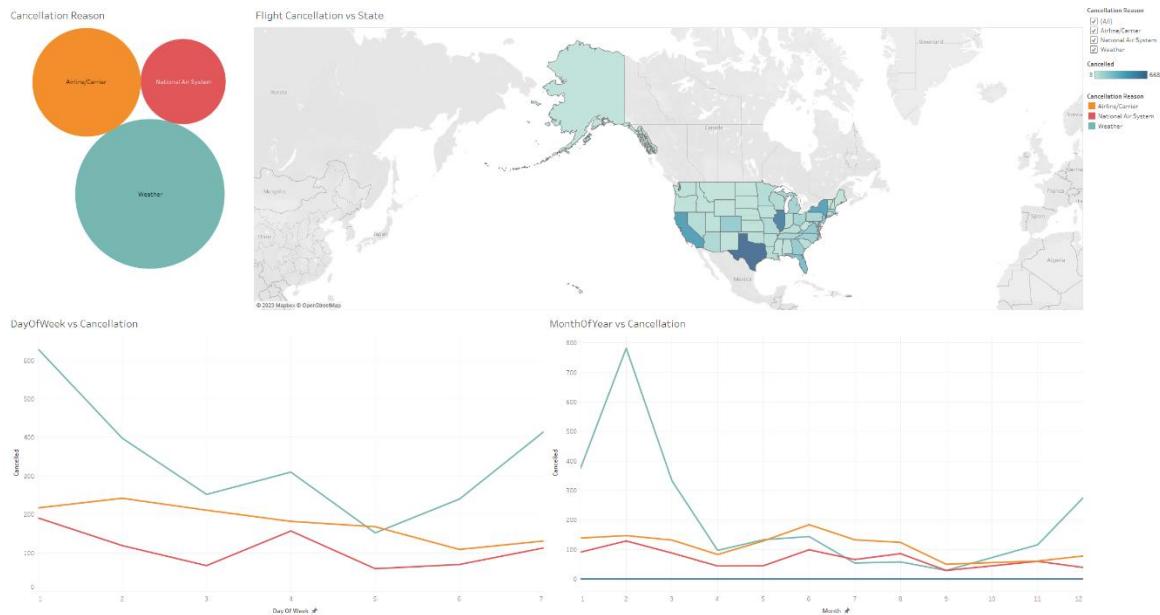


## Insight 1: Flight Cancellation Dashboard

### Snapshot:



### Link:

[https://public.tableau.com/app/profile/kevin.darmasaputra/viz/Book1\\_16987924518680/FlightCancellationDashboard](https://public.tableau.com/app/profile/kevin.darmasaputra/viz/Book1_16987924518680/FlightCancellationDashboard)

### Summary:

This dashboard contains 4 charts that explain about flight cancellation in the US in 2015. The purpose of the bubble chart is to show that most of the cancellations are due to weather. The map chart shows most cancellations happened in 4 states, which are CA, TX, IL, and NY.

There are 2-line charts. The first one shows the day of the week vs number of cancellations. From the chart, we can gather that Monday has the most number of cancellations, while Friday has the lowest. The 2<sup>nd</sup> line chart illustrates the month of the year vs number of cancellations. By a huge margin, February has the most number of cancellations and it's mostly due to the weather. September has the lowest number of cancellations, which also happen to be the only month where weather is not the number one reason for cancellation.

### Design:

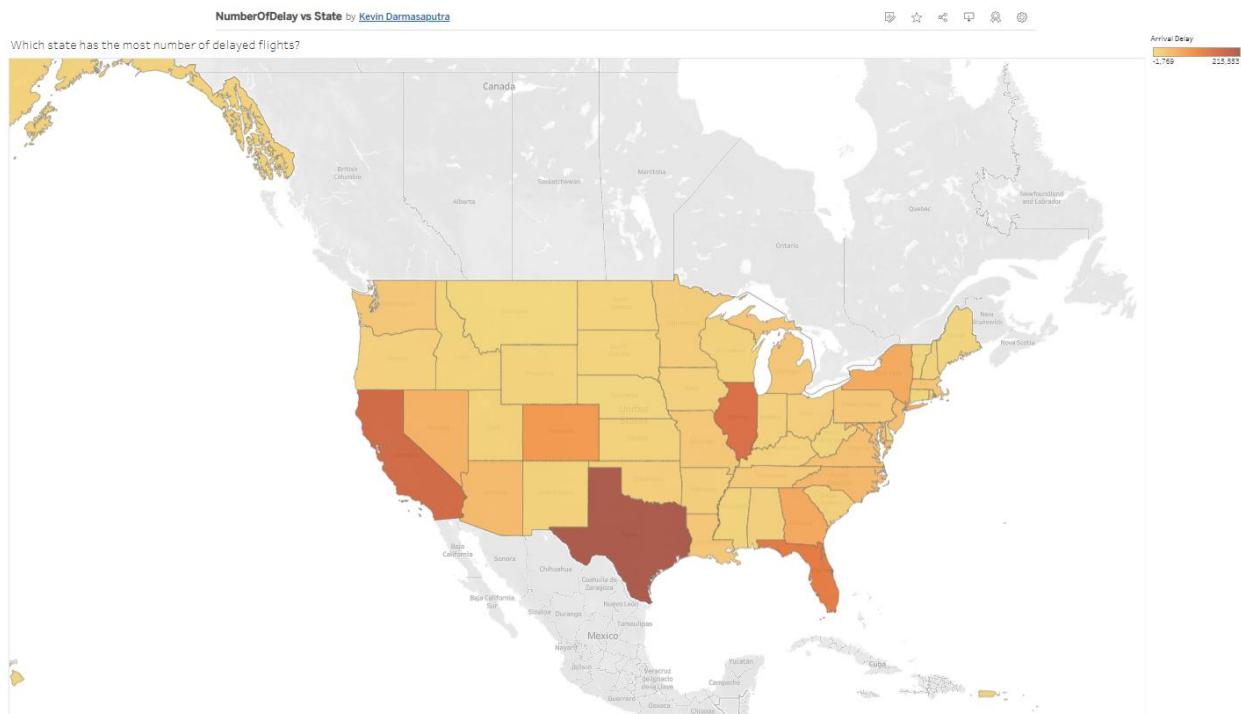
In this dashboard, I chose the contrast color encoding to show the dominance of weather as the number one reason for cancellations. I also provided in-chart filter to let the reader easily filter based on the reason of cancellation. Reader can also filter based on the state on the map chart if they want to check cancellation reason per state only. The reason why line charts were used for day of the week and month of the year data is because it's a time series data.

### Resources:

N/A

## Insight 2: Which state has the greatest number of delayed flights?

### Snapshot:



### Link:

[https://public.tableau.com/app/profile/kevin.darmasaputra/viz/NumberOfDelayvsState/NumberOfDelay\\_vsState](https://public.tableau.com/app/profile/kevin.darmasaputra/viz/NumberOfDelayvsState/NumberOfDelay_vsState)

### Summary:

Since we have discussed about flight cancellation on the dashboard, this next visualization will explore about flight delay. The map chart shows US states in respect to their number of flight delays. The darker color indicates state with the most delay relative to their arrival time.

### Design:

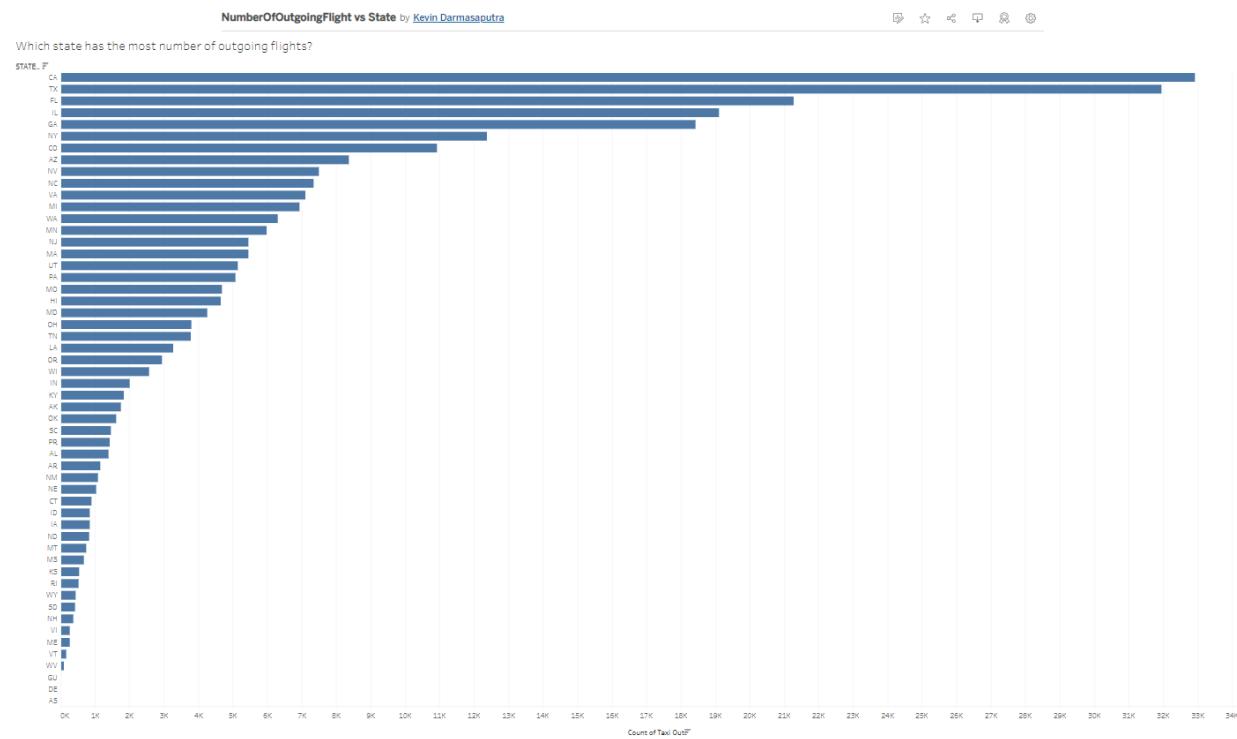
I choose the shades of orange to red because it's distinguishable across its color spectrum and also color-blind friendly. There's also an added tooltip for the reader to look at its state respective arrival and departure delay.

### Resources:

N/A

### Insight 3: Which state has the greatest number of outgoing flights?

#### Snapshot:



#### Link:

<https://public.tableau.com/app/profile/kevin.darmasaputra/viz/NumberOfOutgoingFlightvsState/NumberOfOutgoingFlightvsState>

#### Summary:

From the previous dashboard and worksheet, we found that both CA and TX dominate the numbers of flight cancellations and flight delays. Next, we want to investigate whether that's because CA and TX also have a greater number of outgoing flights compared to the other state. According to the graph, it is confirmed those 2 have the most number of flights.

#### Design:

I use a bar chart and use descending sort from the state with the highest number to quickly highlight the difference compared to other states. Bar chart is better on displaying it than map chart because it's placed next to each other so we can identify the difference easily. The color chosen is easy for the eyes.

#### Resources:

N/A