Insight #1 : Which Carrier had the Most Delays in Arrival and Departure flights in 2015?

Link: Delays in Departure and Arrivals | Tableau Public

https://public.tableau.com/app/profile/vibha.marks/viz/DelaysinDepartureandArrivals/DelaysinDeparturreandArrival?publish=yes

Summary: Southwest Airlines(WN) is at the top of the race at delays both for arrival(289,992) and departure(648,419).On the other end of the spectrum with the least delays in Arrival is Alaska Airlines (AS) with a negative (-4007) flight delays. For departure the lowest is Hawaiian Airlines (HA) with 589 flight delays.

Design: I used horizontal bars and changed the angle of the graph by 90 degrees and have two similar graphs side by side for better comparison. Used Color blind friendly color palette. Showed the numbers on the graph and used a filter to be more interactive.

Resources: Used YouTube video while doing the entire project, to further my learning of tableau. Tableau - Interactive Filters - YouTube. When the same information is presented in multiple forms, each time you learn a new thing and the information is absorbed by your long term memory.

Insight #2 : Which Carrier had the most amount diverted flights?

Link: Diverted Flights | Tableau Public

https://public.tableau.com/app/profile/vibha.marks/viz/DivertedFlights_16282898166440/DivertedFlights

Summary: Southwest Airlines(WN) has the most amount of diverted flights(181), followed by Atlantic Southeast Airline(99) ,Delta Airline(97), Atlantic Southeast Airline(99) and American Airline (91).

Design: I used packed bubbles and used a tableau`s preset color combination that leans more towards color blind friendly colors. Mainly Blue, Red, Orange and Brown. We can clearly see from the size of the circle which airline had the most diverted flights. And so I feel that the visualization answers the questions without much explanation. I also used a filter to make it more interactive.

Since the std color-blind has only 10 colors, and there are more than 10 airlines, I thought it was better to use Tableau Classic 20, as it is approved by Tableau to use instead for a color-blind palette.

Resources: Tableau in Two Minutes - Tableau Basics for Beginners - YouTube

Used Color Palette Named **Tableau Classic 20** in version 10.0 and higher.

Tableau 20 , Create Custom Color Palettes - Tableau please see reference.

Insight # 3 : Reasons for flight Cancellations?

Link: Reasons for Flight Cancellation? | Tableau Public

https://public.tableau.com/app/profile/vibha.marks/viz/ReasonsforFlightCancellations_16282894712730/ReasonsforFlightCancellation

Summary: American Eagle Airlines (MQ) has the highest number of cancelled flights at 448. Southwest Airlines (WN) had 309 cancelled flights due to Airline carrier and Atlantic Southeast Airlines (EV) due to National Air Systems had 335 cancelled flights.

Design : I used a TreeMaps here, with color-blind friendly colors palette.

We can see at one glance and know the answer to the question, the size of the rectangle plus name of the airlines with numbers adds to the information. The visualization tells a story on its own. The places where the rectangles are much smaller, we can hover over to give more details.

Resources : Tableau - Tree Maps - YouTube