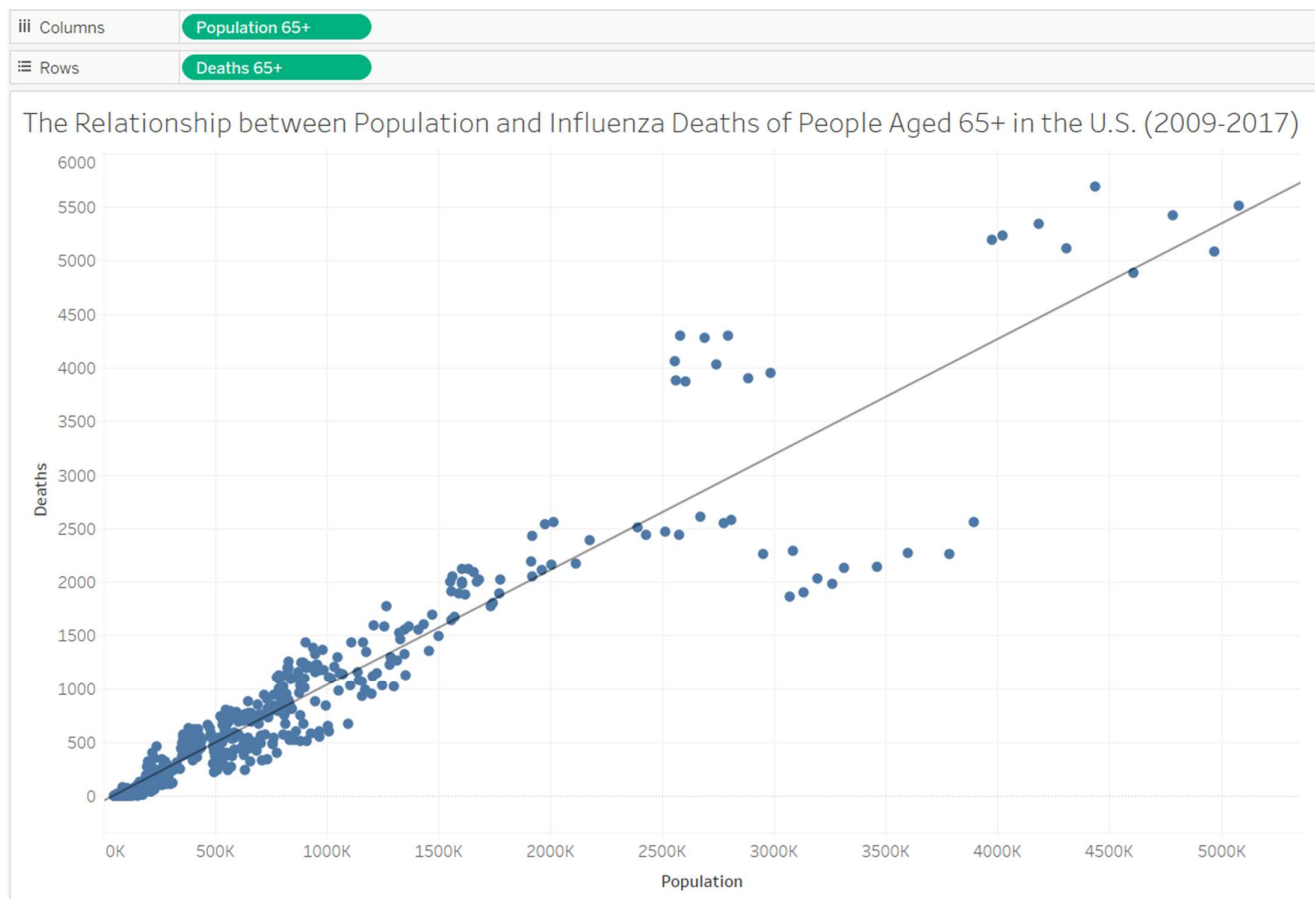


Statistical Visualisations: Scatterplots & Bubble Charts

Link:

https://public.tableau.com/views/DataImmersionAchievement2Ex2_6StatisticalVisualisationsScatterplotsBubbleCharts/Story1?:language=en-US&:sid=&:display_count=n&:origin=viz_share_link

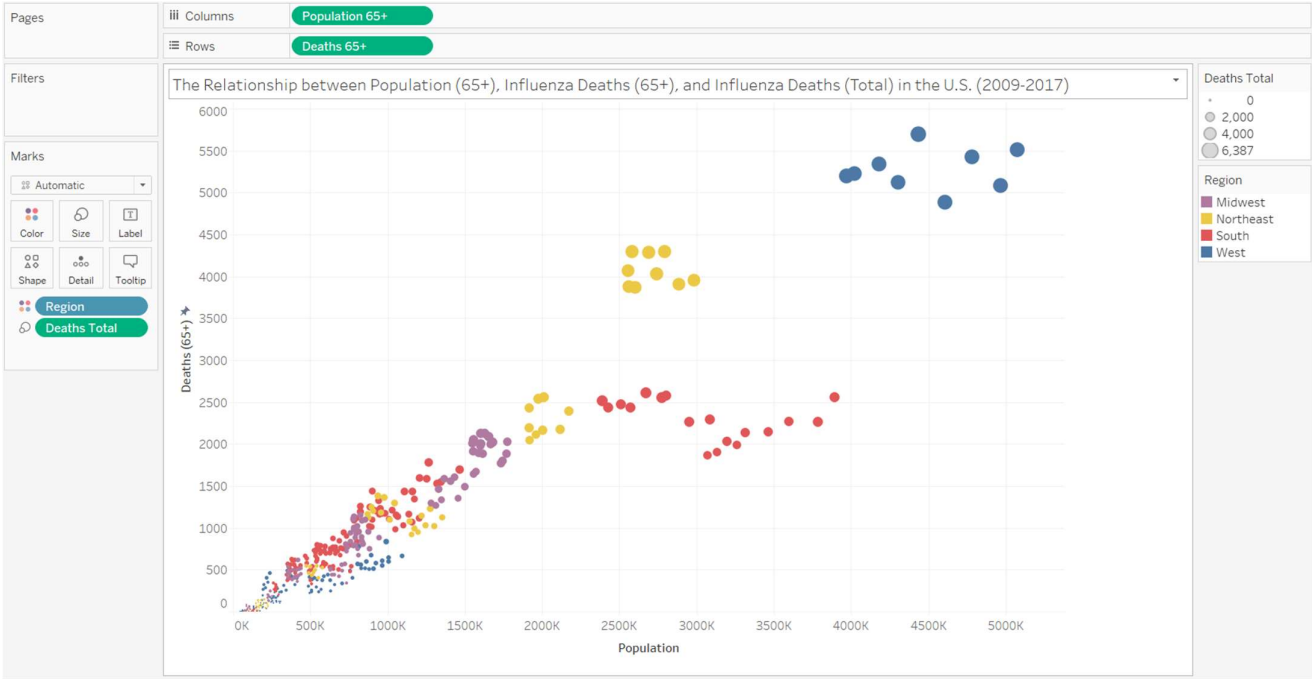
Scatterplot:



Correlation Coefficient Comparison	
Excel's	Tableau's
0.94	0.94

The scatterplot provides additional information as to how all the data points contribute to the correlation between population and influenza deaths for people over 65-years-old. For example, a large majority of the data is clustered close to the trend line on the right side of the graph, however, there are small clusters further away from the trend line as the population increases which weakens the correlation.

Bubble Chart:



Visualisation Checklist

(S = Scatterplot, B = Bubble Chart)

Text

- Are the title and text descriptive enough? (i.e., do you understand what the visualization is trying to convey just by looking at the title and text?)
 - S – Yes. The title explains the population and influenza deaths of the 65+ age group is being compared.
 - B – Yes. The title makes it clear that the population and deaths of the 65+ age groups is being compared in addition to the total influenza deaths.
- Are there text labels?
 - S & B – Only axes labels.
- Does the text portray any redundant information that could be gotten rid of?
 - S & B – No.
- Do colours, shapes, and size scales come with legends?
 - S – N/A
 - B – Yes. There is a colour legend for the region and size scale for the Total Deaths variable.

Colour

- What does the colour scheme signify?
 - S – N/A
 - B – The regions.
- Are there more than five colours?
 - S – N/A
 - B – No.
- Does the colour scheme make sense? Are colours analogous, complementary, monochromatic, or intuitive?
 - S – N/A
 - B – The colour scheme simply uses colours that contrast each other to display each region distinctly. Similar to Ex 2.4.
- If colour is used to draw attention to important information, is the darkest colour representing the most important information?
 - S – N/A
 - B – N/A (colour is not used to draw attention to the most important information).

Other

- Are different sizes used? If so, is there meaning behind the sizes?
 - S – No
 - B – Yes. The size of each point represents the total population of the state represented by that point.
- Are there groupings in the data that can be portrayed through colour, size, or position?
 - S – Points further right or higher up in the graph represent states with greater 65+ populations and 65+ deaths respectively. Points further left or lower in the graph represents states with smaller 65+ populations and 65+ deaths respectively.
 - B – Position groupings are the same as the scatterplot. Colour groupings portray regions. Size groupings represent state influenza death total.
- Is there (enough) whitespace?
 - S – Yes
 - B - Yes
- Is the visualization accessible?
 - S – Yes
 - B – Yes. The combination of red and green was avoided.
- Does the visualization teach you something?
 - S - Yes (the scatterplot demonstrates that as the population of a state's 65+ population increases, so does the reported number of influenza deaths for people 65 years and older).
 - B – Yes. This chart demonstrates the same information as the scatterplot. It also shows clusters in the data, such as that there are Northeast states have comparably high 65+ influenza deaths for their 65+ population size.