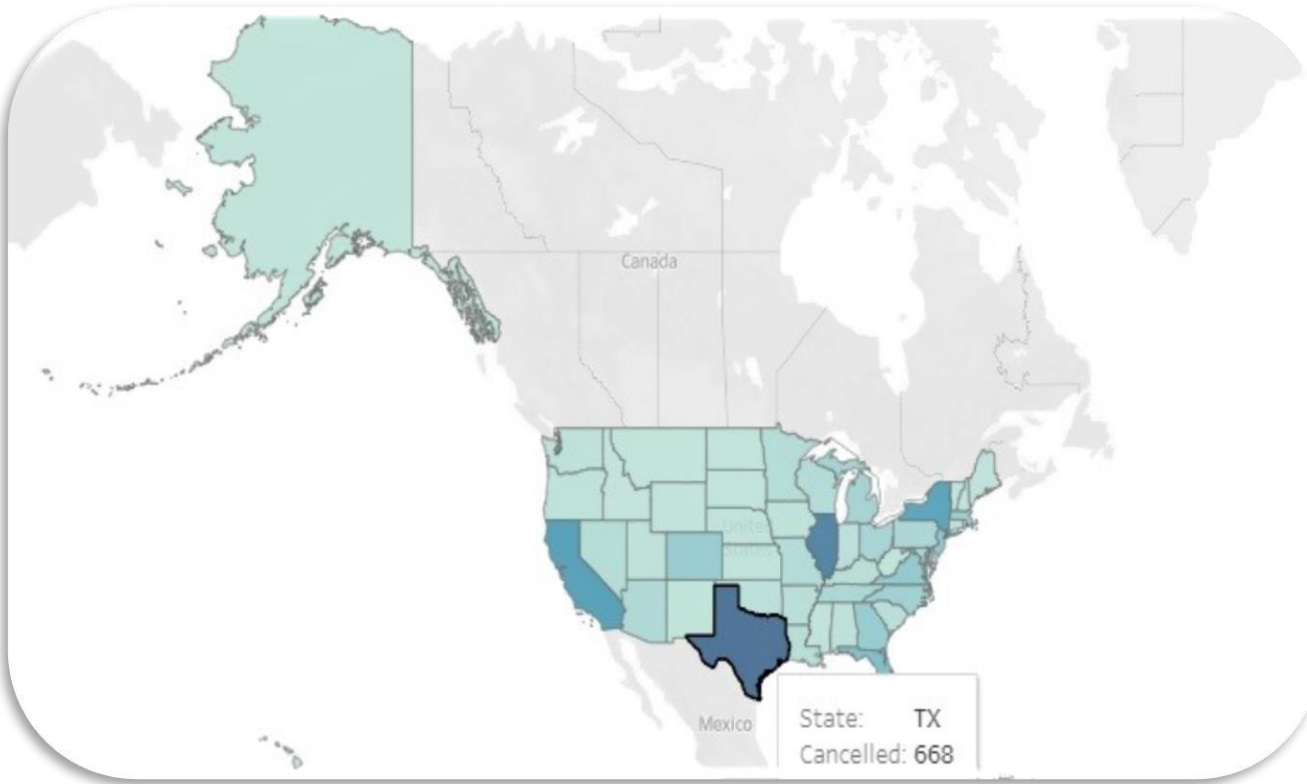# Flight Delay Analysis Report

- Among the three options that I was given, I choose to do Flight analysis. As mentioned, I have created 3 visuals that answer individual questions. The visuals consist of a map, bar chart and a line chart. Links to the dashboard and the summary are given below.

- Story :- https://public.tableau.com/shared/J5Z7SK4BX?:display_count=yes&:origin=viz_share_link

- Dashboard :-
https://public.tableau.com/views/FilghtDelayDashboard/Dashboard1?:embed=y&:display_count=yes&:origin=viz_share_link

- Sheet Links :-

https://public.tableau.com/shared/HXST4K526?:display_count=yes&:origin=viz_share_link

https://public.tableau.com/views/BarChartSheet/Sheet2?:embed=y&:display_count=yes&:origin=viz_share_link

https://public.tableau.com/views/LineChartSheet/Sheet3?:embed=y&:display_count=yes&:origin=viz_share_link

Changes made after the review

- A color scale or legend is added to the map and the labels for months is changed to a range from 1 to 12.

- A filter has been added to the bar chart to see average delay for each airline.

- Colors used in line chart has been changed so that its accessible to individuals with colorblindness.

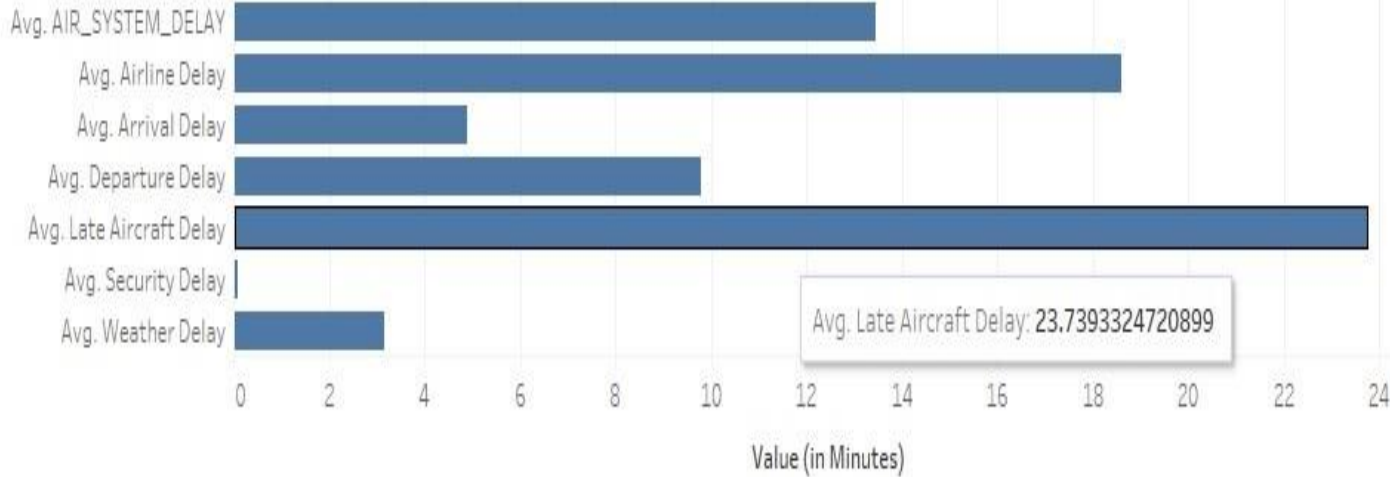- Links to a dashboard, story and sheets are provided separately.

Most Cancellations in each state

It can be noted that the state of Texas has the highest number of cancellations with a record of 668 followed by Illinois at 563. Montana has the least number of cancellations, i.e., 3. Delaware has a cancellation record of 0 which cannot be counted as the least citing to the number of flights flying in and out.

I have chosen Maps to answer this question. Even people with no knowledge about the states can hover over and get to know the cancellation number.
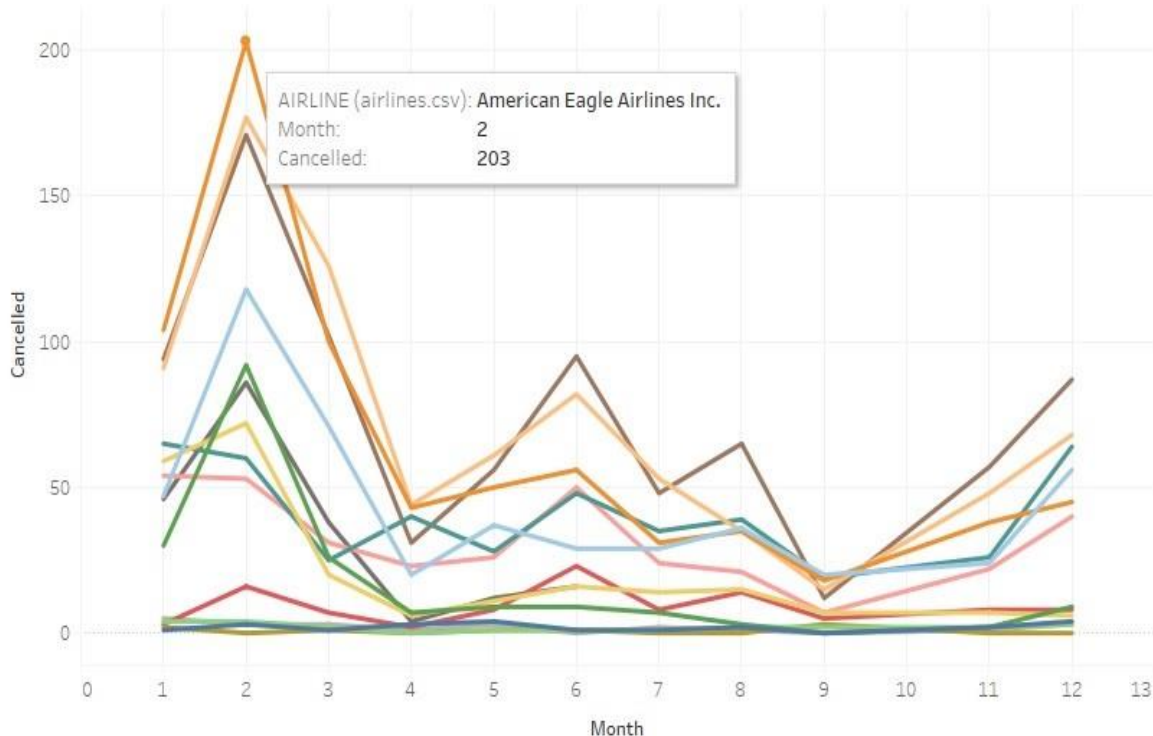
Most delay cause

Flight delay occur due to various reasons and the ones mentioned in the data are compared below. It is quite clear that on average late aircraft delay tops the list with 23.7 mins approx followed by airline delay at 18.6 mins approx. It can be understood from the graph that the people at the security check work efficiently as they seem to have a very low delay average which is less than a minute.

Bar charts are the best choice while comparing quantitative data. It clearly shows the difference in each delay.

Most number of cancellations by airlines in a month

It is clear from the chart the month of february witnessed the most number of cancellations with American Eagle Airlines topping the list at 203. In the month of June, cancellation record has noted some shoot up after a steady drop in the months that followed february. Southwest airlines recorded 95 in June. September had the least number of cancellations.Clearly,fewer people had no second thoughts about their trip.

I felt line charts could be the best choice to represent number of cancellations in a month indicating for each airline within a single chart.