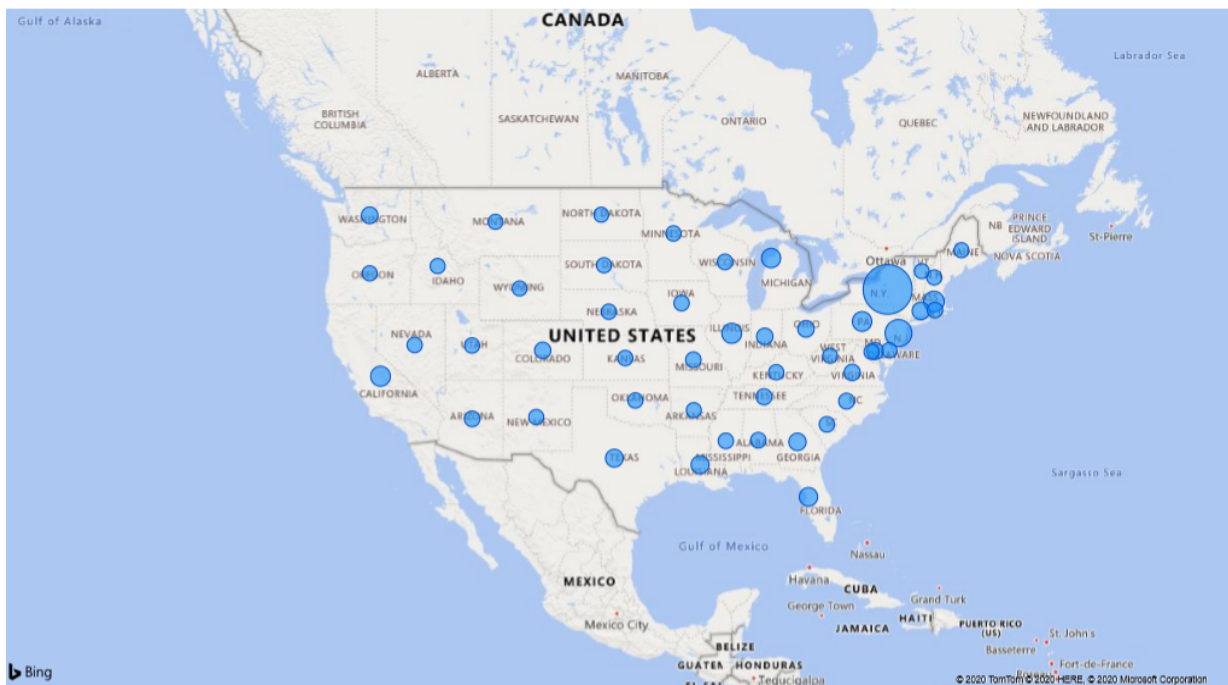


Detailed analysis on covid cases in America

This is the detailed report on the situation about covid-19 in america. In this case study i have discussed about various kinds of analysis on different states and counties in america and made some detailed analysis.

The data has been taken from kaggle. The data which has been taken is used only for the educational purpose. There is no authorization given on this dataset.



ATTRIBUTES:

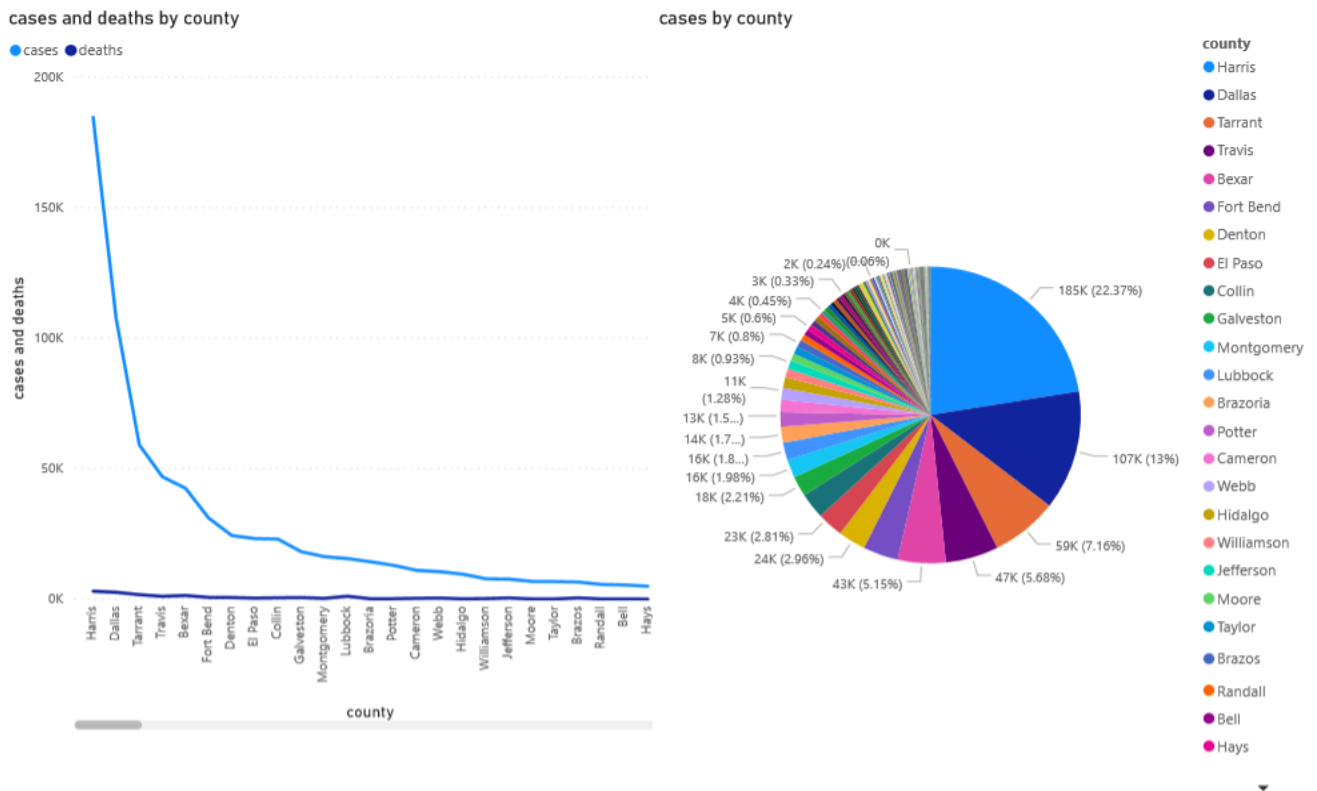
There are a total of six attributes in this dataset named **Date, State, County, Cases, Fips, Deaths**. The dataset provides a total of 55 states with each having its own counties.

ANALYSIS:

For our analysis let us choose Texas, California, New York and comparing separately and combined will give us better results. So, let us dig deep into it.

Texas :

Texas being one among the largest states in americas is taken into consideration for some better understanding.

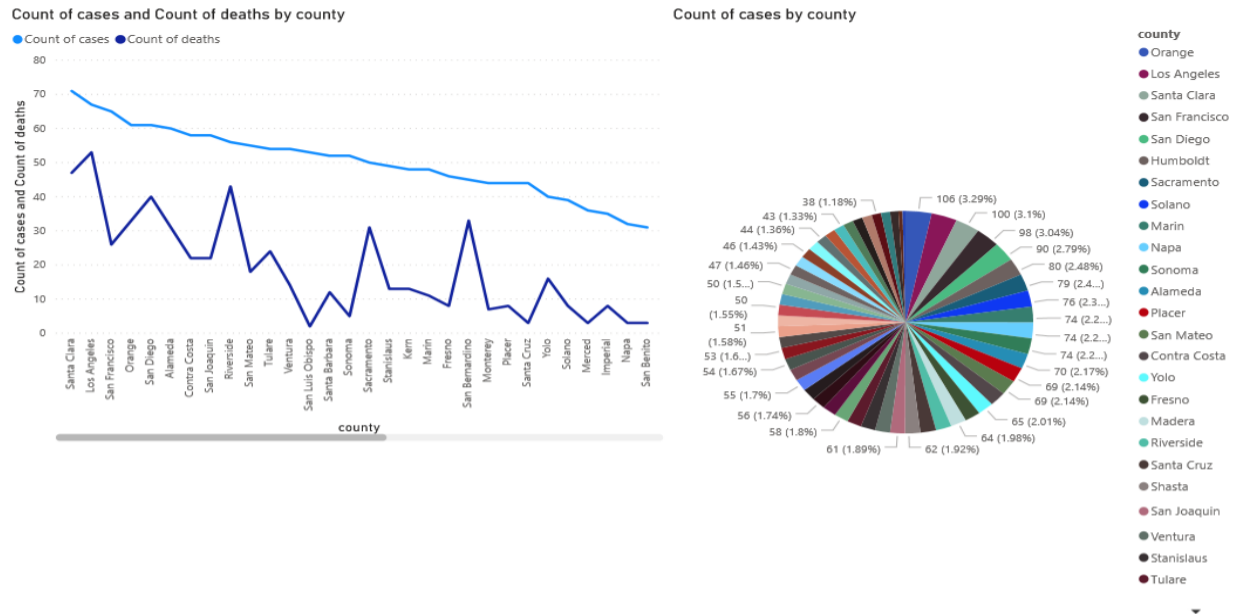


From the above image we can see the highest number of cases in Harris and contains a total of 185K which is 23.3% and the deaths being 3072 and Lowest number of cases being Reeves with 2 cases registered and total count of deaths being zero of the total cases registered in Texas.

	cases	deaths
count	129747.000000	129747.000000
mean	243.680154	12.736287
std	2749.624646	248.077834
min	0.000000	0.000000
25%	3.000000	0.000000
50%	12.000000	0.000000
75%	53.000000	2.000000
max	188663.000000	19324.000000

California:

As California being considered as one of the most powerful areas in technological advancements and many of the software and other technological companies are placed there. Making a detailed analysis on California will increase the clarity about the spread of the disease.

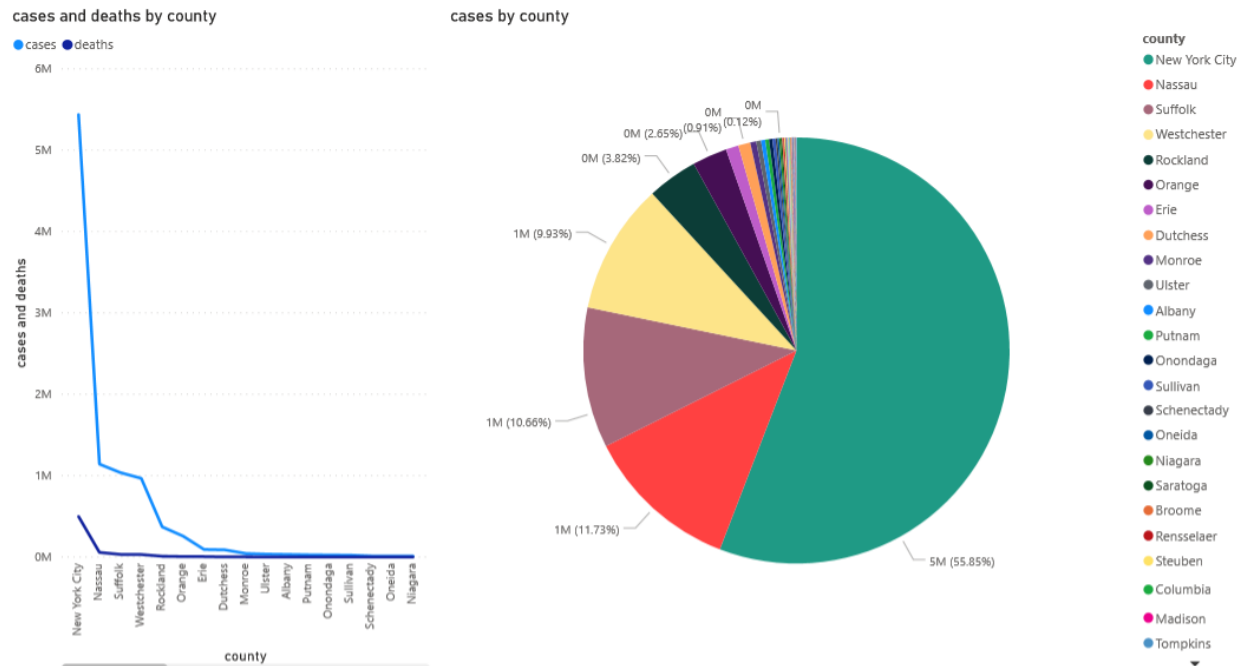


From the graphs taken we can understand the spread of corona in California is throughout the region as shown in the pie graph which contradicts with the case in Texas. The cases to deaths the ratio differs significantly as it not the case with Texas. The highest being Santa Carla with the most number of cases of 106 with 3.29% of the total cases registered. The interesting fact about California is about the deaths with most of them showing a irregular pattern. For example Santa Carla being the most deaths registered county but San Francisco having the cases/death ratio being 65/26 where the ratio change to 56/43 when it comes to Riverside.

	cases	deaths
count	3226.000000	3226.000000
mean	450.198078	16.424675
std	2009.782602	92.181597
min	0.000000	0.000000
25%	4.000000	0.000000
50%	30.000000	1.000000
75%	199.000000	5.000000
max	31197.000000	1512.000000

New York:

New York being one of the busy cities in the world records a highest number of registered cases in the world. New York state shows some kind of peculiar situation to deal with. In this analysis of New York let us see what happens

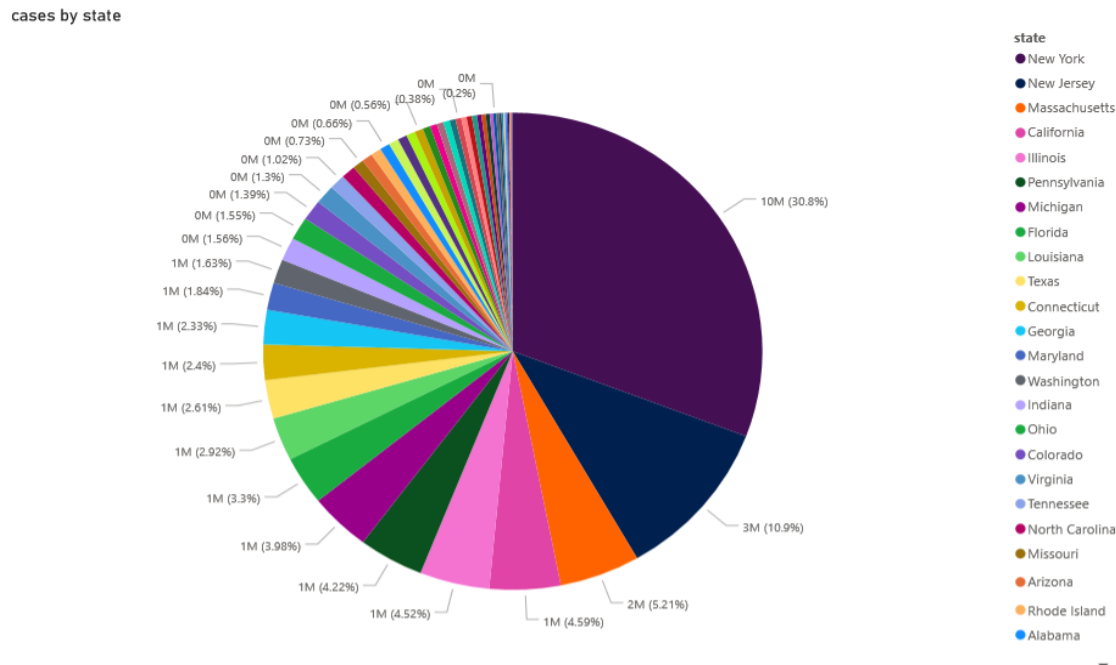
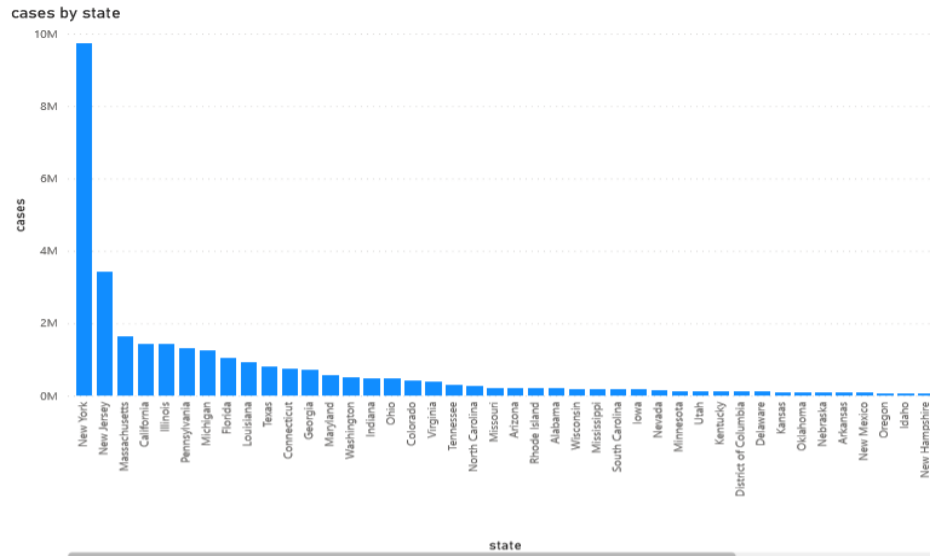


As we can see from the above figure New York City holds the highest number of registered COVID-19 cases with 5M cases and deaths being 498k. If we dig deep into analysis New York is not being the highest in its state it is the highest individual city in the country to with the highest number of cases registered. New York City holds a total of total of 55.85% in the state. Follow up to New York City there are cities that hold the numbers of cases in state which Nassau, Suffolk, Westchester with 11.73, 10.66, 9.93 percentages respectively.

	fips	cases	deaths
count	3040.000000	3117.000000	3117.000000
mean	36062.997368	3123.932948	211.830927
std	36.197477	16295.449500	1547.362110
min	36001.000000	0.000000	0.000000
25%	36031.000000	13.000000	0.000000
50%	36063.000000	53.000000	1.000000
75%	36095.000000	221.000000	6.000000
max	36123.000000	188663.000000	19324.000000

STATES WITH HIGHEST NUMBER OF CASES :

State	Count_of_cases
New York	9737299
Illinois	1430518
California	1452339
Michigan	1257775
Pennsylvania	1333711
Massachusetts	1648066
New Jersey	3447283
Florida	1043327
Connecticut	757928
Maryland	582677
Texas	825472
Washington	516676
Indiana	494762
Rhode Island	211051
Louisiana	924269
DoC	121952
Arizona	219861
Virginia	411272
Nevada	155815
Colorado	439012
Wisconsin	205504
Missouri	230895
Ohio	489136

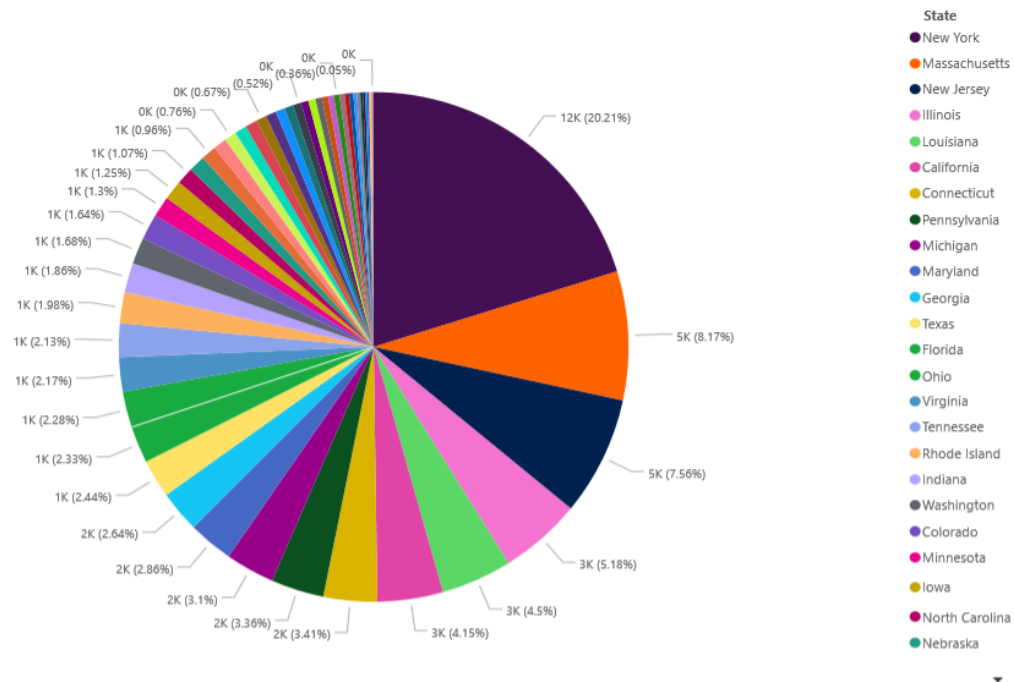


We can see the cases in New York being the highest touching a jaw dropping number of around 10M in total registered cases next to it is New Jersey having a total registered cases of 3M with a gap of 7M with the New York. To our fascination New York(30%), New Jersey(10.9%), Massachusetts(5.2%), California(4.59%) making half the total number of registered cases in USA.

Highest Cases registered in a day:

Having knowledge about the highest number of cases registered in a day will give a certain amount of knowledge about how fast the spread is in one region when compared with another.

Casesperday by State



From the above graph we can tell that New York holds the highest in registering the highest number of cases in a single day with over 12K positive cases and share a 20% of graph when compared with other. Follow up being Massachusetts with over 5K cases and has 8.17% of graph. Next being New Jersey, Illinois, Louisiana with around 5K, 3K, 3K respectively and have a graph share of around 7.56, 5.18, 4.5 percentages respectively.

comparing highest number of cases registered with highest cases registered per day:

State	Count_of_cases	State	Cases_Per_Day
New York	9737299	New York	12237
New Jersey	3447283	Massachusetts	4946
Massachusetts	1648066	New Jersey	4578
California	1452339	Illinois	3137
Illinois	1430518	Louisiana	2726

Comparing the results of the highest registered cases in total with highest registered cases per day have given us some fascinating results with over a 4% results matching in the table of top five. With New York being the highest in the country having the most number of cases registered. New Jersey, Massachusetts, New Jersey, Illinois matching the list.

To conclude with having the most number of cases registered in a day make take up the list of having most number of cases to sum.