

Homework 1 Report

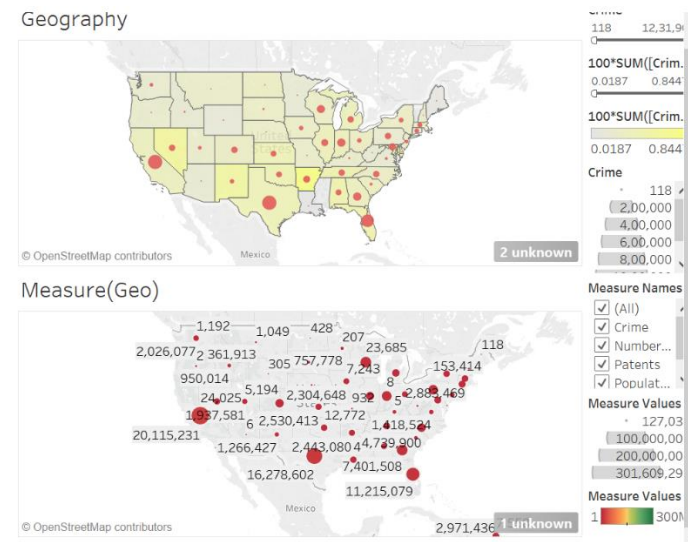
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Github Link:

<https://github.com/FROQKH>
[TR](#)

DASHBOARD 1 :

Comparing Variable by Geography



In the topmost graph, I have calculated Crime/Population ratio and have applied various filters in it.

In the second graph, I have given all the measure name and measure values in the filters. Hence we can filter each Measure (like we can check Crime for a particular state), similarly we can select a lot of measure values in the filter and check individually for a state or for all the states.

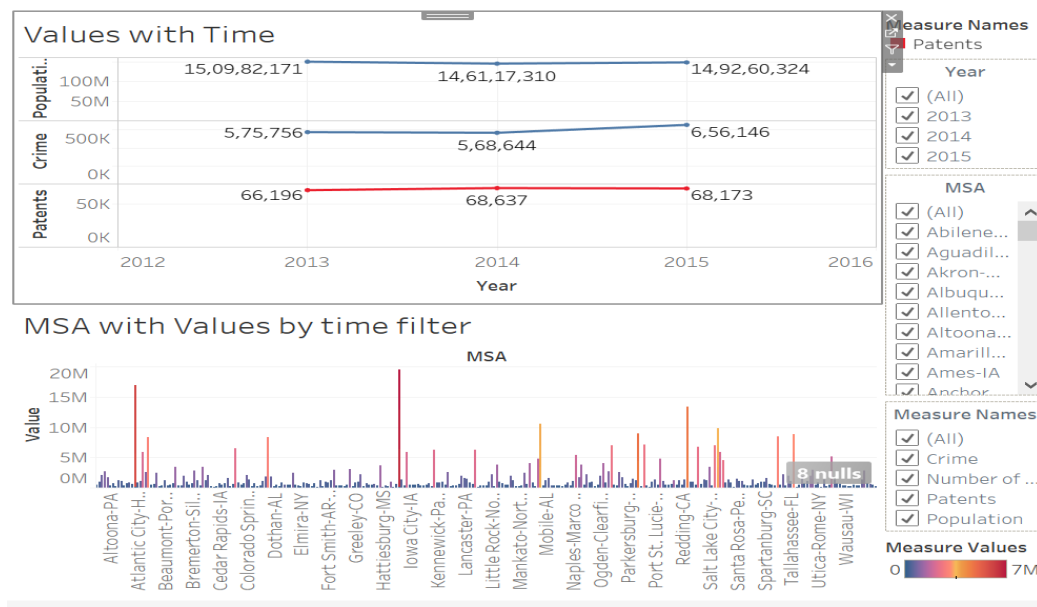
I have also used Colour combination as well as values in the labels, which is helping in easily locating the range of values.

This type of Graph is chosen so as to easily depict the area in which that Measure is talked about.

DASHBOARD 2 :

Comparing Variable by Time

Line Chart & Bar Chart



On the topmost graph, I have taken all the variables with the time. I have also applied Time as filter, hence we can see one year at a time or all the years together.

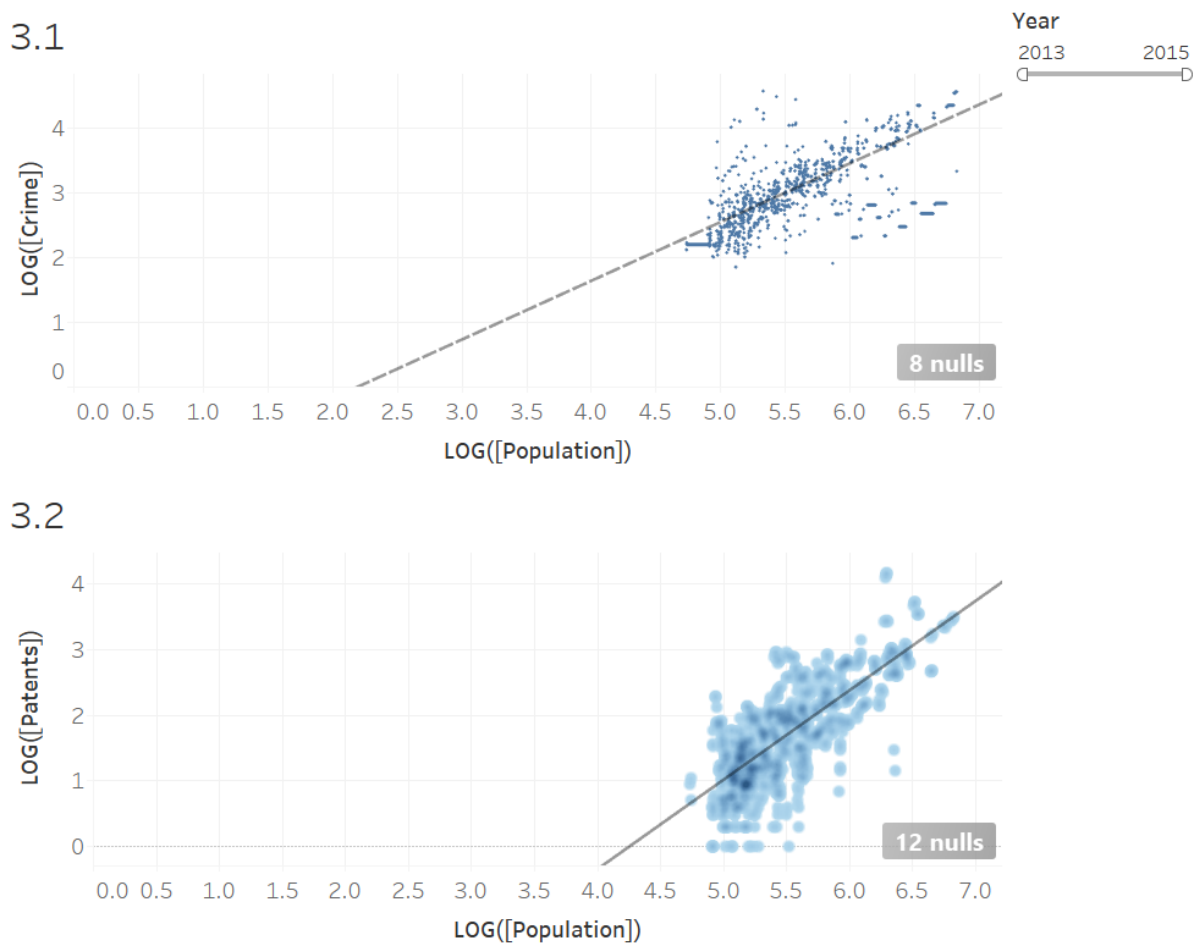
In the visualisation, I have taken all the MSAs values in as per Time filter and various variable (Measure names) filters.

This type of graph is chosen to focus more on number values, and we can easily compare the trend over the years.

DASHBOARD 3

Variables vs Population

Scatter Plots & Density Plots :



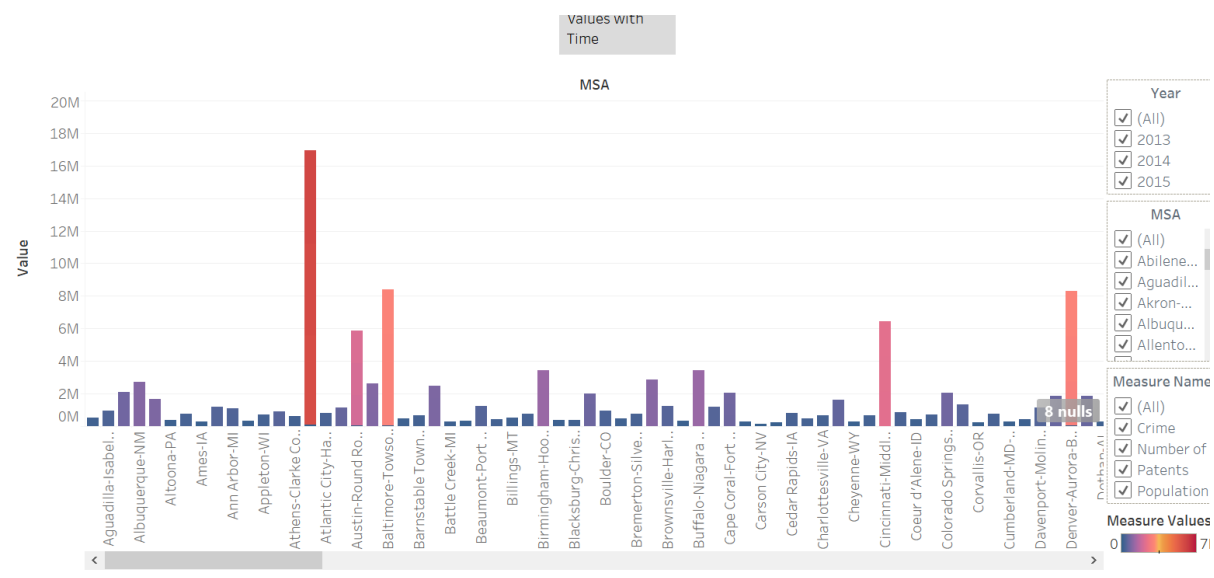
I have figured this graph by reading the Urban Scaling in the link provided.

Hence I have taken Population vs measures on a logarithmic scale and I have applied Trend Line.

This helps me to achieve the Trend Line over the years which depicts that with the growth of population, crime and patents are growing as can be seen in the graphs.

I have chosen the above graph because it helps in giving change according to population in the given data set in the most convenient manner. Plus the trend line in the above graph gives a clear and easy picture of positive (Inclining trend) or a negative(declining trend).

BARPLOT:



In the above Barplot, I have tried to display Various Measures across the Metropolitan cities, which are kept in filter which gives the possibility of visualizing individually or as whole too.