PART 1 & 4: INFLUENZA DEATHS BY STATE & YEAR

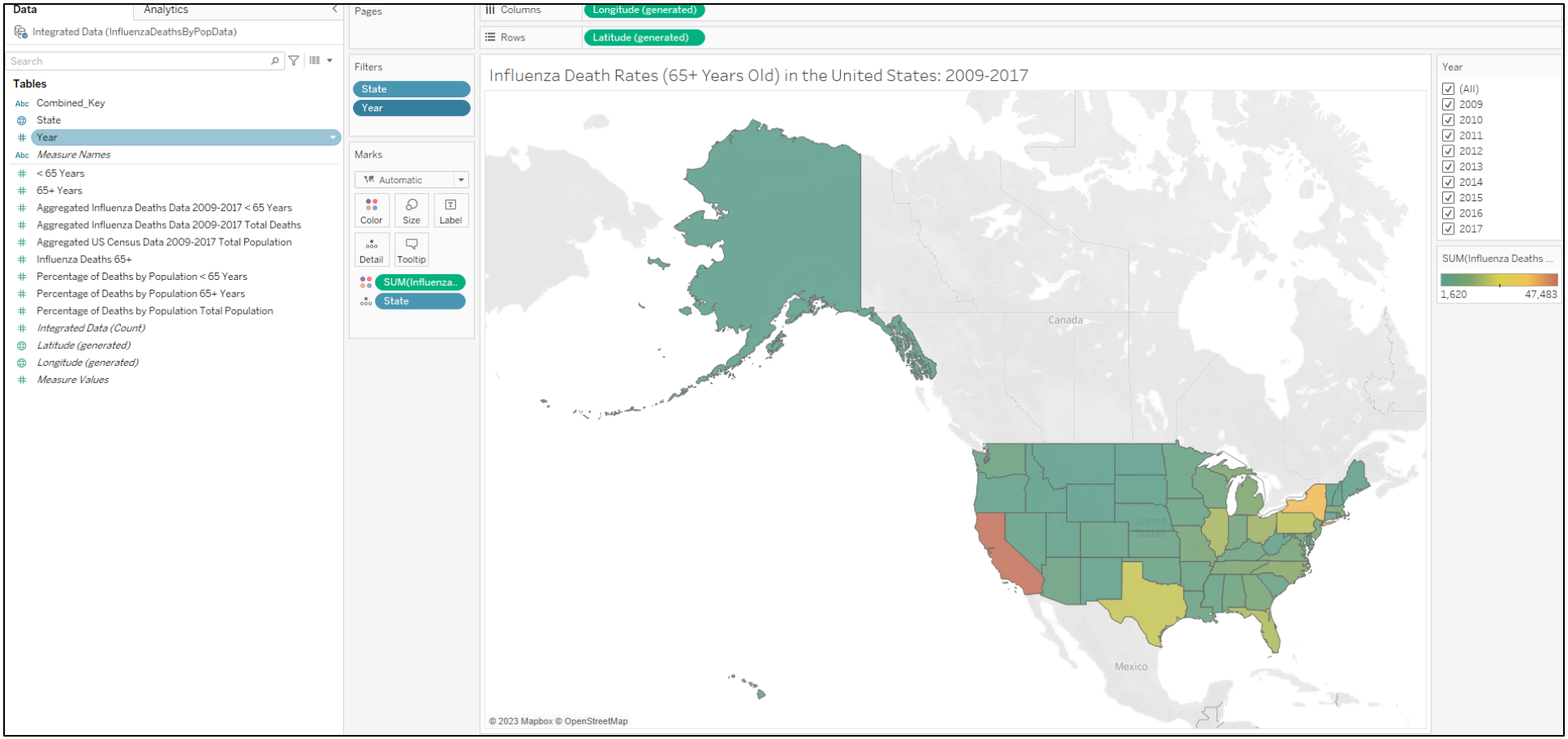

Tableau Public Link:
https://public.tableau.com/app/profile/mindy.duong/viz/DataImmersionTask2_7SpatialAnalysis/SpatialMap?publish=yes

Part 1 & 4: Influenza Deaths by State & Month

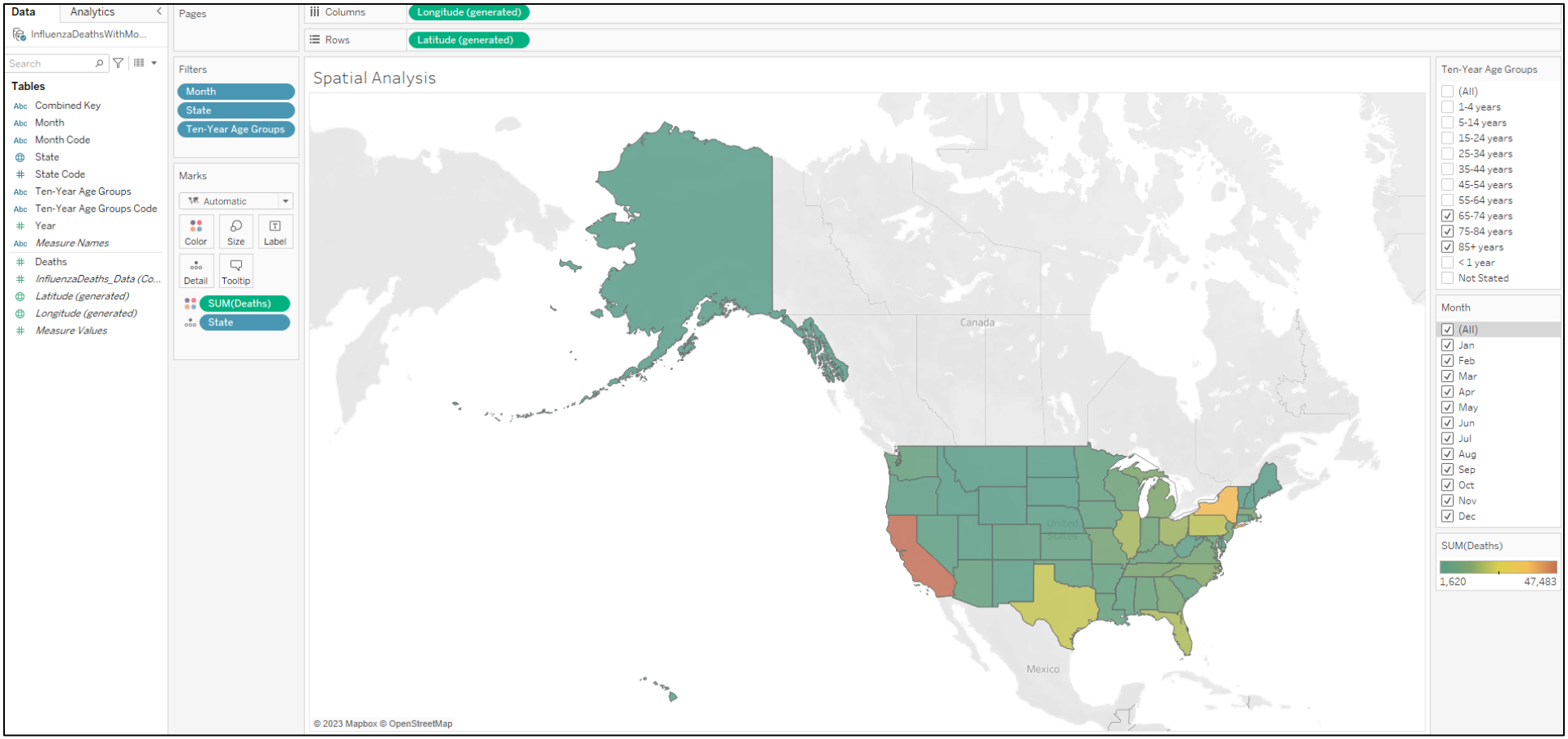

Tableau Public Link:
https://public.tableau.com/app/profile/mindy.duong/viz/DataImmersionTask2_7SpatialAnalysisMonth/SpatialAnalysis?publish=yes

What states or regions are the highest? The lowest?

California, New York, Texas, Pennsylvania, and Florida have the highest influenza death rates for those 65+ years old. Wyoming, Montana, Idaho, North Dakota, and South Dakota have the lowest influenza death rates. These are likely due to the amount of people (population size) of these respective states.

How does time impact those trends?

I decided to look at both year and month for separate reasons. For year, I was curious whether the rates would change due to public trust in vaccines, politics, etc. (would be interesting to see how things changed in the post-COVID era). For month, I was curious about seasonality, and unsurprisingly influenza death rates are higher in the winter months compared to the summer months. For example, California's mortality rate double in January (~6K) compared to June (~3K).

PART 2 & 4: COMBINATION MAP

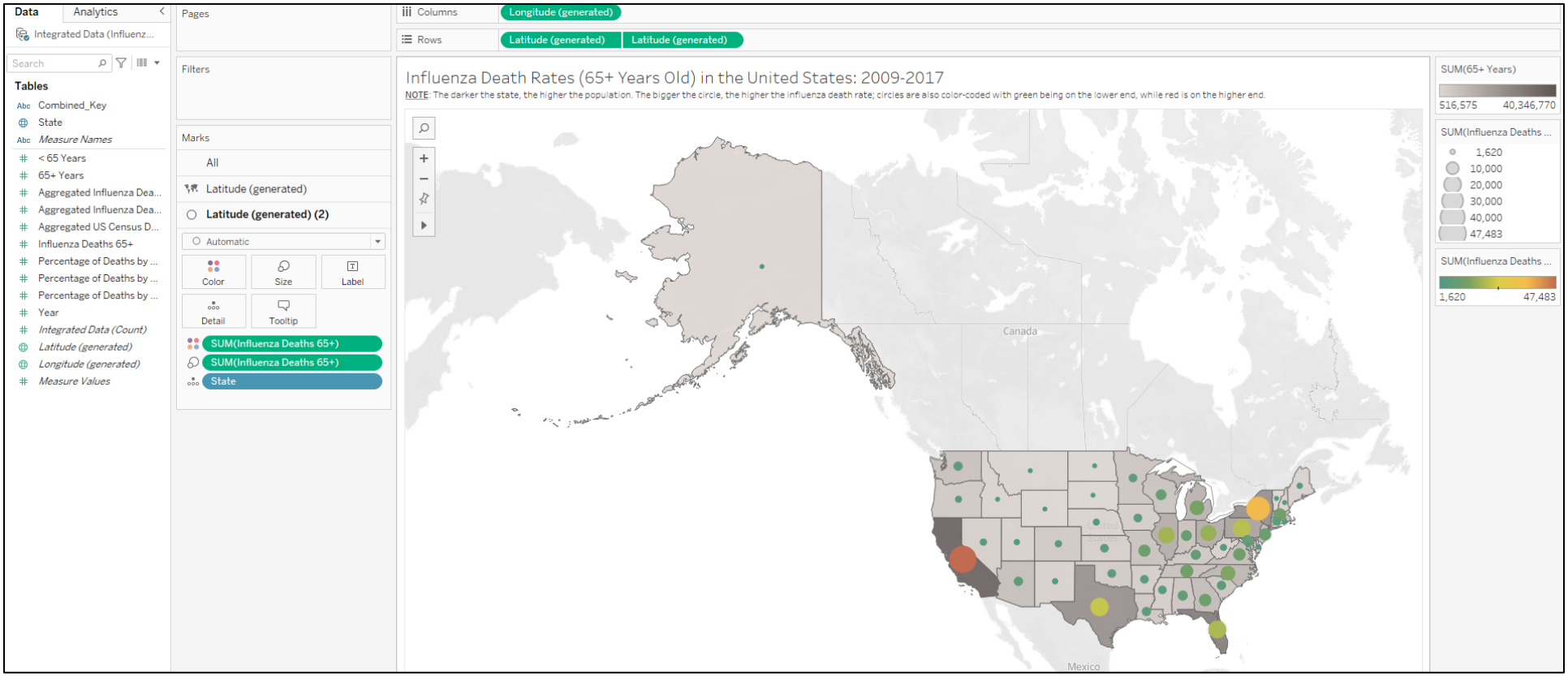

Tableau Public Link:
https://public.tableau.com/app/profile/mindy.duong/viz/DataImmersionTask2_7SpatialAnalysisCombo/SpatialAnalysisCombo?publish=yes

Notes:

In the above visualization, I used population for the choropleth portion of the combined map, and then the influenza death rates for the graduate symbol portion of the map – both of which are for those 65+ years old. By presenting the data this way, it reinforces the hypothesis that states with a larger population of people 65+ years old will subsequently have a higher influenza death rate as well for that group since they're in the vulnerable population.

PART 3: CHECKLIST

Text	
Are the title and text descriptive enough?	Yes, and in the combined map, there is an additional note at the bottom of the title to further explain what is being shown.
Are there text labels?	Not ones added by me, but if you zoom in, Tableau has already added the state names to the respective US states.
Does the text portray any redundant information that could be gotten rid of?	No; what could be construed as redundant information adds value to the visualization. There is a legend included, but the extra note at the bottom of the title provides further explanation that may not have been clear if the viewer is not familiar with combined maps/visualizations.
Color	
What does the color scheme signify?	The warm grayscale color signifies the population density, while the temperature diverging (green-yellow-red) colors signify the influenza death rates.
Are there more than five colors?	Yes, there is a five-level scheme for the warm grayscale color as well as the temperature diverging colors, so there's ten total.
Does the color scheme make sense? Are colors analogous, complementary, monochromatic, or intuitive?	Yes, the darker the color for the states, the denser the population; as for the influenza deaths, the redder the color, the greater number of influenza deaths there are in that state. The colors for the states are monochromatic, and the colors for the influenza death rates are intuitive, with green signifying the least number of deaths while red signifies the greatest number of deaths.
If color is used to draw attention to important information, is the darkest color representing the most important information?	Yes, the darker the color for the states, the denser the population (of 65+ years old in this case).
Other	
Are different sizes used? If so, is there meaning behind the sizes?	Yes, there are different sizes for the circles that represents the influenza death rates – the bigger the circle, the more deaths there are in that state.
Are there groupings in the data that can be portrayed through color, size, or position?	Population density is represented by color, while the influenza death rates are represented by both color and size.
Is there (enough) whitespace?	Yes, there is enough white space.
Is the visualization accessible?	Partially, because while the population density is monochromatic and color-blind friendly, the temperature diverging colors may not be, which is where sizing is beneficial. In addition, the note at the bottom of the title further explains what is being presented.
Does the visualization teach you something?	Yes, it reinforces the hypothesis of those 65+ years are at a higher risk than those younger than 65.
My Additional Questions from Last Task	
Is there a link to the source of the data for more information?	No, I did not include it in this visualization.

Is it interactive, and is the interaction beneficial or arbitrary?	Yes, you can hover over each category to focus on it; I don't think it's necessarily beneficial or arbitrary since this is just the default interaction.
Does the visualization serve its purpose?	Yes, it's reinforcing the hypothesis that those 65+ years and older are indeed at a higher risk for influenza deaths.
Do the graph, chart, maps, and/or pictures add value to the visualization, or are they distracting?	The map adds value to the visualization. By presenting the data this way (the combined map), it reinforces the hypothesis that states with a larger population of people 65+ years old will subsequently have a higher influenza death rate as well for that group since they're in the vulnerable population.