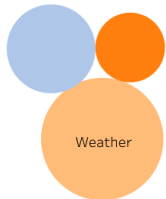


1st viz: Flight Cancellations

Dashboard:

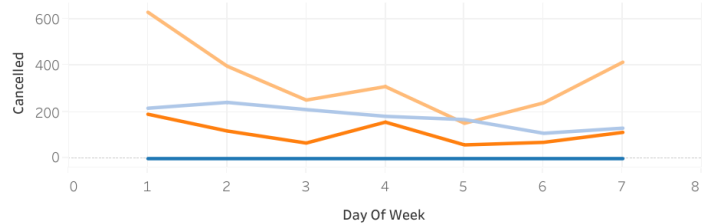
Cancellation by Type



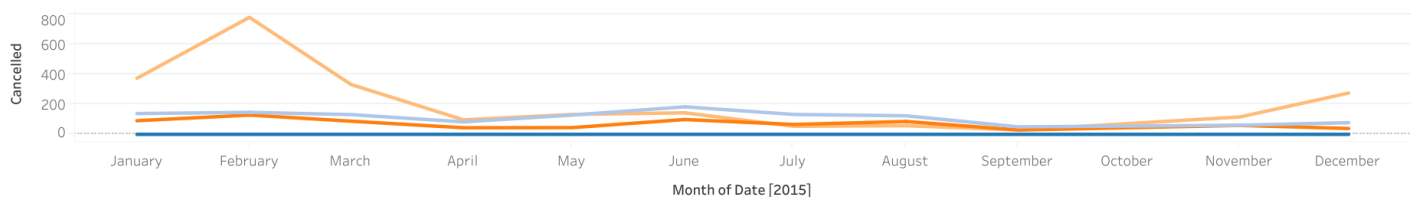
Cancellation Reason

- Security
- Airline/Carrier
- National Air System

Which day has most cancellation?



The most/least months in flight cancellation



Link:

https://public.tableau.com/app/profile/mohanad1479/viz/FlightCancellations_16450234892960/Dashboard1?publish=yes

Summary (insight):

This dashboard contains three charts about flight cancellation in the US in 2015.

First, the pie chart, which illustrates the number of cancellations by type. From this graph, it is noticeable that most cancelled flight were because of the (bad weather).

Second, the line chart. The insight which can be concluded from this visualization, is that most cancelled flight were on Monday; whereas on Friday lowest number of flights got cancelled.

Third, the line chart explains the variation for each cancellation type over time. It appears that February, is the month where most cancellations occurred, with (weather) as the predominant reason. September scored the best months in terms of less cancelled flight.

Design Choice:

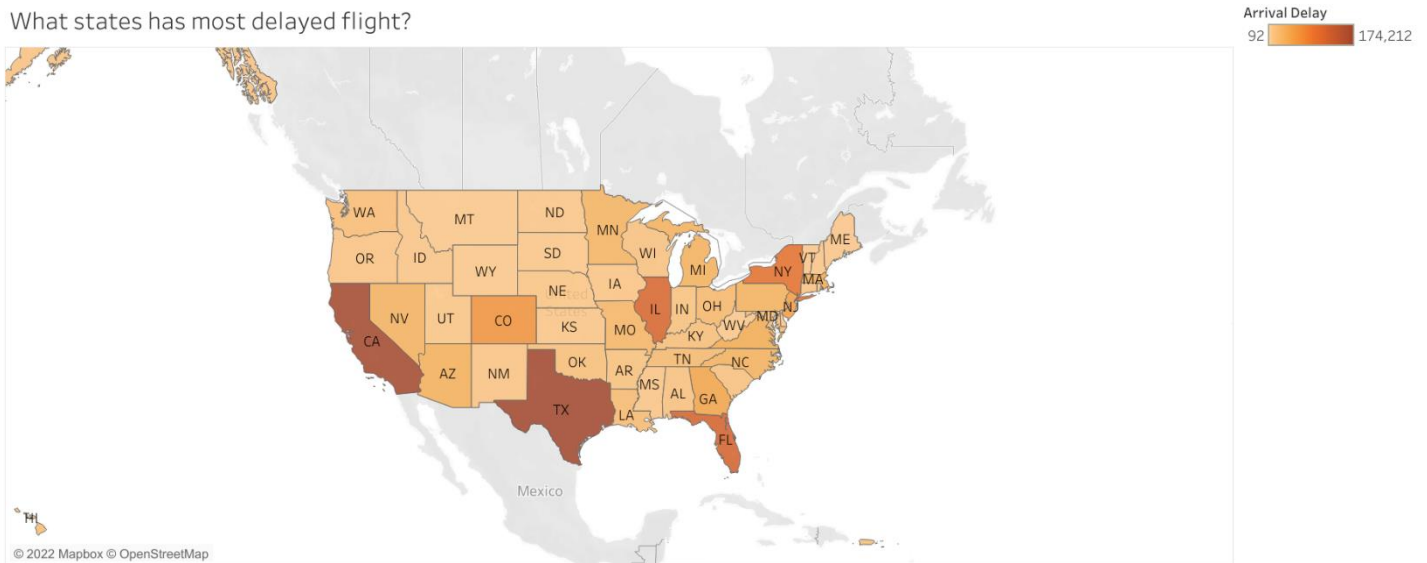
In these charts, I chose to use color encoding to represent the reason for cancellation. The color palette is chosen carefully to not causing distraction or eye blindness (red/green). I use in-chart filter to let the reader easily click on one color, and it will automatically filter the data on the other graphs based on this specific color (i.e., cancellation reason). Line charts were used because the data is time series data.

Resources: N/A

2nd viz: What states has most delayed flight?

Dashboard:

What states has most delayed flight?



Link:

<https://public.tableau.com/app/profile/mohanad1479/viz/Whatstateshasmostdelayedflight/Dashboard2?publish=yes>

Summary (insight):

This visualization describes the US states with most arrival delay in 2015. This lighter color indicates fewer delay period, and the dark one is the worst, which takes longer time. Texas and California the among the worst destinations in terms of flight delay time upon arrival.

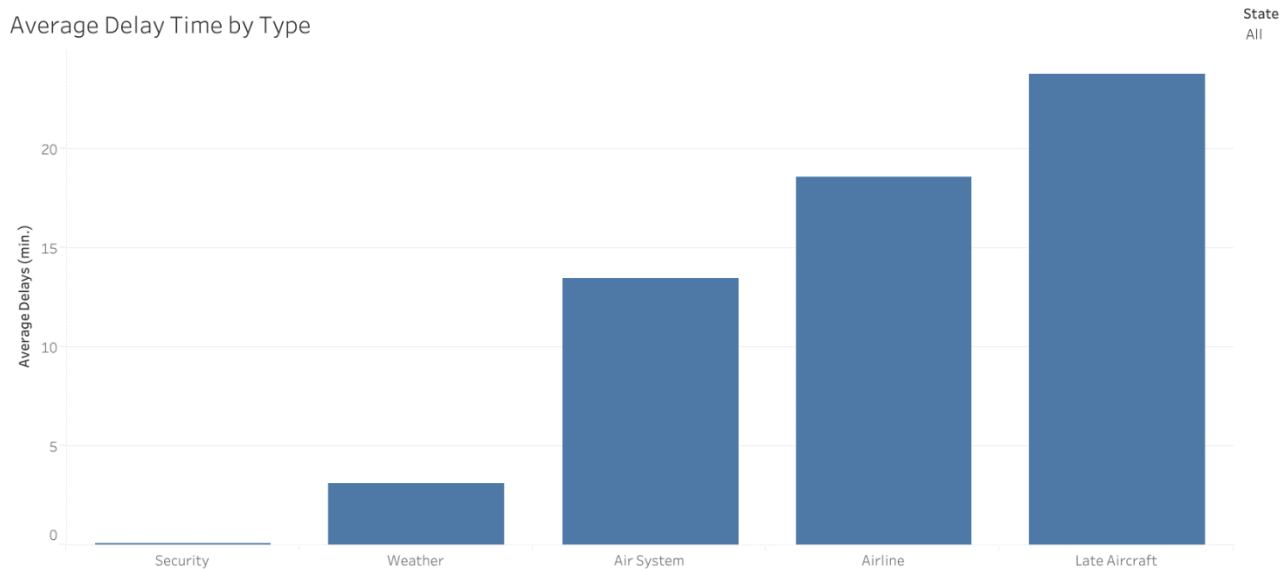
Design Choice:

I choose this specific color because it the maps describes the "delay" which is viewed as negative thing. I've also added tooltip feature for "Departure Delay" for the reader to look at the difference between Departure and Arrival Delays for each state.

Resources: N/A

3rd viz: Causes for Delayed Flights

Dashboard:



Link: <https://public.tableau.com/app/profile/mohanad1479/viz/CausesforDelayedFlights/Dashboard3>

Summary (insight):

The overall average delay time for based on the cause is shown in this visualization.

The graph shows that Delay caused by "Late Aircrafts" got the highest amount of time on average. On the other hand, there is almost no significant delays caused by Security for flights in 2015.

Design Choice:

This is a bar chart, which is suitable to compare between categorical variables. I chose this color because it is good for the eyes, and not causing eye-blindness. I also didn't add any irrelevant or unnecessary details that could distract the reader. I've added an option to filter the data by "State" because it would be helpful for readers who interested to how the distribution changes per for each state.

Resources: N/A