Flight Delays and Cancellations Visualizations

1- Cancellation Reason Dashboard:

Link:

https://public.tableau.com/views/CancellationReasonDashboard_16713750701050/CancellationReasonDashboard?:language=en-US&:display_count=n&:origin=viz_share_link

Summary: this dashboard shows the total of cancellation reasons for each airline where the stacked bars show the total for each reason per airline meanwhile pie chart shows the total for each reason for all airline in total. We can see that Southwest Airlines Co. has the most cancelled times for airline/carrier reasons (309). American Eagle Airline inc. had the most cancelled flights for weather reason (448). Atlantic Southeast airlines had the most cancelled flights for national air system reasons (335). Lastly, no airline had any issue cancelling for security reasons.

Design: I used the stacked bar and pie charts because they suit categorical data where bar chart showed clearly the total for each cancellation reason per airline while pie chart highlighted the total for each reason. Each reason has its own color to distinguish between them easily. I added cancellation reason filter to help focus more on one reason or compare two of them. I changed aliases for each reason from metadata provided.

2- Security Delay per State Dashboard:

Link:

https://public.tableau.com/views/SecurityDelayperStateDashboard/DomesticFlightSecurityDelay
sinUSAin2015_1?:language=en-US&:display_count=n&:origin=viz_share_link

Summary: in this dashboard we see that both the map and bar chart show the total Security Delay per state in each month. According to the dashboard the state with the most delay time in Florida (FL) by 663 minutes and the least state with security delays is Indiana (IN) by 1 minute of the total of all months together.

Design: I chose the map because it suits geographical data and gives a nice quick highlighted view of total delays for all states at once. Using sequential blue color also made it easier to see the total delays where the darker it gets the more security delay time spent in that state. For the bar chart it's for this chart simplicity to see and read the different numbers. I added the month filter helps in getting more info of any range of months. The data has been filtered to show the states who had at least one security delay in any month.

3- Total Distance and Air Time Per Airline:

Link:

https://public.tableau.com/views/TotalDistanceandAirTimePerAirline/TotalDistanceandAirTime
PerAirline?:language=en-US&:display_count=n&:origin=viz_share_link

Summary: this visualization shows two line charts, one for the total distance and the other for airtime per airline on each day of the week in total. We can see that for all airlines they had the highest distance and airtime in total on day 1 and the lowest on day 6. Southwest Airlines Co. have the most in terms of both distance and airtime totals.

Design: line chart is best suited to represent time series data, and by choosing separate line charts we can see the changes in both data sets clearly on each day of the week. I added an airline filter to click and find both line charts for each airline. I edited Days of the week axis range to normal range by removing day 0 and 8.