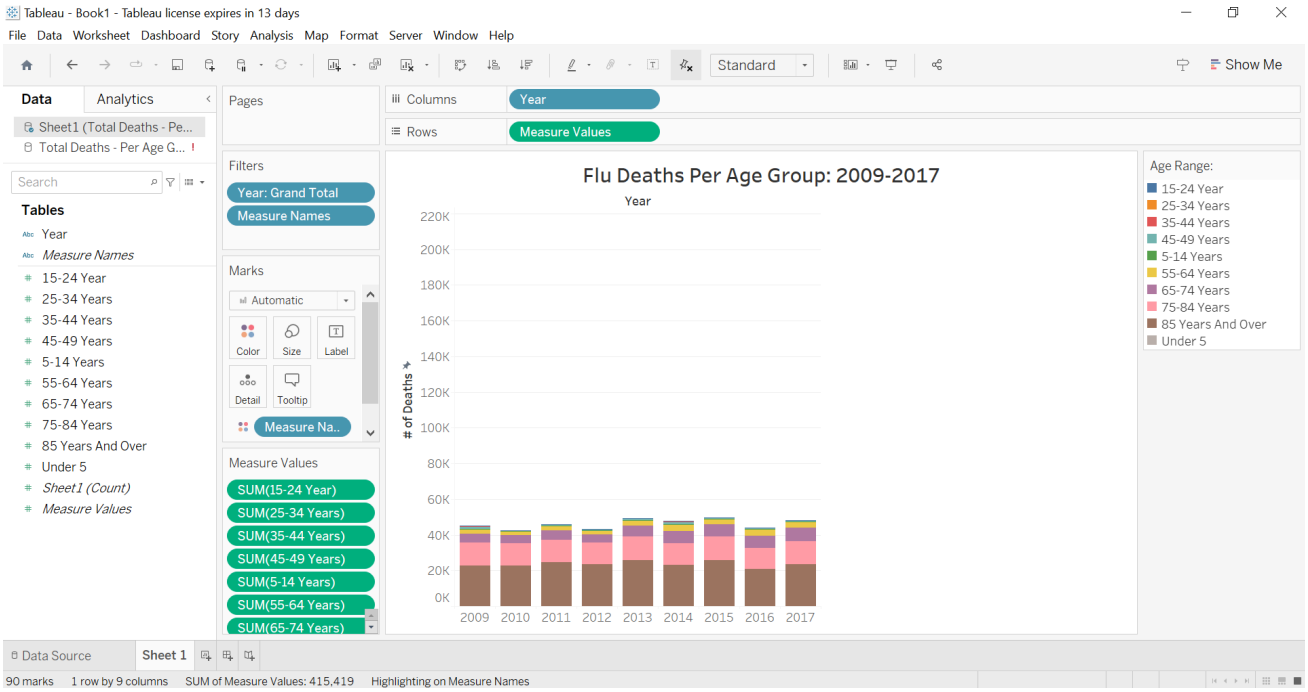
2.5 - Statical Visualizations
Katherine Lecce

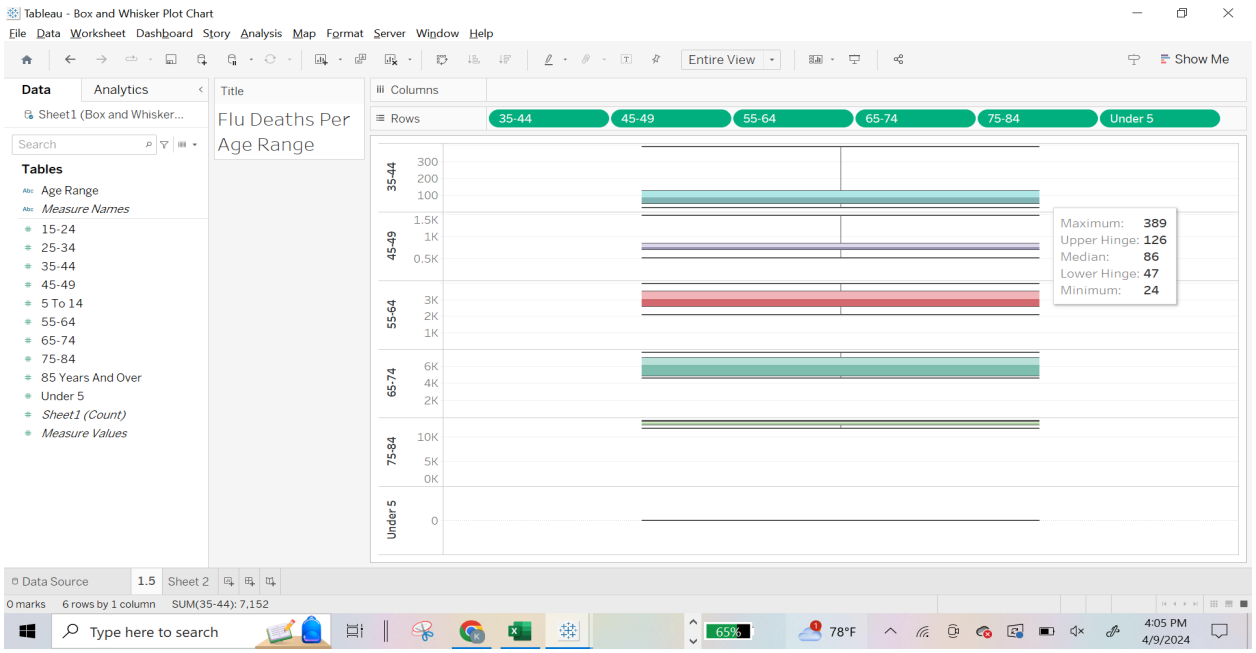
1. **Create a histogram of influenza deaths by age.**
    - The histogram should be the frequency of deaths.
    - Examine age by adding age categories as colors.
    - Are young and old populations more vulnerable (because they have more deaths)? The older population, highlighted in the most prominent colors in the chart (brown and pink), highlights that they have an overall higher mortality rate among all age groups. They are visually demonstrating their vulnerability to flu-like illness.



Are there any age groups that have no deaths?

Under 5 age - the report has 0 deaths from the year 2009 -2017

2. **Create a box and whisker plot of this same information.**



3. **Explain what the box plot tells you that the histogram can't.**

When comparing certain data groups, the box and whisker plot takes the information one step further. Unlike histograms, the box and whisker plot highlights outliers, medians, and lower and upper bounds of the data. This visualization quickly points out any discrepancies within the data that might affect the outcome of the results of each age group. With all this information in one visual, the box and whisker plot makes it easier to see if there are other hypotheses or if further data collection is needed to make testing more complete and accurate.

Style Guide Checklist -

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?)	Yes
Are there text labels?	Yes - There is a legend on the left with the Age range; the Y and X axis are labeled
Does the text portray any redundant information that could be eliminated?	No
Do colors, shapes, and size scales come with legends?	Yes
Color	
What does the color scheme signify?	Age Range
Are there more than five colors?	Yes
Does the color scheme make sense? Are colors analogous, complementary, monochromatic, or intuitive?	The color scheme is intuitive because no distinct correlations or relationships exist between the colors.

If color is used to draw attention to important information, is the darkest color representing the most critical information?	Yes
Other	
Are different sizes used? If so, is there meaning behind the sizes?	Yes - The most prevalent colors are the age range with the most flu-related deaths that year.
Are there groupings in the data that can be portrayed through color, size, or position?	Portrayed through color and size.
Is there (enough) whitespace?	Yes
Is the visualization accessible?	Yes
Does visualization teach you something?	Yes—It highlights the number of deaths per age group each year from our data source from 2009 to 2017.