



# US Car Accidents

R Shiny App:

[https://melanie-m-zheng.shinyapps.io/us car accidents/](https://melanie-m-zheng.shinyapps.io/us_car_accidents/)

# Overview

Which State has the most car accidents?

-Count

-Count per (1k) capita

-Trends?

## US CAR ACCIDENTS

OVERVIEW

EXPLORE

DATA

ABOUT ME

### Car Accidents in the U.S.

The map aggregates 2.6 million US car accident records from January 2017 to December 2019, excluding Hawaii and Alaska.

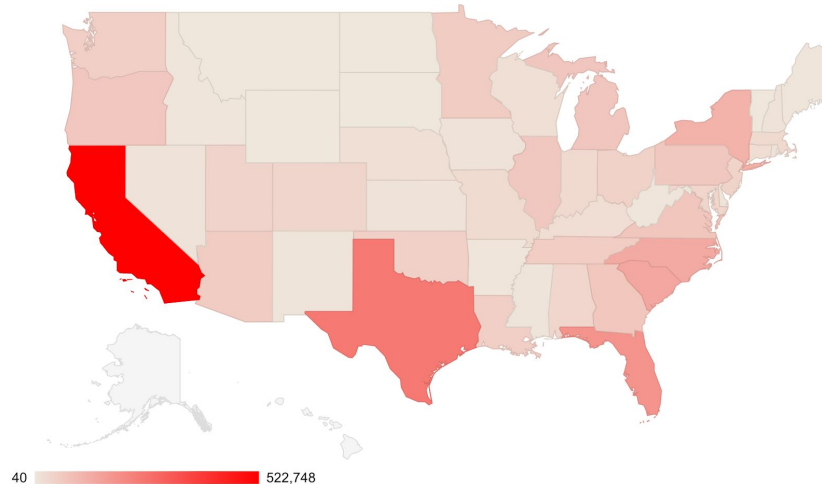
#### CHOOSE FROM:

- ☒ Count of Accidents
- ☐ Accidents per 1,000 residents

#### YEAR RANGE



Hover over the states to see more detail.



NO.1: California

NO.2: Texas

NO.3: Florida

## Car Accidents in the U.S.

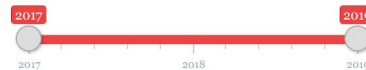
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### CHOOSE FROM:

- ☐ Count of Accidents
- ☒ Accidents per 1,000 residents

### YEAR RANGE

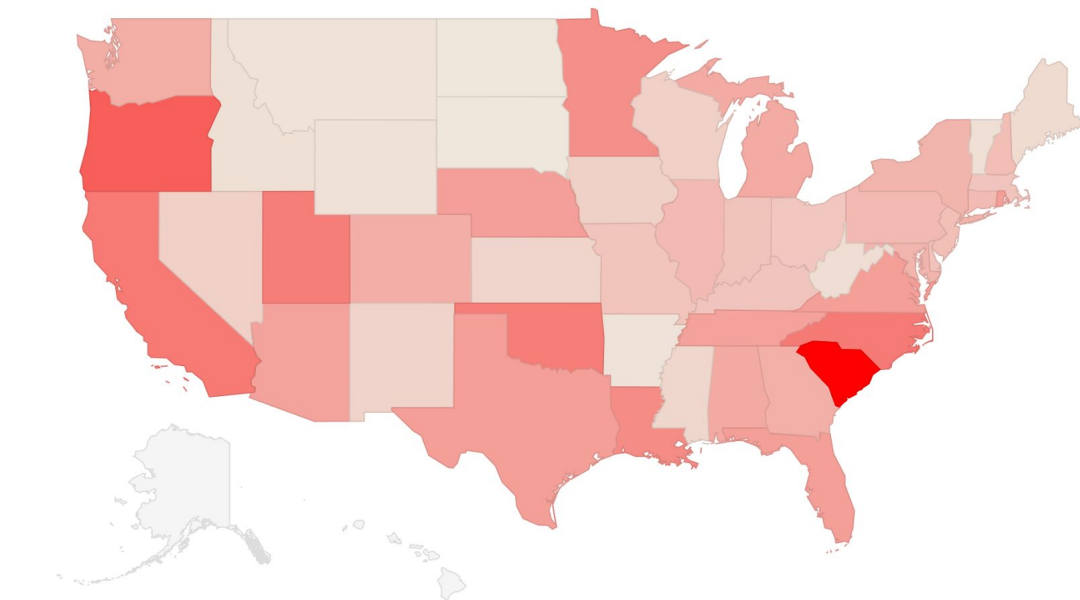


Hover over the states to see more detail.

NO.1: South Carolina

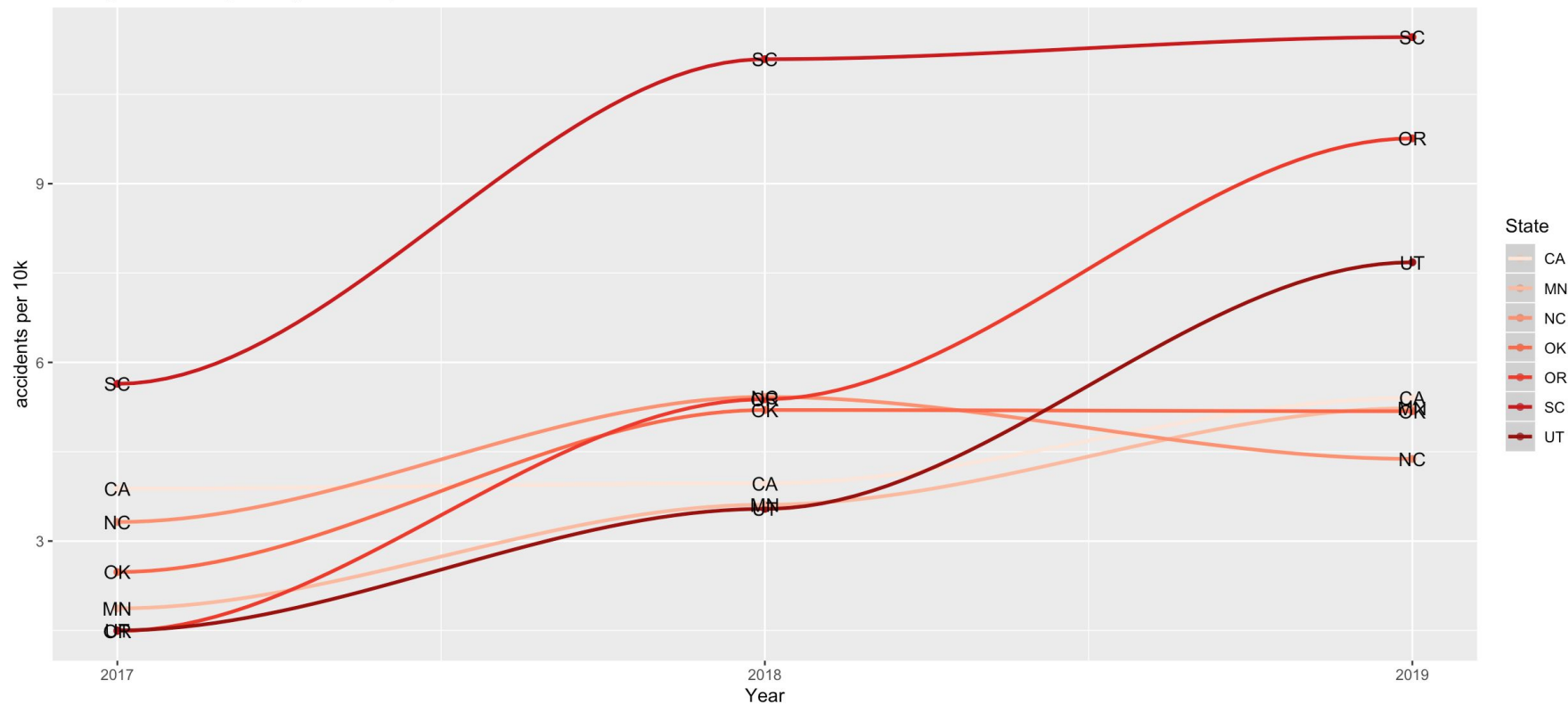
NO.2: Oregon

NO.3: California



0.05 28.19

Change over the past 3 years. Top 7 States in 2019.



# Explore

- Selection Panel

- Top 3 counties

- Any findings from the map?

(highways)

## US CAR ACCIDENTS

[OVERVIEW](#)[EXPLORE](#)[DATA](#)[ABOUT ME](#)

SELECT A STATE:

NY

DATE RANGE:

Dec/01/2019

-

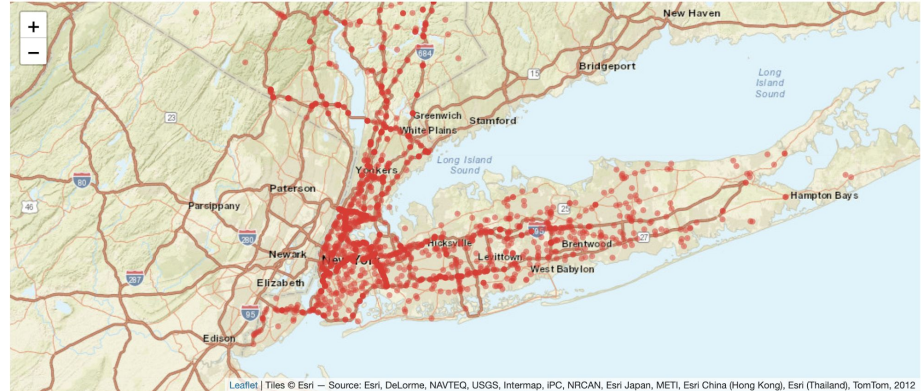
Dec/31/2019

FILTER BY SEVERITY:

☒ 1 ☒ 2 ☒ 3 ☒ 4[MAP](#)[SUMMARY](#)[VARIABLES](#)[TRENDS](#)[INTERESTING FINDINGS](#)

Zoom in to view more details

### TOP 3 COUNTIES

**NO.1: Monroe**  
Count: 431**NO.2: Queens**  
Count: 314**NO.3: Suffolk**  
Count: 278

# Severity vs Day\_Night

SELECT A STATE:

NY ▼

DATE RANGE:

Dec/01/2019 - Dec/31/2019

FILTER BY SEVERITY:

☒ 1 ☒ 2 ☒ 3 ☒ 4



VS

SELECT A STATE:

NY ▼

DATE RANGE:

Dec/01/2019 - Dec/31/2019

FILTER BY SEVERITY:

☐ 1 ☐ 2 ☐ 3 ☒ 4



# Weather Variables

- Interactive dropdown

HEAT MAP/DENSITY GRAPH

Select a variable:

temperature

Select another variable:

humidity

humidity

windchill

pressure

visibility

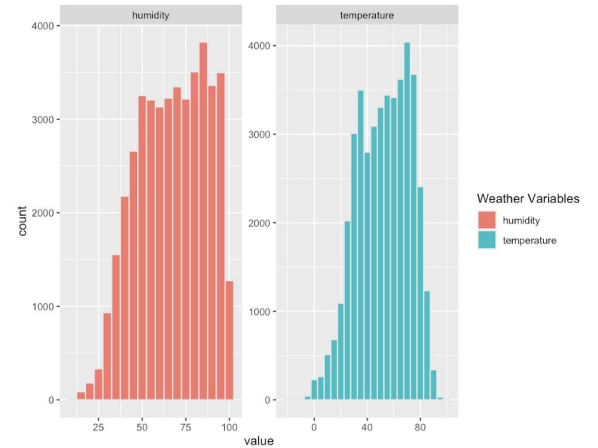
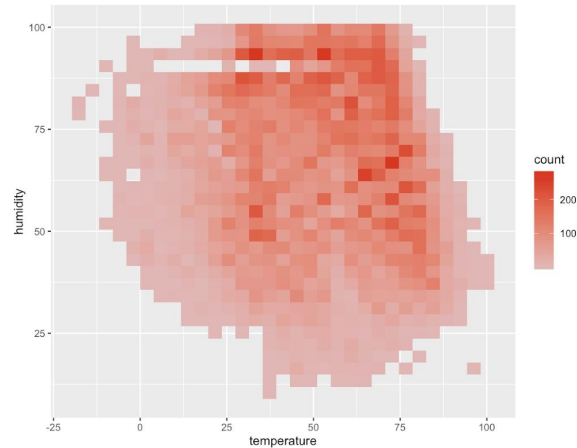
windspeed

precipitation

VARIABLES

TRENDS

INTERESTING FINDINGS



# Time Series Chart

SELECT A STATE:

NY

DATE RANGE:

Sep/01/2019

-

Dec/31/2019

FILTER BY SEVERITY:

☒ 1 ☒ 2 ☒ 3 ☒ 4

MAP

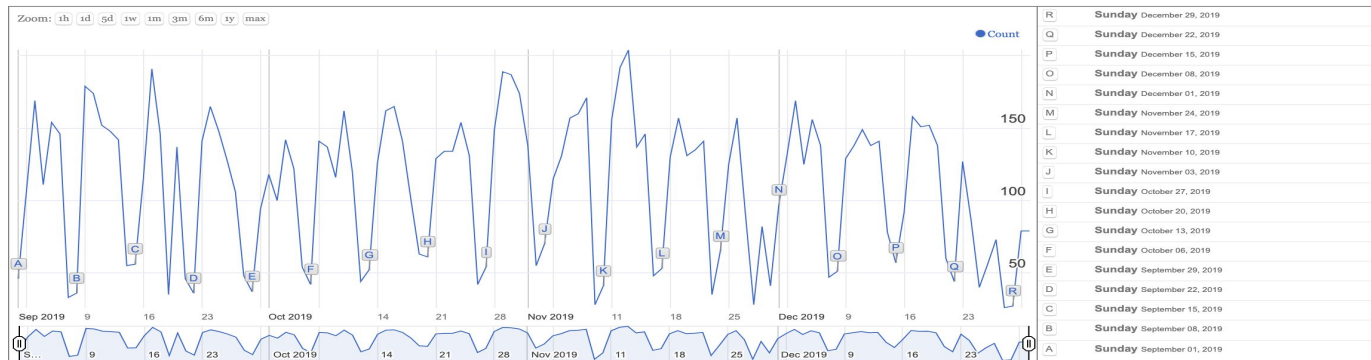
SUMMARY

VARIABLES

TRENDS

INTERESTING FINDINGS

## Number of Car Accidents Over Time





# Data Tables

## US CAR ACCIDENTS

[OVERVIEW](#)[EXPLORE](#)[DATA](#)[ABOUT ME](#)

Dataset is very large with 3 million records.

Choose a state:

AL

[ACCIDENTS DATA](#)[POPULATION DATA](#)[INSURANCE DATA](#)

Source: [Kaggle](#)

Show **10** entries

Search:

Severity	Start_Lat	Start_Lng	City	County	State	temperature	windchill	humidity	pressure	visibility	windspeed	pre
2	31.987831	-85.114471	Eufaula	Barbour	AL	82.9		49	29.96	10		
2	32.765179	-85.263687	Valley	Chambers	AL	85.6		50	30.1	10	3.5	
2	32.487099	-84.99881	Phenix City	Russell	AL	73		93	30.06	10	3.5	
2	32.080082	-85.149788	Pittsview	Russell	AL	82.4		79	30	10	3.5	
2	31.54051	-87.908562	Jackson	Clarke	AL	59	59	83	29.77	10	0	
2	33.174229	-87.475052	Tuscaloosa	Tuscaloosa	AL	49	49	83	29.85	10	3	
2	33.165249	-87.547287	Tuscaloosa	Tuscaloosa	AL	84	84	34	29.95	10	6	