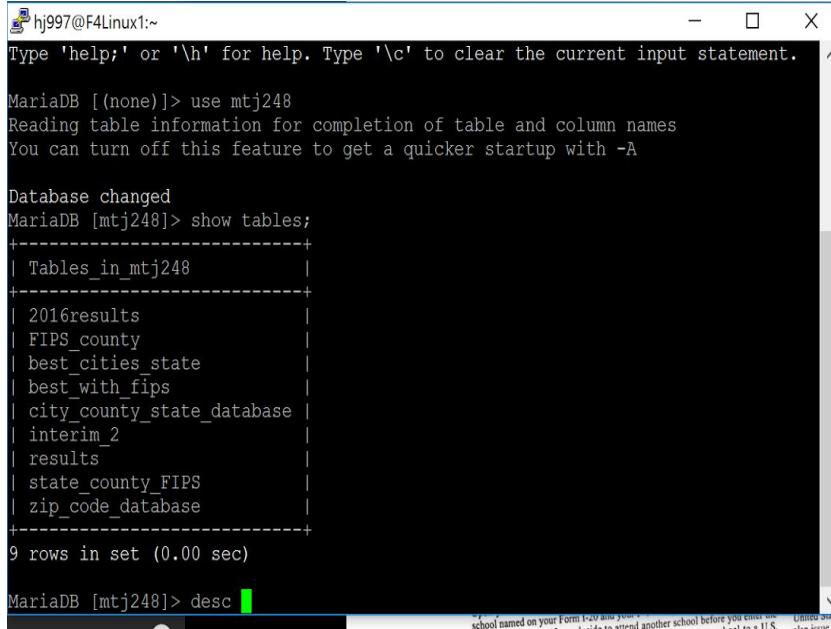
## Uploaded Data IBM Cloud MariaDB...

```
CREATE TABLE mtj248.zip_code_database (
    zip int(11) DEFAULT NULL,
    type varchar(50) DEFAULT NULL,
    primary_city varchar(50) DEFAULT NULL,
    acceptable_cities varchar(200) DEFAULT NULL,
    state varchar(50) DEFAULT NULL,
    county varchar(50) DEFAULT NULL,
    country varchar(50) DEFAULT NULL
)
```



**Imported Data into those tables from each csv using HeidiSQL and dbForge Studio**

# Uploaded Data IBM Cloud MariaDB...



A screenshot of a terminal window titled "hj997@F4Linux1:~". The window displays a MySQL/MariaDB session. The user has run the command "use mtj248" to switch to the "mtj248" database. They then ran "show tables;" which lists nine tables: 2016results, FIPS\_county, best\_cities\_state, best\_with\_fips, city\_county\_state\_database, interim\_2, results, state\_county\_FIPS, and zip\_code\_database. Finally, they started to run the command "desc" (likely intended to be "describe").

```
hj997@F4Linux1:~  
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.  
  
MariaDB [(none)]> use mtj248  
Reading table information for completion of table and column names  
You can turn off this feature to get a quicker startup with -A  
  
Database changed  
MariaDB [mtj248]> show tables;  
+-----+  
| Tables_in_mtj248 |  
+-----+  
| 2016results      |  
| FIPS_county      |  
| best_cities_state |  
| best_with_fips    |  
| city_county_state_database |  
| interim_2         |  
| results           |  
| state_county_FIPS |  
| zip_code_database |  
+-----+  
9 rows in set (0.00 sec)  
  
MariaDB [mtj248]> desc
```

## Extracting data :

The clean Data in Tables

Extracting Data Meaningful to the Problem Statement

SQL JOINS and Table Creation

Best cities Data - best\_cities\_state Table

county name based on ZIP codes , City name and State - Zip\_code\_database

necessary data from both - New Table interim\_2

# Interim\_2 based on primary city and state JOIN

```
MariaDB [mtj248]> CREATE TABLE interim_2 AS (SELECT b.city_name ,z.primary_city,z.zip,z.county,b.rank,b.state_name,b.population FROM zip_code_database AS z JOIN best_cities_state AS b ON z.primary_city = b.city_name AND z.state = b.state_name ORDER BY b.rank) ;
Query OK, 1006 rows affected (0.61 sec)
Records: 1006  Duplicates: 0  Warnings: 0

MariaDB [mtj248]> SELECT * FROM best_cities_state AS b WHERE b.city_name NOT IN (SELECT city_name FROM interim_2);
+-----+-----+-----+
| city_name | state_name | population | rank |
+-----+-----+-----+
| Woodbury | MN      | 65,667    | 26   |
| Edina    | MN      | 49,373    | 36   |
| St. Paul | MN      | 295,043   | 40   |
| Eagan    | MN      | 65,424    | 89   |
| Centennial | CO      | 106,604   | 97   |
| Lakewood | CO      | 147,836   | 57   |
+-----+-----+-----+
6 rows in set (0.00 sec)

MariaDB [mtj248]> SELECT b.city_name,z.acceptable_cities,z.zip,z.county,b.rank,b.state_name FROM zip_code_database AS z JOIN best_cities_state AS b ON z.state = b.state_name AND b.city_name = z.acceptable_cities WHERE b.city_name NOT IN (SELECT city_name FROM interim_2);
+-----+-----+-----+-----+-----+-----+
| city_name | acceptable_cities | zip     | county  | rank   | state_name |
+-----+-----+-----+-----+-----+-----+
| Eagan    | Eagan             | 55121  | Dakota County | 89 | MN      |
| Eagan    | Eagan             | 55122  | Dakota County | 89 | MN      |
| Eagan    | Eagan             | 55123  | Dakota County | 89 | MN      |
| Woodbury | Woodbury         | 55125  | Washington County | 26 | MN      |
| Woodbury | Woodbury         | 55129  | Washington County | 26 | MN      |
| Edina    | Edina             | 55410  | Hennepin County | 36 | MN      |
| Edina    | Edina             | 55439  | Hennepin County | 36 | MN      |
| Centennial | Centennial       | 80015  | Arapahoe County | 97 | CO      |
| Centennial | Centennial       | 80122  | Arapahoe County | 97 | CO      |
| Centennial | Centennial       | 80161  | Arapahoe County | 97 | CO      |
| Lakewood | Lakewood          | 80226  | Jefferson County | 57 | CO      |
| Lakewood | Lakewood          | 80227  | Jefferson County | 57 | CO      |
| Lakewood | Lakewood          | 80228  | Jefferson County | 57 | CO      |
| Lakewood | Lakewood          | 80232  | Jefferson County | 57 | CO      |
| Lakewood | Lakewood          | 80235  | Jefferson County | 57 | CO      |
| Lakewood | Lakewood          | 80236  | Denver County   | 57 | CO      |
+-----+-----+-----+-----+-----+-----+
16 rows in set (0.06 sec)
```

# Inserting Leftover acceptable cities.

```
MariaDB [mtj248]> INSERT INTO interim_2 SELECT b.city_name,z.primary_city,z.zip,z.county,b.rank,b.state_name,b.population FROM zip_code_database as z JOIN best_cities_state as b on z.state = b.state_name and b.city_name = z.acceptable_cities WHERE b.city_name NOT IN (SELECT city_name FROM interim_2);
Query OK, 16 rows affected (0.10 sec)
Records: 16  Duplicates: 0  Warnings: 0
```

```
MariaDB [mtj248]> SELECT * FROM interim_2 WHERE city_name = 'saint paul';
+-----+-----+-----+-----+-----+
| city_name | primary_city | zip | county | rank | state_name | population |
+-----+-----+-----+-----+-----+
| saint paul | Saint Paul | 55116 | Ramsey County | 40 | MN | 295,043 |
| saint paul | Saint Paul | 55144 | Ramsey County | 40 | MN | 295,043 |
| saint paul | Saint Paul | 55188 | Ramsey County | 40 | MN | 295,043 |
| saint paul | Saint Paul | 55101 | Ramsey County | 40 | MN | 295,043 |
| saint paul | Saint Paul | 55117 | Ramsey County | 40 | MN | 295,043 |
| saint paul | Saint Paul | 55145 | Ramsey County | 40 | MN | 295,043 |
| saint paul | Saint Paul | 55191 | Ramsey County | 40 | MN | 295,043 |
| saint paul | Saint Paul | 55102 | Ramsey County | 40 | MN | 295,043 |
| saint paul | Saint Paul | 55118 | Dakota County | 40 | MN | 295,043 |
| saint paul | Saint Paul | 55146 | Ramsey County | 40 | MN | 295,043 |
| saint paul | Saint Paul | 55103 | Ramsey County | 40 | MN | 295,043 |
| saint paul | Saint Paul | 55119 | Ramsey County | 40 | MN | 295,043 |
| saint paul | Saint Paul | 55155 | Ramsey County | 40 | MN | 295,043 |
| saint paul | Saint Paul | 55104 | Ramsey County | 40 | MN | 295,043 |
| saint paul | Saint Paul | 55120 | Dakota County | 40 | MN | 295,043 |
| saint paul | Saint Paul | 55161 | Ramsey County | 40 | MN | 295,043 |
| saint paul | Saint Paul | 55105 | Ramsey County | 40 | MN | 295,043 |
| saint paul | Saint Paul | 55121 | Dakota County | 40 | MN | 295,043 |
| saint paul | Saint Paul | 55164 | Ramsey County | 40 | MN | 295,043 |
```



## FIPS code and county name with cities= best\_with\_fips

CREATE TABLE best\_with\_fips (SELECT \* FROM interim\_2 as i JOIN state\_county\_FIPS as s on i.`county` = s.`County Name` and i.state\_name = s.state);

city_name	primary_city	zip	county	rank	state_name	population	State	County Name	Status Code	Combined FIPS
Anchorage	Anchorage	99518	Anchorage Municipality	54	AK	299,107	AK	Anchorage Municipality	H6	2020
Anchorage	Anchorage	99501	Anchorage Municipality	54	AK	299,107	AK	Anchorage Municipality	H6	2020
Anchorage	Anchorage	99503	Anchorage Municipality	54	AK	299,107	AK	Anchorage Municipality	H6	2020
Anchorage	Anchorage	99504	Anchorage Municipality	54	AK	299,107	AK	Anchorage Municipality	H6	2020
Anchorage	Anchorage	99504	Anchorage Municipality	54	AK	299,107	AK	Anchorage Municipality	H6	2020
Anchorage	Anchorage	99507	Anchorage Municipality	54	AK	299,107	AK	Anchorage Municipality	H6	2020
Anchorage	Anchorage	99508	Anchorage Municipality	54	AK	299,107	AK	Anchorage Municipality	H6	2020
Anchorage	Anchorage	99510	Anchorage Municipality	54	AK	299,107	AK	Anchorage Municipality	H6	2020
Anchorage	Anchorage	99515	Anchorage Municipality	54	AK	299,107	AK	Anchorage Municipality	H6	2020
Anchorage	Anchorage	99516	Anchorage Municipality	54	AK	299,107	AK	Anchorage Municipality	H6	2020
Anchorage	Anchorage	99517	Anchorage Municipality	54	AK	299,107	AK	Anchorage Municipality	H6	2020
Anchorage	Anchorage	99519	North Slope Borough	54	AK	299,107	AK	North Slope Borough	H1	2185
Anchorage	Anchorage	99520	North Slope Borough	54	AK	299,107	AK	North Slope Borough	H1	2185
Fayetteville	Fayetteville	72701	Washington County	99	AR	79,037	AR	Washington County	H1	5143
Fayetteville	Fayetteville	72702	Washington County	99	AR	79,037	AR	Washington County	H1	5143
Fayetteville	Fayetteville	72703	Washington County	99	AR	79,037	AR	Washington County	H1	5143
Fayetteville	Fayetteville	72704	Washington County	99	AR	79,037	AR	Washington County	H1	5143
Pleasanton	Pleasanton	94505	Alameda County	86	CA	60,009	CA	Alameda County	H1	6001
Pleasanton	Pleasanton	94508	Alameda County	86	CA	75,109	CA	Alameda County	H1	6001
Berkeley	Berkeley	94701	Alameda County	86	CA	117,384	CA	Alameda County	H1	6001
Berkeley	Berkeley	94702	Alameda County	86	CA	117,384	CA	Alameda County	H1	6001
Berkeley	Berkeley	94703	Alameda County	86	CA	117,384	CA	Alameda County	H1	6001
Berkeley	Berkeley	94704	Alameda County	86	CA	117,384	CA	Alameda County	H1	6001
Berkeley	Berkeley	94705	Alameda County	86	CA	117,384	CA	Alameda County	H1	6001
Berkeley	Berkeley	94707	Alameda County	86	CA	117,384	CA	Alameda County	H1	6001
Berkeley	Berkeley	94708	Alameda County	86	CA	117,384	CA	Alameda County	H1	6001
Berkeley	Berkeley	94709	Alameda County	86	CA	117,384	CA	Alameda County	H1	6001
Berkeley	Berkeley	94710	Alameda County	86	CA	117,384	CA	Alameda County	H1	6001
Berkeley	Berkeley	94712	Alameda County	86	CA	117,384	CA	Alameda County	H1	6001
Berkeley	Berkeley	94720	Alameda County	86	CA	117,384	CA	Alameda County	H1	6001
Walnut Creek	Walnut Creek	94598	Contra Costa County	34	CA	66,799	CA	Contra Costa County	H1	6013
Walnut Creek	Walnut Creek	94599	Contra Costa County	34	CA	66,799	CA	Contra Costa County	H1	6013
Walnut Creek	Walnut Creek	94605	Contra Costa County	34	CA	66,799	CA	Contra Costa County	H1	6013
Walnut Creek	Walnut Creek	94597	Contra Costa County	34	CA	66,799	CA	Contra Costa County	H1	6013
San Rafael	San Rafael	94915	Marin County	64	CA	58,819	CA	Marin County	H1	6041
San Rafael	San Rafael	94901	Marin County	64	CA	58,819	CA	Marin County	H1	6041
San Rafael	San Rafael	94910	Marin County	64	CA	58,819	CA	Marin County	H1	6041
San Rafael	San Rafael	94912	Marin County	64	CA	58,819	CA	Marin County	H1	6041
San Rafael	San Rafael	94913	Marin County	64	CA	58,819	CA	Marin County	H1	6041
Irvine	Irvine	92606	Orange County	59	CA	238,474	CA	Orange County	H1	6059
Irvine	Irvine	92612	Orange County	59	CA	238,474	CA	Orange County	H1	6059
Irvine	Irvine	92613	Orange County	59	CA	238,474	CA	Orange County	H1	6059
Irvine	Irvine	92616	Orange County	59	CA	238,474	CA	Orange County	H1	6059
Irvine	Irvine	92617	Orange County	59	CA	238,474	CA	Orange County	H1	6059
Irvine	Irvine	92618	Orange County	59	CA	238,474	CA	Orange County	H1	6059
Irvine	Irvine	92619	Orange County	59	CA	238,474	CA	Orange County	H1	6059
Irvine	Irvine	92620	Orange County	59	CA	238,474	CA	Orange County	H1	6059
Irvine	Irvine	92623	Orange County	59	CA	238,474	CA	Orange County	H1	6059
Irvine	Irvine	92697	Orange County	59	CA	238,474	CA	Orange County	H1	6059
Irvine	Irvine	92709	Orange County	59	CA	238,474	CA	Orange County	H1	6059
Irvine	Irvine	92710	Orange County	59	CA	238,474	CA	Orange County	H1	6059
Irvine	Irvine	92702	Orange County	59	CA	238,474	CA	Orange County	H1	6059
Irvine	Irvine	92603	Orange County	59	CA	238,474	CA	Orange County	H1	6059

**2016 results + best\_with\_fips = results table.**

```
CREATE TABLE results (SELECT DISTINCT b.city_name ,b.state_name ,b.`County Name`,b.`Combined FIPS`,b.rank ,r.votes_dem ,r.votes_gop ,r.county_name,r.combined_fips FROM best_with_fips as b JOIN 2016results as r on b.county = r.county_name and b.`Combined FIPS` = r.combined_fips ORDER BY b.rank);
```



hj997@F4Linux1:~

```
| Anchorage | AK      | Anchorage Municipality | 2020 | 54 | 93003
| 130413 | Anchorage Municipality | 2020 |
```

115 rows in set (0.00 sec)

MariaDB [mtj248]> select \* from results;

city_name	state_name	County Name	Combined FIPS	rank	votes_dem	votes_gop	county_name	combined_fips
Rochester	MN	Olmsted County	27109	1	36266	35668	Olmsted County	27109
Iowa City	IA	Johnson County	19103	2	49942	20993	Johnson County	19103
Ann Arbor	MI	Washtenaw County	26161	3	128025	50335	Washtenaw County	26161
Olympia	WA	Thurston County	53067	4	65015	46219	Thurston County	53067
Charlottesville	VA	Charlottesville city	51540	5	17865	2951	Charlottesville city	51540
Charlottesville	VA	Albemarle County	51003	5	33297	19232	Albemarle County	51003
Bellevue	WA	King County	53033	6	657149	197781	King County	53033
Palo Alto	CA	Santa Clara County	6085	7	483472	137452	Santa Clara County	6085
Palo Alto	CA	San Mateo County	6081	7	219580	53731	San Mateo County	6081
Madison	WI	Waukesha County	55133	8	79200	142521	Waukesha County	55133
Madison	WI	Dane County	55025	8	217506	71270	Dane County	55025
Overland Park	KS	Johnson County	20091	9	126324	133907	Johnson County	20091
Bismarck	ND	Burleigh County	38015	10	10865	32499	Burleigh County	38015
Burlington	VT	Chittenden County	50007	11	54463	18298	Chittenden County	50007
Newton	MA	Middlesex County	25017	12	508919	216163	Middlesex County	25017
Rockville	MD	Montgomery County	24031	13	309761	82985	Montgomery County	24031
Ithaca	NY	Tompkins County	36109	14	25555	9647	Tompkins County	36109
Franklin	TN	Williamson County	47187	15	30992	68160	Williamson County	47187
Fort Collins	CO	Larimer County	8069	16	92170	82624	Larimer County	8069
Pleasanton	CA	Alameda County	6001	17	486351	91189	Alameda County	6001
Columbia	MD	Howard County	24027	18	93808	44792	Howard County	24027
Arlington	VA	Arlington County	51013	19	91879	20155	Arlington County	51013
Pittsburgh	PA	Allegheny County	42003	20	363017	257488	Allegheny County	42003
Cary	NC	Wake County	37183	21	298253	193607	Wake County	37183
Manhattan	KS	Riley County	20161	22	8892	9817	Riley County	20161
Brentwood	ME	Cumberland County	23005	23	102935	57697	Cumberland County	23005
Frederick	MD	Frederick County	24021	24	51891	56472	Frederick County	24021
Ames	IA	Story County	19169	25	25085	19111	Story County	19169
Woodbury	MN	Washington County	27163	26	67086	64429	Washington County	27163
Fairfax	VA	Fairfax County	51059	27	354485	157837	Fairfax County	51059
Fairfax	VA	Fairfax city	51600	27	7363	3695	Fairfax city	51600
Cambridge	MA	Middlesex County	25017	28	508919	216163	Middlesex County	25017
Bethesda	MD	Montgomery County	24031	29	309761	82985	Montgomery County	24031
West Hartford	CT	Hartford County	9003	30	233789	147912	Hartford County	9003
Fargo	ND	Cass County	38017	31	31291	39738	Cass County	38017
Alexandria	VA	Fairfax County	51059	32	354485	157837	Fairfax County	51059
Alexandria	VA	Alexandria city	51510	32	57147	13241	Alexandria city	51510
Columbia	MO	Boone County	29019	33	41072	36146	Boone County	29019
Walnut Creek	CA	Contra Costa County	6013	34	286658	105819	Contra Costa County	6013
Boulder	CO	Boulder County	8013	35	124715	38766	Boulder County	8013
Edina	MN	Hennepin County	27053	36	429283	191768	Hennepin County	27053
Naperville	IL	DuPage County	17043	37	222499	164355	DuPage County	17043
Naperville	IL	Will County	17197	37	146230	129726	Will County	17197
Chesapeake	VA	Chesapeake city	51550	38	52554	53988	Chesapeake city	51550
Sioux Falls	SD	Minnehaha County	46099	39	30610	42043	Minnehaha County	46099
Sioux Falls	SD	Lincoln County	46083	39	8076	15499	Lincoln County	46083
saint paul	MN	Washington County	27163	40	67086	64429	Washington County	27163
saint paul	MN	Ramsey County	27123	40	176929	70778	Ramsey County	27123
saint paul	MN	Hennepin County	27053	40	429283	191768	Hennepin County	27053
saint paul	MN	Dakota County	27037	40	110251	99624	Dakota County	27037
San Mateo	CA	San Mateo County	6081	41	219580	53731	San Mateo County	6081
Bozeman	MT	Gallatin County	30031	42	23879	23360	Gallatin County	30031

Contributors: HJ

**Once all the data had been joined the results:**

Exported that data to excel to:

Create final voting difference calculations and % difference of total.

**Then used that CSV in Tableau to generate maps:**

	A	B	C	D	E	F	G	H	I
1	rank	city_name	state_name	County Name	Combined FIPS	votes_dem	votes_gop	Vote Difference	Diff as a % of total votes
2	5	Charlottesville	VA	Charlottesville city	51540	17865	2951	14914	71.65%
3	17	Pleasanton	CA	Alameda County	6001	486351	91189	395162	68.42%
4	86	Berkeley	CA	Alameda County	6001	486351	91189	395162	68.42%
5	64	San Rafael	CA	Marin County	6041	86650	17531	69119	66.35%
6	19	Arlington	VA	Arlington County	51013	91879	20155	71724	64.02%
7	32	Alexandria	VA	Alexandria city	51510	57147	13241	43906	62.38%
8	56	Santa Cruz	CA	Santa Cruz County	6087	85185	20158	65027	61.73%
9	7	Palo Alto	CA	San Mateo County	6081	219580	53731	165849	60.68%
10	41	San Mateo	CA	San Mateo County	6081	219580	53731	165849	60.68%
11	57	Lakewood	CO	Denver County	8031	174611	43637	130974	60.01%
12	13	Rockville	MD	Montgomery County	24031	309761	82985	226776	57.74%
13	29	Bethesda	MD	Montgomery County	24031	309761	82985	226776	57.74%
14	7	Palo Alto	CA	Santa Clara County	6085	483472	137452	346020	55.73%
15	6	Bellevue	WA	King County	53033	657149	197781	459368	53.73%
16	51	Renton	WA	King County	53033	657149	197781	459368	53.73%
17	35	Boulder	CO	Boulder County	8013	124715	38766	85949	52.57%
18	62	Longmont	CO	Boulder County	8013	124715	38766	85949	52.57%
19	55	Chapel Hill	NC	Orange County	37135	59105	18373	40732	52.57%
20	79	Santa Rosa	CA	Sonoma County	6097	116027	37421	78606	51.23%
21	8	Madison	WI	Dane County	55025	217506	71270	146236	50.64%
22	11	Burlington	VT	Chittenden County	50007	54463	18298	36165	49.70%
23	34	Walnut Creek	CA	Contra Costa County	6013	286658	105819	180839	46.08%
24	14	Ithaca	NY	Tompkins County	36109	25555	9647	15908	45.19%
25	3	Ann Arbor	MI	Washtenaw County	26161	128025	50335	77690	43.56%

	A	B	C	D	E	F	G	H	I
26	40	saint paul	MN	Ramsey County	27123	176929	70778	106151	42.85%
27	2	Iowa City	IA	Johnson County	19103	49942	20993	28949	40.81%
28	12	Newton	MA	Middlesex County	25017	508919	216163	292756	40.38%
29	28	Cambridge	MA	Middlesex County	25017	508919	216163	292756	40.38%
30	27	Fairfax	VA	Fairfax County	51059	354485	157837	196648	38.38%
31	32	Alexandria	VA	Fairfax County	51059	354485	157837	196648	38.38%
32	58	Reston	VA	Fairfax County	51059	354485	157837	196648	38.38%
33	88	Burke	VA	Fairfax County	51059	354485	157837	196648	38.38%
34	36	Edina	MN	Hennepin County	27053	429283	191768	237515	38.24%
35	40	saint paul	MN	Hennepin County	27053	429283	191768	237515	38.24%
36	53	Corvallis	OR	Benton County	41003	28431	13030	15401	37.15%
37	67	Lawrence	KS	Douglas County	20045	30089	14308	15781	35.55%
38	18	Columbia	MD	Howard County	24027	93808	44792	49016	35.37%
39	63	Ellicott City	MD	Howard County	24027	93808	44792	49016	35.37%
40	45	White Plains	NY	Westchester County	36119	245670	121643	124027	33.77%
41	27	Fairfax	VA	Fairfax city	51600	7363	3695	3668	33.17%
42	82	Santa Barbara	CA	Santa Barbara County	6083	100120	53740	46380	30.14%
43	52	Brookline	MA	Norfolk County	25021	219129	119171	99958	29.55%
44	71	East Lansing	MI	Ingham County	26065	81266	44354	36912	29.38%
45	23	Portland	ME	Cumberland County	23005	102935	57697	45238	28.16%
46	5	Charlottesville	VA	Albemarle County	51003	33297	19232	14065	26.78%
47	46	Albany	NY	Albany County	36001	74775	44227	30548	25.67%
48	95	Beverly	MA	Essex County	25009	220027	135405	84622	23.81%
49	81	Gainesville	FL	Alachua County	12001	75370	46584	28786	23.60%
50	30	West Hartford	CT	Hartford County	9003	233789	147912	85877	22.50%

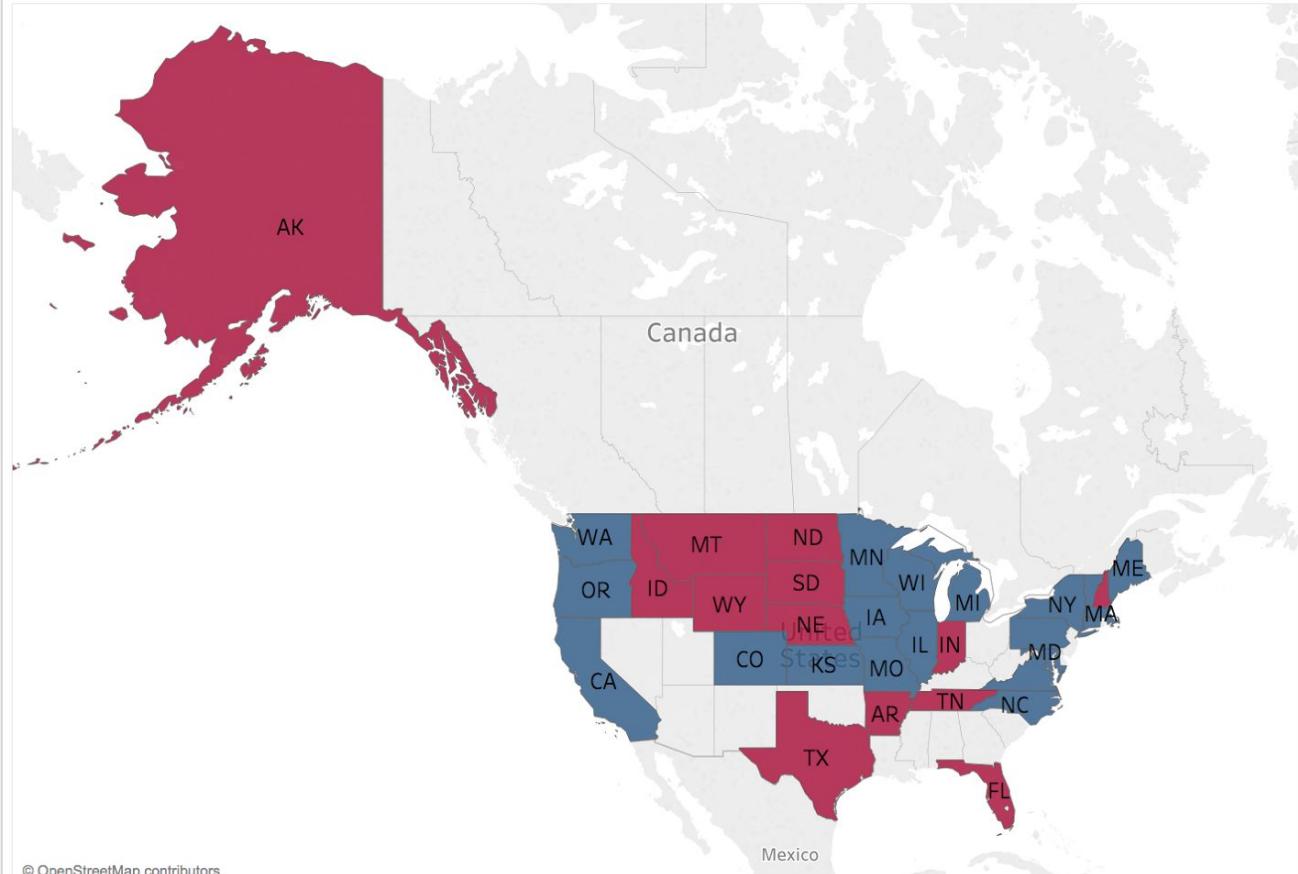
	A	B	C	D	E	F	G	H	I
51	21	Cary	NC	Wake County	37183	298353	193607	104746	21.29%
52	90	Norwalk	CT	Fairfield County	9001	238723	155457	83266	21.12%
53	96	Edmonds	WA	Snohomish County	53061	167943	116433	51510	18.11%
54	66	Camarillo	CA	Ventura County	6111	170489	118764	51725	17.88%
55	92	Ventura	CA	Ventura County	6111	170489	118764	51725	17.88%
56	80	Ashburn	VA	Loudoun County	51107	99909	69633	30276	17.86%
57	76	Missoula	MT	Missoula County	30063	30740	21699	9041	17.24%
58	20	Pittsburgh	PA	Allegheny County	42003	363017	257488	105529	17.01%
59	4	Olympia	WA	Thurston County	53067	65015	46219	18796	16.90%
60	47	Asheville	NC	Buncombe County	37021	74937	55339	19598	15.04%
61	37	Naperville	IL	DuPage County	17043	222499	164355	58144	15.03%
62	43	Downers Grove	IL	DuPage County	17043	222499	164355	58144	15.03%
63	49	Littleton	CO	Arapahoe County	8005	148365	109638	38727	15.01%
64	97	Centennial	CO	Arapahoe County	8005	148365	109638	38727	15.01%
65	25	Ames	IA	Story County	19169	25085	19111	5974	13.52%
66	74	Duluth	MN	St. Louis County	27137	57769	44631	13138	12.83%
67	61	Ankeny	IA	Polk County	19153	119671	93421	26250	12.32%
68	75	Des Moines	IA	Polk County	19153	119671	93421	26250	12.32%
69	85	La Crosse	WI	La Crosse County	55063	32402	26384	6018	10.24%
70	50	San Luis Obispo	CA	San Luis Obispo County	6079	63001	52672	10329	8.93%
71	73	Royal Oak	MI	Oakland County	26125	342976	289127	53849	8.52%
72	59	Irvine	CA	Orange County	6059	556544	472669	83875	8.15%
73	49	Littleton	CO	Jefferson County	8059	151885	130233	21652	7.67%
74	57	Lakewood	CO	Jefferson County	8059	151885	130233	21652	7.67%
75	33	Columbia	MO	Boone County	29019	41072	36146	4926	6.38%

	A	B	C	D	E	F	G	H	I
76	37	Naperville	IL	Will County	17197	146230	129726	16504	5.98%
77	93	Rockville Centre	NY	Nassau County	36059	307326	275479	31847	5.46%
78	16	Fort Collins	CO	Larimer County	8069	92170	82624	9546	5.46%
79	40	saint paul	MN	Dakota County	27037	110251	99624	10627	5.06%
80	89	Eagan	MN	Dakota County	27037	110251	99624	10627	5.06%
81	94	Bethlehem	PA	Lehigh County	42077	77087	70285	6802	4.62%
82	26	Woodbury	MN	Washington County	27163	67086	64429	2657	2.02%
83	40	saint paul	MN	Washington County	27163	67086	64429	2657	2.02%
84	42	Bozeman	MT	Gallatin County	30031	23879	23360	519	1.10%
85	1	Rochester	MN	Olmsted County	27109	36266	35668	598	0.83%
86	68	Lincoln	NE	Lancaster County	31109	60533	60456	77	0.06%
87	38	Chesapeake	VA	Chesapeake city	51550	52554	53988	-1434	-1.35%
88	9	Overland Park	KS	Johnson County	20091	126324	133907	-7583	-2.91%
89	94	Bethlehem	PA	Northampton County	42095	65936	71384	-5448	-3.97%
90	24	Frederick	MD	Frederick County	24021	51891	56472	-4581	-4.23%
91	98	Saratoga Springs	NY	Saratoga County	36091	46546	51088	-4542	-4.65%
92	22	Manhattan	KS	Riley County	20161	8892	9817	-925	-4.94%
93	91	Portsmouth	NH	Rockingham County	33015	79994	90447	-10453	-6.13%
94	83	Helena	MT	Lewis and Clark County	30049	14331	16665	-2334	-7.53%
95	84	Boise	ID	Ada County	16001	75676	93748	-18072	-10.67%
96	99	Fayetteville	AR	Washington County	5143	32296	40418	-8122	-11.17%
97	31	Fargo	ND	Cass County	38017	31291	39738	-8447	-11.89%
98	60	Sarasota	FL	Sarasota County	12115	97676	124098	-26422	-11.91%
99	48	Roseville	CA	Placer County	6061	61969	78977	-17008	-12.07%
100	39	Sioux Falls	SD	Minnehaha County	46099	30610	42043	-11433	-15.74%

	A	B	C	D	E	F	G	H	I
101	54	Anchorage	AK	Anchorage Municipality	2020	93003	130413	-37410	-16.74%
102	60	Sarasota	FL	Manatee County	12081	71066	101681	-30615	-17.72%
103	65	Plano	TX	Collin County	48085	139837	200395	-60558	-17.80%
104	49	Littleton	CO	Douglas County	8035	67045	100178	-33133	-19.81%
105	44	Grand Forks	ND	Grand Forks County	38035	10828	16325	-5497	-20.24%
106	100	Fishers	IN	Hamilton County	18057	57214	87299	-30085	-20.82%
107	72	Aberdeen	SD	Brown County	46013	5452	9613	-4161	-27.62%
108	8	Madison	WI	Waukesha County	55133	79200	142521	-63321	-28.56%
109	78	Richland	WA	Benton County	53005	25173	45594	-20421	-28.86%
110	87	Billings	MT	Yellowstone County	30111	21117	38675	-17558	-29.37%
111	39	Sioux Falls	SD	Lincoln County	46083	8076	15499	-7423	-31.49%
112	69	Cheyenne	WY	Laramie County	56021	11572	24844	-13272	-36.45%
113	15	Franklin	TN	Williamson County	47187	30992	68160	-37168	-37.49%
114	10	Bismarck	ND	Burleigh County	38015	10865	32499	-21634	-49.89%
115	70	Kearney	NE	Buffalo County	31019	4690	14424	-9734	-50.93%
116	77	Minot	ND	Ward County	38101	5792	18601	-12809	-52.51%

## Dem/Rep States

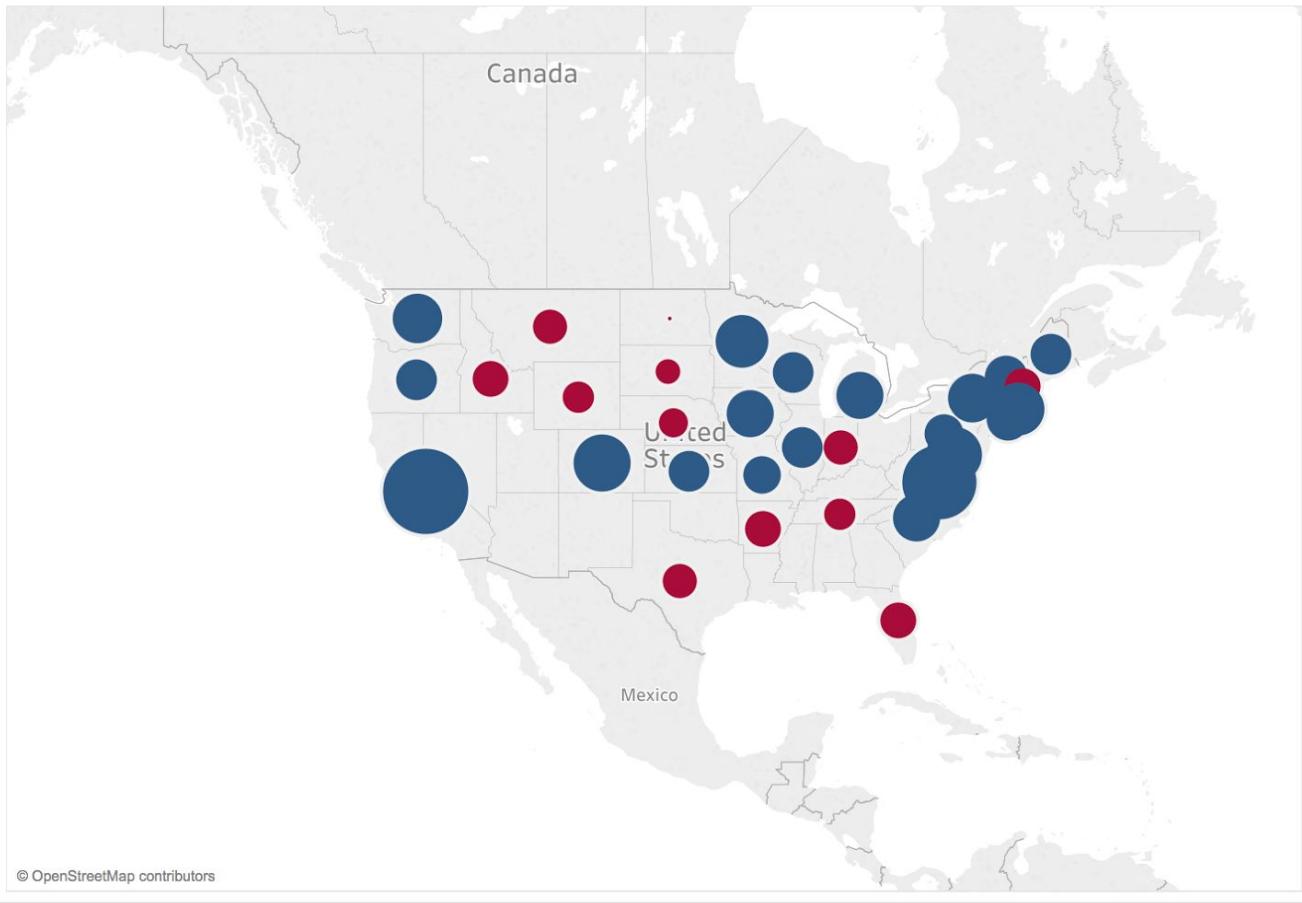
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Contributors: JJ

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## Size/Vote Difference



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2.000

4.000

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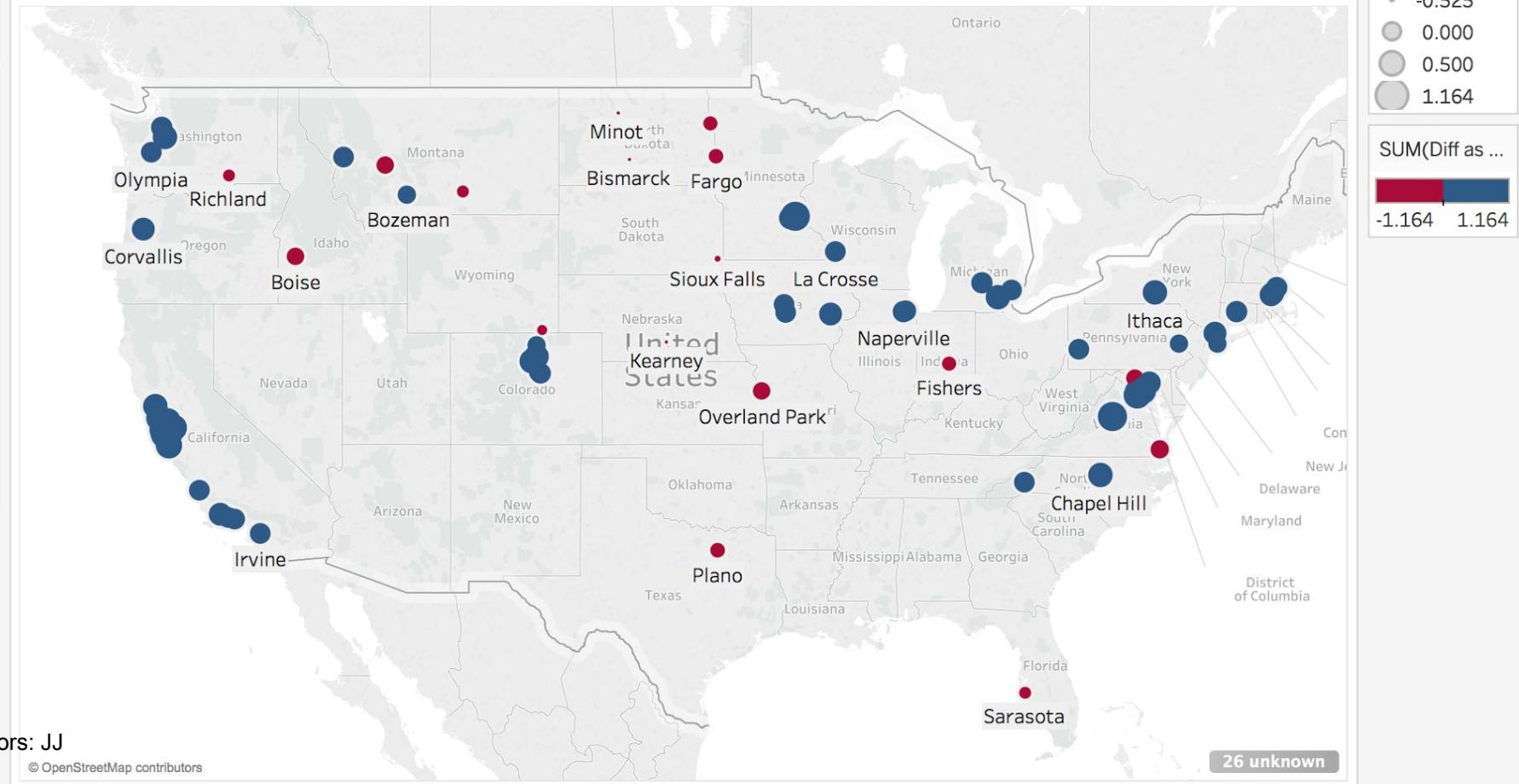
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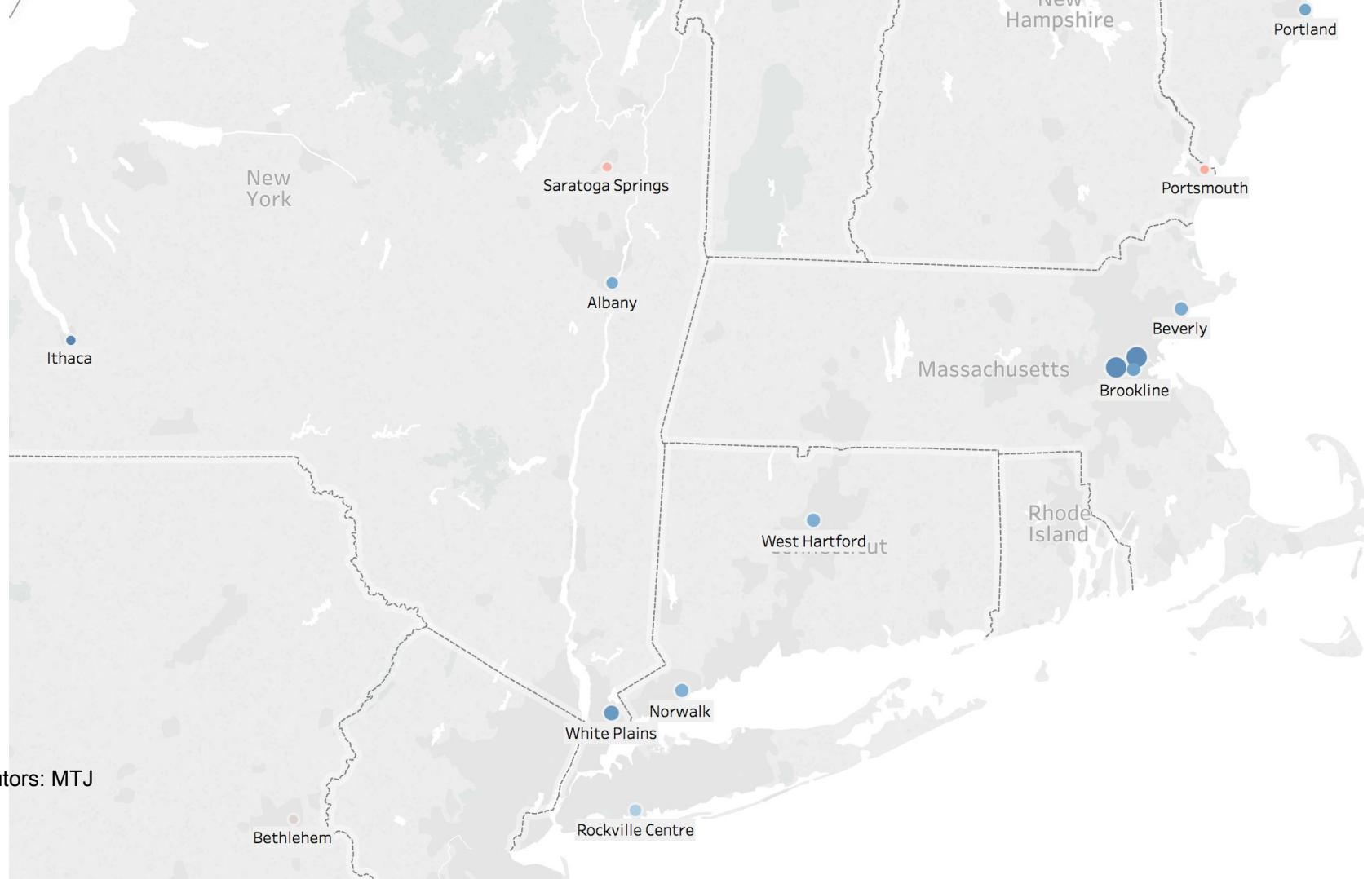
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Contributors: JJ

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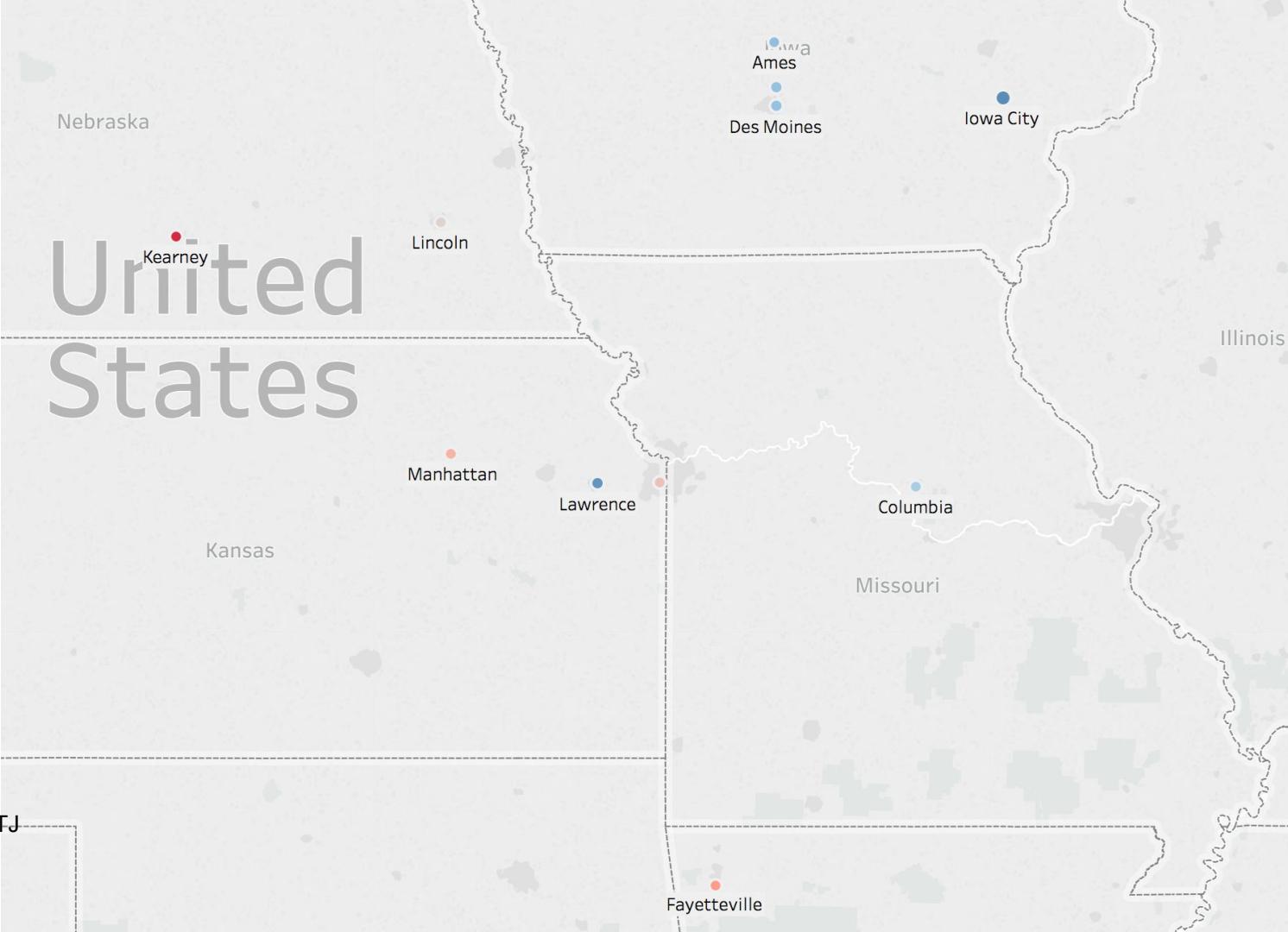
# Dem/Rep Cities







Contributors: MTJ

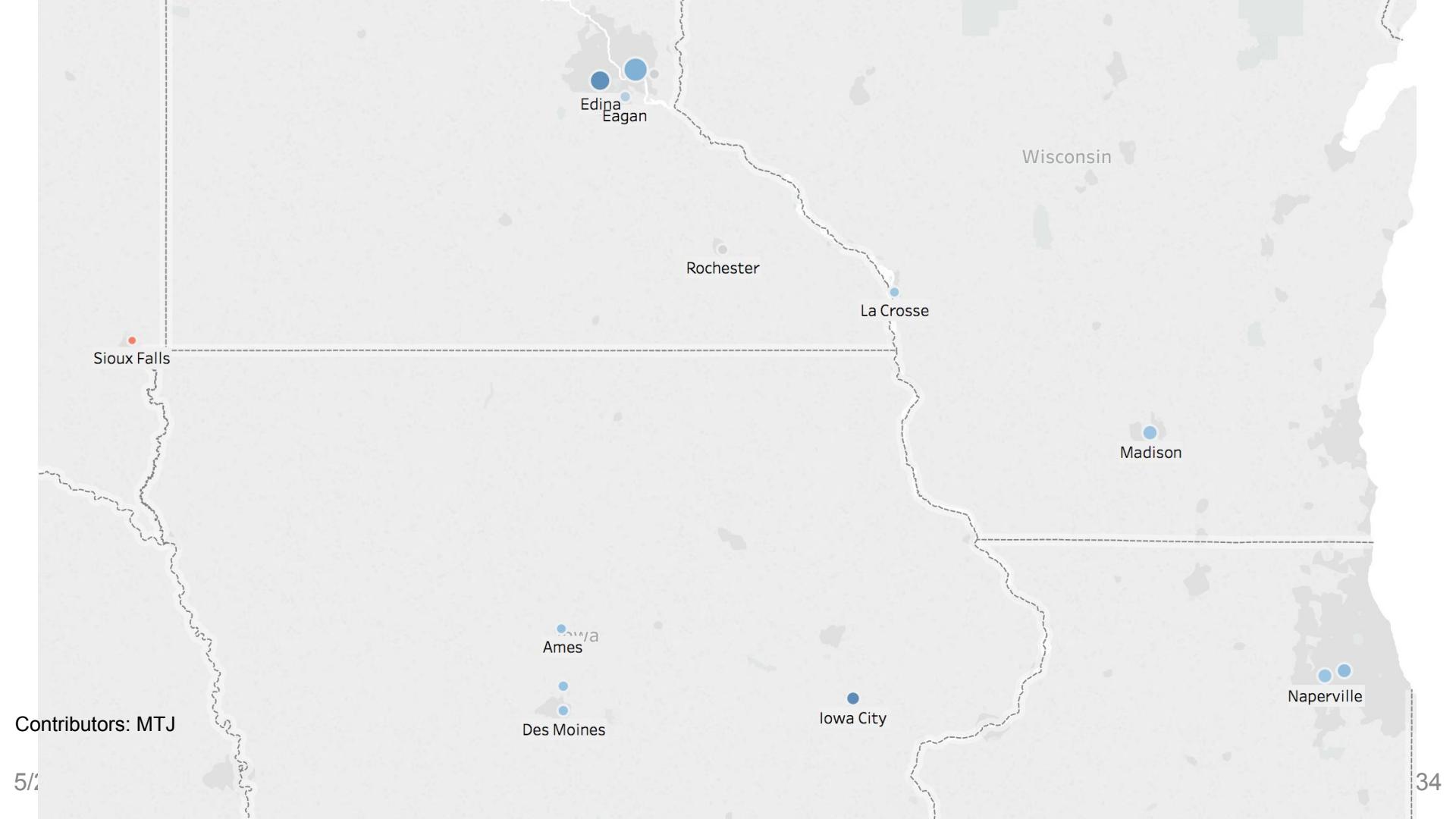


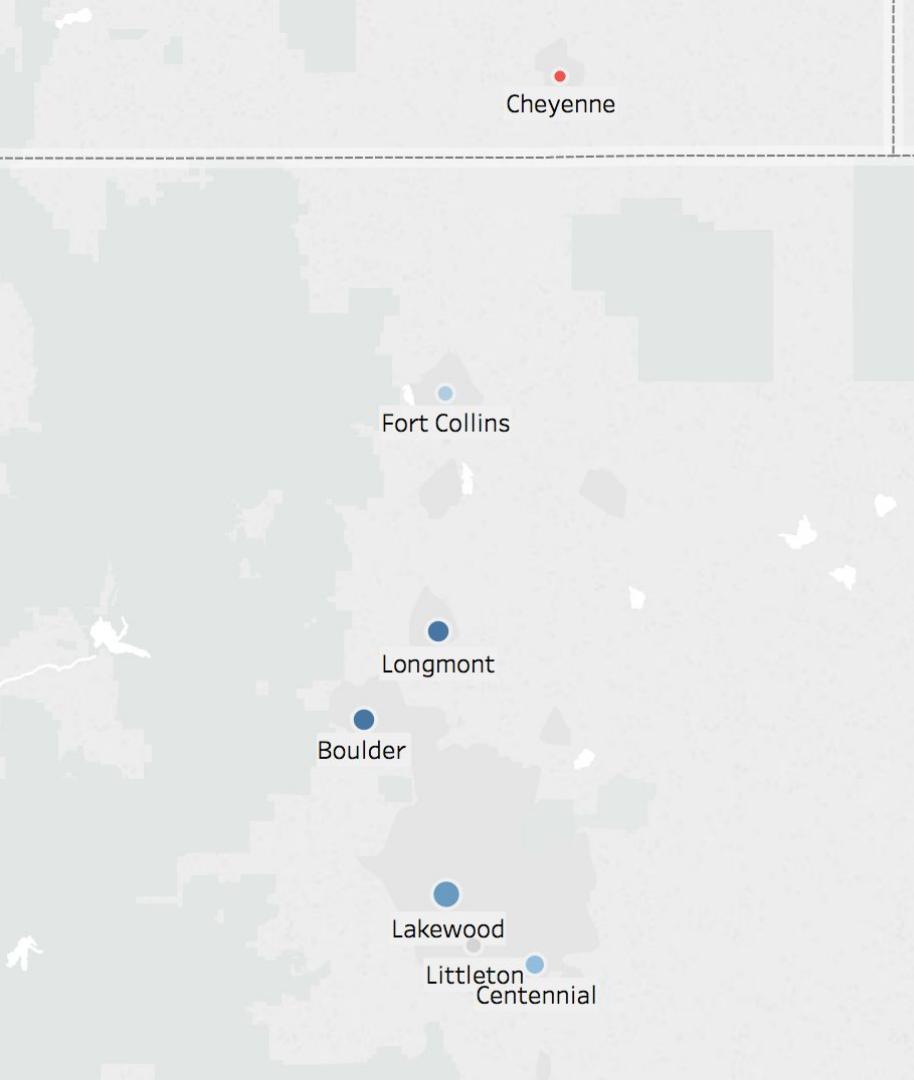


Contributors: MTJ

5/2/17

33

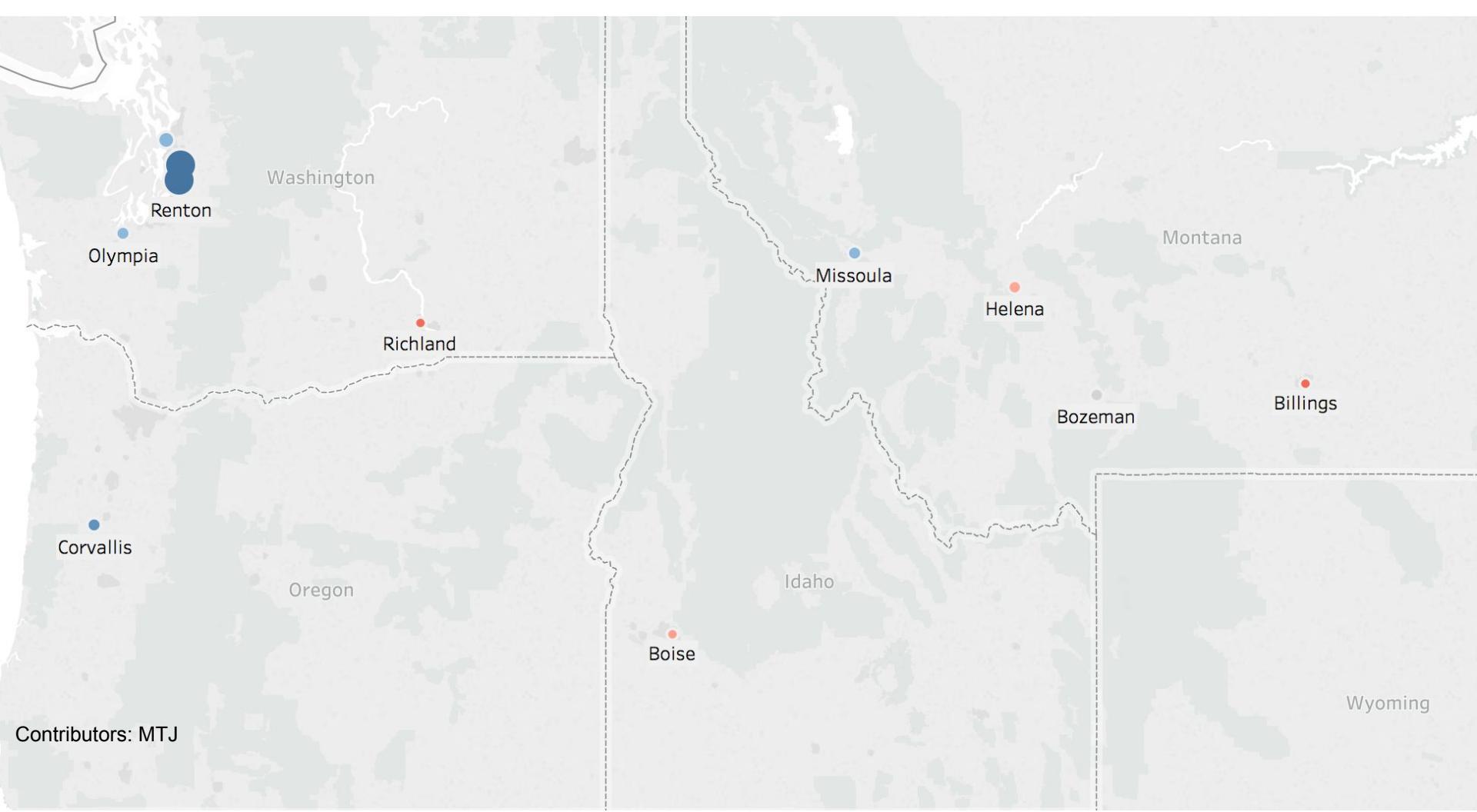


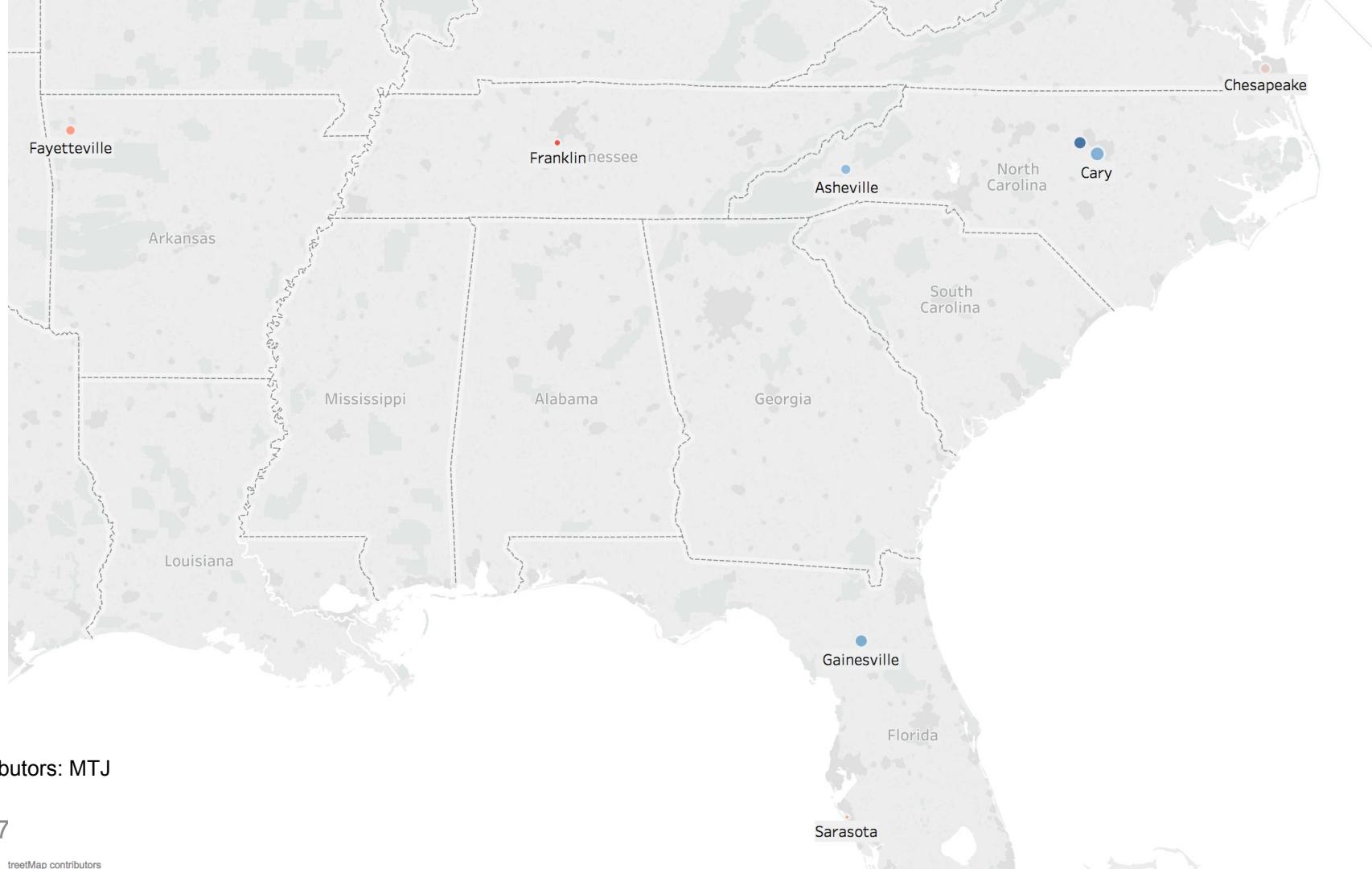


Contributors: MTJ

5/2/17

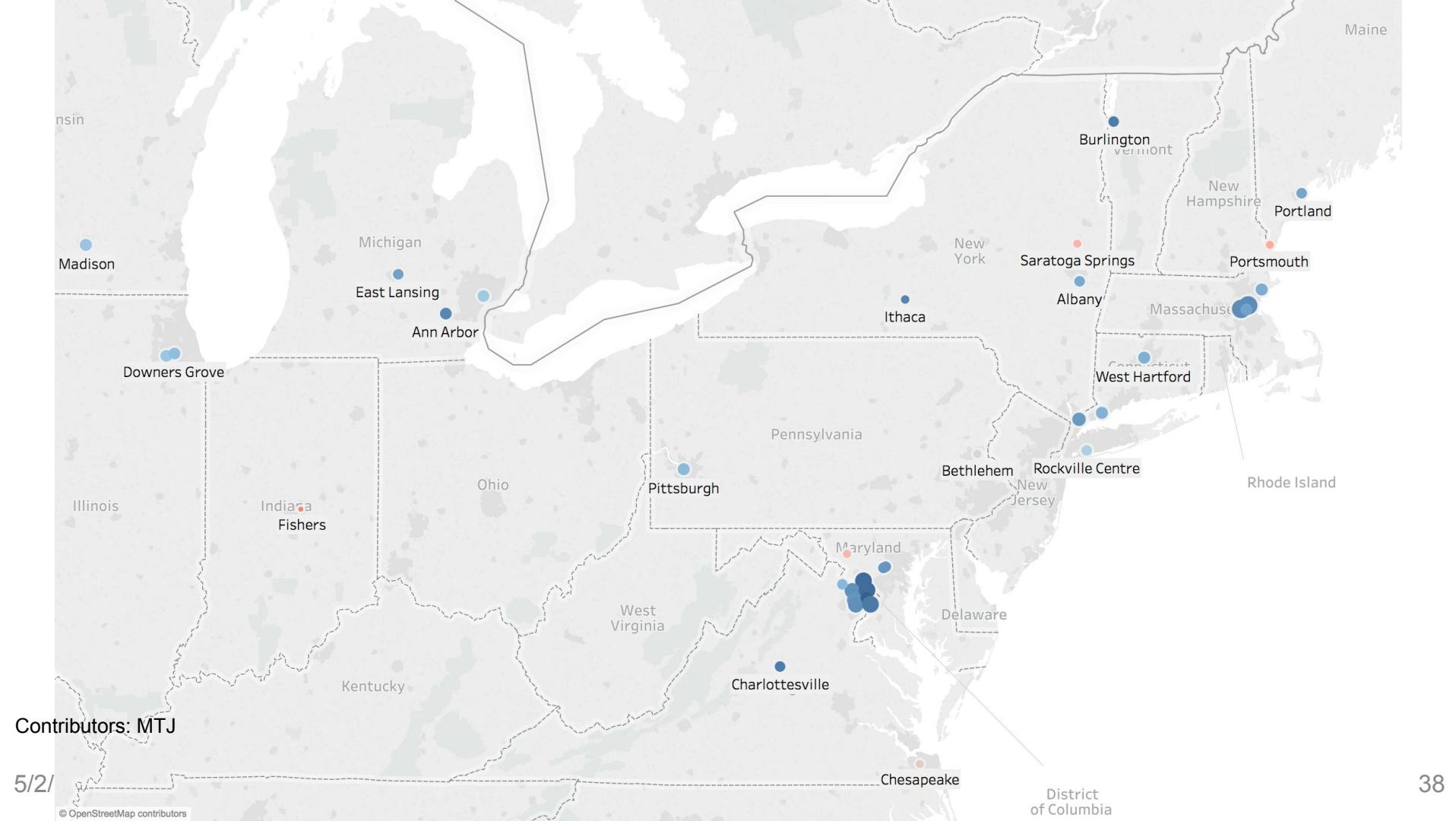
35





Contributors: MTJ

5/2/17



What would be the leading places to move to in the USA for people wanting to leave the expensive coastal regions (California, New York City) but were concerned about the political environment as well?

## Answer: Democrat

Overall Rank	City	State	% delta between parties
5	Charlottesville	VA	72%
57	Lakewood	CO	60%
35	Boulder	CO	53%
62	Longmont	CO	53%

## Republican

Overall Rank	City	State	% delta between parties
77	Minot	ND	53%
70	Kearney	NE	51%
10	Bismarck	ND	50%
15	Franklin	TN	37%

What would be the leading places to move to in the USA for people wanting to leave the expensive coastal regions (California, New York City) but were concerned about the political environment as well?

## Answer: Centrist

Overall Rank	City	State	% delta between parties
68	Lincoln	NE	.06%
1	Rochester	MN	.83%
42	Bozeman	MT	1.1%
39	Chesapeake	VT	1.35%

**Top 100 cities = 115 different counties / districts**

**85 of the 115 skew Democratic / 30 skew Republican (2.83:1)**

**Almost 74% of the top 100 are democratic oriented.**

**Average Republican county skewed 19.85% that direction  
Average Democrat county skewed 30.57% that direction**

**FIPS / City / State data needs to be normalized**

- Differences in spellings still prevalent in gov datasets.

**Tableau for data visualization is very nice, but view of data in excel was easier to look at.**

- Tableau was slow with multiple joins - multiple data retrievals
- Tableau also wanted to SUM multiple integer together, which caused some issues with FIPS codes.

**The question to answer:** What would be the leading places to move to in the USA for people wanting to leave the expensive coastal regions (California, New York City) but were concerned about the political environment as well?

## Data sources:

### Election results from the 2016 Presidential election:

<https://www.kaggle.com/joelwilson/2012-2016-presidential-elections>

### Best Places to Live:

Top 100 best places to live - <http://livability.com/best-places/top-100-best-places-to-live/2017>

**Raman Kannan**to Mark, Harshita, Jay 

Apr 1



approved..

how are you planning to scrape data?

...

# Project Approval:

On Sat, Apr 1, 2017 at 10:37 PM, Mark Thomas Jaggers <[mark.jaggers@nyu.edu](mailto:mark.jaggers@nyu.edu)> wrote:

Professor Kannan,

This email is to get your approval for our group project (Harshita, Jay, Mark).

**The question that we want to answer is:**

What would be the leading places to move to in the USA for people wanting to leave the expensive coastal regions (California, New York City) but were concerned about the political environment as well?

To answer this question, we will pull data from the following sources:

**Election results from the 2016 Presidential election:**

<https://www.kaggle.com/joelwilson/2012-2016-presidential-elections>

**Best Places to Live:**

100 Best Places to Live - [realestate.usnews.com](http://realestate.usnews.com)

Best Cities to live in the USA - <https://www.niche.com/places-to-live/rankings/cities/best-cities/>

Top 100 best places to live - <http://livability.com/best-places/top-100-best-places-to-live/2017>

Our plan is to merge/sort the different rankings of places and then join the election results to that dataset.

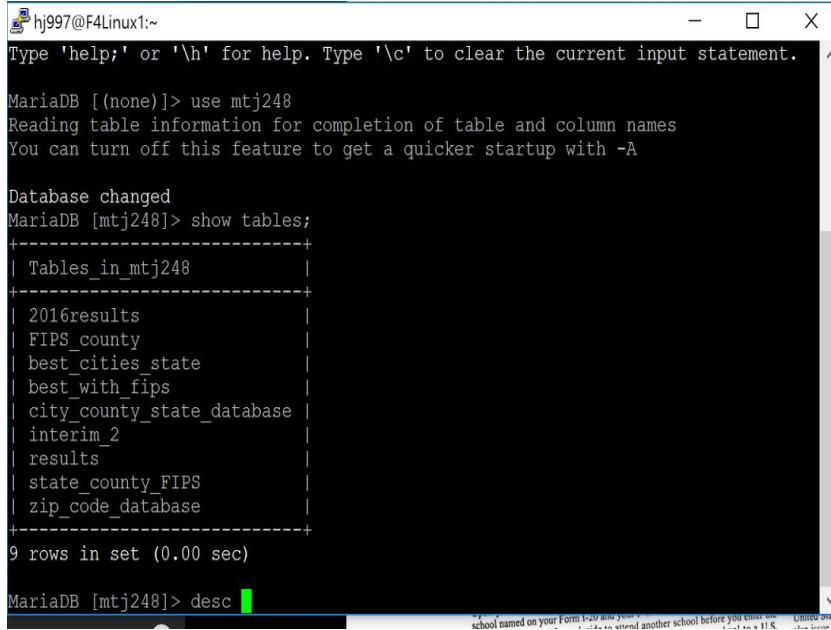
Please let us know if we have your approval to proceed or if you have further questions.

Cheers,

## Dataset facts:

**Best Cities Dataset -** HTML web scraping from the mentioned url, using python and loaded data into .csv file <http://livability.com/best-places/top-100-best-places-to-live/2017>

# Uploaded Data IBM Cloud MariaDB...



A screenshot of a terminal window titled "hj997@F4Linux1:~". The window shows a MySQL/MariaDB session. The user has run the command "use mtj248" and is viewing the results of the "show tables;" command. The output lists nine tables: 2016results, FIPS\_county, best\_cities\_state, best\_with\_fips, city\_county\_state\_database, interim\_2, results, state\_county\_FIPS, and zip\_code\_database. The user then begins to type "desc" to view the descriptions of the columns.

```
hj997@F4Linux1:~  
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.  
  
MariaDB [(none)]> use mtj248  
Reading table information for completion of table and column names  
You can turn off this feature to get a quicker startup with -A  
  
Database changed  
MariaDB [mtj248]> show tables;  
+-----+  
| Tables_in_mtj248 |  
+-----+  
| 2016results      |  
| FIPS_county      |  
| best_cities_state |  
| best_with_fips    |  
| city_county_state_database |  
| interim_2         |  
| results           |  
| state_county_FIPS |  
| zip_code_database |  
+-----+  
9 rows in set (0.00 sec)  
  
MariaDB [mtj248]> desc
```

**Data was already in a CSV format**

**Original:**

Long data, mixed, varied, etc

**Refined:**

Shorter data

This was done by:

Mark

**Resulting cleansed data was then used to Tableau for visualization:**

## Extracting data :

- The clean Data in Tables
- Extracting Data Meaningful to the Problem Statement
- SQL JOINS and Table Creation

Best cities Data - best\_cities\_state Table

county name based on ZIP codes , City name and State - Zip\_code\_database

necessary data from both - New Table nterim\_2

## Interim\_2 based on primary city and state JOIN

```
MariaDB [mtj248]> CREATE TABLE interim_2 AS (SELECT b.city_name ,z.primary_city,z.zip,z.county,b.rank,b.state_name,b.population FROM zip_code_database AS z JOIN best_cities_state AS b ON z.primary_city = b.city_name AND z.state = b.state_name ORDER BY b.rank) ;
Query OK, 1006 rows affected (0.61 sec)
Records: 1006  Duplicates: 0  Warnings: 0

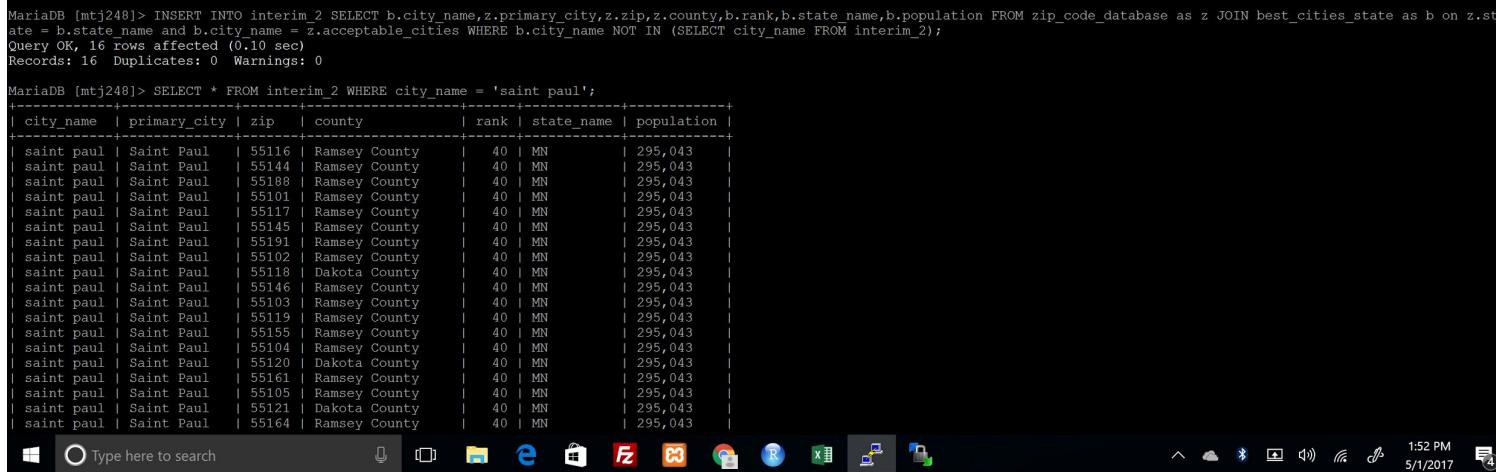
MariaDB [mtj248]> SELECT * FROM best_cities_state AS b WHERE b.city_name NOT IN (SELECT city_name FROM interim_2);
+-----+-----+-----+-----+
| city_name | state_name | population | rank |
+-----+-----+-----+-----+
| Woodbury | MN | 65,667 | 26 |
| Edina | MN | 49,373 | 36 |
| St. Paul | MN | 295,043 | 40 |
| Eagan | MN | 65,424 | 89 |
| Centennial | CO | 106,604 | 97 |
| Lakewood | CO | 147,836 | 57 |
+-----+-----+-----+-----+
6 rows in set (0.00 sec)

MariaDB [mtj248]> SELECT b.city_name,z.acceptable_cities,z.zip,z.county,b.rank,b.state_name FROM zip_code_database AS z JOIN best_cities_state AS b ON z.state = b.state_name AND b.city_name = z.acceptable_cities WHERE b.city_name NOT IN (SELECT city_name FROM interim_2);
+-----+-----+-----+-----+-----+-----+
| city_name | acceptable_cities | zip | county | rank | state_name |
+-----+-----+-----+-----+-----+-----+
| Eagan | Eagan | 55121 | Dakota County | 89 | MN |
| Eagan | Eagan | 55122 | Dakota County | 89 | MN |
| Eagan | Eagan | 55123 | Dakota County | 89 | MN |
| Woodbury | Woodbury | 55125 | Washington County | 26 | MN |
| Woodbury | Woodbury | 55129 | Washington County | 26 | MN |
| Edina | Edina | 55410 | Hennepin County | 36 | MN |
| Edina | Edina | 55439 | Hennepin County | 36 | MN |
| Centennial | Centennial | 80015 | Arapahoe County | 97 | CO |
| Centennial | Centennial | 80122 | Arapahoe County | 97 | CO |
| Centennial | Centennial | 80161 | Arapahoe County | 97 | CO |
| Lakewood | Lakewood | 80226 | Jefferson County | 57 | CO |
| Lakewood | Lakewood | 80227 | Jefferson County | 57 | CO |
| Lakewood | Lakewood | 80228 | Jefferson County | 57 | CO |
| Lakewood | Lakewood | 80232 | Jefferson County | 57 | CO |
| Lakewood | Lakewood | 80235 | Jefferson County | 57 | CO |
| Lakewood | Lakewood | 80236 | Denver County | 57 | CO |
+-----+-----+-----+-----+-----+-----+
16 rows in set (0.06 sec)
```

## Inserting Leftover acceptable cities.

```
MariaDB [mtj248]> INSERT INTO interim_2 SELECT b.city_name,z.primary_city,z.zip,z.county,b.rank,b.state_name,b.population FROM zip_code_database as z JOIN best_cities_state as b on z.state = b.state_name and b.city_name = z.acceptable_cities WHERE b.city_name NOT IN (SELECT city_name FROM interim_2);
Query OK, 16 rows affected (0.10 sec)
Records: 16  Duplicates: 0  Warnings: 0

MariaDB [mtj248]> SELECT * FROM interim_2 WHERE city_name = 'saint paul';
+-----+-----+-----+-----+-----+-----+
| city_name | primary_city | zip | county | rank | state_name | population |
+-----+-----+-----+-----+-----+-----+
| saint paul | Saint Paul | 55116 | Ramsey County | 40 | MN | 295,043 |
| saint paul | Saint Paul | 55144 | Ramsey County | 40 | MN | 295,043 |
| saint paul | Saint Paul | 55188 | Ramsey County | 40 | MN | 295,043 |
| saint paul | Saint Paul | 55101 | Ramsey County | 40 | MN | 295,043 |
| saint paul | Saint Paul | 55117 | Ramsey County | 40 | MN | 295,043 |
| saint paul | Saint Paul | 55145 | Ramsey County | 40 | MN | 295,043 |
| saint paul | Saint Paul | 55191 | Ramsey County | 40 | MN | 295,043 |
| saint paul | Saint Paul | 55102 | Ramsey County | 40 | MN | 295,043 |
| saint paul | Saint Paul | 55118 | Dakota County | 40 | MN | 295,043 |
| saint paul | Saint Paul | 55146 | Ramsey County | 40 | MN | 295,043 |
| saint paul | Saint Paul | 55103 | Ramsey County | 40 | MN | 295,043 |
| saint paul | Saint Paul | 55119 | Ramsey County | 40 | MN | 295,043 |
| saint paul | Saint Paul | 55155 | Ramsey County | 40 | MN | 295,043 |
| saint paul | Saint Paul | 55104 | Ramsey County | 40 | MN | 295,043 |
| saint paul | Saint Paul | 55120 | Dakota County | 40 | MN | 295,043 |
| saint paul | Saint Paul | 55161 | Ramsey County | 40 | MN | 295,043 |
| saint paul | Saint Paul | 55105 | Ramsey County | 40 | MN | 295,043 |
| saint paul | Saint Paul | 55121 | Dakota County | 40 | MN | 295,043 |
| saint paul | Saint Paul | 55164 | Ramsey County | 40 | MN | 295,043 |
```



## FIPS code and county name with cities= best\_with\_fips

```
CREATE TABLE best_with_fips (SELECT * FROM interim_2 as i JOIN state_county_FIPS as s on i.`county` = s.`County Name` and i.state_name =s.state);
```

Best Cities with FIPS												
City Name	Primary City	Zip	County	Rank	State Name	Population	State	County Name	Status Code	Combined FIPS		
Anchorage	Anchorage	99518	Anchorage Municipality	54	AK	299,107	AK	Anchorage Municipality	H6	2020		
Anchorage	Anchorage	99501	Anchorage Municipality	54	AK	299,107	AK	Anchorage Municipality	H6	2020		
Anchorage	Anchorage	99502	Anchorage Municipality	54	AK	299,107	AK	Anchorage Municipality	H6	2020		
Anchorage	Anchorage	99503	Anchorage Municipality	54	AK	299,107	AK	Anchorage Municipality	H6	2020		
Anchorage	Anchorage	99504	Anchorage Municipality	54	AK	299,107	AK	Anchorage Municipality	H6	2020		
Anchorage	Anchorage	99507	Anchorage Municipality	54	AK	299,107	AK	Anchorage Municipality	H6	2020		
Anchorage	Anchorage	99508	Anchorage Municipality	54	AK	299,107	AK	Anchorage Municipality	H6	2020		
Anchorage	Anchorage	99513	Anchorage Municipality	54	AK	299,107	AK	Anchorage Municipality	H6	2020		
Anchorage	Anchorage	99514	Anchorage Municipality	54	AK	299,107	AK	Anchorage Municipality	H6	2020		
Anchorage	Anchorage	99516	Anchorage Municipality	54	AK	299,107	AK	Anchorage Municipality	H6	2020		
Anchorage	Anchorage	99517	Anchorage Municipality	54	AK	299,107	AK	Anchorage Municipality	H6	2020		
Anchorage	Anchorage	99519	North Slope Borough	54	AK	299,107	AK	North Slope Borough	H1	2185		
Anchorage	Anchorage	99520	North Slope Borough	54	AK	299,107	AK	North Slope Borough	H1	2185		
Fayetteville	Fayetteville	72701	Washington County	99	AR	79,037	AR	Washington County	H1	5143		
Fayetteville	Fayetteville	72702	Washington County	99	AR	79,037	AR	Washington County	H1	5143		
Fayetteville	Fayetteville	72703	Washington County	99	AR	79,037	AR	Washington County	H1	5143		
Fayetteville	Fayetteville	72704	Washington County	99	AR	79,037	AR	Washington County	H1	5143		
Pleasanton	Pleasanton	94580	Alameda County	17	CA	75,009	CA	Alameda County	H1	6001		
Pleasanton	Pleasanton	94589	Alameda County	17	CA	75,009	CA	Alameda County	H1	6001		
Berkeley	Berkeley	94701	Alameda County	86	CA	117,384	CA	Alameda County	H1	6001		
Berkeley	Berkeley	94702	Alameda County	86	CA	117,384	CA	Alameda County	H1	6001		
Berkeley	Berkeley	94703	Alameda County	86	CA	117,384	CA	Alameda County	H1	6001		
Berkeley	Berkeley	94704	Alameda County	86	CA	117,384	CA	Alameda County	H1	6001		
Berkeley	Berkeley	94705	Alameda County	86	CA	117,384	CA	Alameda County	H1	6001		
Berkeley	Berkeley	94707	Alameda County	86	CA	117,384	CA	Alameda County	H1	6001		
Berkeley	Berkeley	94708	Alameda County	86	CA	117,384	CA	Alameda County	H1	6001		
Berkeley	Berkeley	94709	Alameda County	86	CA	117,384	CA	Alameda County	H1	6001		
Berkeley	Berkeley	94710	Alameda County	86	CA	117,384	CA	Alameda County	H1	6001		
Berkeley	Berkeley	94711	Alameda County	86	CA	117,384	CA	Alameda County	H1	6001		
Berkeley	Berkeley	94720	Alameda County	86	CA	117,384	CA	Alameda County	H1	6001		
Walnut Creek	Walnut Creek	94598	Contra Costa County	34	CA	66,799	CA	Contra Costa County	H1	6013		
Walnut Creek	Walnut Creek	94599	Contra Costa County	34	CA	66,799	CA	Contra Costa County	H1	6013		
Walnut Creek	Walnut Creek	94600	Contra Costa County	34	CA	66,799	CA	Contra Costa County	H1	6013		
Walnut Creek	Walnut Creek	94597	Contra Costa County	34	CA	66,799	CA	Contra Costa County	H1	6013		
San Rafael	San Rafael	94915	Marin County	64	CA	58,819	CA	Marin County	H1	6041		
San Rafael	San Rafael	94901	Marin County	64	CA	58,819	CA	Marin County	H1	6041		
San Rafael	San Rafael	94912	Marin County	64	CA	58,819	CA	Marin County	H1	6041		
San Rafael	San Rafael	94913	Marin County	64	CA	58,819	CA	Marin County	H1	6041		
Irvine	Irvine	92606	Orange County	59	CA	238,474	CA	Orange County	H1	6059		
Irvine	Irvine	92612	Orange County	59	CA	238,474	CA	Orange County	H1	6059		
Irvine	Irvine	92613	Orange County	59	CA	238,474	CA	Orange County	H1	6059		
Irvine	Irvine	92616	Orange County	59	CA	238,474	CA	Orange County	H1	6059		
Irvine	Irvine	92617	Orange County	59	CA	238,474	CA	Orange County	H1	6059		
Irvine	Irvine	92618	Orange County	59	CA	238,474	CA	Orange County	H1	6059		
Irvine	Irvine	92619	Orange County	59	CA	238,474	CA	Orange County	H1	6059		
Irvine	Irvine	92620	Orange County	59	CA	238,474	CA	Orange County	H1	6059		
Irvine	Irvine	92623	Orange County	59	CA	238,474	CA	Orange County	H1	6059		
Irvine	Irvine	92697	Orange County	59	CA	238,474	CA	Orange County	H1	6059		
Irvine	Irvine	92709	Orange County	59	CA	238,474	CA	Orange County	H1	6059		
Irvine	Irvine	92710	Orange County	59	CA	238,474	CA	Orange County	H1	6059		
Irvine	Irvine	92712	Orange County	59	CA	238,474	CA	Orange County	H1	6059		
Irvine	Irvine	92603	Orange County	59	CA	238,474	CA	Orange County	H1	6059		

**2016 results + best\_with\_fips = results table.**

```
CREATE TABLE results (SELECT DISTINCT b.city_name ,b.state_name ,b.`County Name`,b.`Combined FIPS`,b.rank ,r.votes_dem ,r.votes_gop ,r.county_name,r.combined_fips FROM best_with_fips as b JOIN 2016results as r on b.county = r.county_name and b.`Combined FIPS` = r.combined_fips ORDER BY b.rank);
```



hj997@F4Linux1:~

```
| Anchorage | AK      | Anchorage Municipality | 2020 | 54 | 93003
| 130413 | Anchorage Municipality | 2020 |
```

115 rows in set (0.00 sec)

MariaDB [mtj248]> select \* from results;

city_name	state_name	County Name	Combined FIPS	rank	votes_dem	votes_gop	county_name	combined_fips
Rochester	MN	Olmsted County	27109	1	36266	35668	Olmsted County	27109
Iowa City	IA	Johnson County	19103	2	49942	20993	Johnson County	19103
Ann Arbor	MI	Washtenaw County	26161	3	128025	50335	Washtenaw County	26161
Olympia	WA	Thurston County	53067	4	65015	46219	Thurston County	53067
Charlottesville	VA	Charlottesville city	51540	5	17865	2951	Charlottesville city	51540
Charlottesville	VA	Albemarle County	51003	5	33297	19232	Albemarle County	51003
Bellevue	WA	King County	53033	6	657149	197781	King County	53033
Palo Alto	CA	Santa Clara County	6085	7	483472	137452	Santa Clara County	6085
Palo Alto	CA	San Mateo County	6081	7	219580	53731	San Mateo County	6081
Madison	WI	Waukesha County	55133	8	79200	142521	Waukesha County	55133
Madison	WI	Dane County	55025	8	217506	71270	Dane County	55025
Overland Park	KS	Johnson County	20091	9	126324	133907	Johnson County	20091
Bismarck	ND	Burleigh County	38015	10	10865	32499	Burleigh County	38015
Burlington	VT	Chittenden County	50007	11	54463	18298	Chittenden County	50007
Newton	MA	Middlesex County	25017	12	508919	216163	Middlesex County	25017
Rockville	MD	Montgomery County	24031	13	309761	82985	Montgomery County	24031
Ithaca	NY	Tompkins County	36109	14	25555	9647	Tompkins County	36109
Franklin	TN	Williamson County	47187	15	30992	68160	Williamson County	47187
Fort Collins	CO	Larimer County	8069	16	92170	82624	Larimer County	8069
Pleasanton	CA	Alameda County	6001	17	486351	91189	Alameda County	6001
Columbia	MD	Howard County	24027	18	93808	44792	Howard County	24027
Arlington	VA	Arlington County	51013	19	91879	20155	Arlington County	51013
Pittsburgh	PA	Allegheny County	42003	20	363017	257488	Allegheny County	42003
Cary	NC	Wake County	37183	21	298253	193607	Wake County	37183
Manhattan	KS	Riley County	20161	22	8892	9817	Riley County	20161
Brentwood	ME	Cumberland County	23005	23	102935	57697	Cumberland County	23005
Frederick	MD	Frederick County	24021	24	51891	56472	Frederick County	24021
Ames	IA	Story County	19169	25	25085	19111	Story County	19169
Woodbury	MN	Washington County	27163	26	67086	64429	Washington County	27163
Fairfax	VA	Fairfax County	51059	27	354485	157837	Fairfax County	51059
Fairfax	VA	Fairfax city	51600	27	7363	3695	Fairfax city	51600
Cambridge	MA	Middlesex County	25017	28	508919	216163	Middlesex County	25017
Bethesda	MD	Montgomery County	24031	29	309761	82985	Montgomery County	24031
West Hartford	CT	Hartford County	9003	30	233789	147912	Hartford County	9003
Fargo	ND	Cass County	38017	31	31291	39738	Cass County	38017
Alexandria	VA	Fairfax County	51059	32	354485	157837	Fairfax County	51059
Alexandria	VA	Alexandria city	51510	32	57147	13241	Alexandria city	51510
Columbia	MO	Boone County	29019	33	41072	36146	Boone County	29019
Walnut Creek	CA	Contra Costa County	6013	34	286658	105819	Contra Costa County	6013
Boulder	CO	Boulder County	8013	35	124715	38766	Boulder County	8013
Edina	MN	Hennepin County	27053	36	429283	191768	Hennepin County	27053
Naperville	IL	DuPage County	17043	37	222499	164355	DuPage County	17043
Naperville	IL	Will County	17197	37	146230	129726	Will County	17197
Chesapeake	VA	Chesapeake city	51550	38	52554	53988	Chesapeake city	51550
Sioux Falls	SD	Minnehaha County	46099	39	30610	42043	Minnehaha County	46099
Sioux Falls	SD	Lincoln County	46083	39	8076	15499	Lincoln County	46083
saint paul	MN	Washington County	27163	40	67086	64429	Washington County	27163
saint paul	MN	Ramsey County	27123	40	176929	70778	Ramsey County	27123
saint paul	MN	Hennepin County	27053	40	429283	191768	Hennepin County	27053
saint paul	MN	Dakota County	27037	40	110251	99624	Dakota County	27037
San Mateo	CA	San Mateo County	6081	41	219580	53731	San Mateo County	6081
Bozeman	MT	Gallatin County	30031	42	23879	23360	Gallatin County	30031

