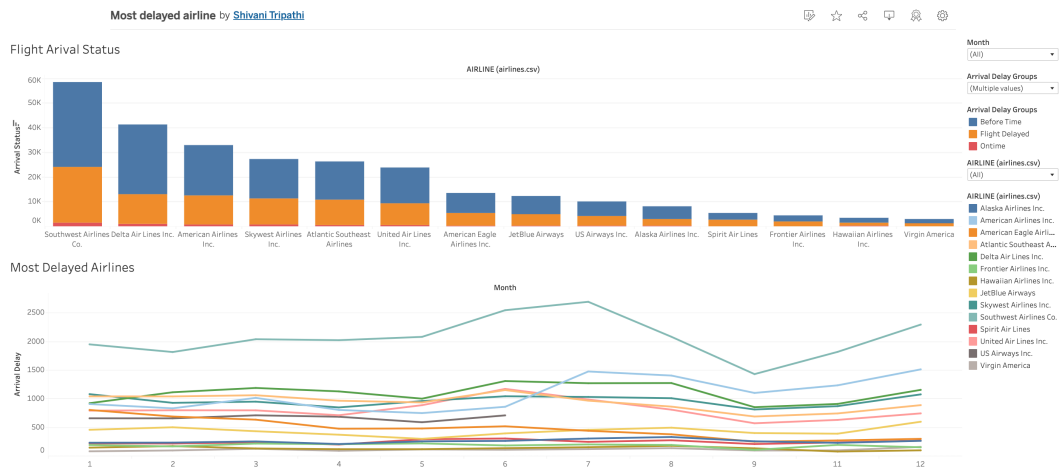# Telling Stories with Tableau
Flights delay and cancellation dataset

- Which airline was delayed the most in 2015?

Link-
https://public.tableau.com/views/Mostdelayedairline_16584353032340/Dashboard1?:language=en-US&:display_count=n&:origin=viz_share_link
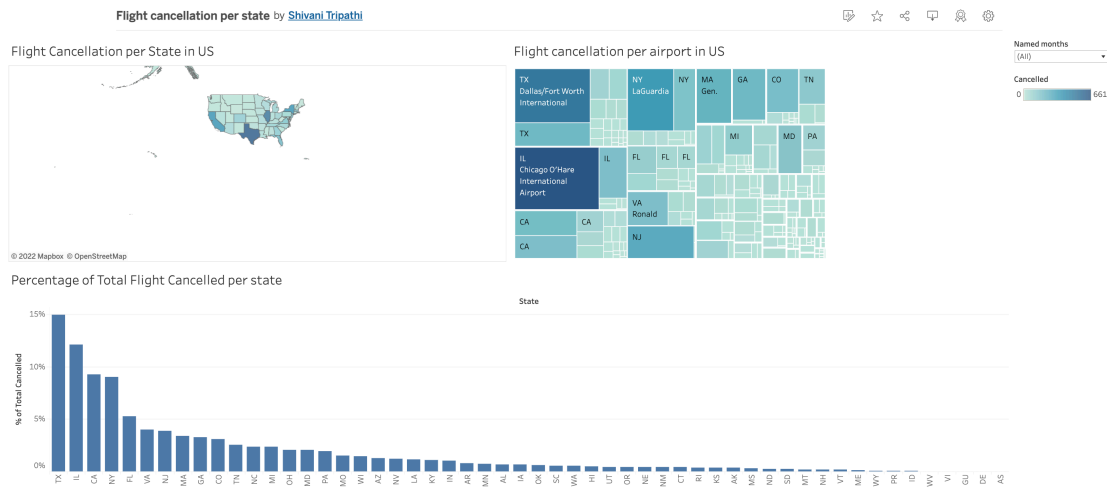

Summary- From the arrival status report generated for year 2015, it can be said that Southwest airlines has the most delayed arrival during the entire year, we can also see the same from the line chart which shows the flight delayed month wise. For each month the delay for southwest airlines is at the top, during the month of July, it's the highest.

Design- I have used the stack bars to show the three groups in arrival delay, i.e. Before time, Flight Delayed, Ontime, which I created using calculated field. For the second graph line chart is used, since it gives the best visualization when comparing the data in time frame.

- Which state in US had the most cancelled flights? Was there any particular airport in that state which had the most cancellation?

Link-
https://public.tableau.com/views/Flightcancellationperstate_16584423869660/Dashboard2?:language=en-US&:display_count=n&:origin=viz_share_link
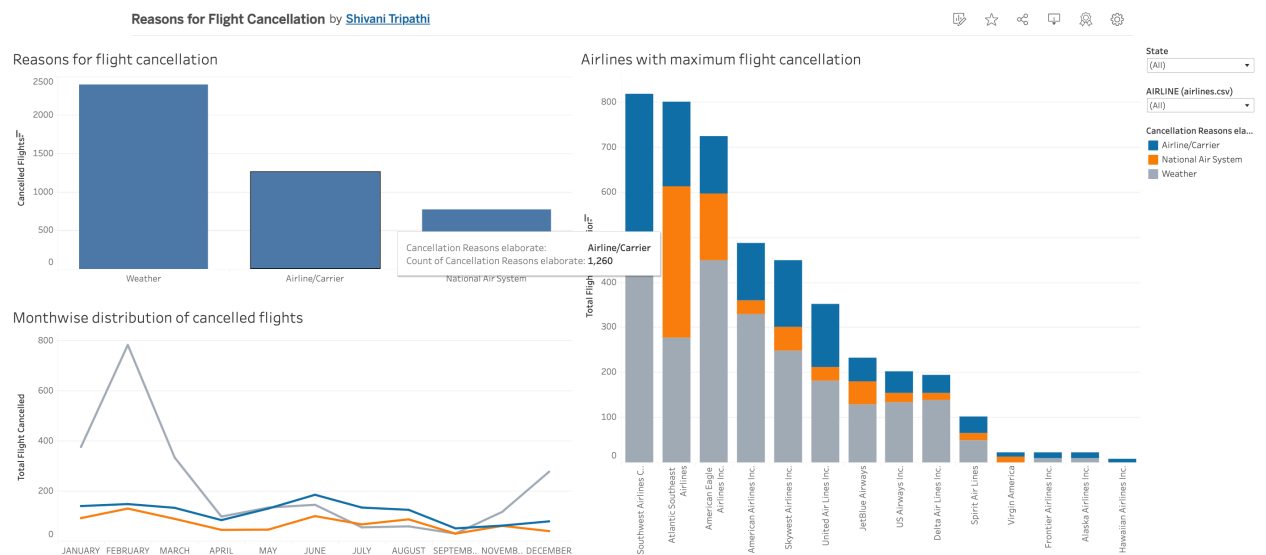
Flight cancellation per state by Shivani Tripathi

Flight Cancellation per State in US

Flight cancellation per airport in US

Named months
(All)

Cancelled
0 ——— 661

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Percentage of Total Flight Cancelled per state

State

Summary- For all the month, Texas had the most cancelled flights, however the situation changes when we select any particular month, for example- if we look at the month of January, New York airports has the most cancelled flights.
From the tree map, we can have a look at the airports in that particular state which had the most flight cancellations. For example- out of many Texas airports, Dallas/ Worth international airport had the highest cancelled flights. The bar chart below shows the percentage of total cancelled flights.
Design- The map shows the flight cancellation per state, gives the quick idea of the cancelled flights based on the color of each state. The bar chart is easy to understand when plotting numerical to categorical data. Tree map is used in order to understand the relative size of each airport which has cancelled flights for any particular state.

- What was the reason for cancellation?
  Link-
  https://public.tableau.com/views/ReasonsforFlightCancellation_16584481149340/Dashboard3?:language=en-US&:display_count=n&:origin=viz_share_link

Reasons for Flight Cancellation by Shivani Tripathi

Reasons for flight cancellation

Airlines with maximum flight cancellation

State
(All)

AIRLINE (airlines.csv)
(All)

Cancellation Reasons ela...
- Airline/Carrier
- National Air System
- Weather

Cancellation Reasons elaborate:
Count of Cancellation Reasons elaborate: 1,260
Airline/Carrier

Monthwise distribution of cancelled flights

Summary- There are 3 reasons for flight cancellation, from graph 1 we can see that most of the time flight got cancelled was because of weather issues, after that Airline/Carrier fault and then National air system.
We can even filter it, if we want to get the information for any particular state, for example- In NY, 210 flights got cancelled because of weather, also the line chart gives the distribution month wise, So during the month of February the flight cancellation because of weather was highest in NY.
Stack bar chart gives the information of all airlines and total cancellation along with the reasons. Based on the visualization, for the year 2015 Southwest had the highest cancellation, and out of all 446 was because of the weather.
Design- The bar chart is used here to get the count of each cancellation reasons, also we wanted to see how these cancellation reasons vary with months, so we used line chart to get the value month wise.

Resources: Knowledge Platform Udacity