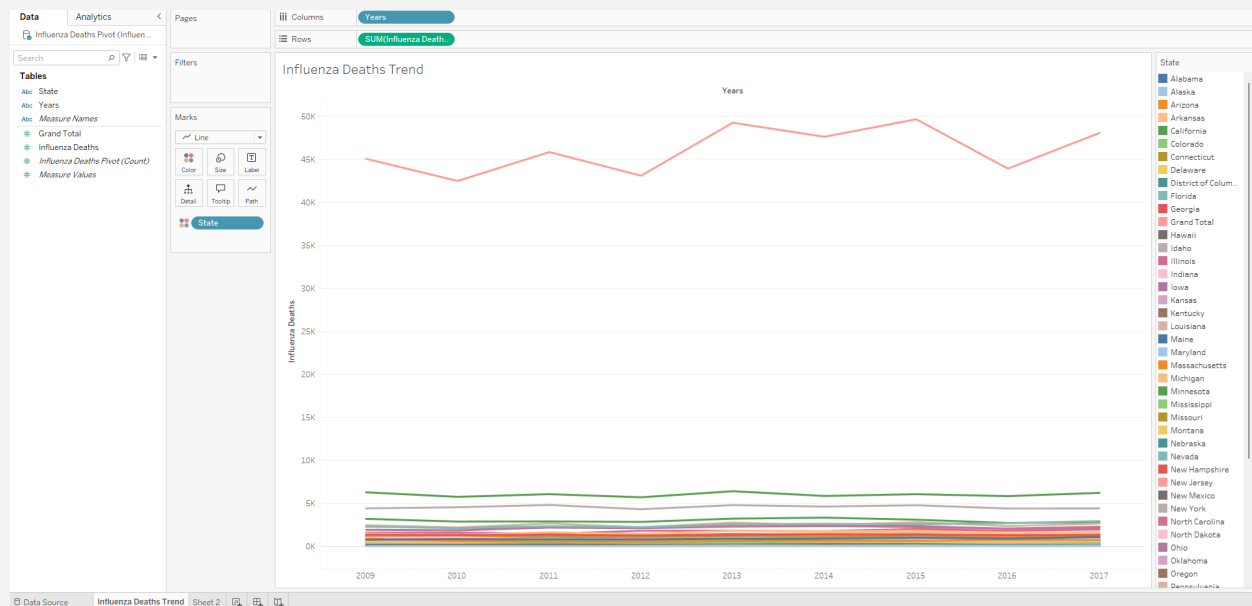Answer 2.4

By Yarisel Velacanto

Influenza Analysis and Forecasting

Line Chart: Influenza Deaths by Year and State

This chart shows how many people died from influenza each year across U.S. states from 2009 to 2017. Each state is represented by a separate line, and the colors help make them easier to tell apart. However, this isn't how I would typically represent the data, as the lines are jumbled and make it difficult to distinguish trends for individual states.

Forecast of Influenza Deaths (With Seasonality)
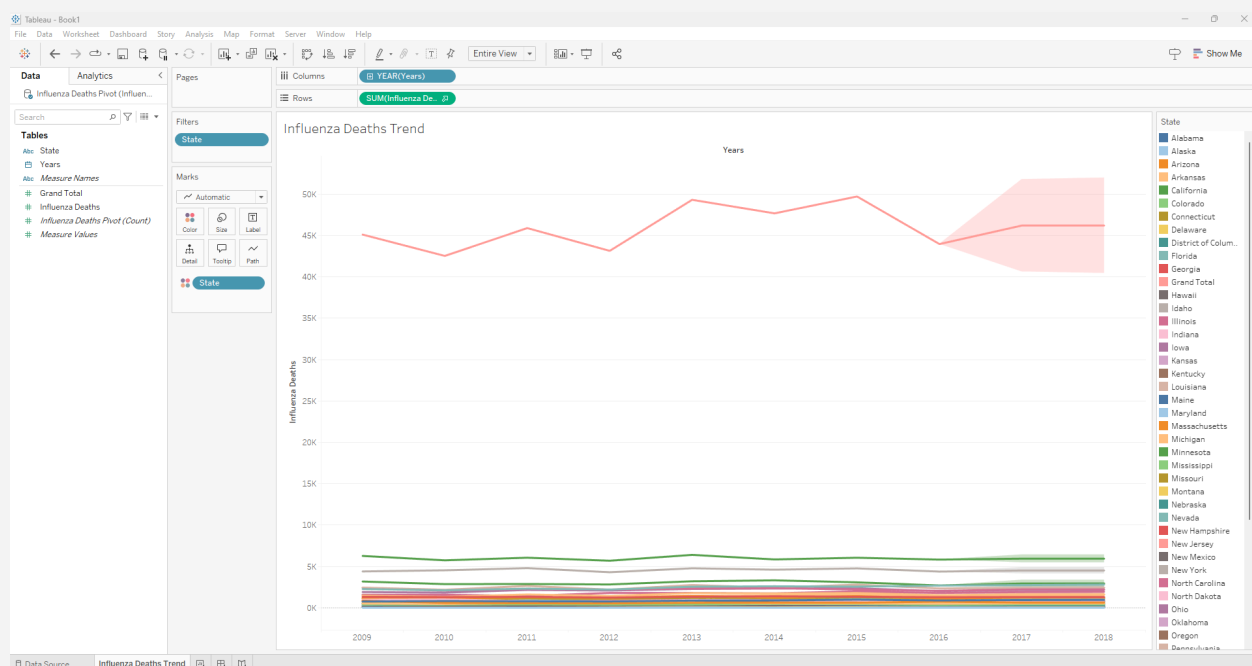
This chart shows the predicted influenza deaths for 2017 and 2018 based on historical data from 2009 to 2016. The shaded area represents the prediction

intervals, showing a range where the actual values are likely to fall. Including seasonality helps account for recurring patterns in the data, making the forecast more accurate for planning purposes.

Forecast of Influenza Deaths (Without Seasonality)
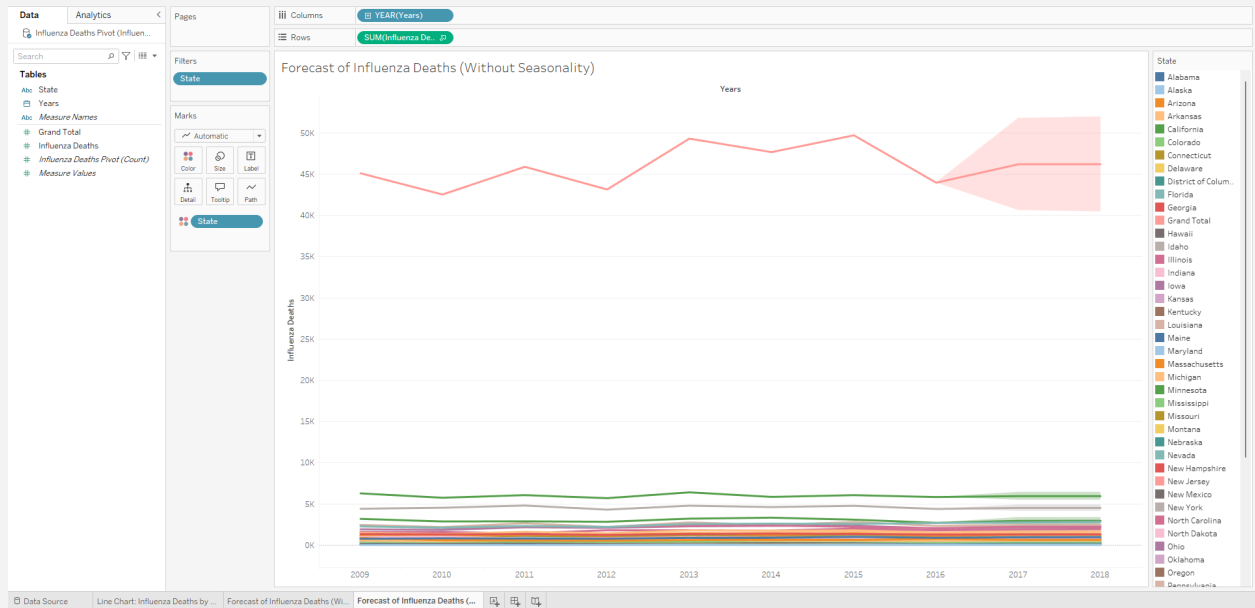
This chart shows the predicted influenza deaths for 2017 and 2018 without factoring in seasonal patterns. Turning off seasonality didn't make much of a difference, which might mean the historical data doesn't have strong seasonal trends. The prediction intervals stayed the same, suggesting that other factors are influencing the trend.

Chronicling America Temporal Coverage by State (Map)
By [Chronicling America: Historic American Newspapers](#)
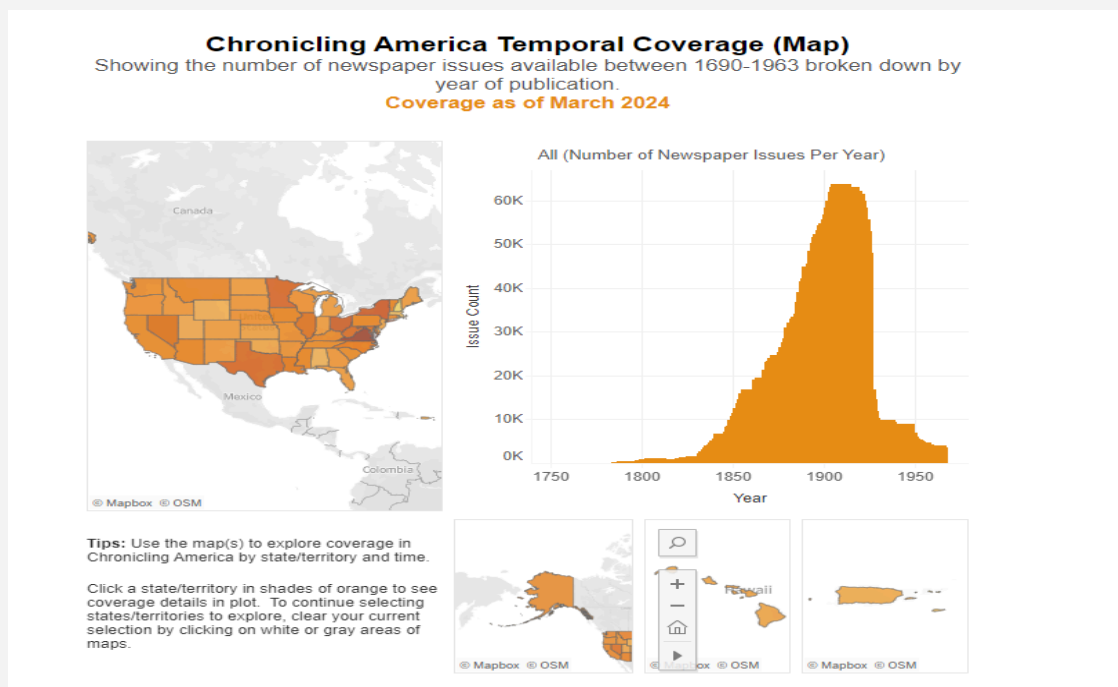
I found a visualization titled *Chronicling America Temporal Coverage by State (Map)* on Tableau Public. It shows the number of newspaper issues available in Chronicling America from 1690 to 1963, broken down by state and year of publication. The map and timeline combination makes it visually engaging and provides a lot of information in one place.

What works well is the interactive aspect of the map. You can explore state-level details by hovering over specific regions, and the timeline gives a clear view of publication trends over time.

However, there are some challenges. The color palette blends too much, making it hard to distinguish between states with similar values. Also, states like Alaska and Hawaii don't have visible labels unless you hover over them, which makes it harder to quickly identify them.

To improve it, I'd suggest using a more distinct color palette to make the differences between states more noticeable. Adding visible labels to states, especially smaller ones like Alaska and Hawaii, would also make the visualization more user-friendly. Overall, it's a strong visualization that could be improved with better clarity and usability.