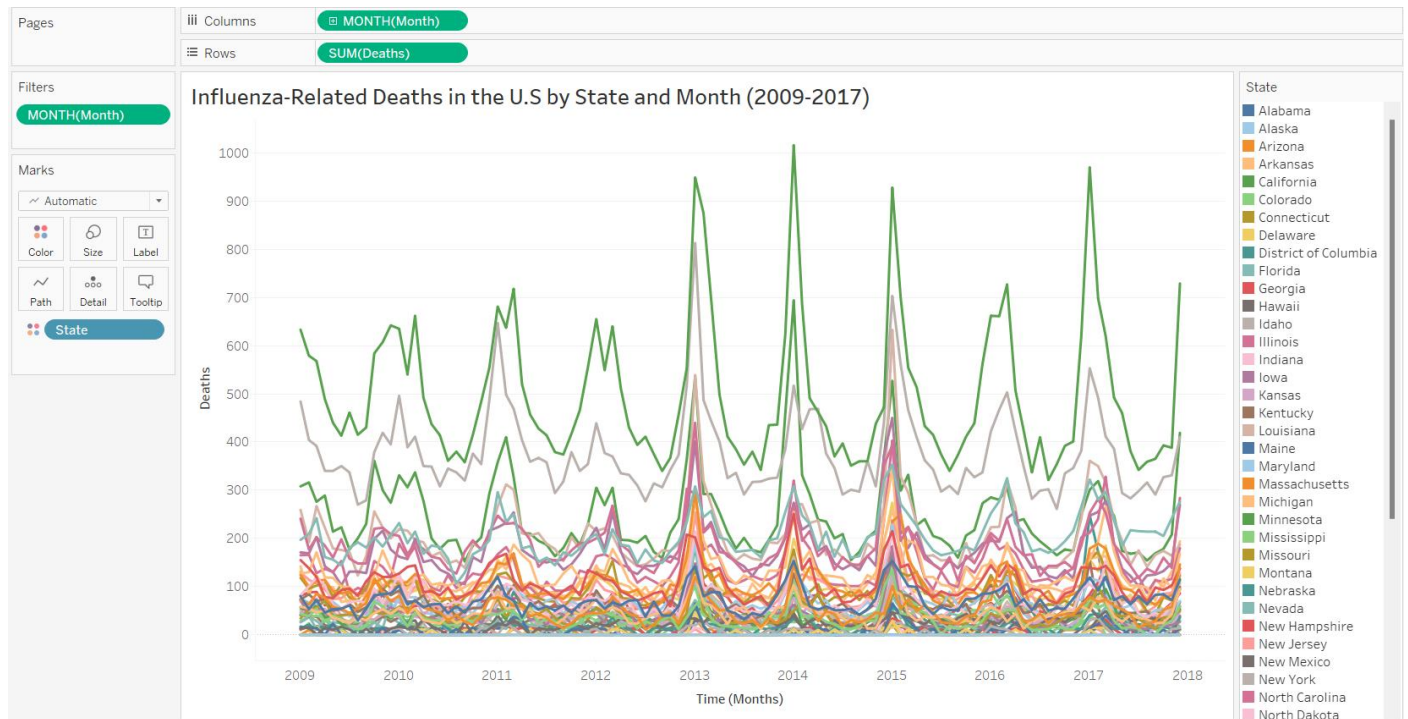## Temporal Analysis & Forecasting
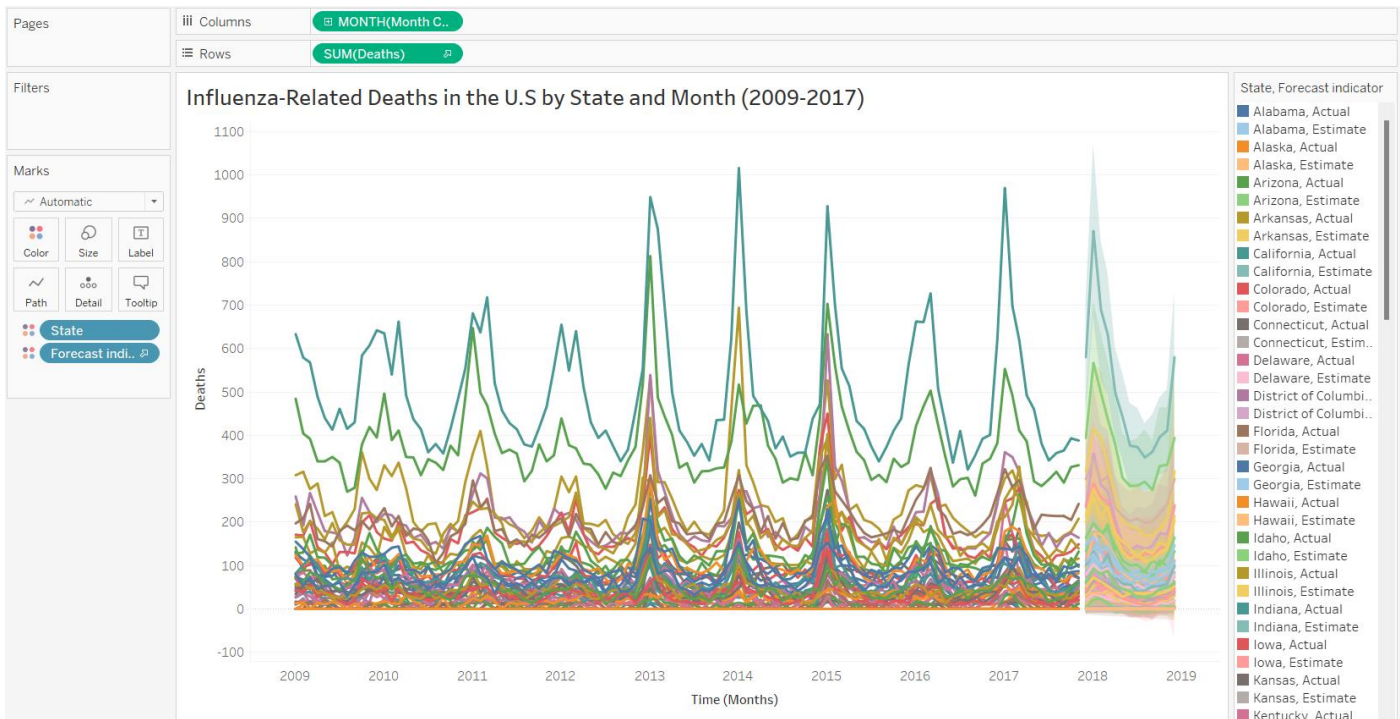
https://public.tableau.com/views/DataImmerisonAchievement2Ex2_4TemporalAnalysisForecasting/TemporalAnalysis?:language=en-US&publish=yes&:sid=&:display_count=n&:origin=viz_share_link
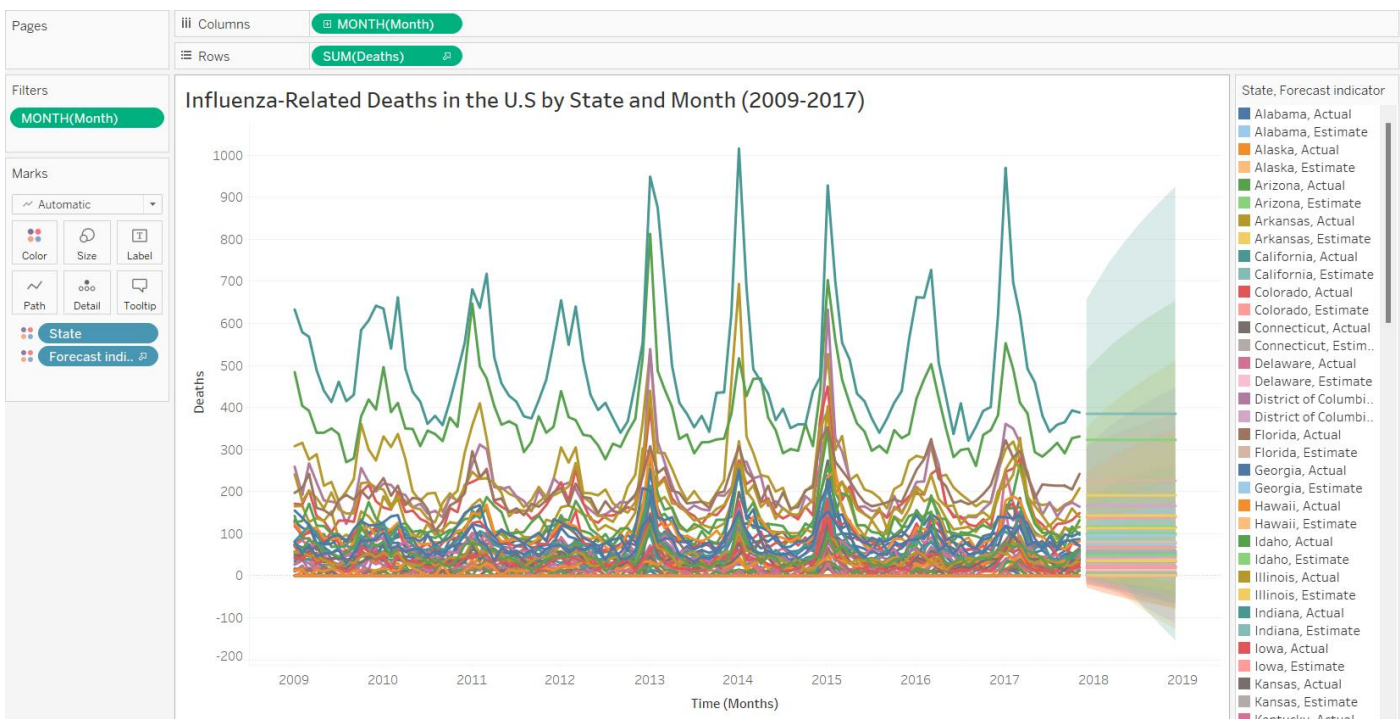
Line Chart: influenza-related deaths

- x-axis: months of each year from January 2009 to December 2017
- y-axis: influenza death count
- categories: each U.S state (makes the line chart difficult to read)
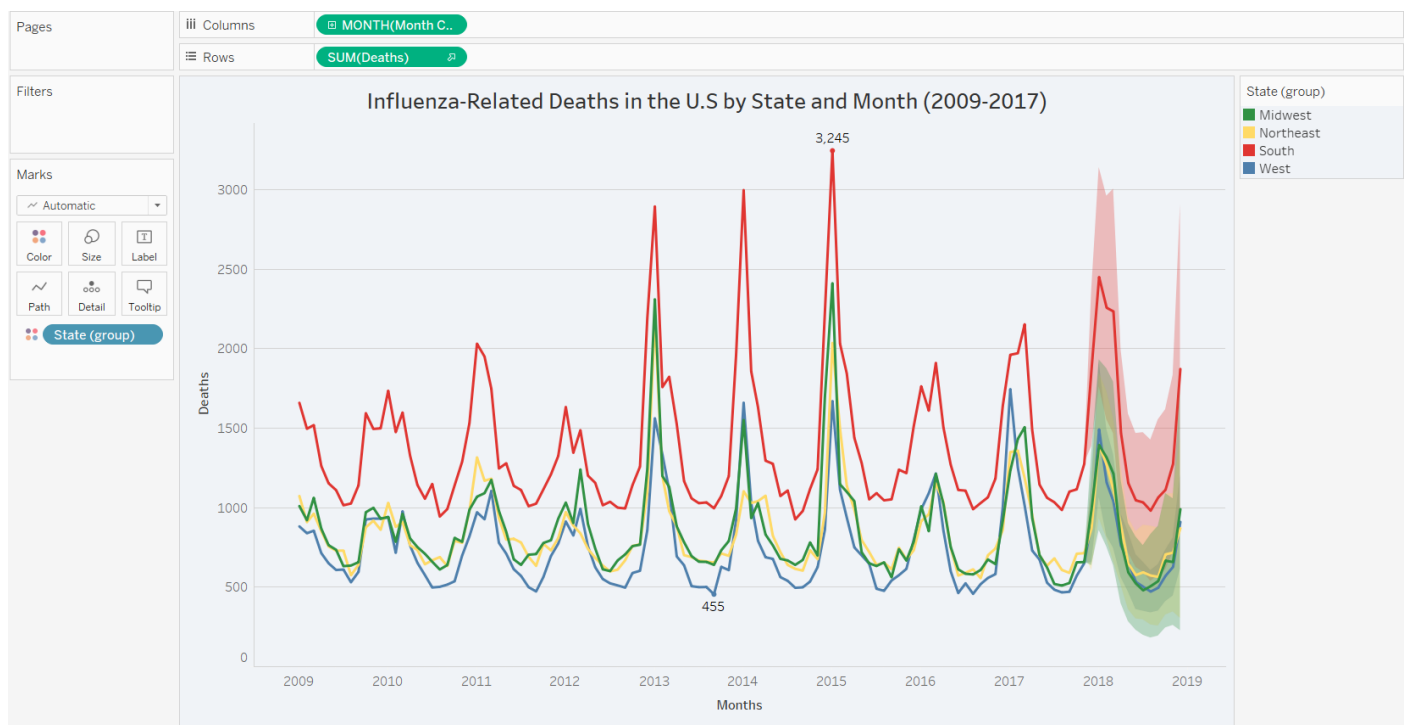
Forecast (with Seasonality):
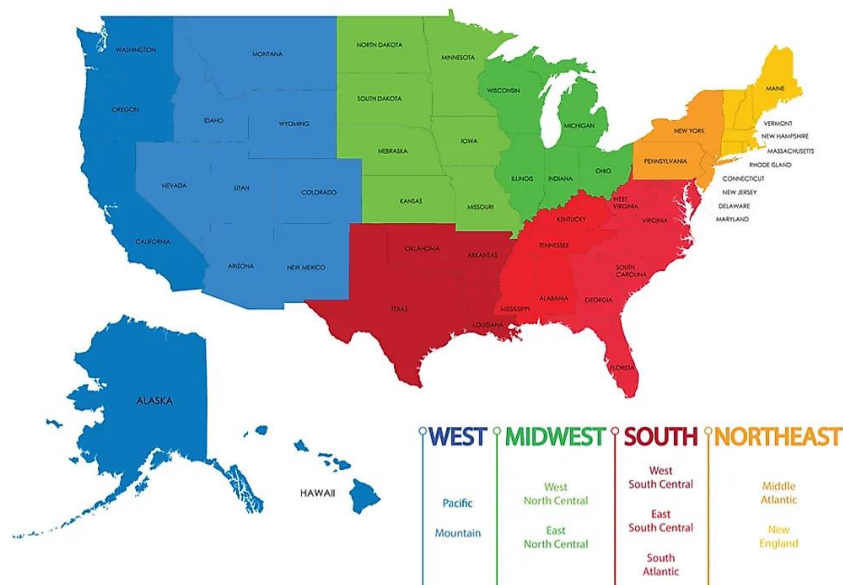

Forecast (without Seasonality):

- Despite the difficulty in reading caused by crowdedness in both charts, the forecast with seasonality is clearly the better option since there are discernible peaks and valleys over the years.

Updated Visualisation:

The biggest issue with the above line charts is their lack of readability caused by many lines. To reduce the number of categories, and thus lines, each state will be grouped into regions across the U.S. Whilst there are many mays this could be done, I have opted to follow a common geographical grouping shown below:

- This graph is far easier to read since it is not as cluttered.
- The colour code of each region matches the map above but also works by itself since each colour contrasts with the rest.