

## Confirmed Covid19 Cases per Capita in the US (11/09/2020)

The New York Times

U.S. | Covid in the U.S.: Latest Map and Case Count

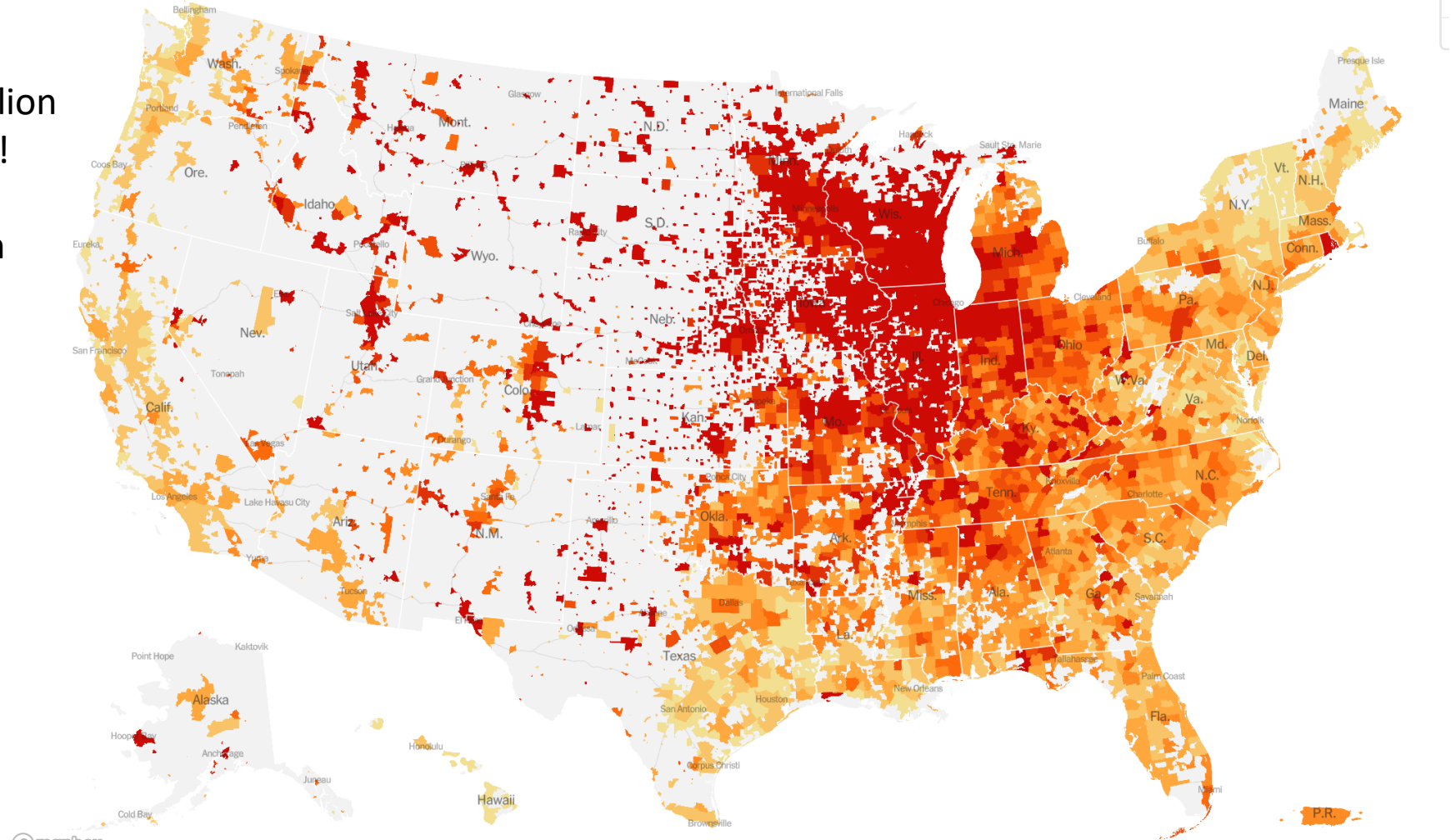


Today, 11/09/2020  
The US overpassed 10 million  
Covid19 confirmed cases!!

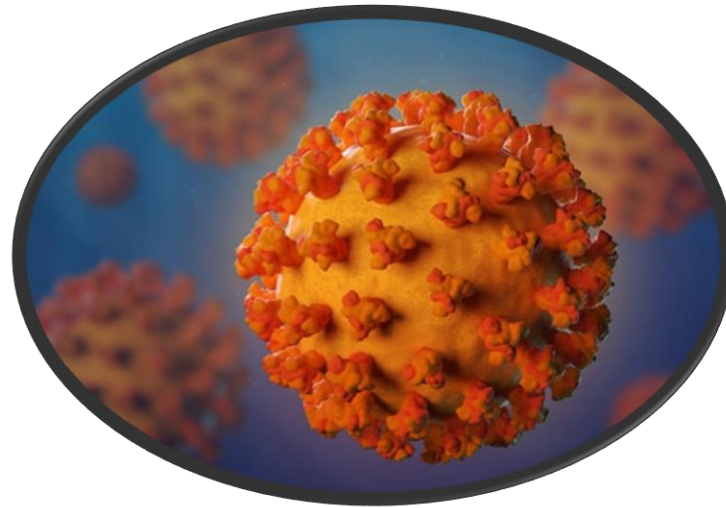
3% of the total population

### Team Members:

- Anna Rischitelli
- Priya Arunachalam
- Nataliia Sokolova
- Vincent Durcan
- Shadia Duery

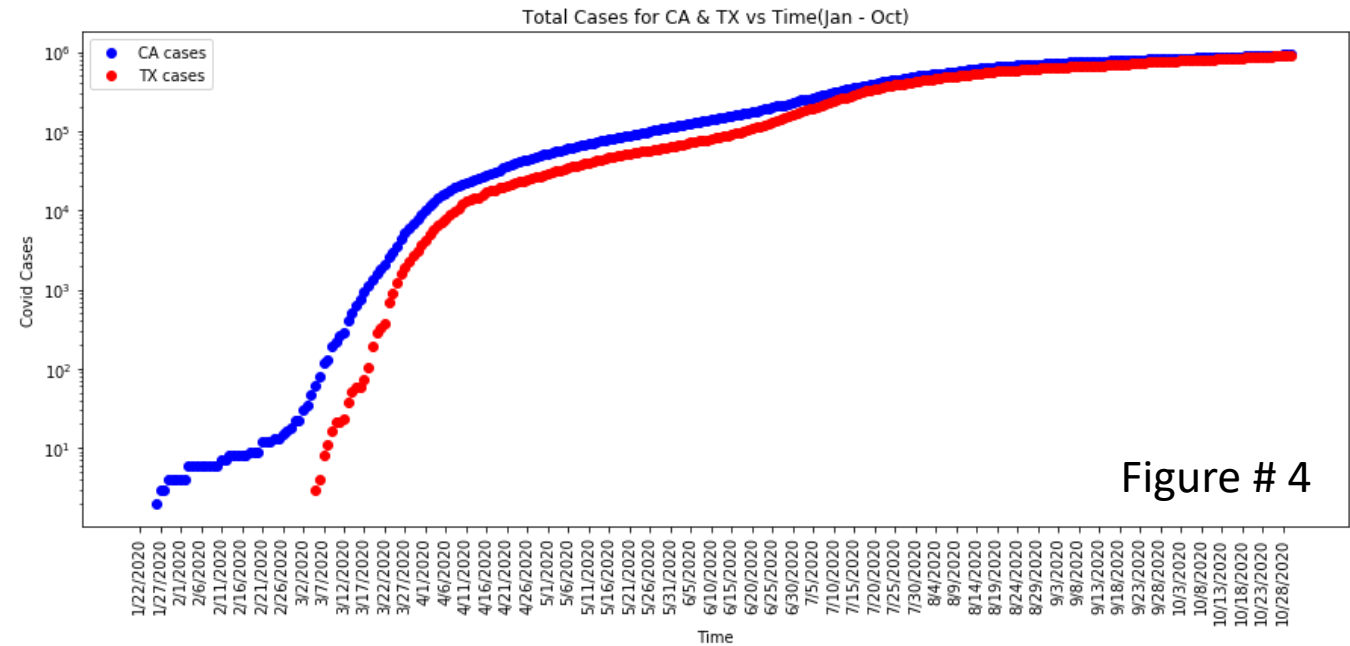
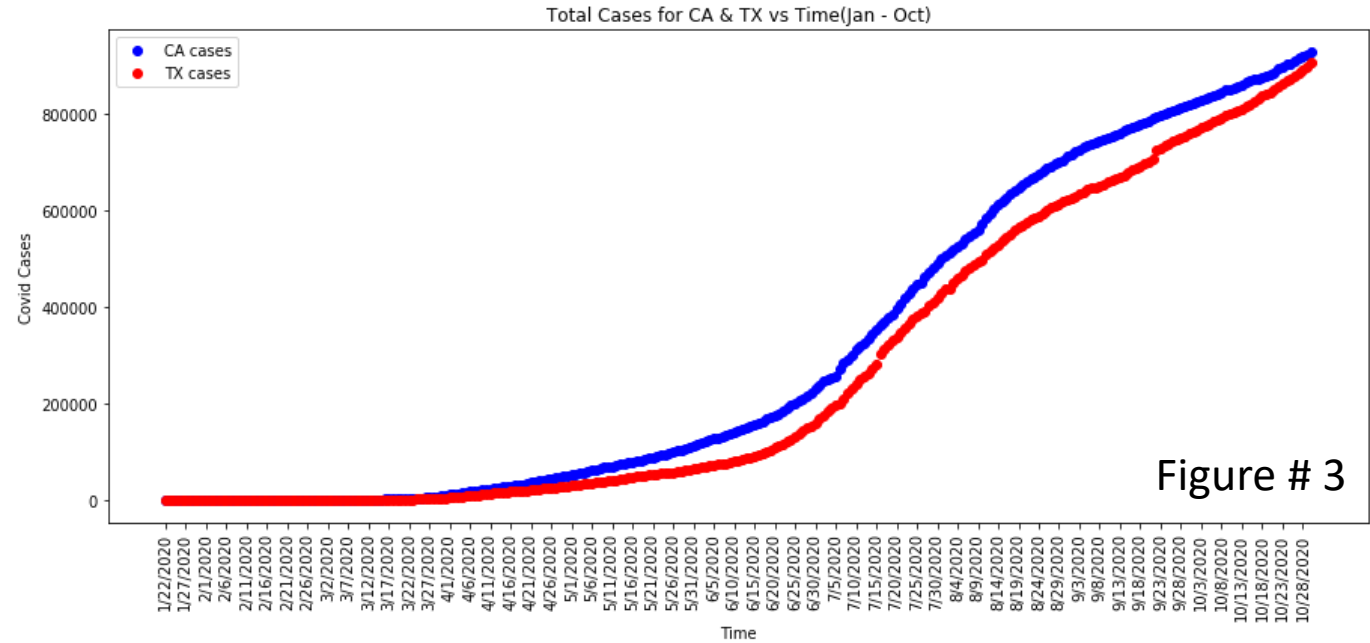
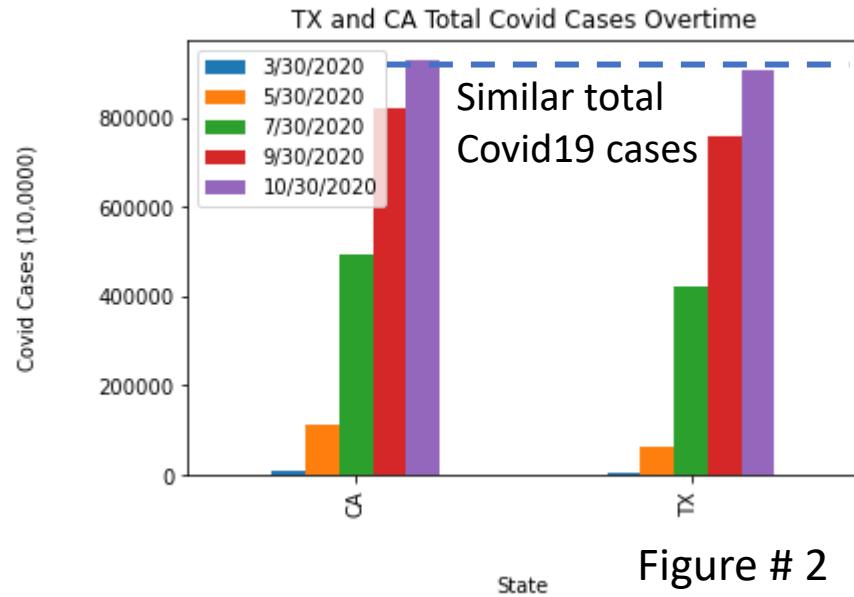
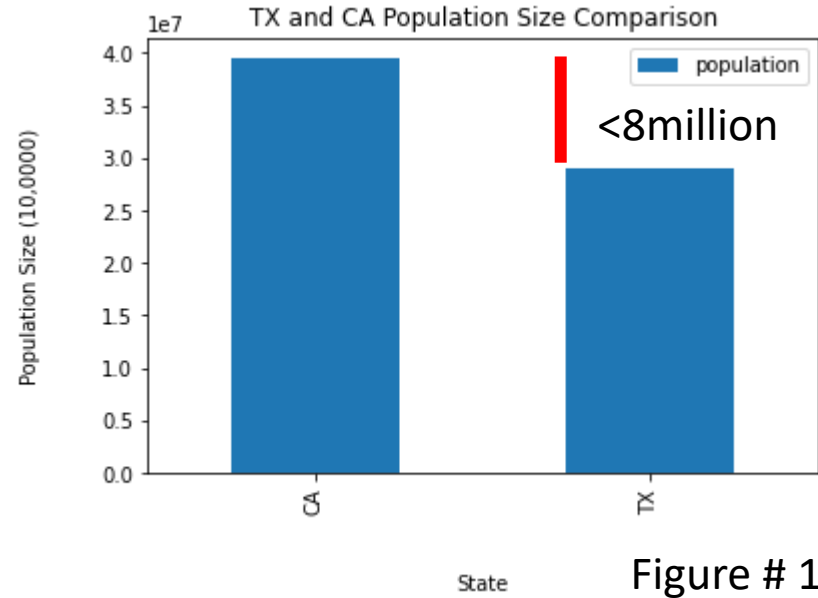


# Do rates of Covid19 differ based on State policies implemented?

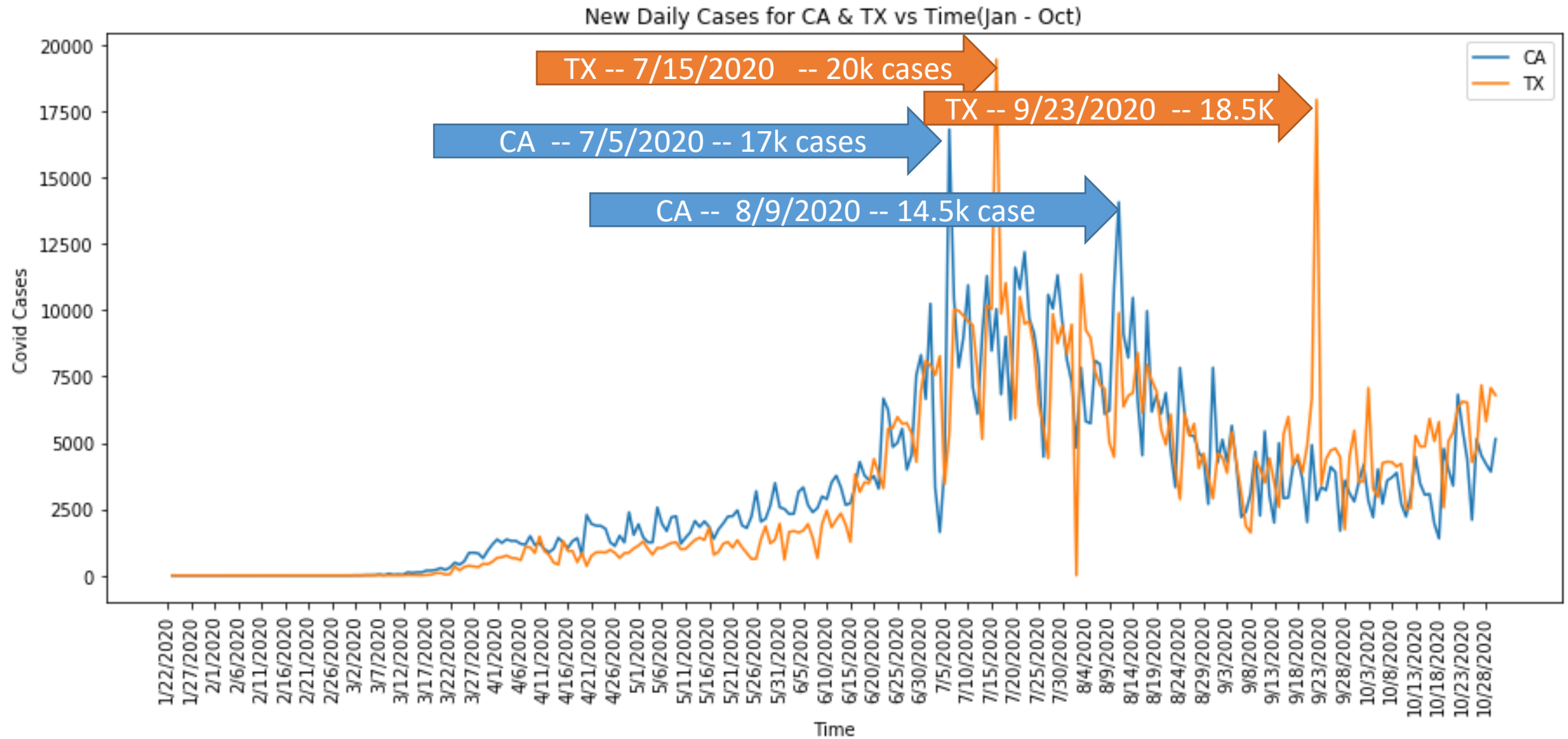


Comparison between California and Texas

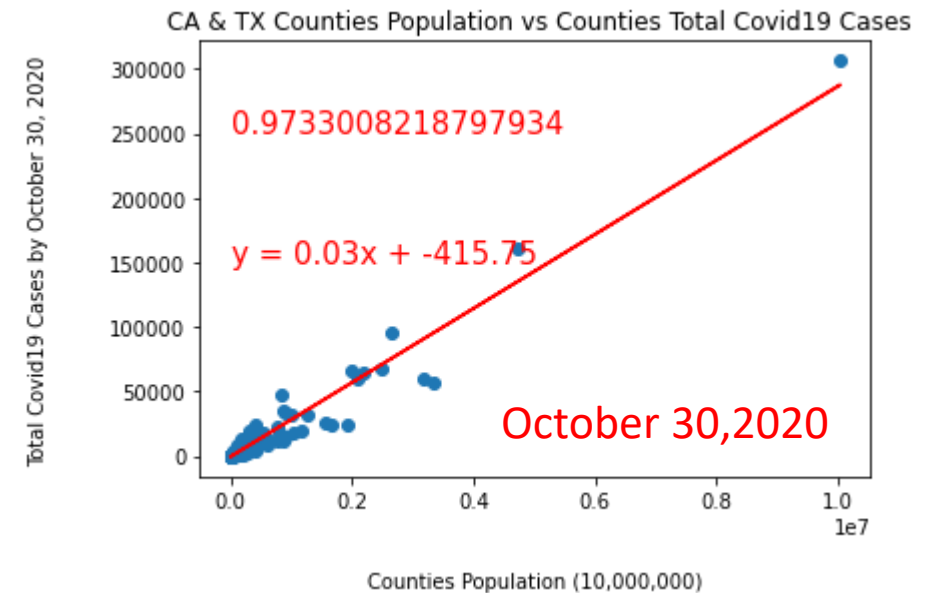
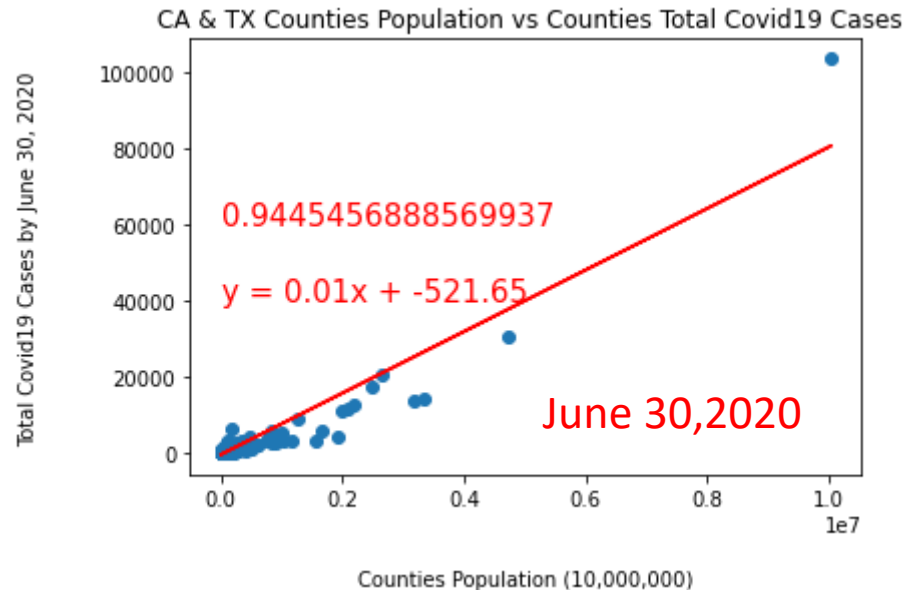
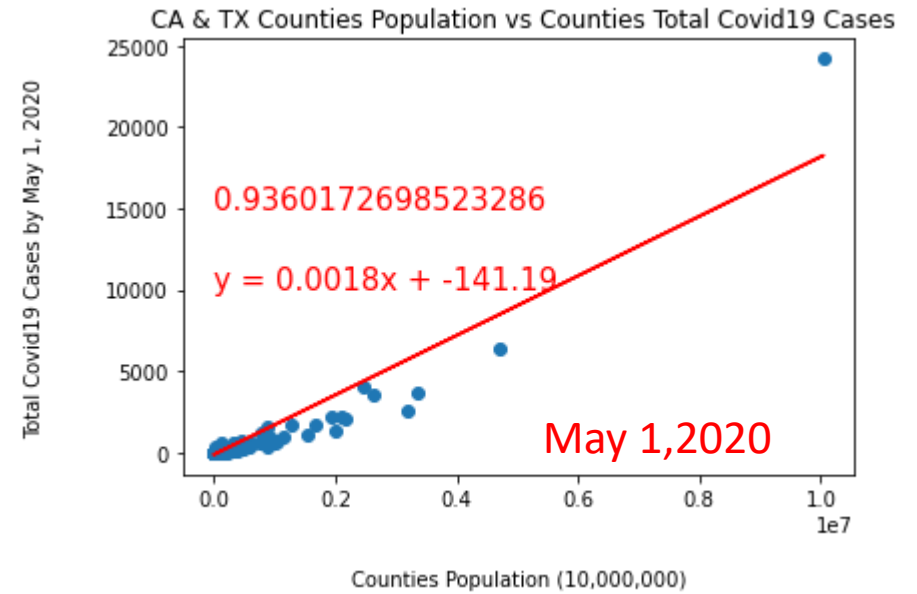
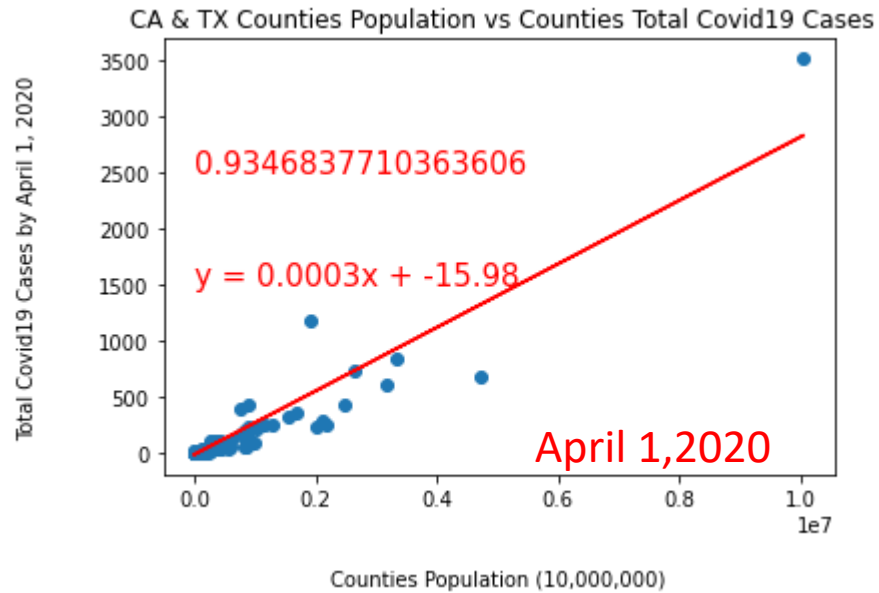
# Number of total confirmed Covid19 cases in CA and TX from Jan-Oct 2020



# Number of new daily confirmed Covid19 cases in CA and TX from Jan-Oct 2020



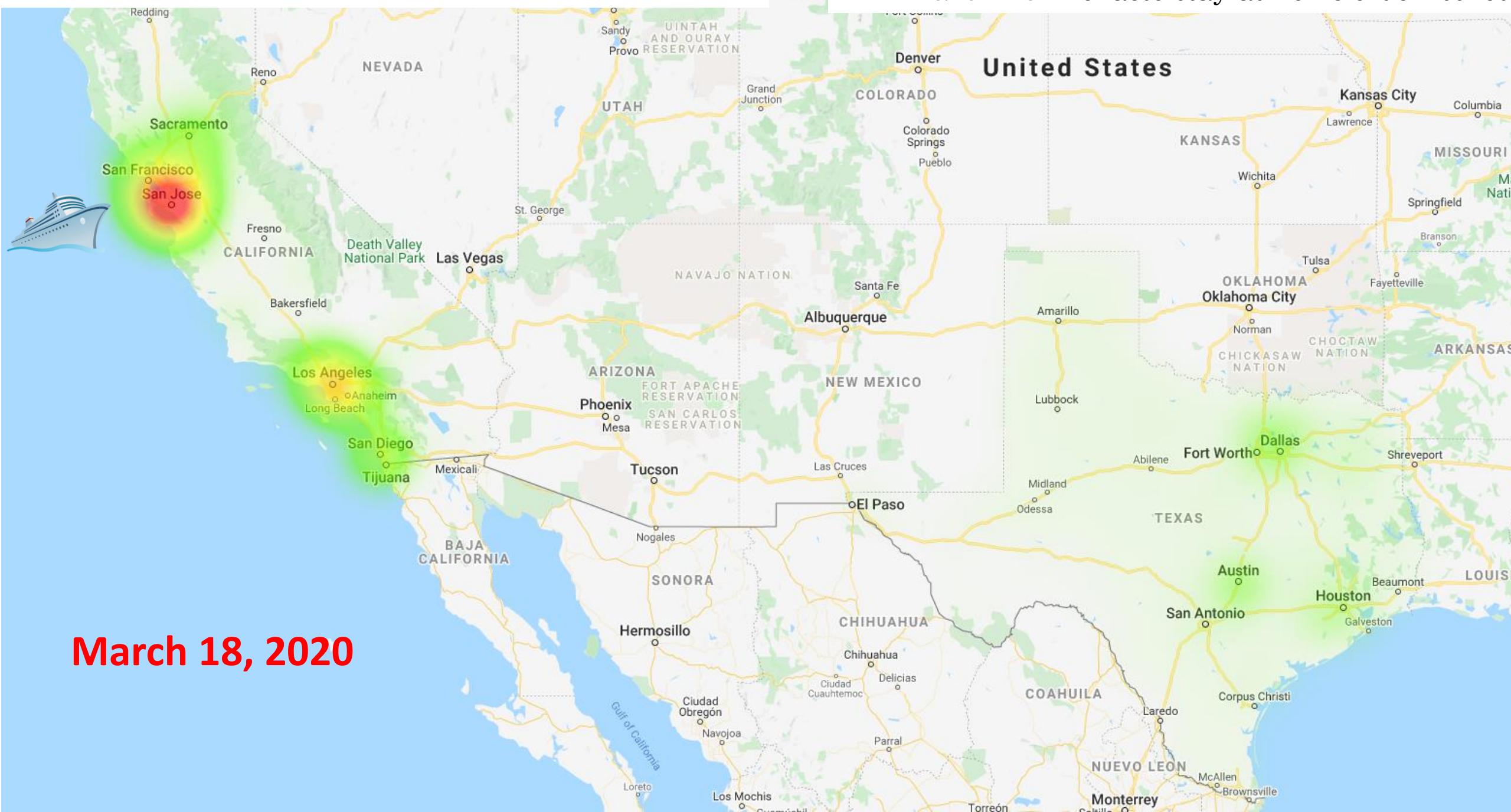
# Exploratory Data Analysis: Total Confirmed Cases Related to Population Size





CA- March 19 -State-wide stay-at-home order issued

TX- March 19 -De facto stay-at-home order issued



March 18, 2020





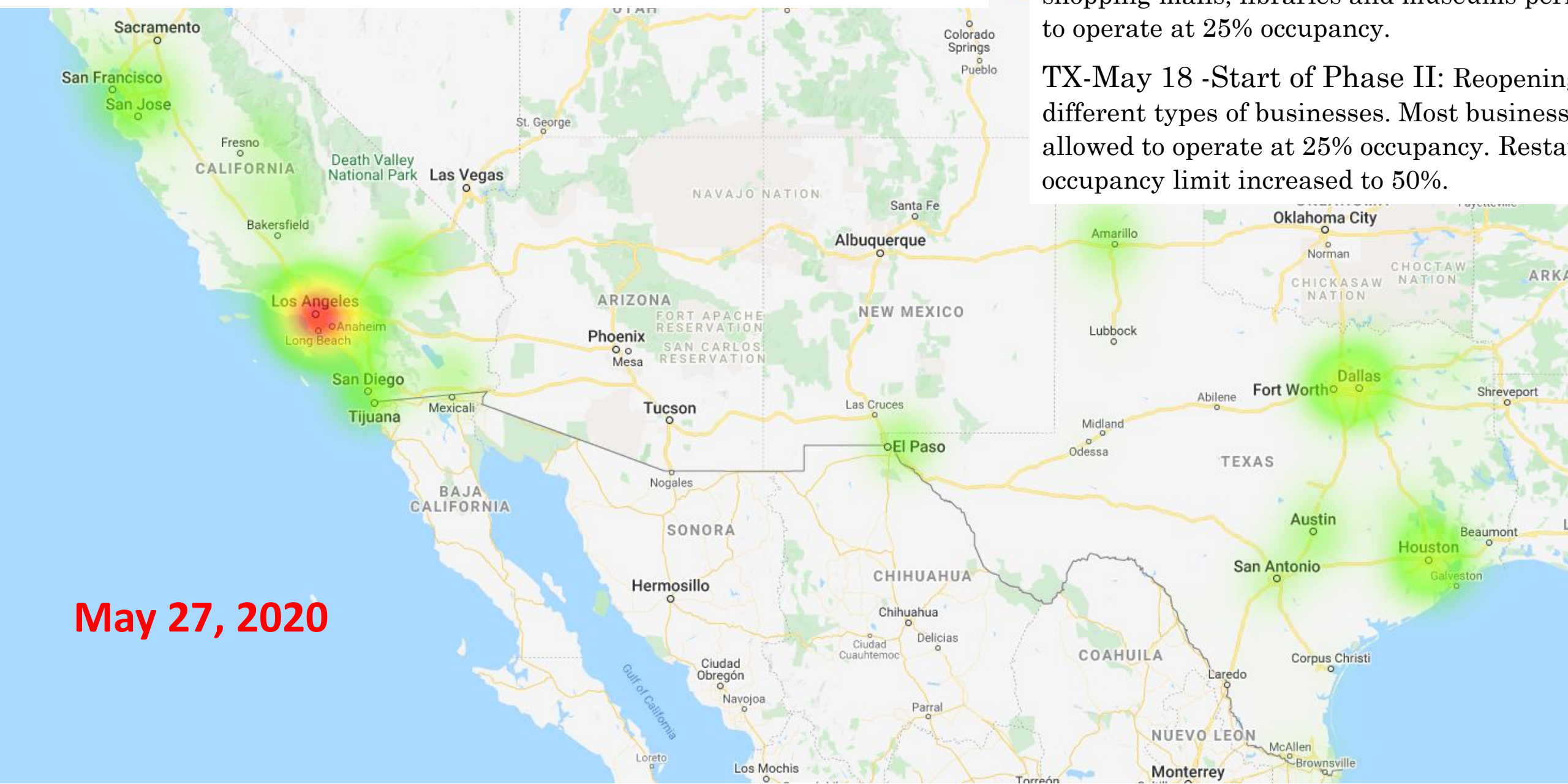


CA-May 7 - State entered Stage 2 of its 4-stage reopening roadmap

CA-May 18 - Businesses that were part of Stage 3 allowed to reopen

TX- May 1 - Start of Phase I: Retail establishments, restaurants, movie theaters, shopping malls, libraries and museums permitted to operate at 25% occupancy.

TX-May 18 -Start of Phase II: Reopening of different types of businesses. Most businesses allowed to operate at 25% occupancy. Restaurant occupancy limit increased to 50%.

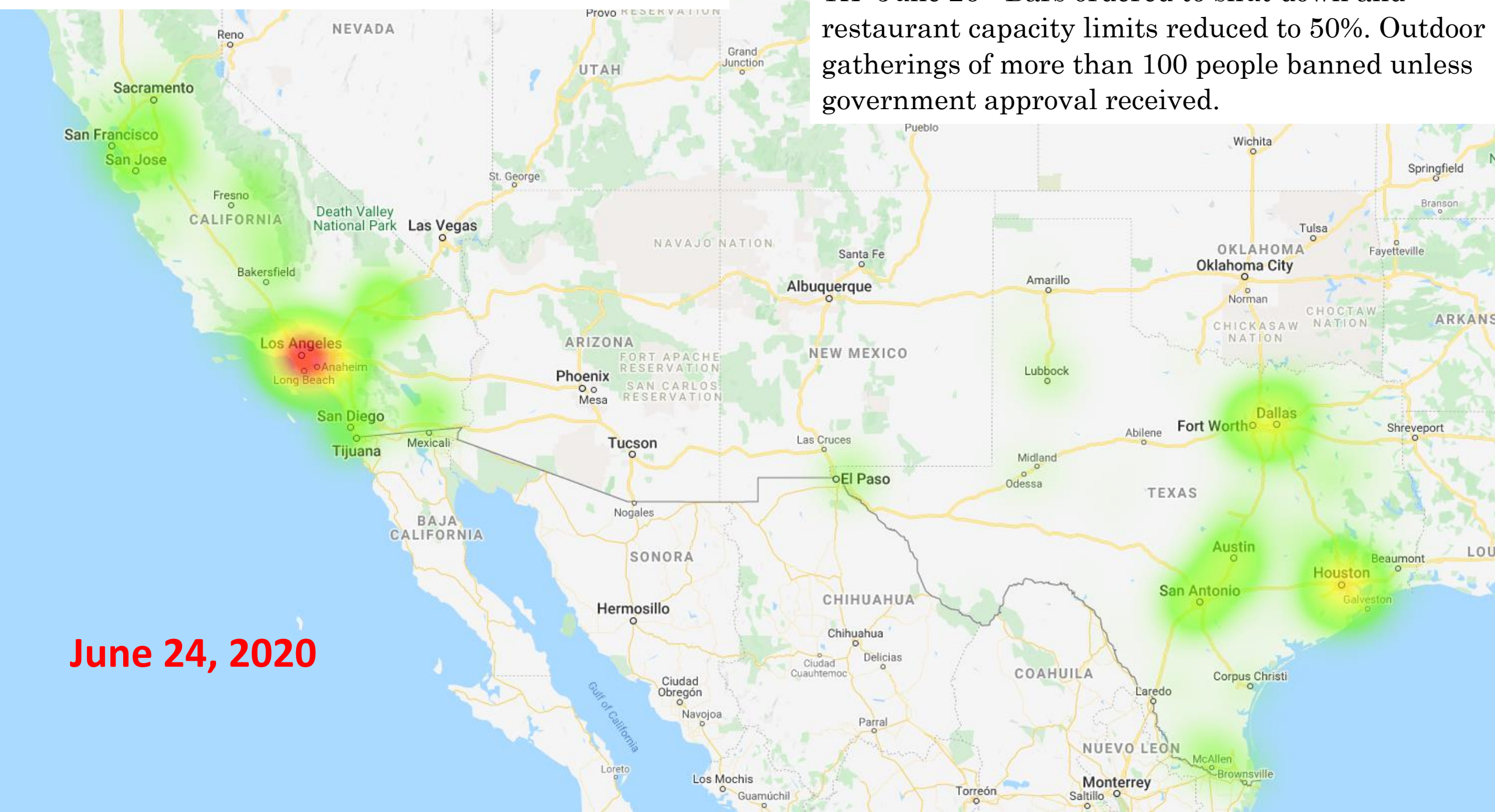


**May 27, 2020**



CA- June 28 - Bars ordered to close in several counties

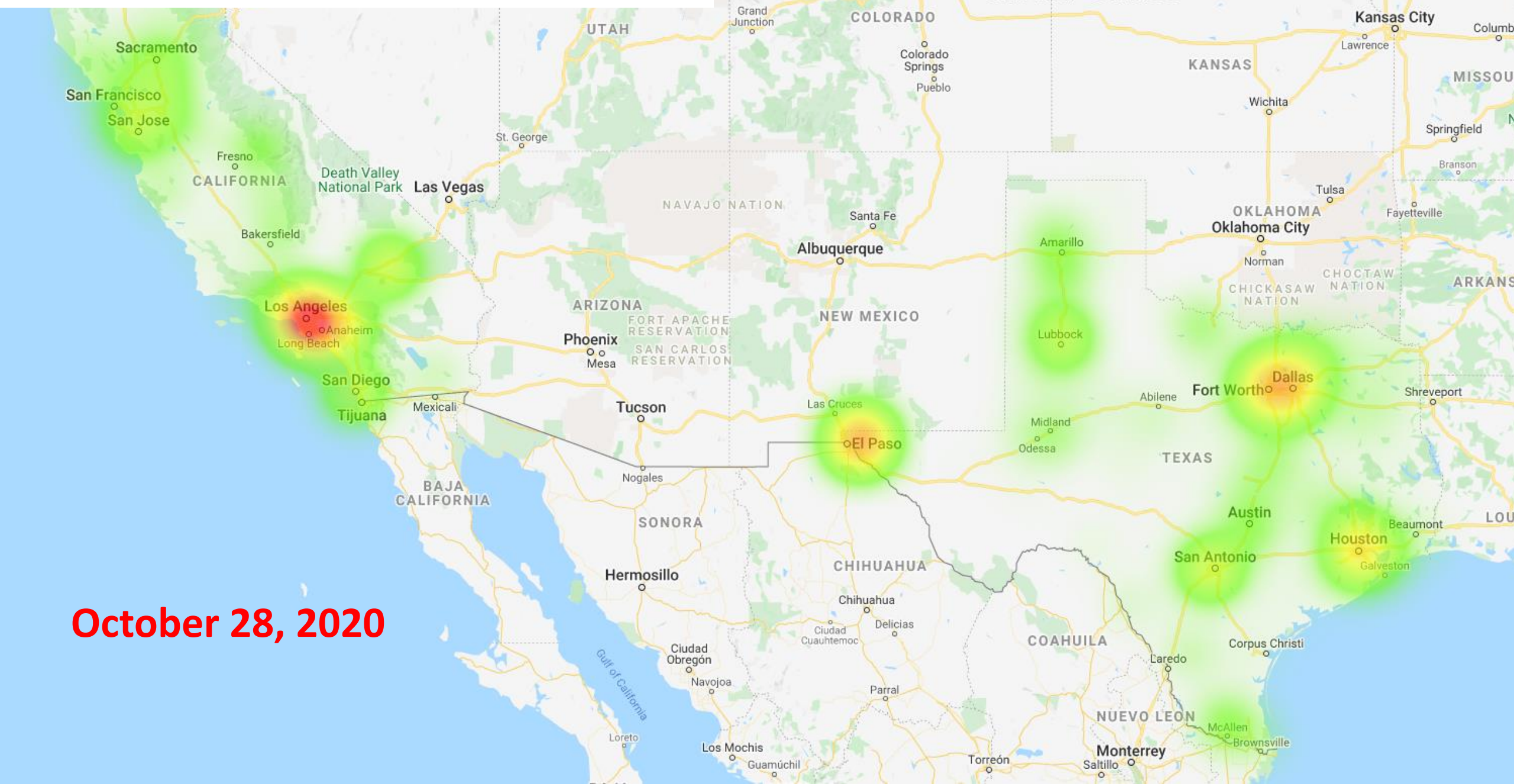
TX- June 26 - Bars ordered to shut down and restaurant capacity limits reduced to 50%. Outdoor gatherings of more than 100 people banned unless government approval received.



June 24, 2020

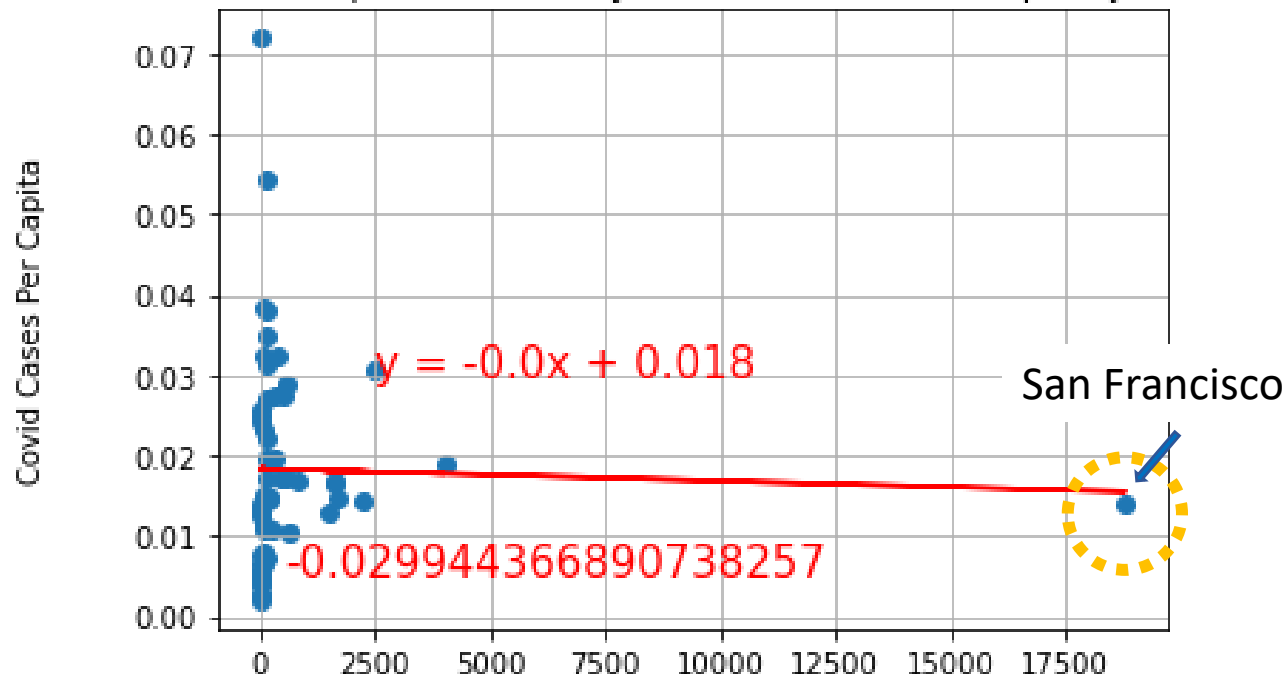


CA - Sep 29 -Majority of population now under  
"Substantial" or lower BSE restrictions.



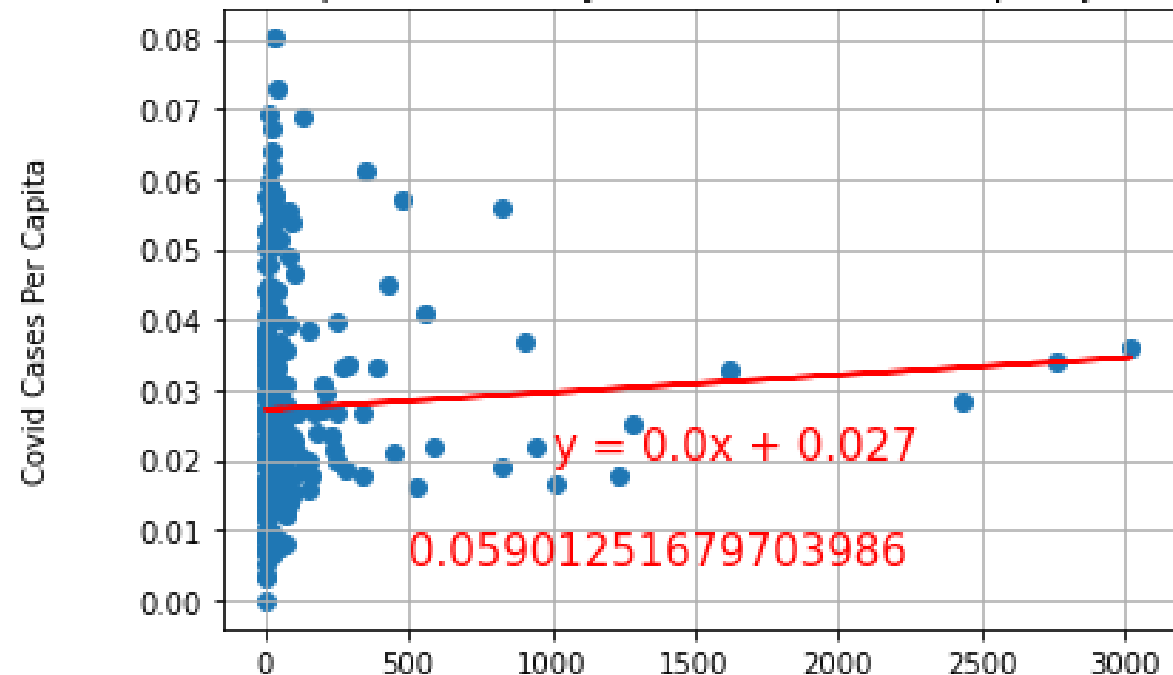
State	Population (million)	Difference in Population	Land Area (Sq. Mi.)	Difference in Land Area	People per Sq. Mi.
CA	37	CA 8 million more	155,779	TX 105K Sq. Mi. more	254
TX	29		261,267		105

California Population Density vs Covid Cases Per Capita (Jan-Oct)



Population Density

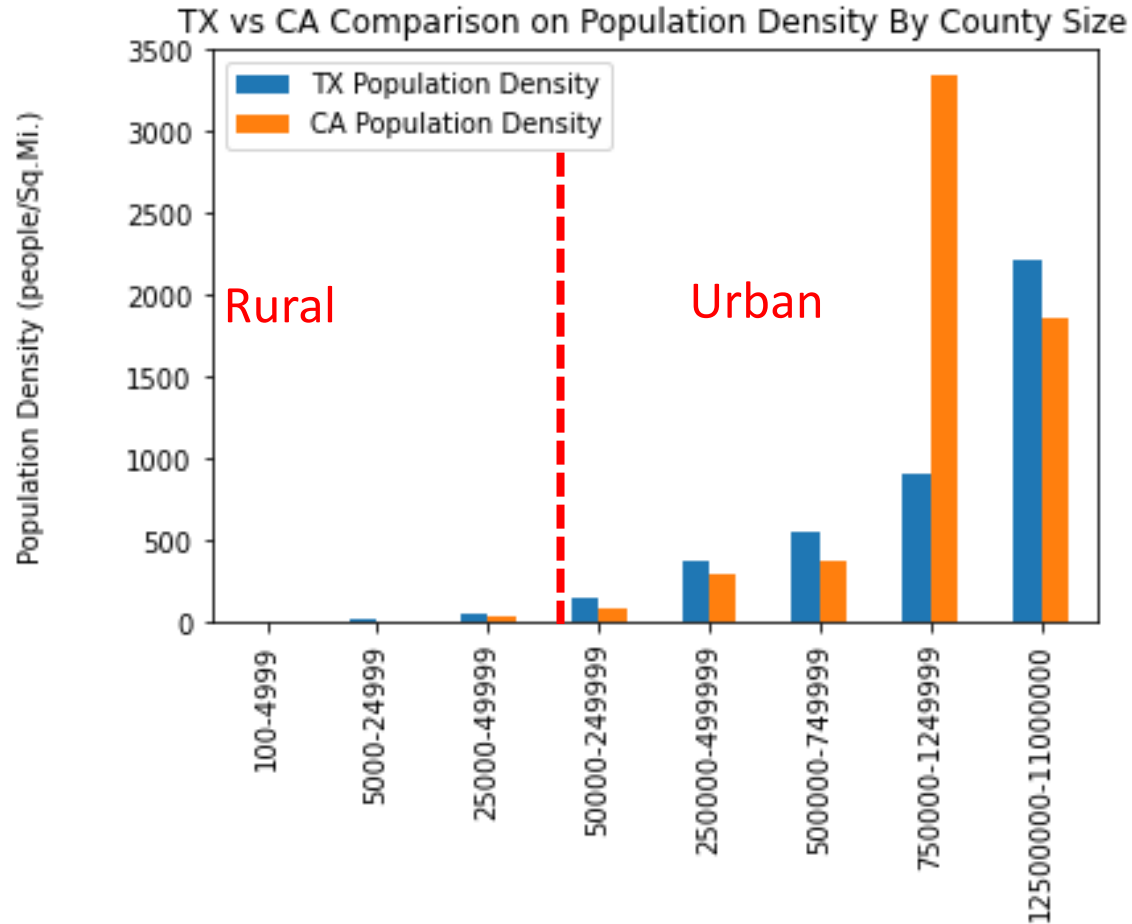
Texas Population Density vs Covid Cases Per Capita (Jan-Oct)



Population Density

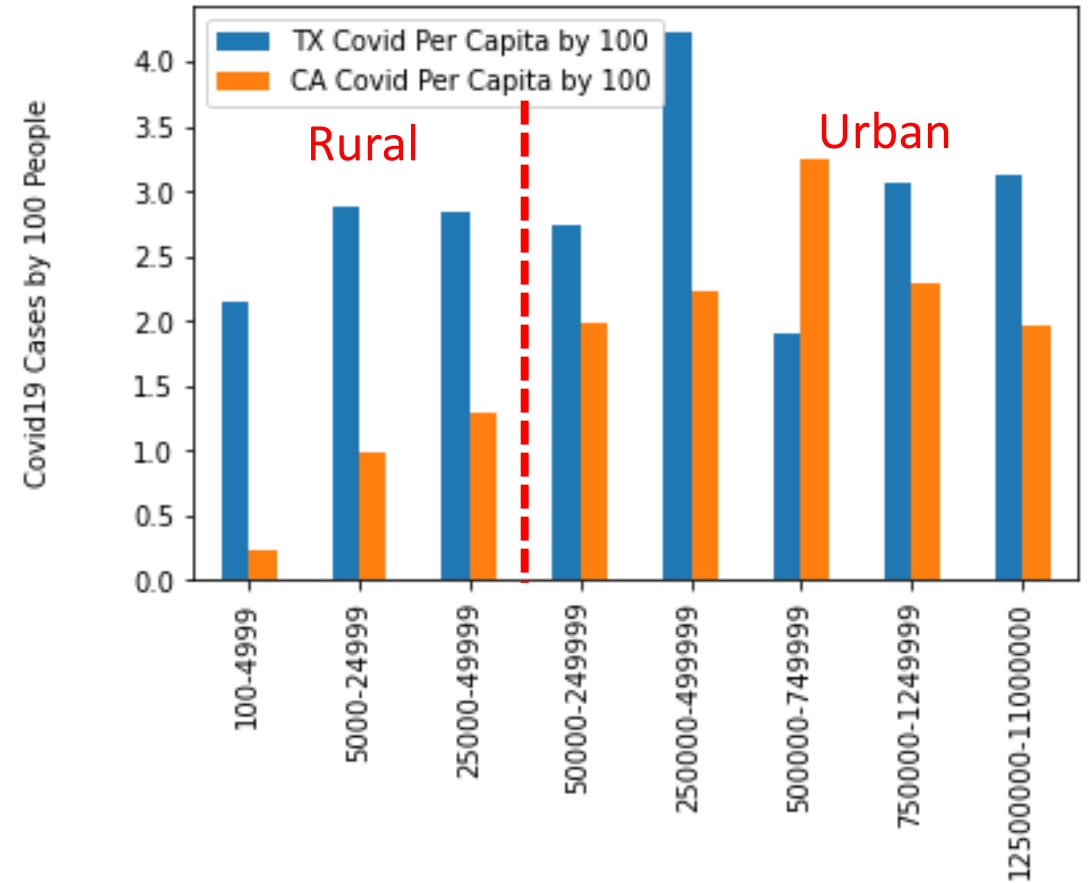


# Population Density and Covid19 per 100 people



County by Population Size

TX vs CA Comparison on Covid19 Cases by 100 People by County Size



County by Population Size



# Revisit Question Study Question

Do rates of Covid19 differ based on State policies implemented?



## Study Findings

- Regardless of the policies implemented the spread is inevitable
- By implementing precursory measures you can slow down the spread
- How can it be that in lower density populations it is observed the same Covid19 per capita rates than in densely populated areas?



# Limitations

- Covid19 testing
- Policy implementation and execution
- Time constraints




# Things we would do different next time

- Include more states in the comparison
- Compare to other country policies







**Thank You**  
**Questions?**