Visualization Data Dashboard

Insight 1

https://public.tableau.com/app/profile/joy.oyaole/viz/ArrivaldelayinvariousAirport/Sheet1?publish=yes

From this insight, it shows the airport that had more flight delays based on counts on arrivals in thousands of minute. Chicago O'Hare International Airport had the highest delay with 223,678. Hartsfield-Jackson Atlanta International Airport was next with 192,689.

The Airport with the least delay on arrival was, Northeast Florida Regional Airport (St.Augustine Airport), which had six(6).

The plot I used was a bar chart, it is easier to read and understand based on the information and a single colour does not distract from the visuals but helps to see into the graph better.

Resources: N/A

Insight 2

https://public.tableau.com/app/profile/joy.oyaole/viz/Weatherdelayin Monthsdays/Sheet2?publish=yes

This shows the weather delays according to months and days. The month with the worst delay was the 6^{th} month which is June having the sum of 2,269. The 3^{rd} month March was the least month with weather delay issues with the sum of 462.

The day with the highest weather delay was on the 8th with the sum of 1,107 and the 30th had the least the sum of 58.

I choose the line graph because it best shows the month and days of weather delays in this dataset.

Resources: N/A

Insight 3

https://public.tableau.com/app/profile/joy.oyaole/viz/WeatherArrivald elayinvariousStates/Sheet3?publish=yes

This insight shows the State in the US that has more delays based on the weather and arrivals. For flight arrival, the State of Texas had the most arrival delays on flight with a count of 174,212 and Weather delay of 23,212. California was next with weather delay of 12,763 and arrival delay of 171,586.

The State within the US with the least arrival delay was Delaware with arrival delay of 214 and weather delay of 0.

For my observations, States with extreme weather, experience weather delays which also affects flight arrivals.

Map graph was used here because I had to plot State-wise flight cancellations, which involves geographical data. I used different shades of blue colour where the darker the blue colour, more the number of flight cancellations. I also used size to differentiate the States with the highest number of delays.

Resources: N/A

Insight 4

https://public.tableau.com/app/profile/joy.oyaole/viz/Summaryshowing ArrivalweatherdelayinmonthsdaysAirportsState__16560684747080/Das hboard1?publish=yes

From this dashboard, you can see the summary of the three visualization for the course of delays in various airport, airlines and states. The focus here was on the weather. With this, you will be able to detect the best time to travel during the year from the months and days count and the Airlines and Airports based on the State you can rely on with little or less delay when you want to travel.

Resources: N/A

Insight 5

https://public.tableau.com/app/profile/joy.oyaole/viz/SecurityDelayinAirportAirline_16560284208170/Sheet4?publish=yes

This shows the security delay on both the Airports and Airlines. Ted Stevens Anchorage International Airport and AS airlines had more delays on security with (244) compared to the others. The least Airline and Airport was, US Airline in Orlando international Airport.

The bar chart was used for this because it best displays the information properly

Resources: N/A

Insight 6

https://public.tableau.com/app/profile/joy.oyaole/viz/Relationshipbetwee ncancelledflightdeparturedelayinvariousAirlines/Sheet5?publish=yes

There is a positive relationship between the delay in departure and cancelled fight. Airlines with high rate of departure delay tend to have more flight cancelled. The WN Airline had the highest cancelled flight of 819 and departure delay of 648,419 while the HA Airline had the lowest with departure delay of 589 and 8 cancelled flight. Scattered plot was used for this visualization because its best used to compare the relationship between two data.

Resources: N/A

Insight 7

https://public.tableau.com/app/profile/joy.oyaole/viz/SummaryofcancelledflightbasedonsecuritydeparturedelaysinAirportAirline_/Dashboard2?publish=yes

This dashboard shows the summary of cancelled flights based on its security and departure delay. It has a filter of the name of the Airlines for better understanding.

Resources: N/A

Insight 8

https://public.tableau.com/app/profile/joy.oyaole/viz/StoryshowingArrivalweatherdelayinmonthsdaysAirportsState_/Story1?publish=yes

This shows the story of flight delays from insight 1-3 and the dashboard representing the three insight. This story saves you time from going through four different insights for understanding but instead you have all in one glance.

Resources: N/A

Conclusion

This report tells us a lot about the flight delay that happened in 2015 in various Airports, Airlines and States in the United State of America. Our focus was on the weather, arrival and security delays, departure time and cancelled flights. These are some of the observations:

Northeast Florida Regional Airport (St.Augustine Airport) would be the best Airport to use because it had the least record of arrival delay.

March was a good time to travel because it had the least weather delay recorded in the year 2015 on this dataset.

California and Texas were States to avoid if you do not want to be delayed by the arrival of Airlines based on the weather. The State of Delaware had good record of less delay, which should be the best place to travel from if you are in a hurry.