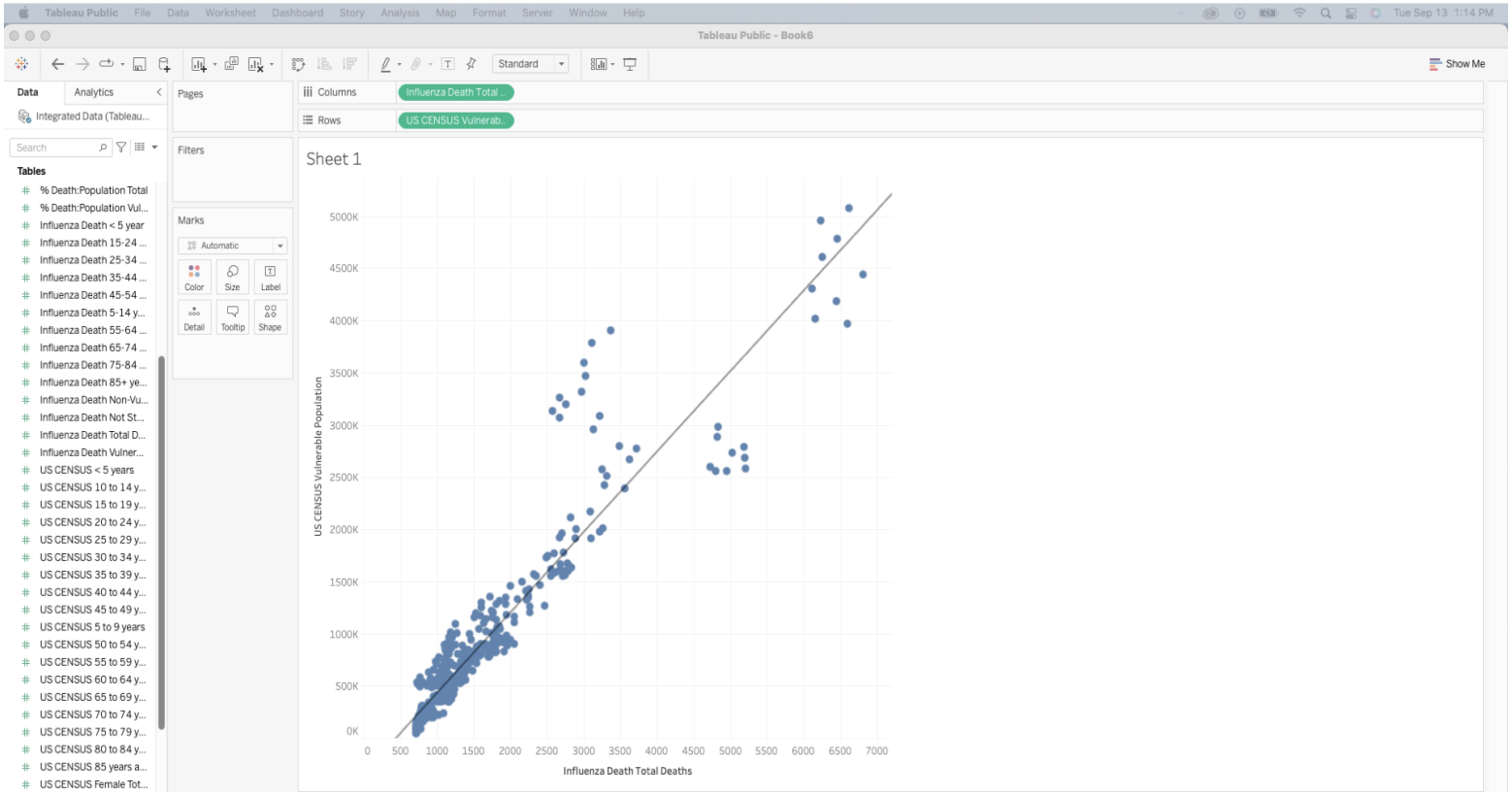
2.6 Scatterplots & Bubble Charts

1. **Refer back to the task in Exercise 1.8: Conducting Statistical Analyses where you examined correlations.**

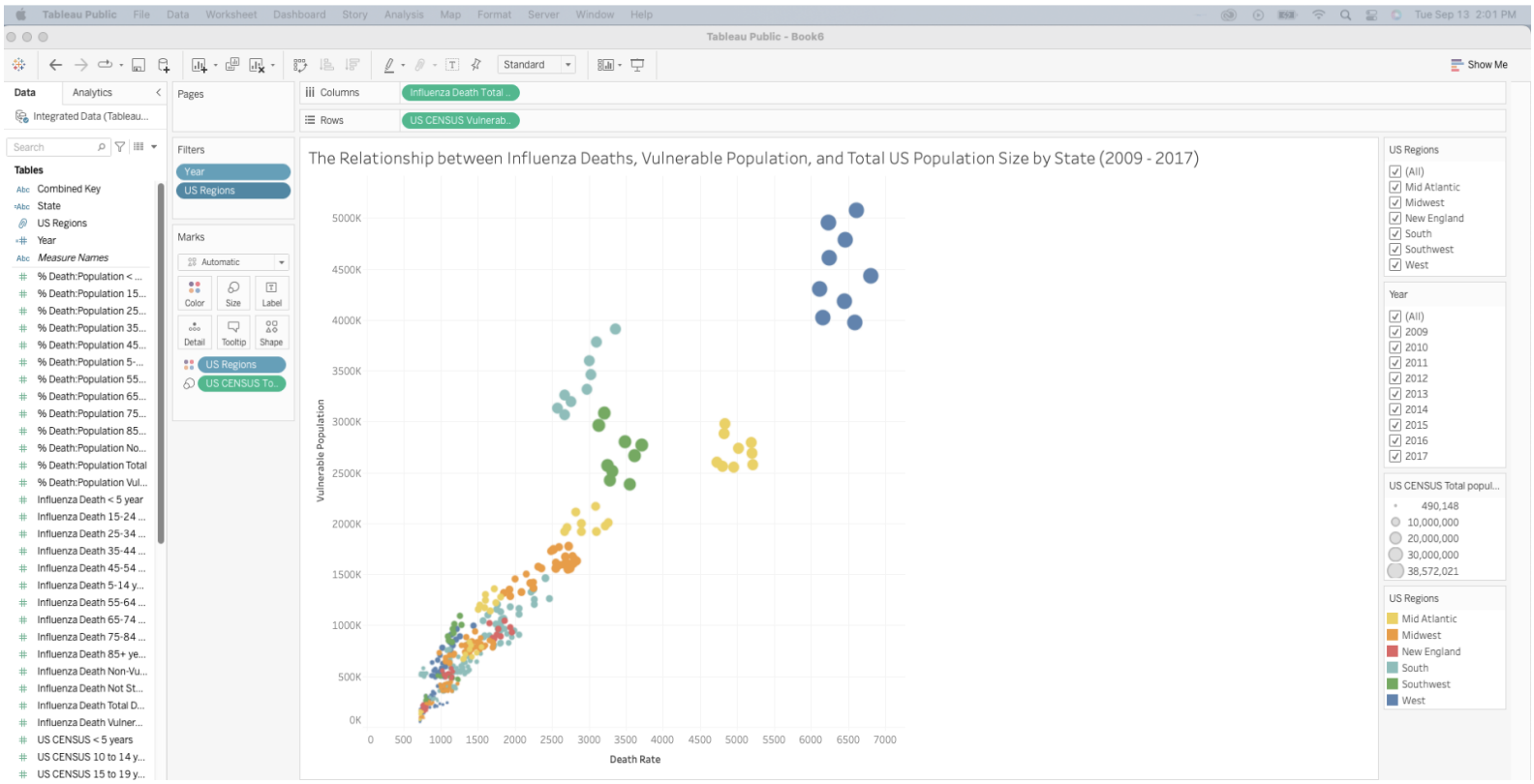
   The 65+ vulnerable age population has a strong correlation (calculated at .94) when looking at total deaths across all age groups, meaning that this age group has the highest mortality rate.



2. **Compare Tableau's r-squared value to the correlation coefficient you calculated in Exercise 1.8. After converting the r-squared value to the Pearson's correlation coefficient by taking the square root, they should be the same.**

   The trend line shows an r-squared value of 0.888723, which is calculated out as the correlation coefficient as 0.94272 by taking the square root.

3. **Take a moment to reflect on whether the chart provides any additional insight that the calculated correlation coefficient didn't.**
   a. As the population increases, so does the death rate. There is a large cluster of data points in the lower population which could represent smaller state population



4. Checklist- Style Guide

- 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
  - Does the text portray any redundant information that could be gotten rid of?
    - No
  - Do colors, shapes, and size scales come with legends?
    - yes
- Color
  - What does the color scheme signify?
    - The colors signify the 6 US regions to help the viewer understand population spread as a region rather than 50 state colors.
  - Are there more than five colors?
    - Yes
  - Does the color scheme make sense? Are colors analogous, complementary, monochromatic, or intuitive?
    - Yes, they are distinct to understand the regions.
  - If color is used to draw attention to important information, is the darkest color representing the most important information?
    - Yes, the darkest color represents the highest population and death rate

    - Do the color schemes contribute to any bias in the viewer?
        - No
- Other
    - Are different sizes used? If so, is there meaning behind the sizes?
        - Yes, the different bubbles represent population size
    - Are there groupings in the data that can be portrayed through color, size, or position?
        - Yes, I groups the 6 US regions together to better visual the correlations
    - Is there (enough) whitespace?
        - yes
    - Is the visualization accessible?
        - yes
    - Does the visualization teach you something?
        - Yes, it shows that as vulnerable populations increase by the state/regions, the death rates also increase.