

Project No. 4: Data visualization project

Flight Delays and Cancellations

This data comes from a Kaggle dataset, it tracks the on-time performance of US domestic flights operated by large air carriers in 2015. You can find the dataset in supporting materials at the bottom of this page. You can find the data set on the link below

[2015 Flight Delays and Cancellations | Kaggle](#)

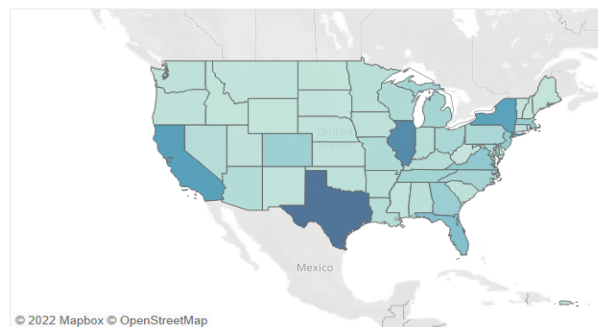
For the visualization I used proper color palette taking into consideration of color blindness people

Insight # 1

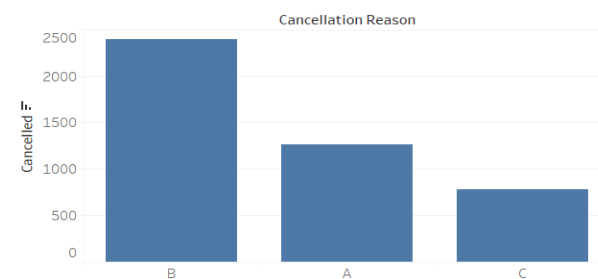
Which state has the most cancellation occurred? And what is the most reason ?

Cancellation reason & sum of cancelation for each state

sum of cancellation for each state



Cancellation reason - in each state-



From the map shown above, we can see that the most cancellation occurred in

No.	state	cancellations
1	Texas	661
2	Illinois	537
3	California	411

While states like Virginia, Guam and Delaware have no cancellation occurred

Overall, the most cancelation occurred due to reason B.

For the top 3 states mentioned before, Texas , Illinois and California; the dashboard shows that

- For Texas and Illinois the most cancelation reason is B , while it is A for California state.

note you can use the map as a filter to view cancelation reason for each state

You can find the map view visualization in this [link](#)

Insight # 2

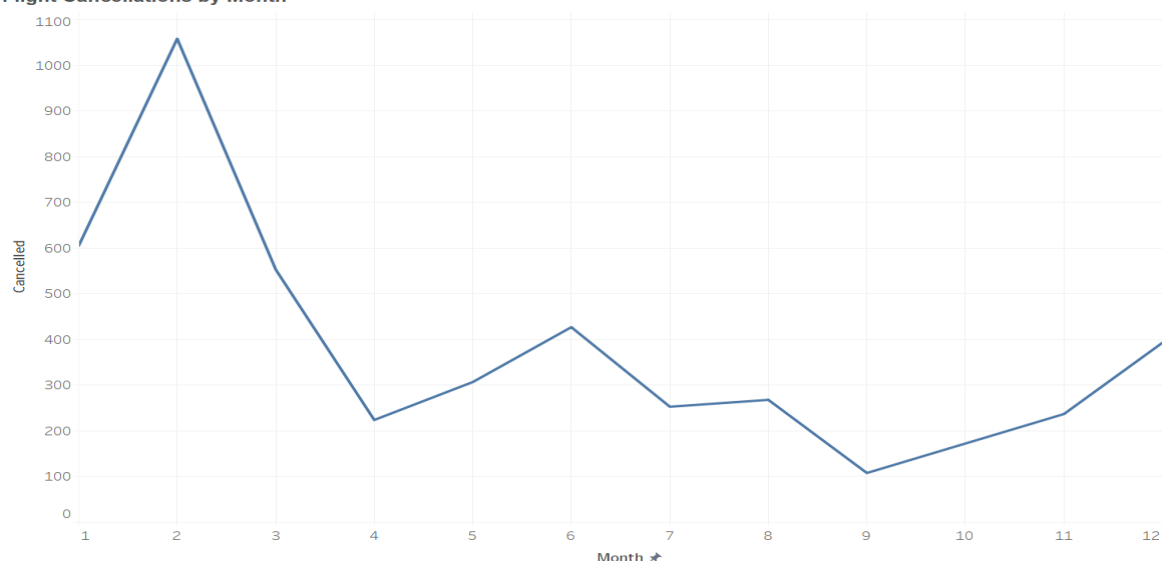
What is the month with the most cancellation?

From the line chart below, it is obviously appears that, in 2015 February was the month with most cancelations (1085) followed by January (605)

By using “state” filter you can we can see that for the three mentioned states February is also was the month with most cancelations except for California it January instead

Please find the line graph in this [link](#)

Flight Cancellations by Month



Insight # 3

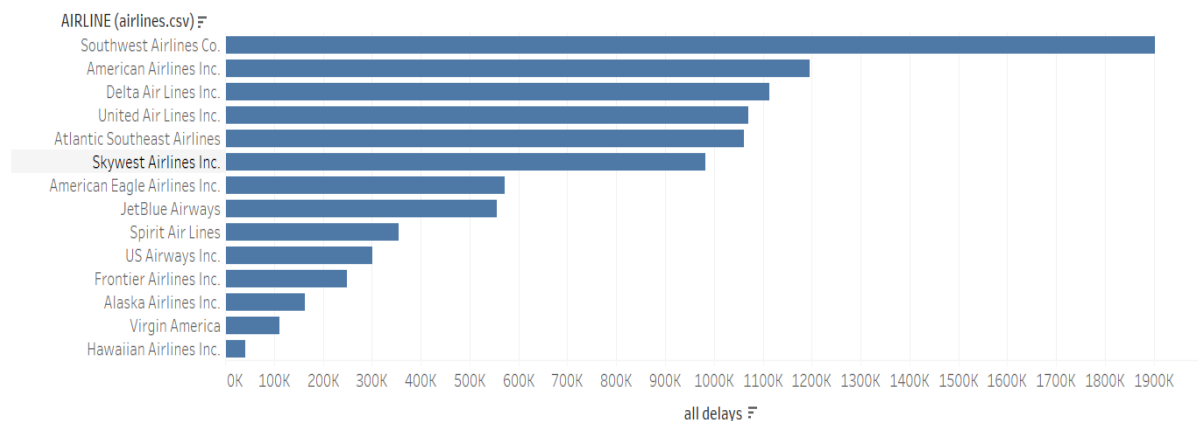
Which airlines or airports have the worst delays?

Note I have created a new field summing up all delays

From the horizontal bar shown below that the “Southwest Airlines Co.” has the worst delay with 1,902,222 followed by “American Airlines Inc.” with 1,195,046

Please find the line graph in this [link](#)

Airline with most delay



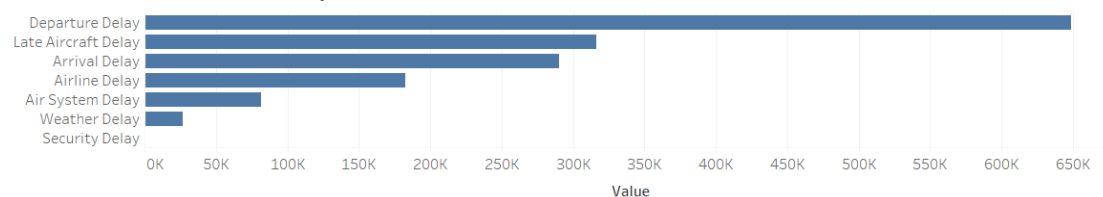
Insight # 4

What causes the high delay for Southwest Airlines Co.?

By tracking Southwest Airlines Co., it is clear that the departure delay causes the most delay for this airline

Find the insight [here](#)

Southwest Airlines Co. delay causes



Insight # 5

To dive deeper we can find that departure delay mainly occurs in those three airports

- Chicago Midway International Airport
- Baltimore-Washington International Airport
- McCarran International Airport

Find the insight [here](#)