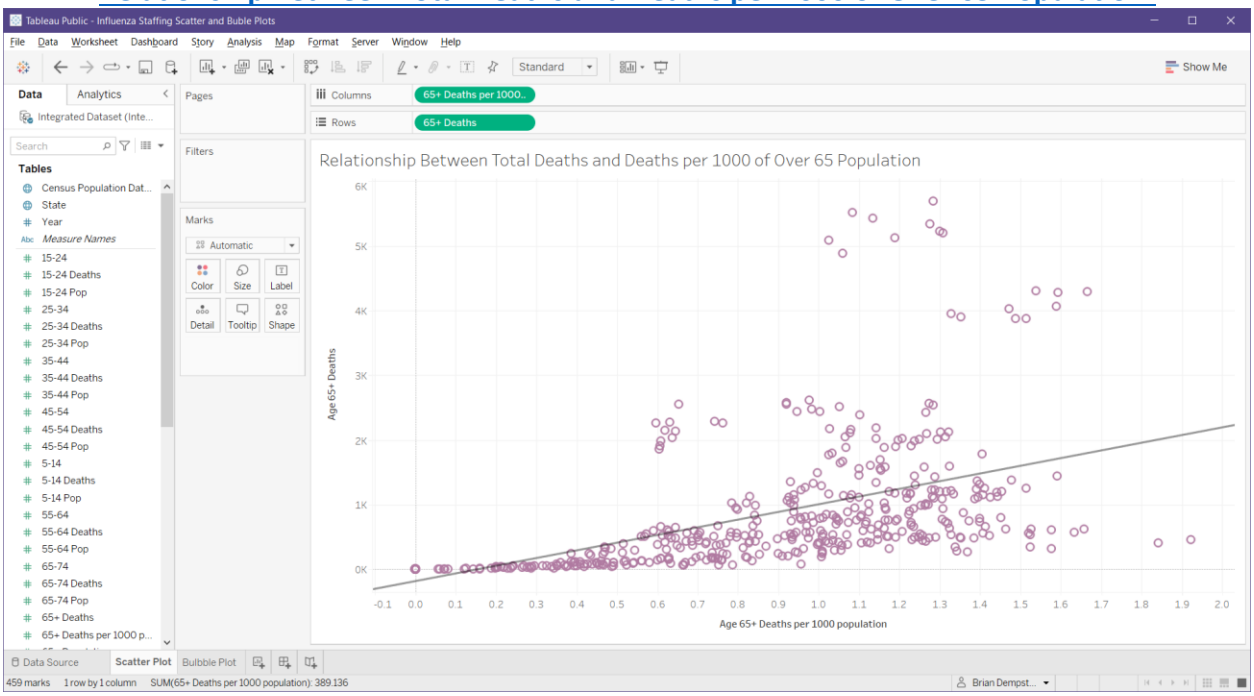
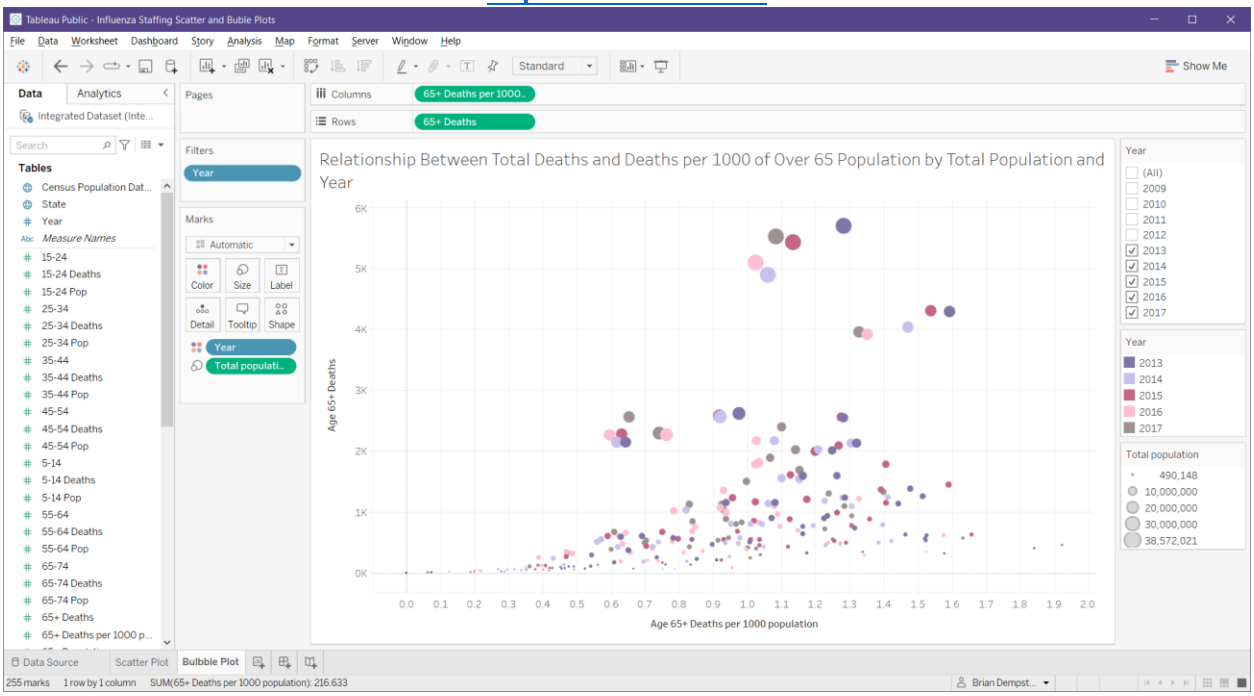
Scatter and Bubble Plots for Influenza Staffing Project

Relationship Between Total Deaths and Deaths per 1000 of Over 65 Population:



Relationship Between Total Deaths and Deaths per 1000 of Over 65 Population by Total Population and Year:



Discussion:

The r value computed by Tableau (square root of r^2 value) matches the calculated value from exercise 1.8:

Correlation		
Variables	65+ Deaths	65+ Deaths per 1000 Population
Proposed Relationship	Moderate to Strong	
Correlation Coefficient	0.51	
Strength of Correlation	Strong	
Usefulness / Interpretation	Useful for prioritizing staffing	

There are many values near the trend line, but there are outliers. The goal for the Age 65+ deaths per 1,000 population field is to normalize the deaths in the vulnerable population to remove the bias of large population centers. If the correlation is very strong, then the field would not be useful in helping to determine priorities for staffing for our project.

The bubble visualization clearly shows that states with larger population (larger bubbles) do not have the greatest number of deaths per 1,000 in the greater than 65 age group (bubbles farther to the right). I showed the effect of Year in color. There is no significant color clustering in the visualization indicating that the year-to-year differences are not significant.