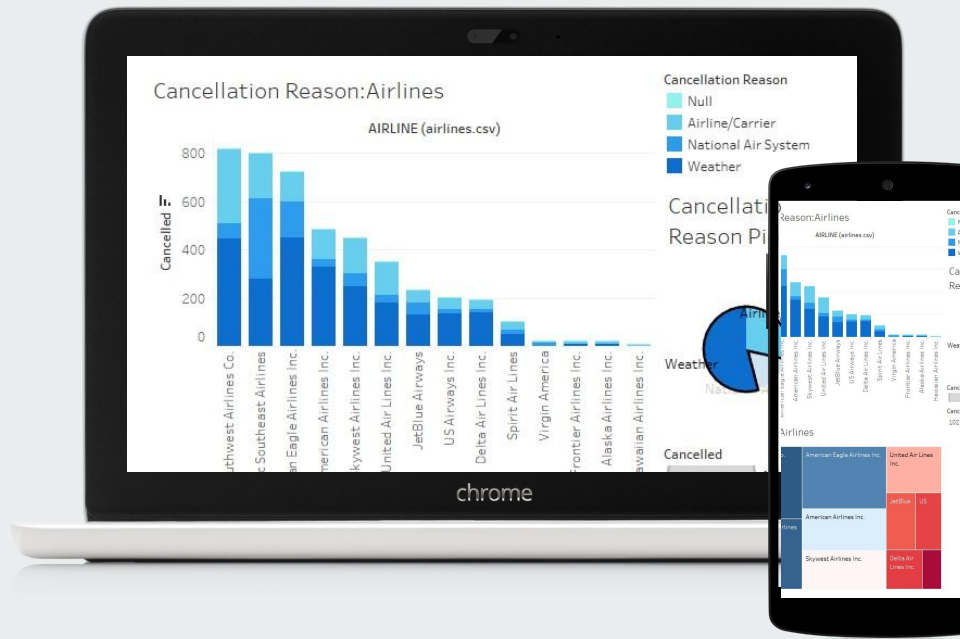



Data Visualization

With Tableau

Udacity Nanodegree
Data Analytics Project 4
Steven Witherspoon





Questions we will attempt to answer using [the Kaggle 2015 Flight Delay/Cancellation Data](#) in Tableau Public

- Which Airlines tend to have the most cancelled flights?
- What Causes Cancellations?
- What causes Flight Delays?
- Which Airlines has the most delays?

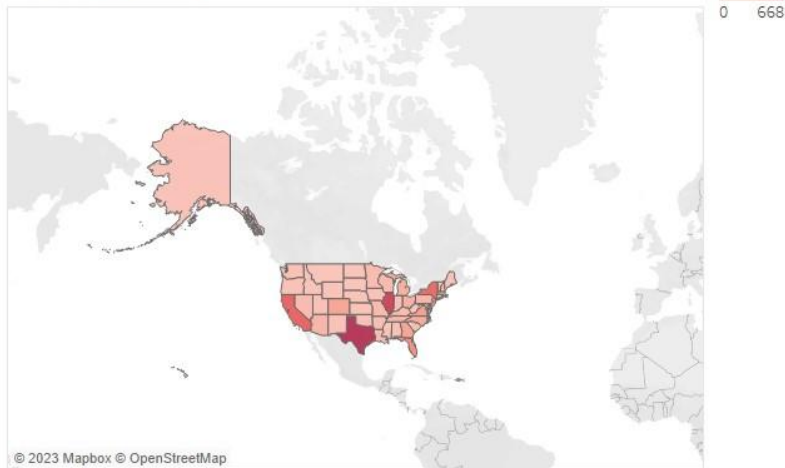
What airlines should you avoid if you want to depart and arrive on time to your destination?

Using the Kaggle Dataset we will create data visualizations that highlight Flights, Delays and Cancellations by airlines.

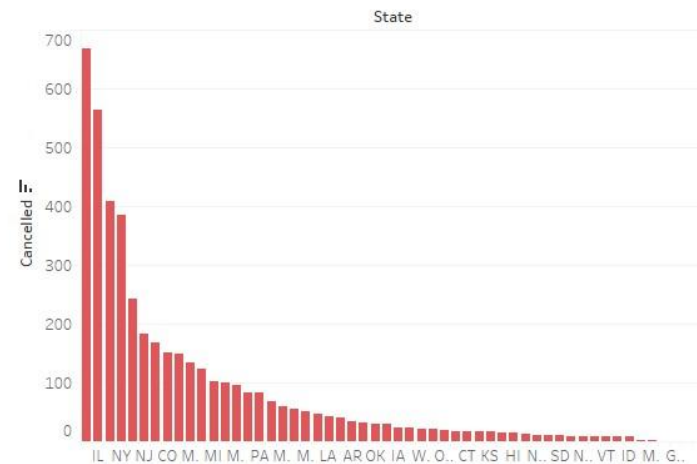
Which States have the most Cancellations?

The Cancellation map highlights the states with the highest number of flight cancellations in 2015. Texas, Illinois, California and New York were the states with the highest number of cancellations in 2015. You may want to avoid flying in or out of these states if you want to avoid cancelled flights; that includes layovers in these locations.

Cancellation Map



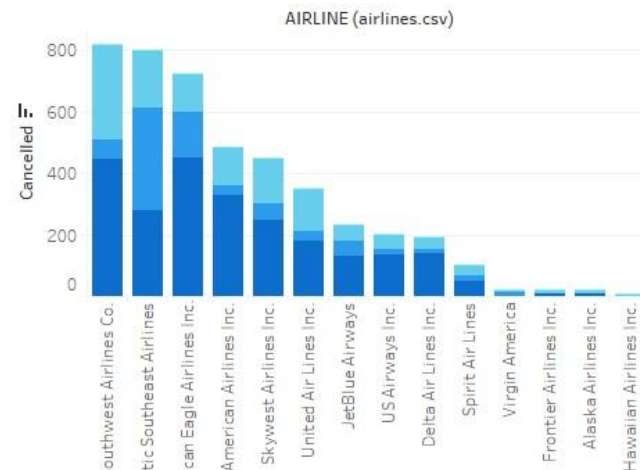
Cancellation: State Bar



Why are flights cancelled? Which Airlines have the most cancellations?

There are three main reasons flights are cancelled- the pie chart shows that WEATHER is the number one reason flights are cancelled for the majority of the airlines with 2,397 flights being cancelled in 2015 for weather related reasons. Southwest Airlines had the most cancellations with 818 cancelled flights in 2015. Spirit Airlines had the least with just 102 cancelled flights.

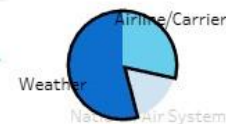
Cancellation Reason:Airlines



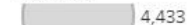
Cancellation Reason



Cancellation Reason Pie



Cancelled



Cancelled



Cancellation:Airlines



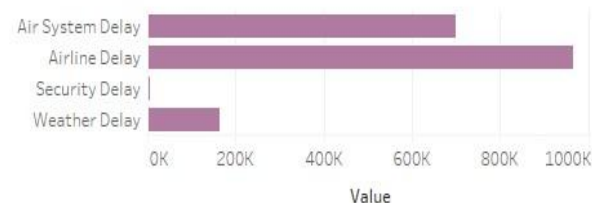
Which airlines had the most Flight Delays in 2015? What were the reasons for these delays?

Southwest Airlines comes in at number one with 182,670 flight cancellations in 2015. The main reason for flight cancellations is Airline Delay with 964,174 airline delays being reported across the board. Air System delays, Security Delays and Weather Delays also factored in on 2015 Flight Delays.

Total Delays: Airline 2015



Flight Delay Reasons





Video showing Dashboard interactivity



References

[Kaggle 2015 Flight Delay Dataset](#)

[Building Tableau Dashboards Cheat Sheet](#)