Tableau Public Profile Link: https://public.tableau.com/app/profile/hayley.wilkinson/vizzes

Insight #1

Link: Cancelled Flights by Origin State

Summary/Insight:

Texas (TX) has the highest number of cancelled flights with a total of 661, Illinois (IL) has the second highest with a total of 537. In stark contrast to these totals the lowest cancelled flights are 0 for American Samoa (AS), Delaware (DE), Guam (GU), and Virgin Islands (VI). When looking at the percentage of flights cancelled in each state, we see that Vermont (VT) leads with 4.605%, Iowa second at 3.567% and the lowest being 0% for American Samoa (AS), Delaware (DE), Guam (GU), and Virgin Islands (VI).

Design:

Creating a map for cancellations by state allowed for an overview with all 54 states/US Territories able to be accessed quickly and using a color gradient with the higher number of cancellations being darker and the lower being lighter gives a quick high-level view of the cancellation distribution. Utilizing a bar char for percentage enables sorting by percentage for ranking purposes. Both of these visualizations allow for comparisons using categorical and numeric variables.

Resources: N/A

Insight #2

Link: Cancelled Flights by Origin Airport/Airline

Summary/Insight:

The airport with the high number of cancelled flights originating from it is Chicago O'Hare International Airport (ORD) located in Illinois with a total of 405 cancellations. Out of the 11 airlines with cancellations, American Eagle Airlines Inc. (MQ) had the most cancellations from this airport, accounting for 129 of the cancelled flights.

Looking at Texas which had the highest total number of cancelled flights we see that Dallas/Fort Worth International Airport (DFW) accounting for nearly half of the cancellations in the state, with 311 cancellations of the 661 total flights cancelled. The airline with the highest DFW cancellations was American Eagle Airlines Inc. (MQ) with 165 and American Airlines Inc. (AA) a close second at 156.

When looking at all states and airports, Southwest Airlines Co. (WN) has the highest number of cancellations, totaling 818 and Hawaiian Airlines Inc. (HA) with the least at 8 cancellations.

Design:

Creating a bar graph allowed for comparison of the origin airport by the numeric number of cancelled flights, this also allows for easy sorting. Creating a tree map for cancelled flights by

airline and using a color gradient for those counts allows for easy identification of the dominant airlines in cancellation. Including a State and Iata code filter allows for honing in on specific states and airport for further exploration and including the Month and Day filters allows for specific time frames to be assessed.

Resources: N/A

Insight #3
Link: Cancelled Flights by Month/Day
Summary/Insight:
Looking at then entire year of 2015, February (Month 2) saw the highest number of cancellations with a count of 1,058 for the month and the day in February with of highest cancellations being the 2nd with 128. The month with the least cancellations is September (Month 9) with 108 cancellations. Totaling all months, the 27th has the highest number of cancellations at 288 and the least number being the 31st with 48 (although this can be partially accounted for since not all months have 31 days.

Design:
A line chart was selected in order to see any trend over a period of time (cancellations in each month and day of the month over the course of the year 2015). This allows for easy identification of individual high and low points as well as overall trends throughout the year/month. The month/day filters allow for easily honing in on a specific month, quarter, week, etc. to identify any trends within smaller frames of time. The use of a color gradient on the day graph allows for easy identification of high and low counts.

Resources: N/A