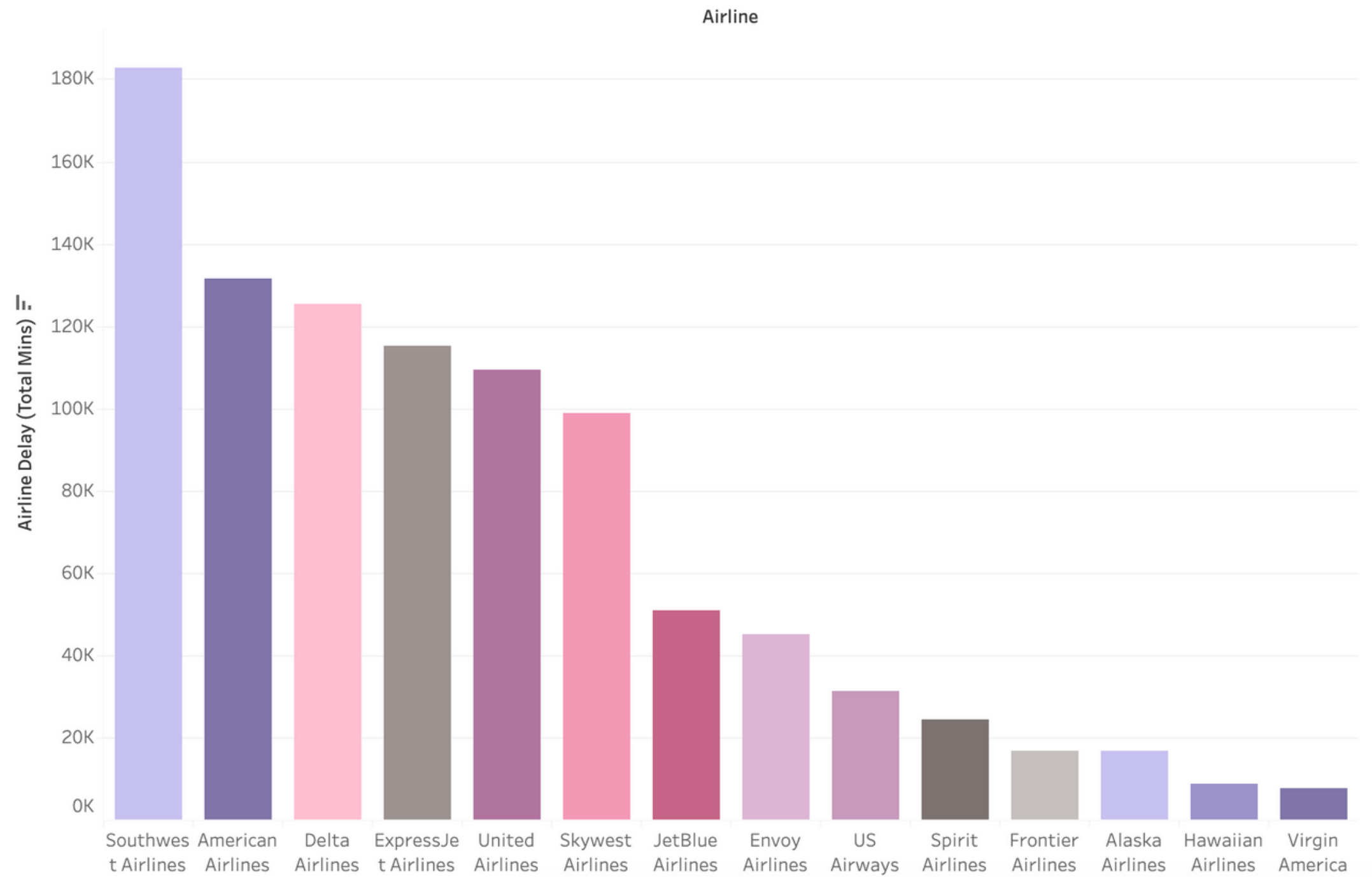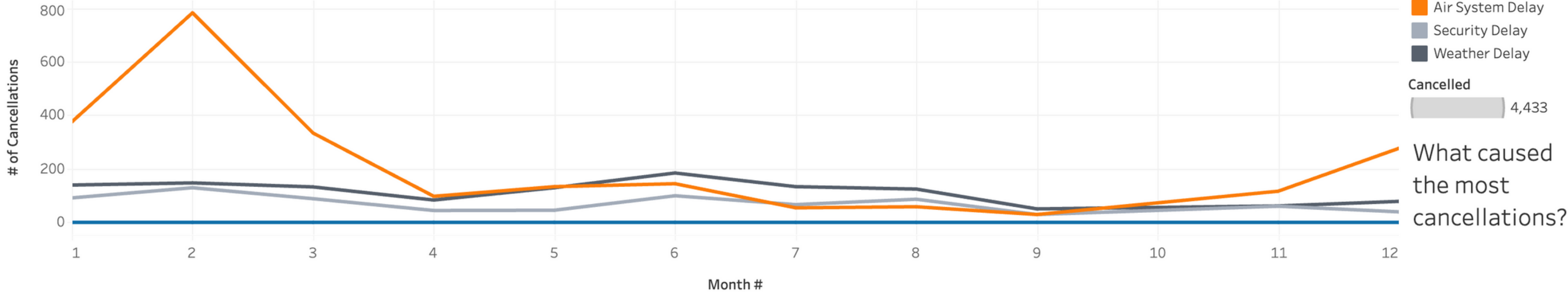# BUILD A DATA VISUALIZATION

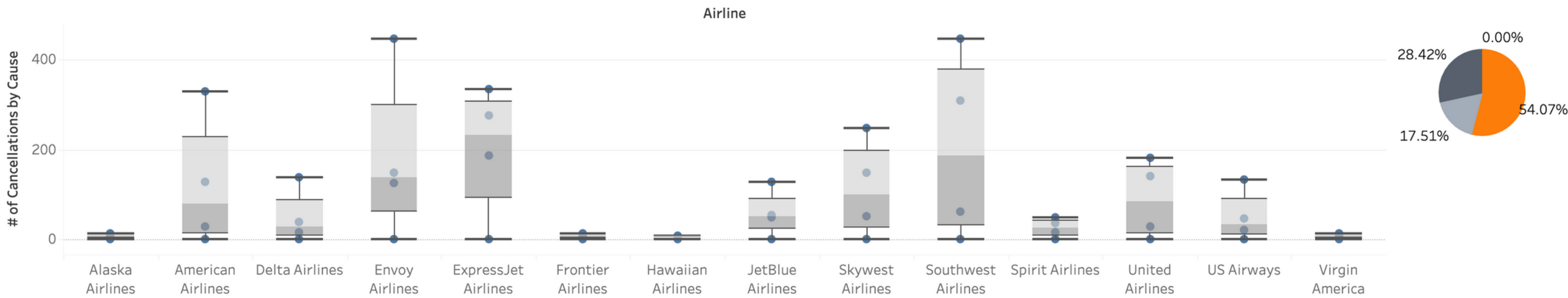BY ALEXIS HAMILTON

Which airline had the most delays?

The airline with the most delays is Southwest Airlines with 182,670 airline delays. The range for delays between airlines is wide with Virgin Airlines having the least amount of delays, at 7, 583. The airlines with the most delays (over 100,000) besides , includes American Airlines, Delta Airlines, and ExpressJet Airlines. I chose a bar chart to visualize this data as it allows for easy comparison with the least amount of clutter.
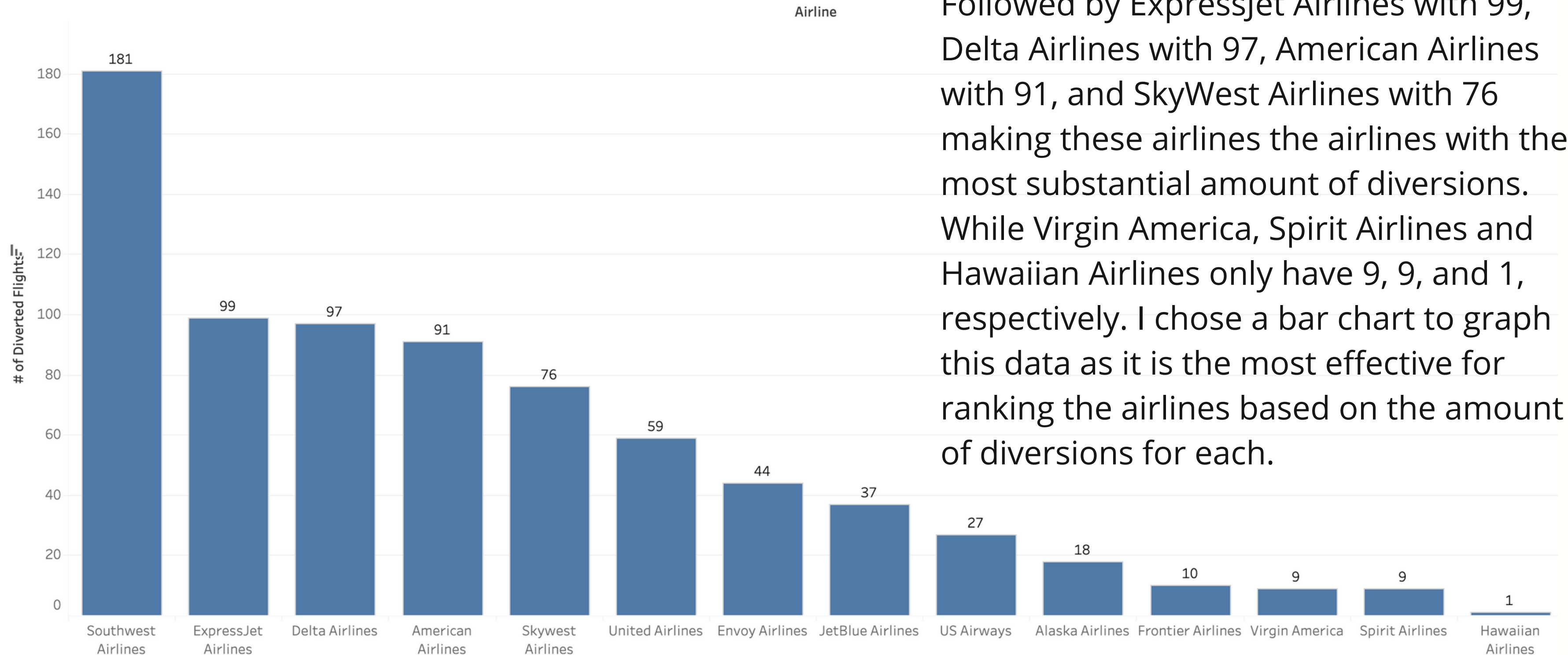
Which months saw the most cancellations per cause?

Cancellation Reason
- Airline Delay
- Air System Delay
- Security Delay
- Weather Delay

Cancelled
4,433

# of Cancellations

Month #

What caused the most cancellations?

Which airlines had cancellations based on each cause?

Airline

# of Cancellations by Cause

0.00%
28.42%
54.07%
17.51%

Alaska Airlines | American Airlines | Delta Airlines | Envoy Airlines | ExpressJet Airlines | Frontier Airlines | Hawaiian Airlines | JetBlue Airlines | Skywest Airlines | Southwest Airlines | Spirit Airlines | United Airlines | US Airways | Virgin America

The primary cause of flight cancellations is due to Air System Delays, accounting for 54.07% of all cancellations across all airlines, making it the largest share among the listed causes. Envoy Airlines and Southwest Airlines suffered most with a total of 448 and 446 cancellations due to Air System delays, respectively. The month of February saw the most cancellations due to Air System delays. September saw the least amount of delays across the board. I also made sure to use a color blind palate so ensure readability, especially with the line chart.
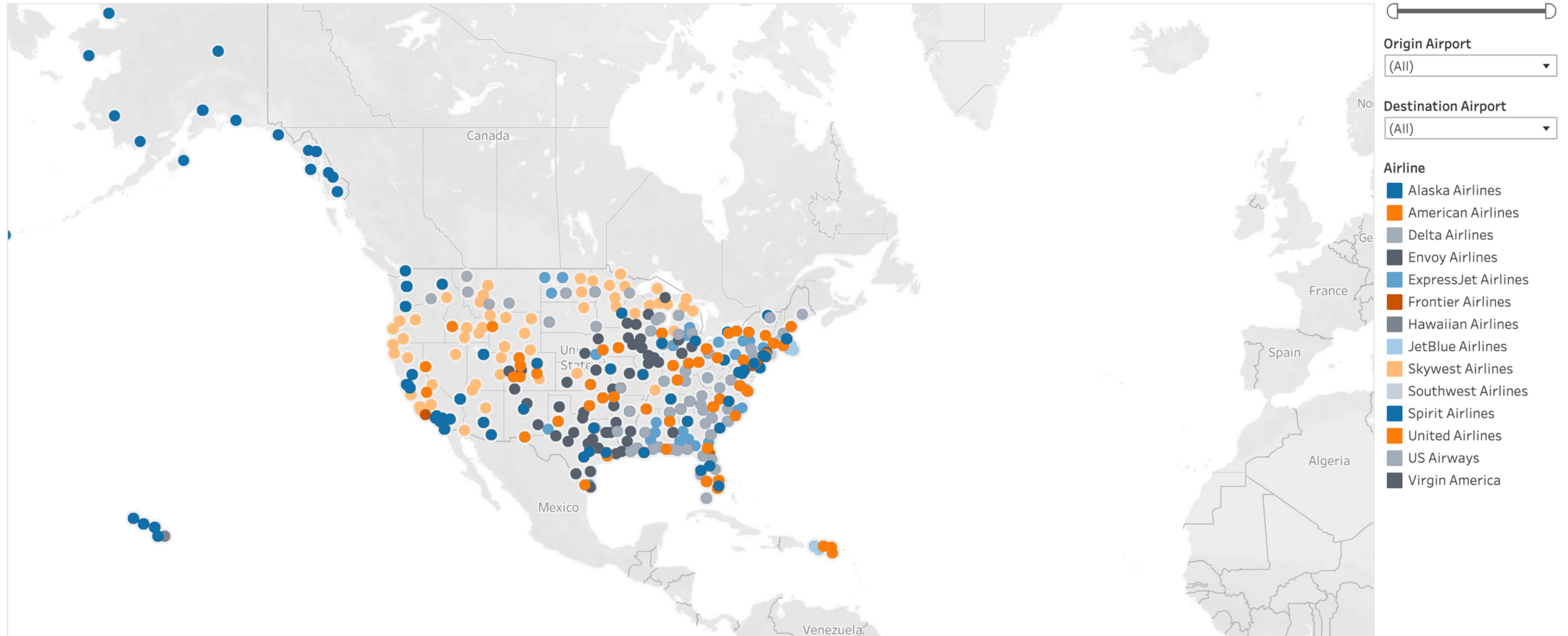
Diversions Link

Which airlines had diversions?

There is a significant variation in the amount of diversions among the airlines. The airline with the most diversions is Southwest Airlines with 181 diversions. Followed by ExpressJet Airlines with 99, Delta Airlines with 97, American Airlines with 91, and SkyWest Airlines with 76 making these airlines the airlines with the most substantial amount of diversions. While Virgin America, Spirit Airlines and Hawaiian Airlines only have 9, 9, and 1, respectively. I chose a bar chart to graph this data as it is the most effective for ranking the airlines based on the amount of diversions for each.

How many flights arrive and depart from each airport by airline?

I wanted to analyze how many flights departed and arrived at each airport, as well as which airline saw the most flight plans for the year. I have included an interactive map to show each airline and their respective amount of flights to each airport which can be filtered by amount of flights and both origin and destination airports. Each airport is color coded for easier readability. With this visualization I was able to identify Hawaiian Airlines as the most active airline with a total of 407 flights from Honolulu (HNL) to Kahului (OGG).