Data Dashboard Project

Case Study: Flight Delays and Cancellations

Visualization One: Which airlines are delayed due to security reasons and the month it occurs most?

Link:

Project4 Udacity Dashboard | Tableau Public

Summary:

This dashboard looks at the airlines' delays for security reasons. The following airlines had the most security delays: American Airlines Inc. (AA), Skywest Airline Inc. (OO), and Jet Blue Airways (B6), with the following numbers: AA (1130), OO (622), and B6 (496), while Virgin America, VX (104) and American Eagle Airlines, HA (113) had the least delays. November has the most security delayed flights, while April has the least security delayed flights. November, December, June, January, and August have the most flights delayed due to security reasons.

Design:

I chose a combination of bar chart and map chart to graph the security delays by airlines over the last few months because it allows me to select in a simpler way the data I wanted to be analyzed.

Resources: N/A

Visualization Two: The most common causes of canceling flights

Link:

Project_4_Udacity_Viz_Two | Tableau Public

Summary:

The common reason for flight cancellation is weather, with 2397 flights canceled, followed by airline/carrier with 1260 flights canceled, and the least is National Air System with 776 flights canceled. The data doesn't show the effect of security as the reason for flight cancellation. This visualization shows the importance of weather as the main determinant for flight cancellation in the given year of the data.

Design:

The packed bubble was chosen for easy pictorial of the data and it will also be advantageous for the color blind people to see the message on display.

Resources: N/A

Visualization Three: Airlines with the worst departure delays

Link:

Project 4 Udacity Viz THREE | Tableau Public

Summary:

Southwest Airlines Co. has the worst delay and departure as seen from the bar chart, with 289992 arrival flights and 648419 flights delayed, followed by United Airlines Inc., American Airlines Inc., and Delta Airlines Inc., with 145517, 138580, and 21654 arrival flights and 360603, 315771, and 311657 delayed flights, respectively. For all these reasons, this flight will not be on my list of recommended airlines for serious business purposes. Alaska Airlines with the least delayed and arrival flights will be the best to travel with.

Design:

A bar chart to show the departure and arrival delays. For easy comparison, styling was kept to a minimum.

Resources: N/A