Insight 1:

You can find it <u>here</u>.

Summary: This dashboard highlights the **departure delay** for states and airports. As we can see, **Chicago O'Hare International Airport** is the airport with the most departure delay (161,133 mins). Also, **CA** is the state with the most departure delay (345,558 mins).

Design: I preferred to use a dashboard having **Bar chart** with **geographic map** as it is better for the eye for exploring. I used **sequential brown color** wherein the darker the brown color, more the delay. You can easily see which states & airports are having the large departure times. Also, it has many filters (state, airline, airport, month) so that readers can dig deeper into the data, you can press on any location on a map to display all its airports too!

Resources: N/A

Insight 2:

You can find it <u>here</u>.

Summary: This dashboard highlights the **arrival delay** for states and airports. As we can see, **Chicago O'Hare International Airport** is the airport with the most arrival delay (118,474 mins). Also, **TX** is the state with the most departure delay (215,553 mins).

Seems like **Chicago O'Hare** airport has a problem in facilitating airplanes' embarkation as it has the highest delays in arrival and departure.

Design: I preferred to use a dashboard having **Bar chart** with **geographic map** as it is better for the eye for exploring. I used **sequential brown color** wherein the darker the brown color, more the delay. You can easily see which states & airports are having the large arrival times. Also, it has many filters (state, airline, airport, month) so that readers can dig deeper into the data, you can press on any location on a map to display all its airports too!

Resources: N/A

Insight 3:

You can find it here.

Summary: Investigating more in Chicago O'Hare International Airport to know when those delays are.

We can see that from **May** to **June** the delays have been increased significantly, dropping again, then increasing from **September** to the last of the year.

We may investigate at those times in the airport to see why the delays rose in this way.

Design: I used a **line chart** with **dual axis** between both delays to see both changes in one graph together. Where I used **blue** & **orange colors** to be easily identified by the users.

Resources: N/A

Insight 4:

You can find it here.

Summary: We want to answer the question "Are flights affected by the time of the year?"

For the first three quarters in 2015, the flights are almost the same. But we see a significant drop in flights from Q3 to Q4 (from 77k to 49k). So now we know that in the last quarter of 2015 flights in USA decreased.

Design: I used a line chart as seeing the changes between events (quarters) is more comfortable for the eye using a line chart. I used a **light blue color** to be comfortable too for the eyes.

Resources: N/A

Insight 5:

You can find it here.

Summary: This dashboard highlights the count of cancelled flights for airlines by each quarter of 2015. It also shows the cancellation rate as a line chart between quarters and the count of cancelled flights.

From this dashboard, we found that the number of cancelled flights is at its peak in the first quarter of 2015, and it keeps decreasing for the rest of the year.

Design: I used a dashboard having a bar chart and a line chart to show both options. Where the bar chart is having 4 colors for each quarter to make it easily identified by the users. Also, used light blue **color** in the line chart to be comfortable for the eyes.

Resources: N/A

Insight 6:

You can find it <u>here</u>.

Summary: This pie chart shows the percentages of whether a flight is had been completed or cancelled

We can find that the cancelled flights take 1.61% of the total flights, while the completed flights take the rest which is 98.39%.

Design: I used a **pie chart** to illustrate the percentages between both cases. Also, there is a tooltip showing the count of both cases. I used orange & blue colors to be easily distinguished and is good for color blind.

Resources: N/A