Project

Build Data Dashboards - Flight Delays

Dashboard Links:

Summary:

This project looks at a variety of data in order to identify the data that may be correlated to overall airline delays. By comparing airline delays to arrival delays, departure delays, specific states, airports, and months in the year, as well as air time and travel distance, the project works to identify any characteristics that appear to have a strong relationship with airline delay within this data set. After analyzing the data, it becomes clear that a variety of factors appear to be correlated with airline delay, including arrival and departure delays, longer distances, and greater airtime. However, the factors with the largest influence on higher than average airline delays seem to be the month of the year and the location of flights. Although this insight cannot be explicitly drawn from the available data, it appears that the human factor (perhaps surrounding holidays and travel as well as location) may be the greatest influence on larger than average airline delays.

Design Choices:

The choices for this design were primarily made to keep things simple and easy to use. When available, the Tableau palette specifically designed to be colorblind friendly has been utilized. When that palette was not an available choice, the colors chosen are oranges and blues, which are colorblind-friendly choices. Values that span a range of numbers are encoded in a range of colors, specifically blue . In order to make numerical differences more obvious in state maps, the colors were stepped in five steps, with the colors reversed so that higher numbers (in terms of delay minutes) were orange, while low delay numbers were blue. This is because people are generally familiar with colors closer to red being the less-desirable figures. Axis titles were made larger and rendered in bold for better legibility, while chart titles were removed from dashboards to reduce clutter. The most user-friendly design for month and airport filters seemed to be single-value dropdown menus, while utilizing a highlighter for states wound up being the most user-friendly tool.

Resources:

flights.csv