1'st Insight: Type of Delay

Link

<u>Summary:</u> This bar chart shows the types of delays experienced by flights and the ratio of each type to the other. In terms of the total number of flights, departure delay was the most significant cause of delays.

Two filters have been added airline and airport and we can search by using one or both filters for more accurate results.

<u>Design:</u> since categorical (types of delays) and quantitative (total number of flight) data were used here, the bar chart was best to depict the relationship between variables.

Resources: N/A

2'nd Insight: Delay Rate per Month

<u>link</u>

<u>Summary:</u> This line chart shows the rate of delay during the months of the year, where we notice an increase in the rate of delays of all kinds during the month of June, while we notice a decrease in the month of September.

<u>Design:</u> Since one of the variables is time, the line chart was the best to show the change over time.

Resources: N/A

3'rd Insight: Cancellation

Link

<u>Summary:</u> This dashboard is for canceled flights. The first chart "Rate of Cancellation Reasons" shows the reasons for cancelling flights and the ratio of each reason to the other during 2015. Where we notice that the weather is the most reason for canceling flights.

The second chart "Cancellation Percentage" shows by the map the percentage of canceled flights out of the total flights in each state. The percentage was used to get an accurate and fair comparison due to the large disparity in total flights between states. From the map, we can see that Vermont has the highest percentage of canceled flights with 8 canceled flights out of 179 at 4.47%. Hawaii, on the other hand, has the lowest percentage of canceled flights with 14 canceled flights out of 4,668 at 0.30%.

The third chart "Cancellation Reason Guide" shows in detail the cancellation cases, three filters have been added, state, airport, airline, where it is possible by using one or more of them to know the details of the cancellation accurately.

<u>Design:</u> Since the data is geographical (country and state), map is the ideal choice to show information and compare clearly and easily.

For Categorical (cancellation reason) – Quantitative (total number of flight) data bar chart was the best choice.

For Categorical (cancellation reason) -Categorical (state, airport, airline) data text table was the best choice.

Resources: N/A