Studying impact of COVID-19 in USA

Unfolding the reason of why USA is most affected?
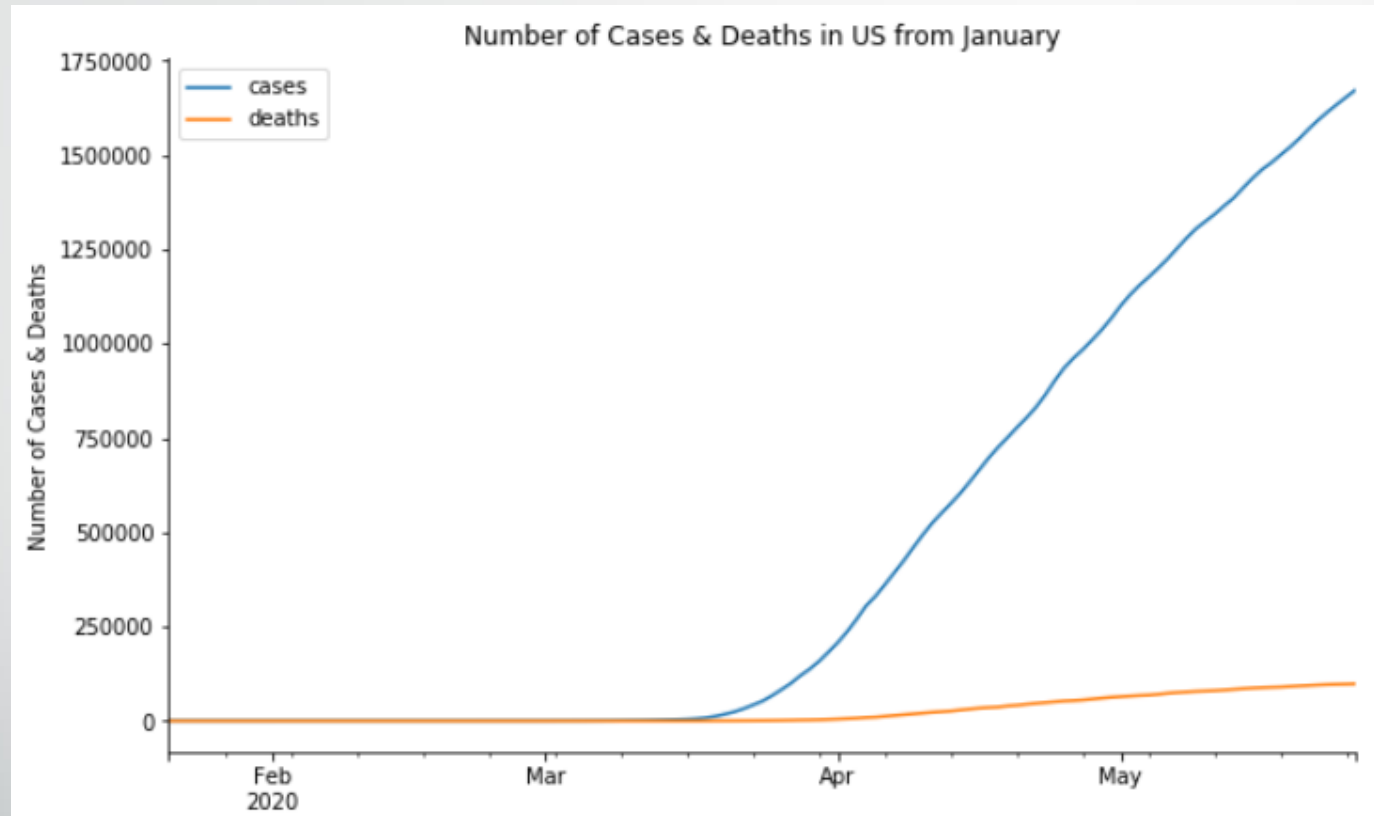
Introduction

- We are facing a global health crisis unlike any in the 75-year history of the United Nations—one that is killing people, spreading human suffering, and upending people's lives. But this is much more than a health crisis. It is a human, economic and social crisis. The coronavirus disease (COVID-19), which has been characterized as a pandemic by the World Health Organization (WHO), is attacking societies at their core.

- Life will be different, even after COVID-19 is brought under control. It will be very challenging for many individuals and businesses. But there will be new opportunities, new endeavors, and we will adapt.

- This is why it is very important have a deep understanding of current situation and what time lies ahead of us for all.

Data Sources

- COVID Tracking organization has developed COVID-19 data set for USA. They have created APIs that we can include in our codes or download a CSV file. For this analysis I have downloaded CSV file. It contains data from January to May.
https://covidtracking.com/data/us-daily

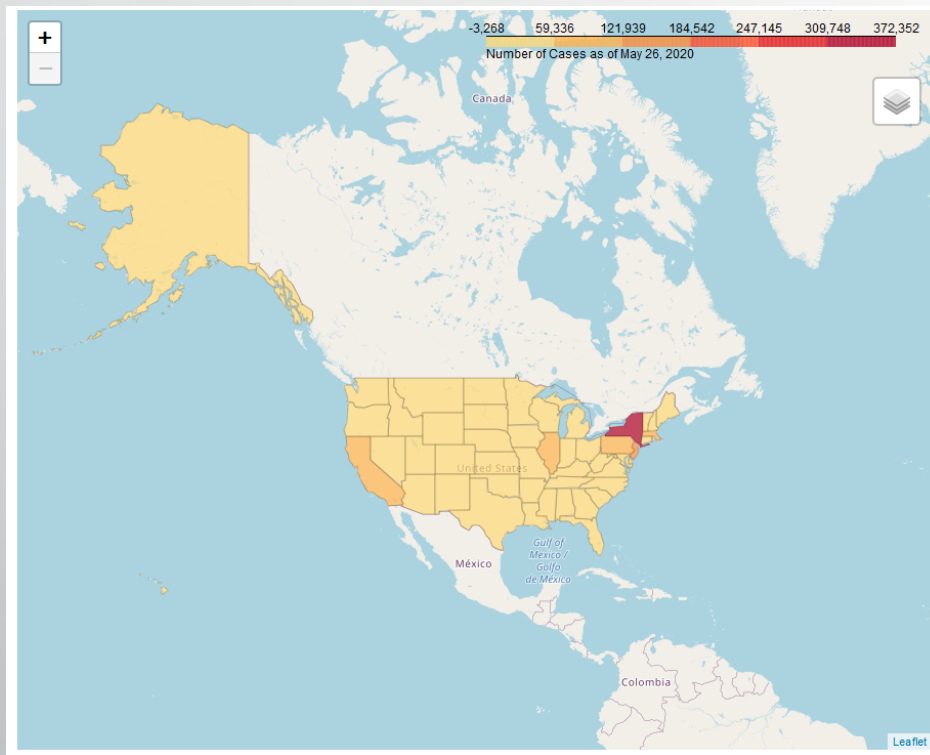- Total Population & its demographics: American Community Survey 5-year estimates, Table B01001, 2014-2018
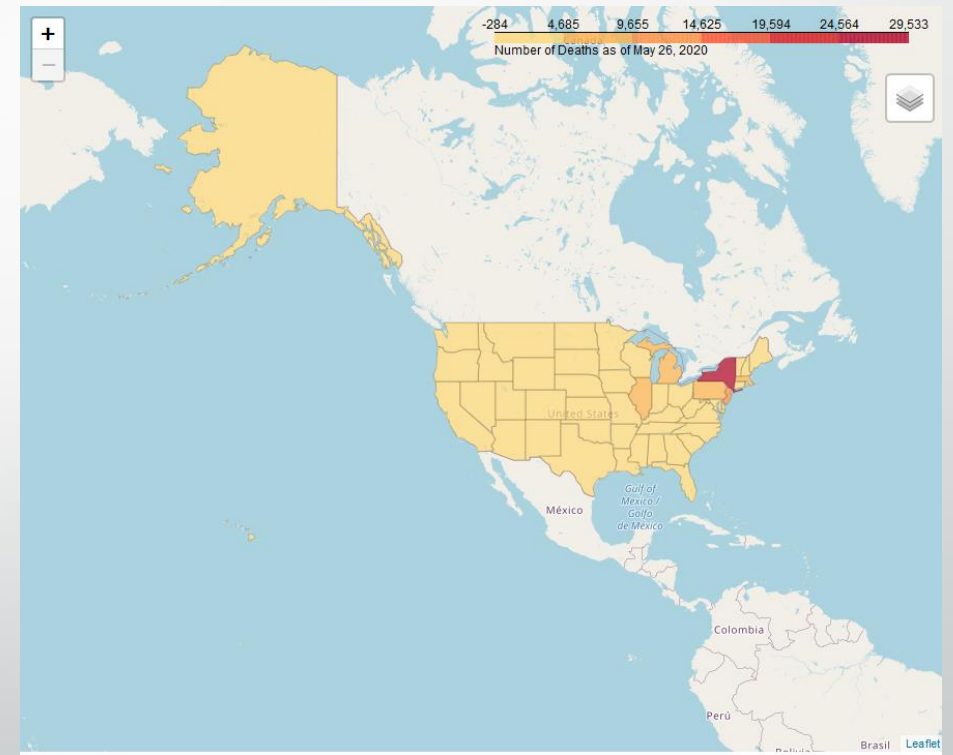
How much is USA infected by COVID?

USA has recorded 2,001,334 positive COVID cases and 112,597 number of deaths as of June 8th, 2020.
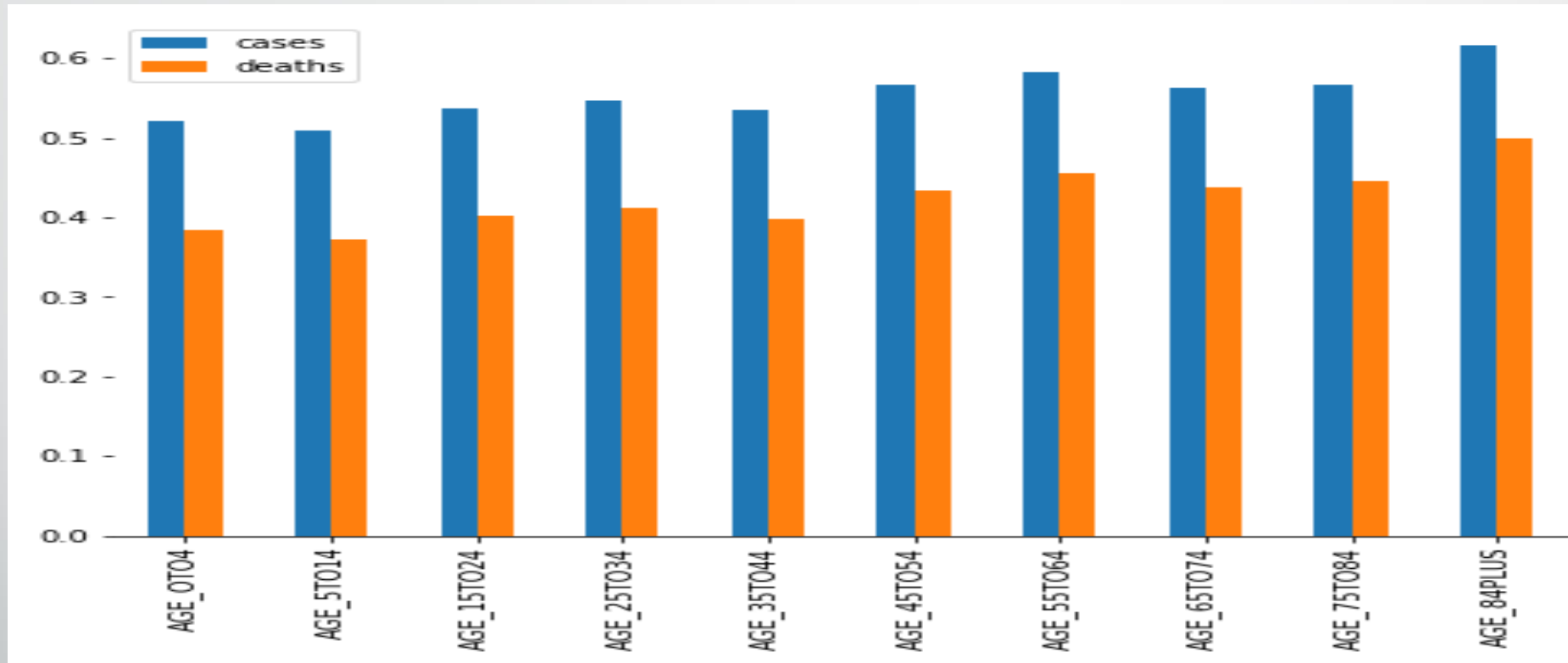
Which states are most affected?

w.r.t Number of Cases
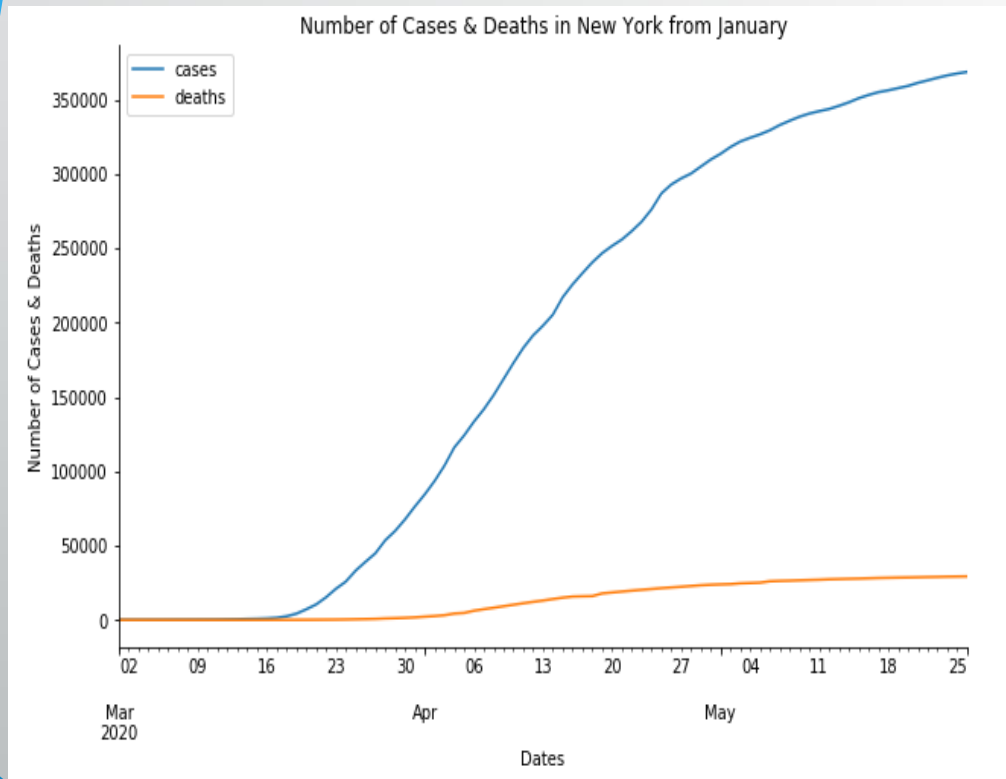

w.r.t Number of Deaths

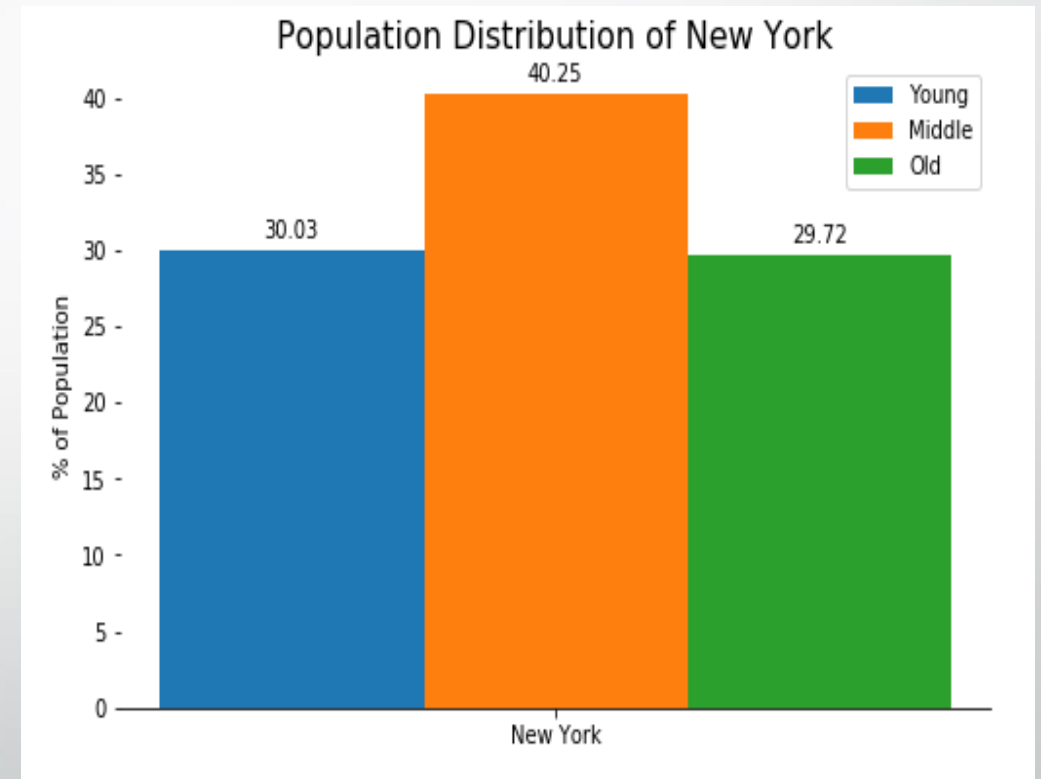# Correlation between Age and COVID-19 KPIs

It is very evident that as your age increases, you're more vulnerable to get infected with COVID-19 and survival rate decreases.
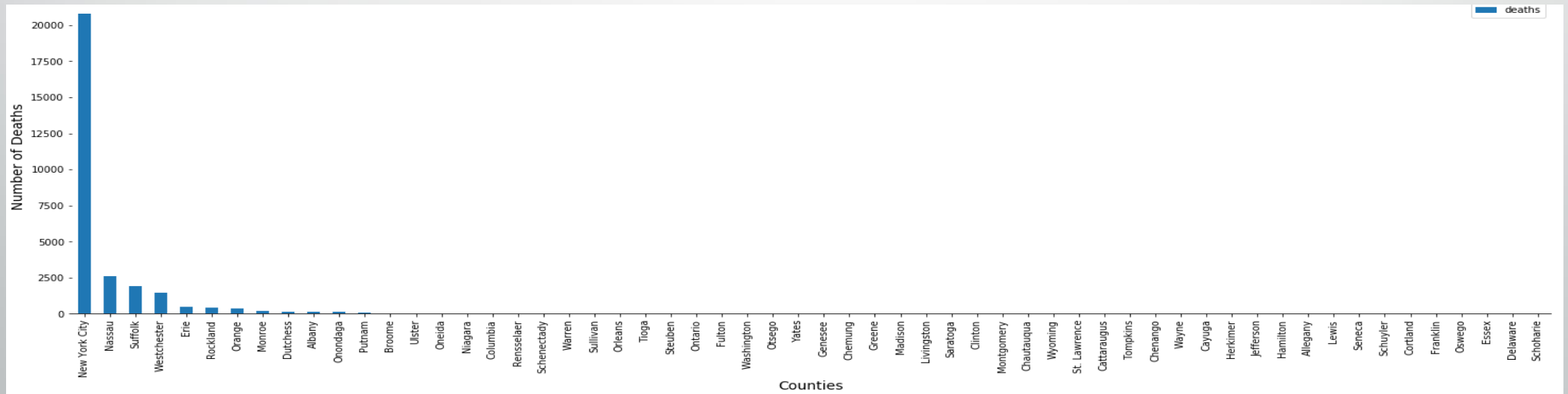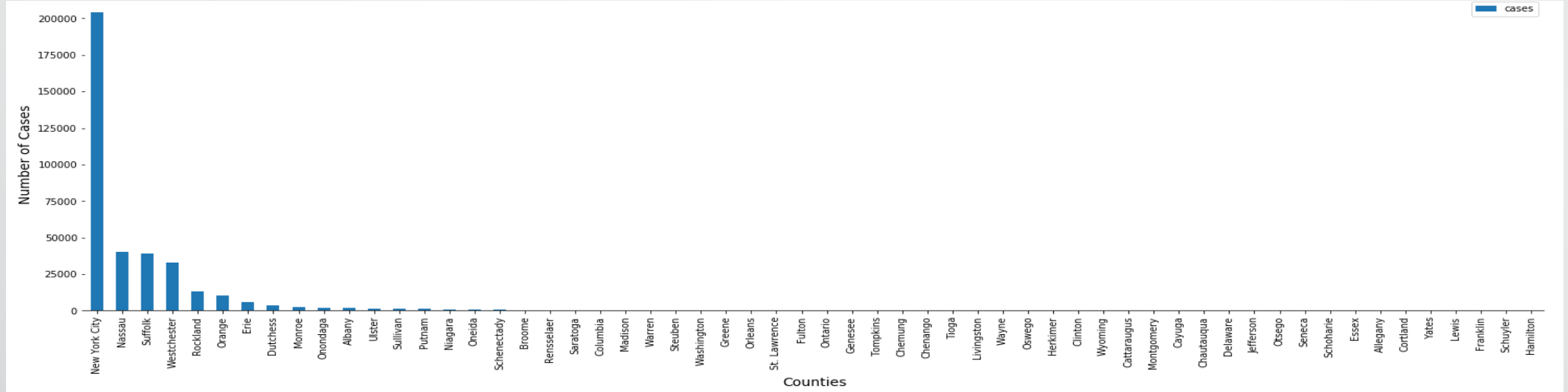
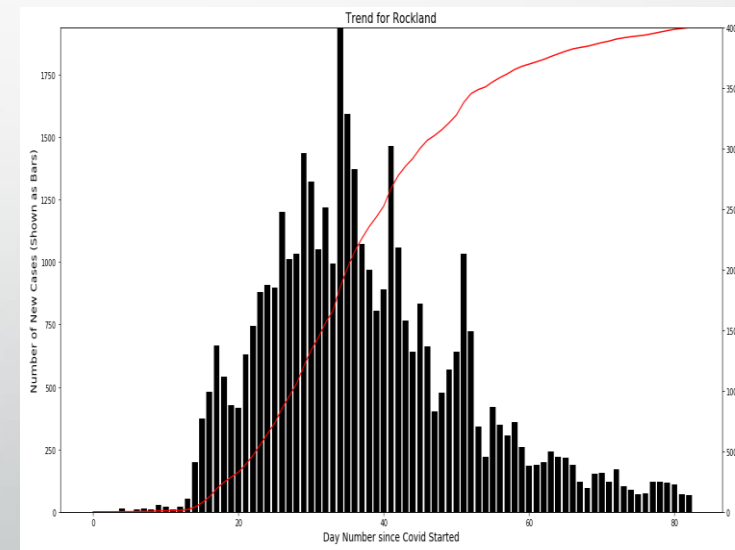# Deep Dive into most affected state: New York

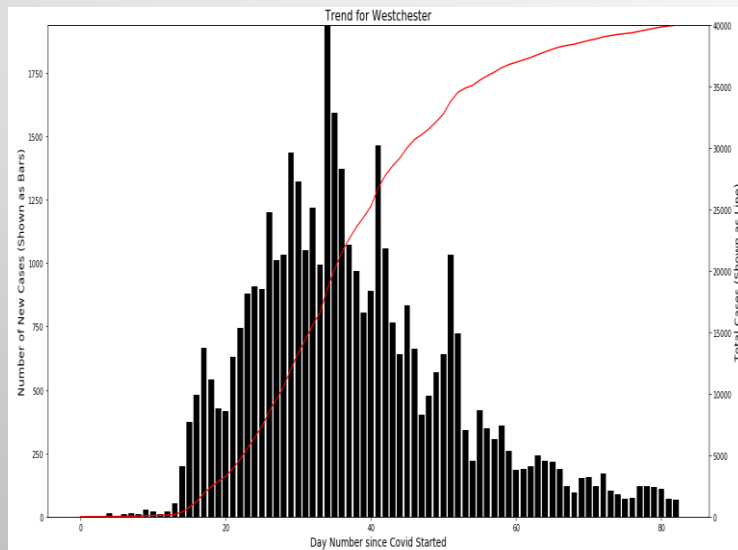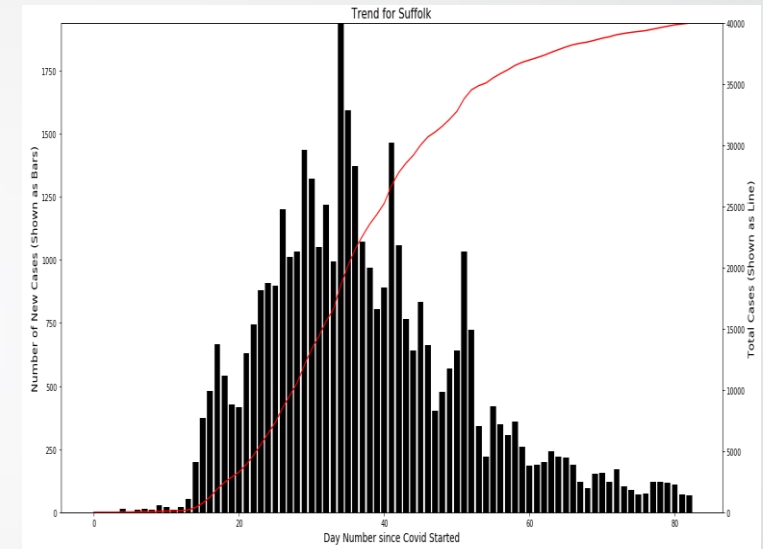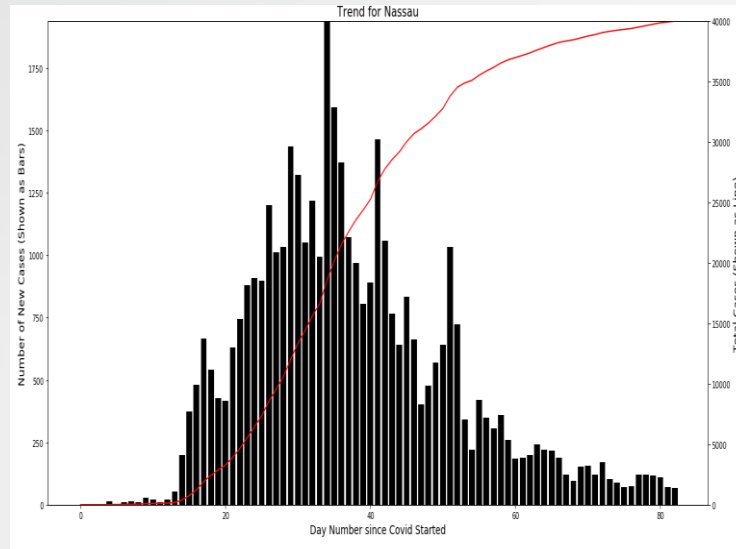## Trend

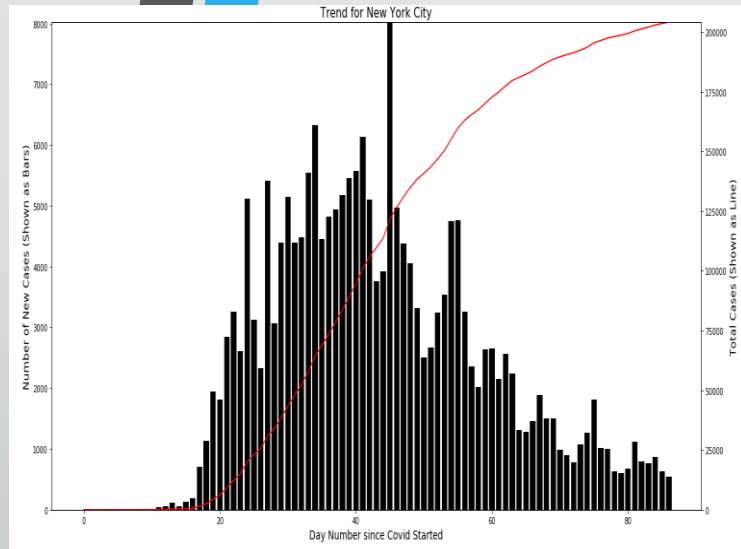## Population distribution

Most affected counties in the state of New York

Results show that Top 5 infected counties contribute 98% of the total cases & deaths in the state of New York.

Trends in top 5 affected counties in New York

Graphs above suggest that though the number of cases is high, the number of new cases being reported daily have decreased significantly over the last 30 days.

Recommendations

- Using Foursquare API, I have scraped recommended venues. The list of contains 81 types of neighborhood activities that we can go for outside!

- List includes categories like: Park, Pizza Place, Ice Cream Shop, Gym, Brewery, Bakery, Grocery Store, Trail, Garden, American Restaurant, Beach, Italian Restaurant, Scenic Lookout, State / Provincial Park, Sandwich Place.

- Just pass a category and we will recommend the best venue for it!

```
get_places('Sushi Restaurant')

:  'Onsen Sushi and Restaurant'
```

Future Scope

Analysis around COVID-19 have caught eyes for all data scientists around the world and many questions are still left unanswered. We can explore how forecasting models can be leveraged to have be better prepared for all businesses that have come to standstill.