

# **Afnan Alomar**

## **Data Analysis Nanodegree**

### **Tableau Project**

#### **Brief Summary Of The Data:**

The data is about the on-time performance of domestic flights operated by large air carriers in the United states in 2015. The data contained summary information about the number of on-time, delayed, canceled, and diverted flights, airlines and airports. During my investigation I found that delays are more likely to happen in small airports and big airports do not have such high delay rate. On the other hand, small airlines have less rating delay than big airlines

#### **Insight 1**

[https://public.tableau.com/views/Averagedelayofflightsbyairport2/AvgDelayBasedonAirports?:e\\_mbed=y&:display\\_count=yes&publish=yes](https://public.tableau.com/views/Averagedelayofflightsbyairport2/AvgDelayBasedonAirports?:e_mbed=y&:display_count=yes&publish=yes)

##### **1. Average delay of flights by airport.**

It's Clear from the par chat that the highest average number of delayed flights are in Sawyer International Airport for 89.92 and the average delay in Pago Pago International Airport (Tafuna Airport)Airport is 50.50.

#### **Design**

I think using the bar chart with one color to recognize the level of delay average in each airport is easy and doesn't distracting the audience.

## Feedback

It will be better if just the highest 10 airports are included to ensure that the reader will not be distracted between these long list of airports.

**Version 2:**

[https://public.tableau.com/shared/896HT28DF?:display\\_count=no](https://public.tableau.com/shared/896HT28DF?:display_count=no)

## Insight 2

**(The link has attached in word document file because it will not open after converting file to pdf)**

### **2. Number of airports in each states**

We can see from the map that Texas and California have the the largest number of airports. While New Hampshire, Vermont, Connecticut, Rhode Island, Delaware, Maryland and West Virginia have the lowest Number of airports.

## Design

I chose a highlighted map for the visualization because it is easy to see which

states have the highest number of airports and which have the lowest.

## Insight 3

**(The link has attached in word document file because it will not open after converting file to pdf)**

### **2. Average Delay/Cancelled flights based on Months**

from this line chart we can see that the highest average number of cancelled flights occurred in February On the other hand that the highest average number of departure delay flights happened in Jun, whereas the lowest average number of cancelled and departure delay flights occurred in September.

## Design

I used line chart to make the trends of the average delay per month are clear to viewers.

## Insight 4

[https://public.tableau.com/views/P4\\_17/AirportAirlineAvgDelay?:embed=y&:display\\_count=yes](https://public.tableau.com/views/P4_17/AirportAirlineAvgDelay?:embed=y&:display_count=yes)

### **2. Airports Average Departure/Arrival Delay**

In the dashboard I combined scatter plots with line chart. The scatter plots is to show the Ave number of departure and arrival delay in five airports and airlines that have the highest Average number of delay, while the line chart show the average departure and arrival delay per month for the same five airports and airlines in the scatter plots.

It appears from this combined visualization that both arrival and departure delay average were at the peak in September, and the delay happened in both Sawyer and Pago Pago International Airport with HA and MQ airlines.

## **Design**

Scatter plot has used with two shapes the star for the Ave number of departure delay and square for Ave number of arrival delay to make it distinguished for the audience. Also, the line chart used to make the trends of the average delay per month are clear to viewers.

## **Resources:**

N/A