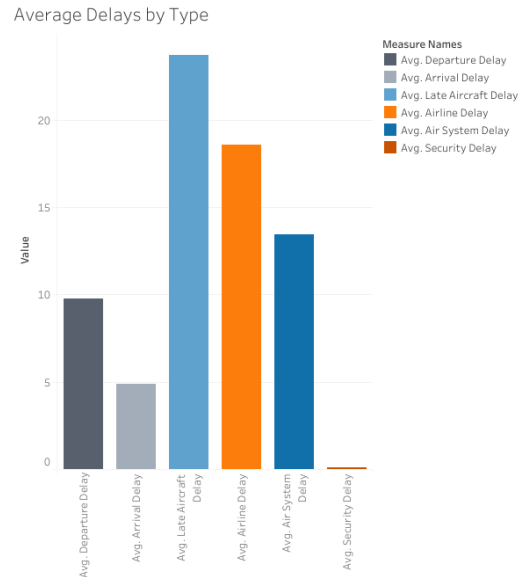


# TELLING STORIES WITH DATA

## 1. What month was Flight delay experienced the most and what were the contributing delay types?



### Link:

<https://public.tableau.com/app/profile/oluwabukunmi.ajayi/viz/ChartforAverageDelayTypes/AverageDelaysbyType>

### Summary:

As we can see from the figure above, there is a representation of the various reason types of flight delay.

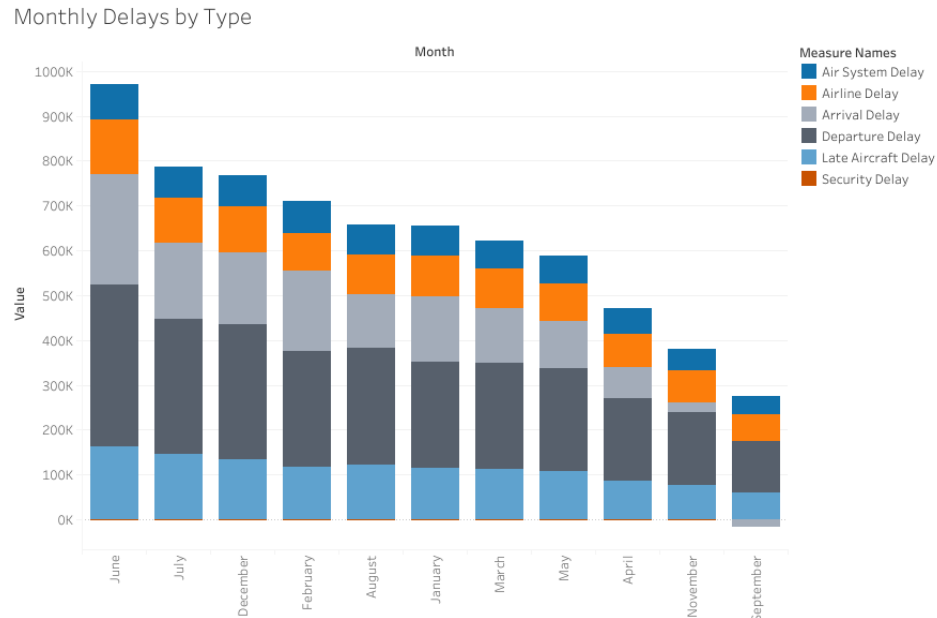
- All Airports experienced all types of delay in the month of June when flight delay was at its peak.
- The lowest level of flight delay was experienced in September.
- Departure can clearly be seen as the leading cause of delay in flights, followed by Arrival.

### Design:

The use of stacked Bar chart helps us see how each type of delay contributes to the total amount of delay experienced in each month with two filters which help specify which Airport data and Delay type relationship you would like to see. The choice of color also came as a result of putting color blind people into consideration.

**Resources:** N/A

## 2. What is the Highest average delay type experienced at all Airports?



### Link:

<https://public.tableau.com/app/profile/oluwabukunmi.ajayi/viz/Monthlydelaysstackedbarchart/MonthlyDelaysbyType>

### Summary:

The highest average delay experienced by Airports is caused by Late Aircraft.

The second highest delay experienced by all airports is caused by Airlines.

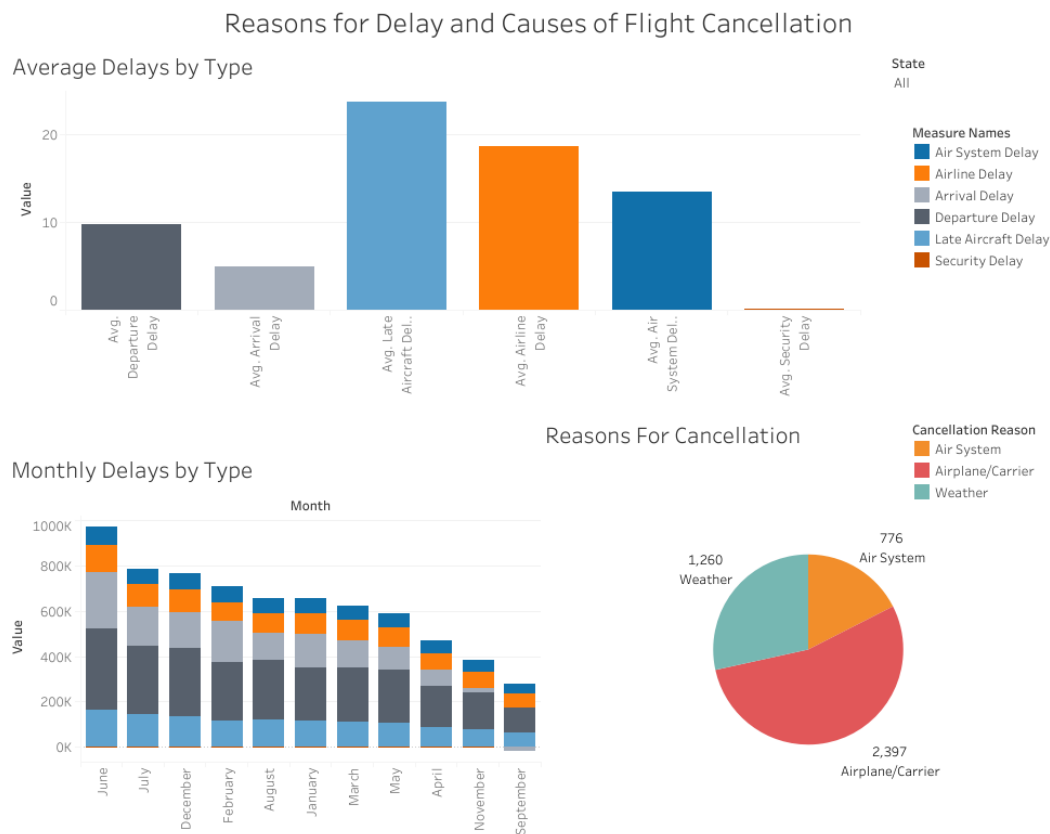
The least of all delay experienced at all airports is caused by Security.

### Design:

Bar chart is used to illustrate the varying average cause of flight delays experienced at all Airports in the US in 2015. Average level of Delay type is illustrated by the different length of the bars on the bar chart while the colors each represent a unique type of delay.

### Resources: N/A

### 3. What is the average total and monthly flight delay, and total cancellation type experienced in various states?



**Link:**

<https://public.tableau.com/app/profile/oluwabukunmi.ajayi/viz/ReasonsforDelayandCausesofFlightCancellation/Dashboard1>

#### Summary:

The Dashboard above analyzes the Average types of Delays, Total delays per delay type, and Total amount of cancellation per cancellation type experienced by all states in the United States in 2015.

- The month with the highest amount of delay is June
- The major reason for Flight cancellation is Weather
- Averagely the highest cause of flight delay is Lateness of Aircrafts.
- Averagely the least cause of flight delay is Arrivals.
- The month where flight delays were least experienced is September.

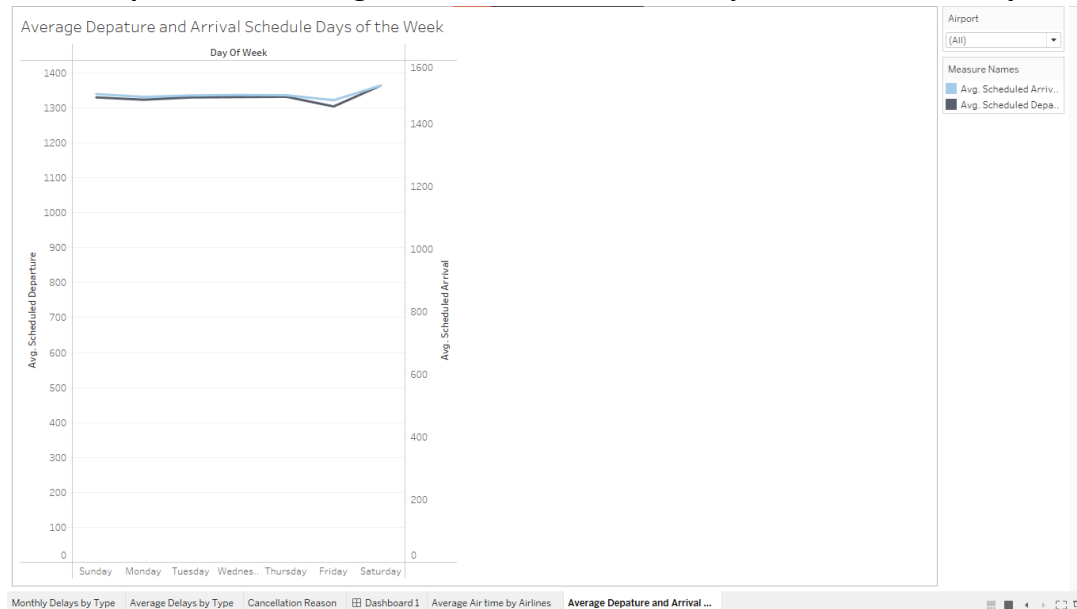
#### Design:

The dashboard clearly shows the visualizations for the major causes of delay and flight cancellation. It also incorporates Filter by states for more specificity on which state's data an Audience might be interested in viewing. The color was chosen in consideration of people with color blindness.

**Resources: N/A**

## EXTRA VISUALIZATIONS

### 4. What is the relationship between average scheduled arrivals and departures from Sunday to Saturday?



#### Link:

<https://public.tableau.com/app/profile/oluwabukunmi.ajayi/viz/DailyTrendLineforArrivalandDepartureSchedules/AverageDepatureandArrivalScheduleTrend>

#### Summary:

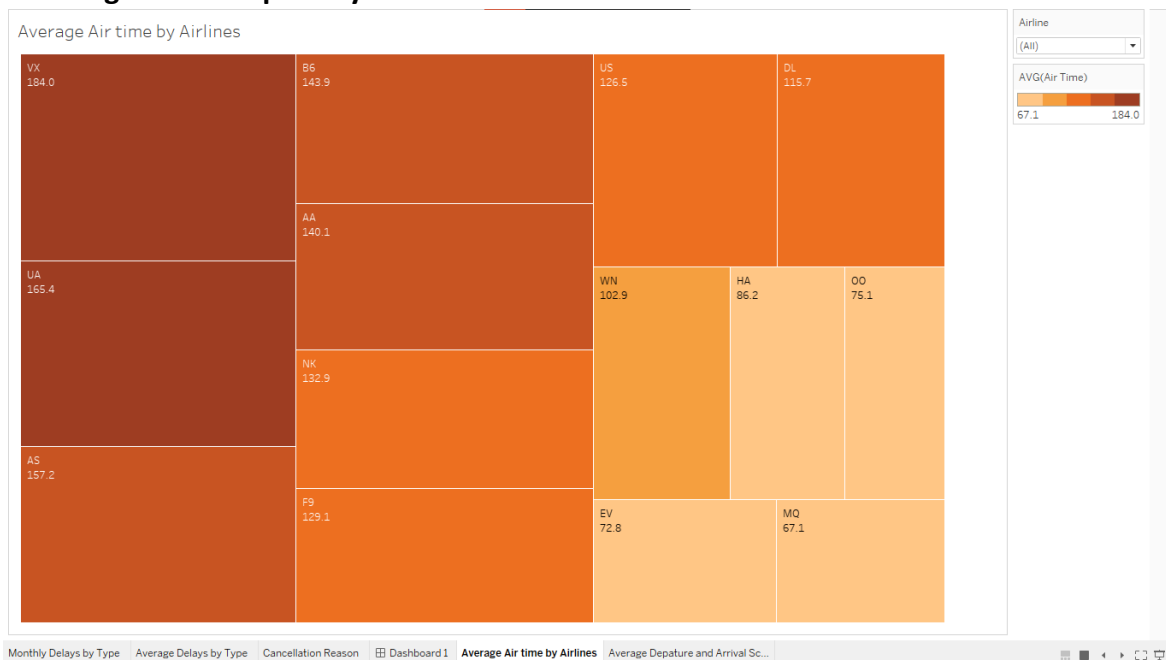
- The relationship between both variables (Average scheduled Arrival and Average scheduled Departure) through each day of the week is a positive one, as we can see through the lines that they both follow the same pattern.
- The average scheduled departure increases from day to day as the average scheduled arrival increases.
- Average scheduled arrival and departure are at the Highest on Saturdays.

#### Design:

I used a line chart here to show the pattern of change in both variables over time through each day of the week.

**Resource:** N/A

## 5. What is the Average Airtime spent by each Airline?



### Link:

<https://public.tableau.com/app/profile/oluwabukunmi.ajayi/viz/TreemapforAverageAirtimespentbyAirlines/AverageAirtimebyAirlines>

### Summary:

- The figure above clearly shows that Airline VX has the highest average airtime spent among other airlines in the US in 2015 with a total of 184.0 hours.

### Design:

I used a tree map here to represent the hierarchical structure of the Average Airtime spent by different Airlines where the size of the rectangles is organized from the Airline with the largest Average Airtime to the Airline with the smallest Average Airtime. The Color is used to encode a second dimension with varying density and also used in consideration of color blinded people.

**Resource:** N/A