

# Project 4: Build Data Dashboards

## Flight Delays and Cancellations



The data I used for this visualization comes from a Kaggle dataset, it tracks the on-time performance of US domestic flights operated by large air carries in 2015. My target audience is people who are interesting in trying to better understand which airlines are more likely to have delays, which states, months are the busiest.

Kaggle link: <https://www.kaggle.com/usdot/flight-delays/data>

First of all I filtered data source to avoid extreme number in arrival delay and departure delay. I have joined flights.csv file with airports.csv file to got more data for the visualisation.

## Visualization 1: Average departure delay per month, airlines and state?

Tableau link:

<https://public.tableau.com/profile/irsol#!/vizhome/DashboardAVGDepartureDelay/DashboardAVGDepartureDelay?publish=yes>

Summary and Design:

I divided this dashboard on two visualization. Map visualization shows us an average departure delay per state. When we hover over the map we can see important details like the state name, airline name and average departure delay time in minutes. We can observe that Aberdeen Regional Airport has the highest average departure time delay of 90.1 minutes.

I used line chart to visualize the average departure delays based on month and airlines. Also filtered airports to Pittsburgh International Airport, Ronald Reagan Washington National Airport. To see trends of an average departure delay hover over the chart.

From thy line chart we can make out that in Pittsburgh Airport the busiest time in September, the average departure delay is 246.3 in DL airline. Washington Airport has the busiest time in March is 200 minutes of an average departure delay.

## Travel destination per state?

Tableau link:

<https://public.tableau.com/profile/irsol#!/vizhome/TravelDestinations/TravelDestinations>

Summary and Design:

For best visibility I filter data to four airports, airport with less than 50 flights are DEN, HNL. Airports JFK and SEA with more than 50 flights. I also added population filter to see if population effects on number of flights from current states.

From the dashboards we can hover over the map and see all the data flights and destination airports. Boston as origin airport has 64 records of destination airports and Seattle Airport has 54.

# What is an average arrival and airlines delay from Boston Logan International Airport?

Tableau link:

<https://public.tableau.com/profile/irsol#!/vizhome/StoryAVGArrivalAirlineDelayfromBOS/StoryAVGarrivalairlinesdelayBOS?publish=yes>

From this story we can see an average arrival delay and average airline delay for Boston Airport. We can conclude the worst average arrival delay is caused by OO airline (40.67) and the worst arrival delay destination airport is OAK (152.0).

Resources: N/A