

US Flight Data

For this project, I created a story that illustrates the most relevant information regarding airline cancellations and delays as well as including the airports that most frequently experience delays.

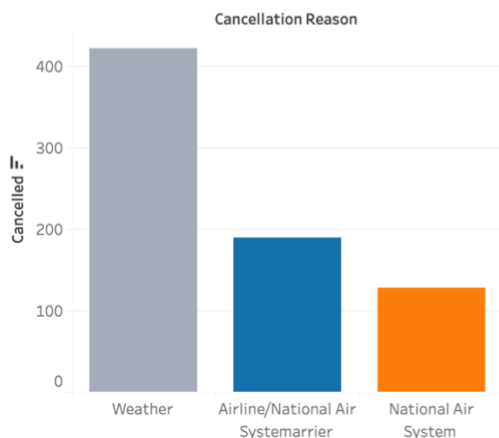
Below a breakdown of each of the visualizations in the story:

1. Dashboard regarding cancellations by airline

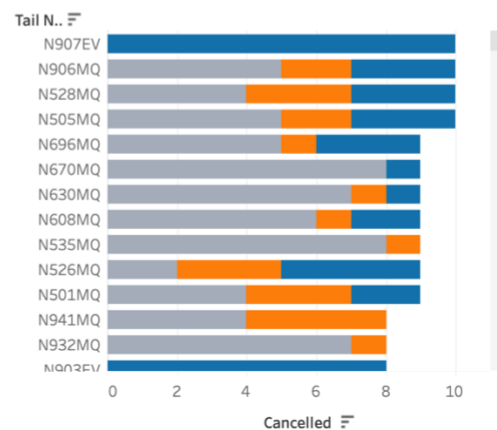
Airlines that cancel the most flights



Most Common Cancellation Reason



Planes with most canceled flights



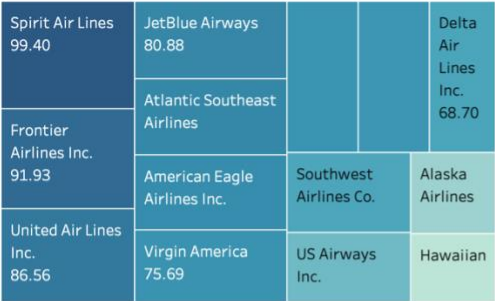
This dashboard was created to give the viewer an understanding of what airlines cancel the most flights. The treemap visualization on the top was selected due to the fact that it illustrates quite well the number of cancellations per airline as well as giving a visual proportion to the viewer. The treemap is then used as a filter the viewer can click to understand the most common reasons a specific airline has for canceling a flight as well as which planes tend to have the most canceled flights. The color pallet used to illustrate the cancellation reason was picked to be accessible for individuals who suffer from

colorblindness. Finally, a filter was created to understand how all these values change for specific months of the year.

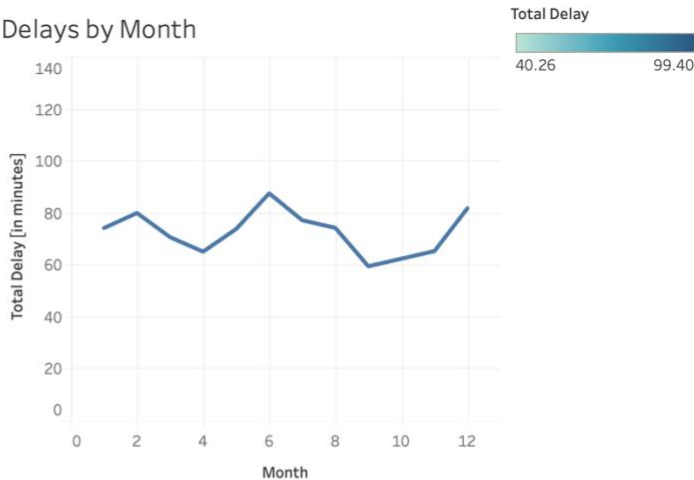
Insight: Southwest and Atlantic appear to be the airlines that cancel the most flights, with the most common cancellation reason being due to the weather.

2. Dashboard regarding delayed flights by airline

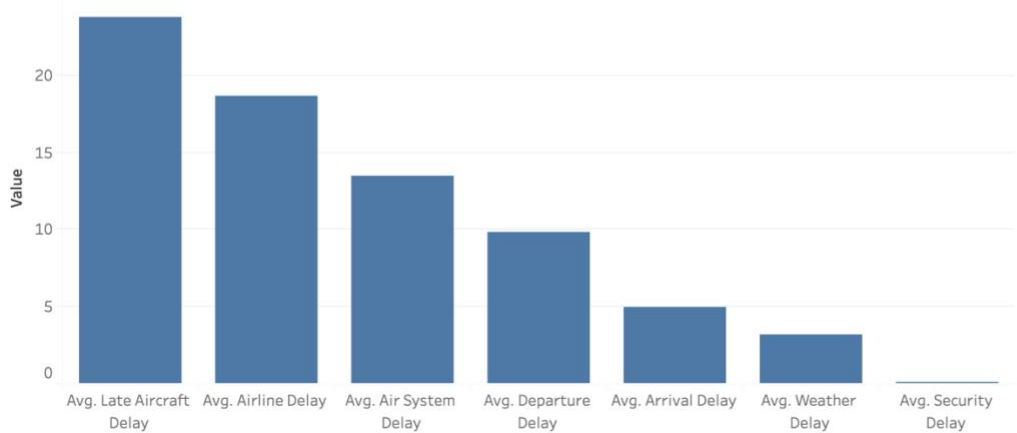
Average Airline Delay



Delays by Month



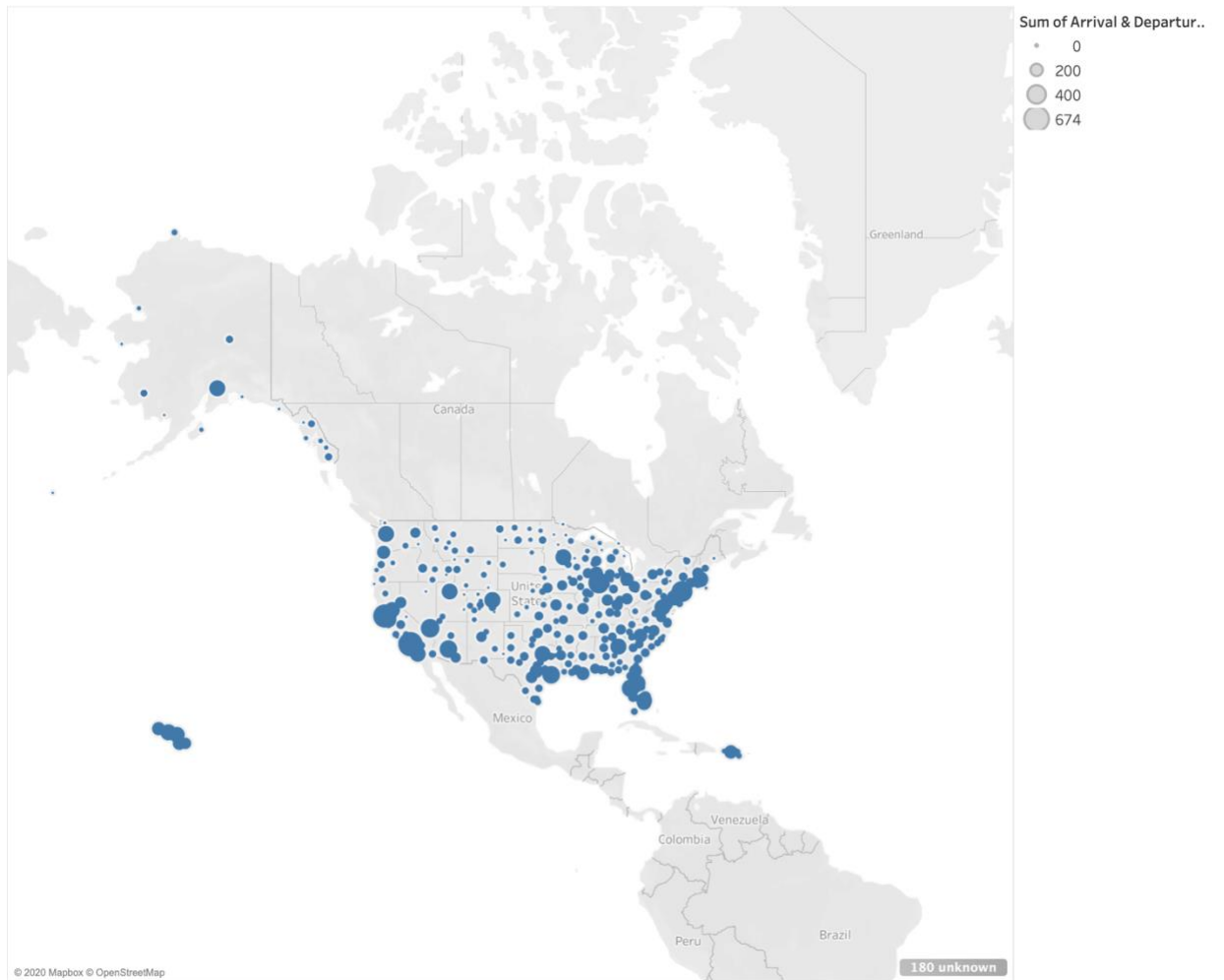
Most Common Causes for Delay



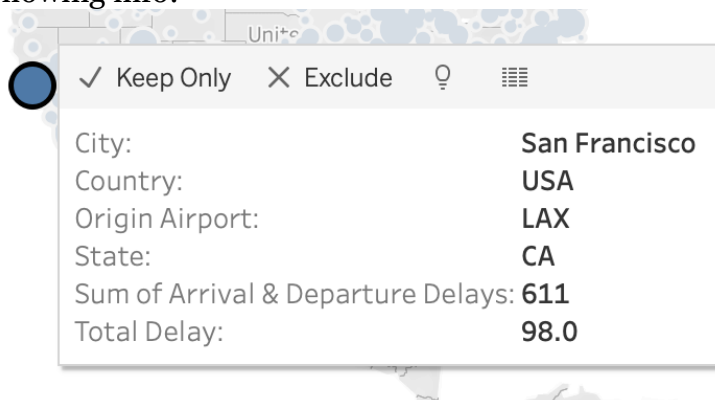
Similar to the previous visualization, this dashboard aims to show the viewer the average delay by airline. Again, the treemap was picked due to the fact it clearly shows which airlines experience the most delays as well as giving a visual proportion. A filter was set on the treemap to better understand the most common causes for delays by airline as well as showing on what months of the year airlines experience the most delays.

Insight: When it comes to delays, Southwest and Atlantic concede the top spots to Spirit and Frontier airlines.

3. Map of airports that most frequently experience delays



The map was created to complement the previous visualizations and show delays by airport instead of by airline. The sized bubbles aim to provide quick visual information of which airports experience the most delays which the reader can then click to get the following info:



Insight: Looking at the map shows that most of the airports that experience delays are located in the eastern part of the US

In conclusion, the story gives its viewer a clear understanding of flight delays and cancellations. Narrowing down the information to airlines and airports then allows the viewer to draw insights regarding which airlines or airports to avoid to minimize the risk of delay or cancellation.

Link

<https://public.tableau.com/profile/daniel.ricci6995#!/vizhome/flightsexcel/UdacityDataVisualizationProject-FlightDelaysCancellationsintheUS?publish=yes>