Flight Delays and Cancellations

This data comes from a Kaggle dataset, which tracks the on-time performance of US domestic flights operated by large air carriers in 2015.

Visualization 1:Number of flights in each state
https://public.tableau.com/app/profile/sakinah4830/viz/Highestarrivaltimeineachstate/Sheet3#1
Summary:
The map shows the number of flights and states. That is the number of flights that arrived in various states in the USA in 2015. Apparently, California(CA) had the highest number of flights at 32,905, with Texas(TX) having the next highest number of flights at 31,924. At the other end of the spectrum, American Samoa had the lowest number of flights at 2.

Design:
The reason why I chose to use a map visualization was that I had to plot the state-wise number of flights which involves geographical data. I added a state filter so that readers can dig which states have the highest and lowest number of flights in each or a range of states. The sequential blue color wherein the darker the blue color, the more the number of flights, makes it easier to quickly spot which states have a high/low number of flights.

Visualization 2- How many airlines were diverted and canceled?
https://public.tableau.com/app/profile/sakinah4830/viz/ScatterplotofDivertedandCanceledAirlines/Sheet2?publish=yes
Summary:
The scatterplot shows the relationship between the sum of diverted and cancelled flights in various airlines. The cancelled was plotted on the y-axis and diverted on the x-axis while the airline was used to form a relationship between the two variables. It appears that the two variables do have a linear relationship with outliers but have a strong positive correlation. From the scatterplot, HA(Hawaiian Airlines inc.) has both low cancelled and diverted flights. WN(Southwest Airlines Co) has the highest cancelled and diverted flights.

Design:
It was best suited to use a scatterplot here to draw insight into two numerical variables. The plots were colored with a color-blind palette to easily distinguish between each airline. A trend line was added to show the magnitude and direction of correlation.

Insight 3- Departure delay of airlines over state and Airline
https://public.tableau.com/app/profile/sakinah4830/viz/DashboardonDepartureDelay/Dashboard1?publish=yes

Summary:

Departure delay, state, and the airline were visualized in two worksheets and connected to a dashboard. The state was used as a filter for both worksheets for easy visibility.

For the first visualization, a map was used to show the departure delay, state and airline. Airline AA and the state of Texas had the highest departure delay.

For the second visualization, a bar chart was used to check for the highest departure delay over the state. The state of CA has the highest departure delay.

Design:

I chose a dashboard here because it shows a broader story of each finding without having to navigate to each worksheet