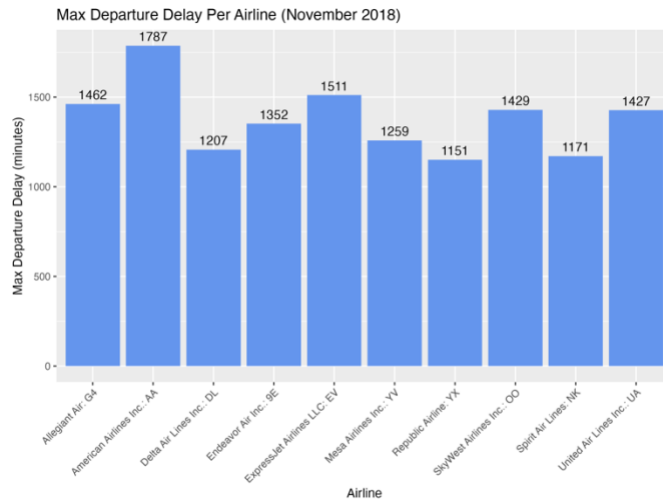


Key Insights from Flight Performance Data in November 2018

This report draws on the Airline On-Time Performance Data from the US Department of Transportation, focusing specifically on the flights occurring in November 2018. This means all insights and commentary below is about US flights in that month.

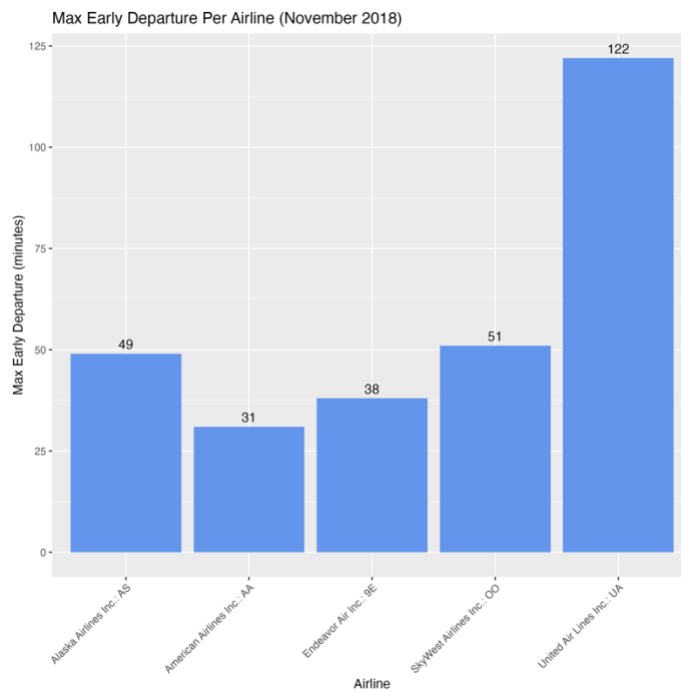
1. American Airlines had the flight with the longest departure delay



When evaluating the maximum recorded delays, American Airlines took the first spot by having a flight with the most delayed takeoff. It departed 1787 minutes after scheduled departure. The next four most delayed flights, in descending order, belonged to ExpressJet Airlines, Allegiant Air, SkyWest Airlines and United Air Lines. The rest of the top 10 are shown in Figure 1. Please note the graph only shows absolute delay values.

Figure 1: Airlines with the top 10 most delayed flights in November 2018.

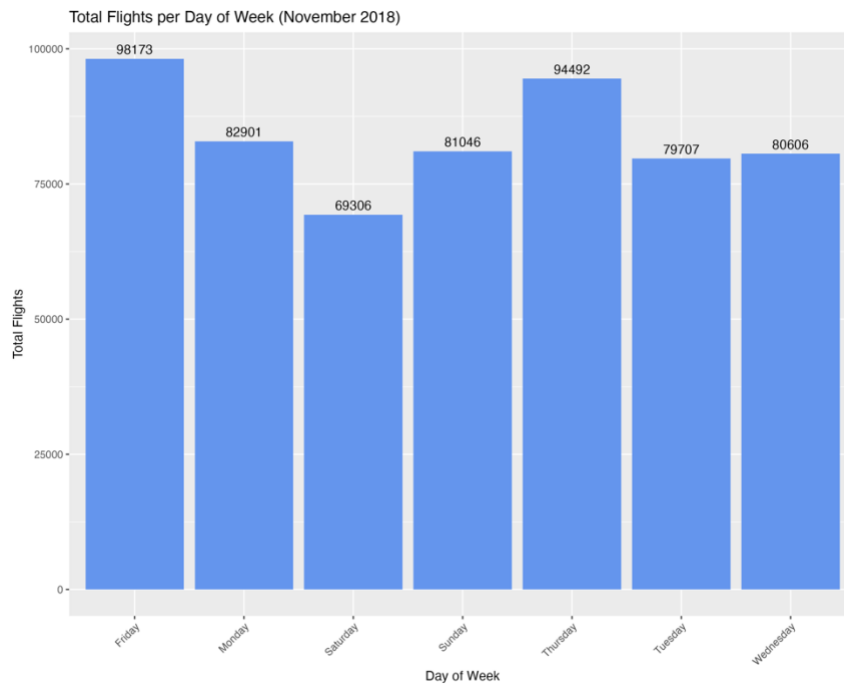
2. United Air Lines had earliest departing flight



For this particular month, a United Airlines (UA) flight took off the earliest compared to its schedule departure. It took off 122 minutes before scheduled departure. The next 4 earliest departing flights, in order from earliest to latest, belong to SkyWest Airlines, Alaska Airlines, Endeavor Air and American Airlines. The UA flight took off more than twice as early compared to the next earliest departing flight.

Figure 2: Airlines with the top 5 earliest departing flights in November 2018.

3. Friday is the busiest day for airports across the US, and Saturday was the least



In November 2018, there were a recorded 98,173 flights occurring on Friday. Some possible explanations are weekend getaways, holiday trips and work trips. For those wanting to avoid crowds at airports and higher flight ticket prices, one could look to fly on a Saturday as there were fewest recorded flights then.

Figure 3: Total number of flights per day of the week in November 2018.

4. ExpressJet and SkyWest Airlines recorded the highest average delays

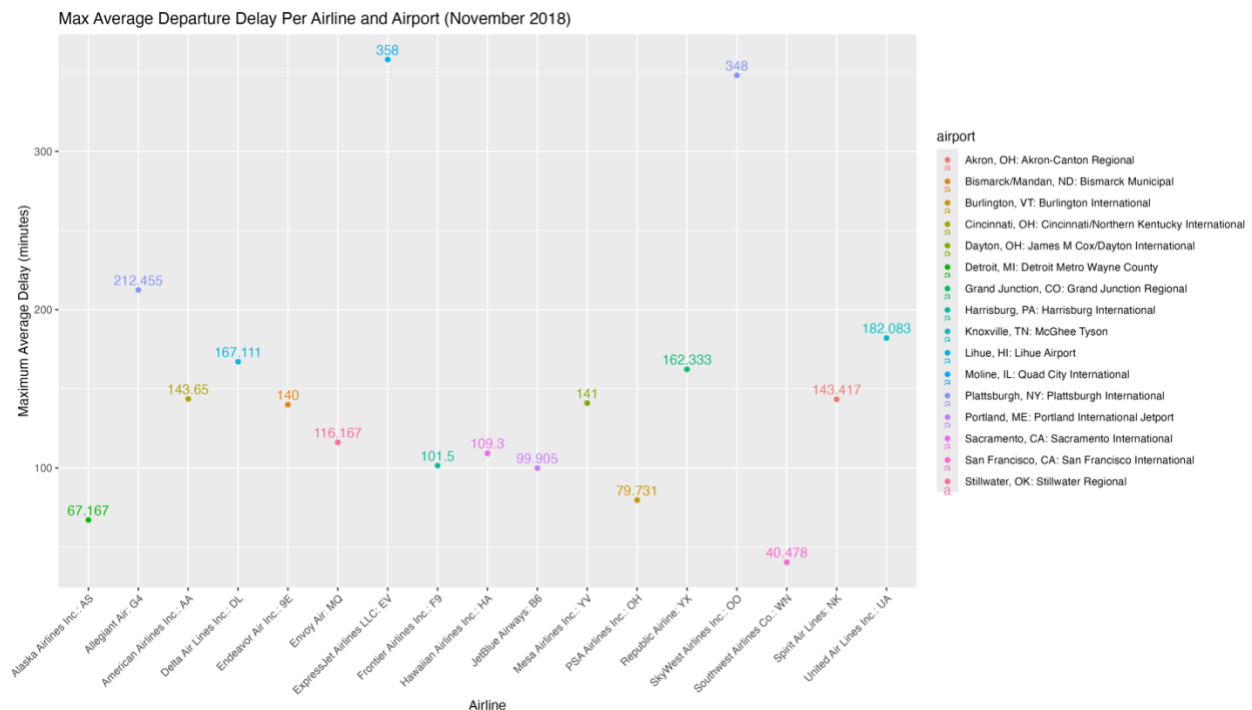


Figure 4: Top 20 Airlines with the highest average departure delays and their associated airports in November 2018.

In November 2018, ExpressJet Airlines and SkyWest Airlines were, on average, delayed the longest at 358 and 348 minutes, respectively. For these two airlines, they were delayed from departing the

most from Quad City International Airport in Moline, IL, and Plattsburg International in Plattsburgh, NY, respectively. It is safe to say customers should avoid those two airlines flying out of those two airports if they want to arrive at their destination on time.

Moreover, Alpena County Regional Airport (APN) in Alpena, MI was the airport with the highest average departure delay among all airports in November 2018 at 46.314 minutes. It is not too surprising that a regional airport was the most delayed as these types of airports typically lack the funding, infrastructure and personnel necessary to handle high flight volumes and any extraordinary events that could lead to delays.

5. Chicago O'Hare International Airport canceled the most flights, and due to weather

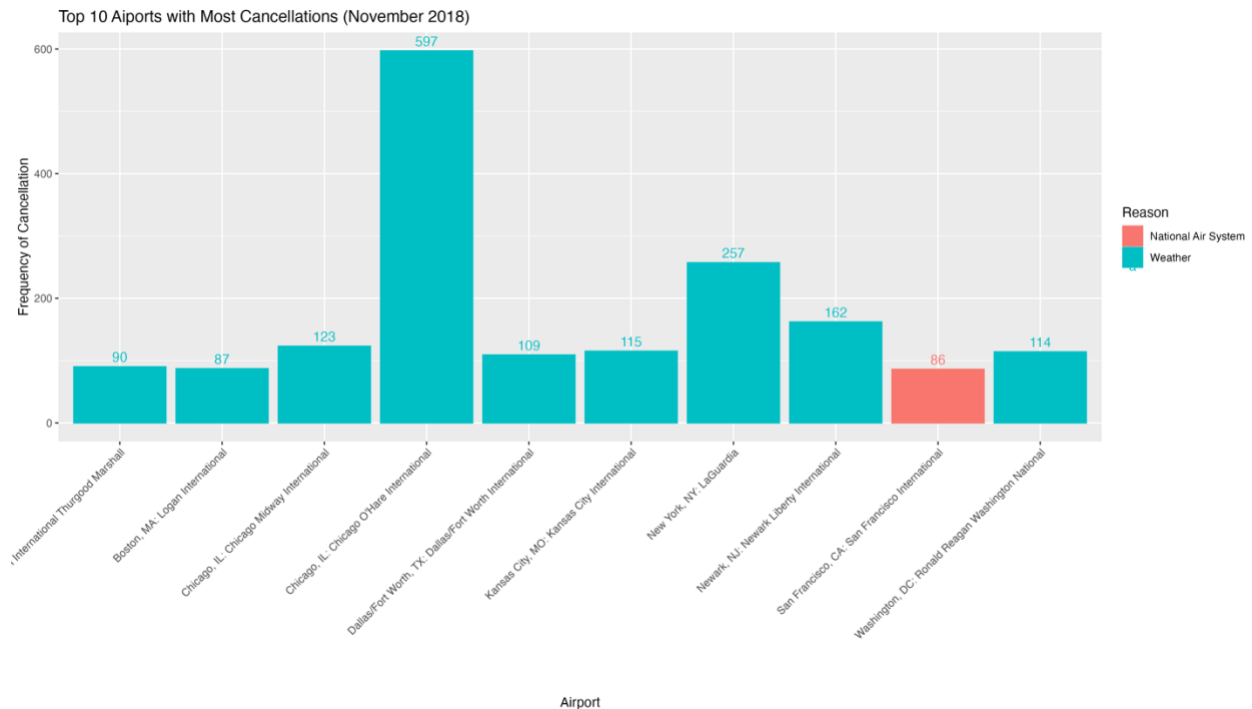


Figure 5: Top 10 US Airports with the most flight cancellations and their corresponding reasons in November 2018.

Chicago O'Hare (ORD), by far, had the most flight cancellations at 597 flights and they were all due to weather. This is no surprise as Chicago is known as the Windy City, and its winters are typically harsh. The combination of wind and snow is a plausible explanation for its flight cancellations. Additionally, San Francisco International (SFO) had the most cancellations due to the National Air System which could be from airport operations, heavy traffic volume and air traffic control. This figure could be an indication of a poorly run, disorganized airport, but more research is required to confirm this theory.

6. Average daily flight count peaked on November 27 and was lowest on November 24

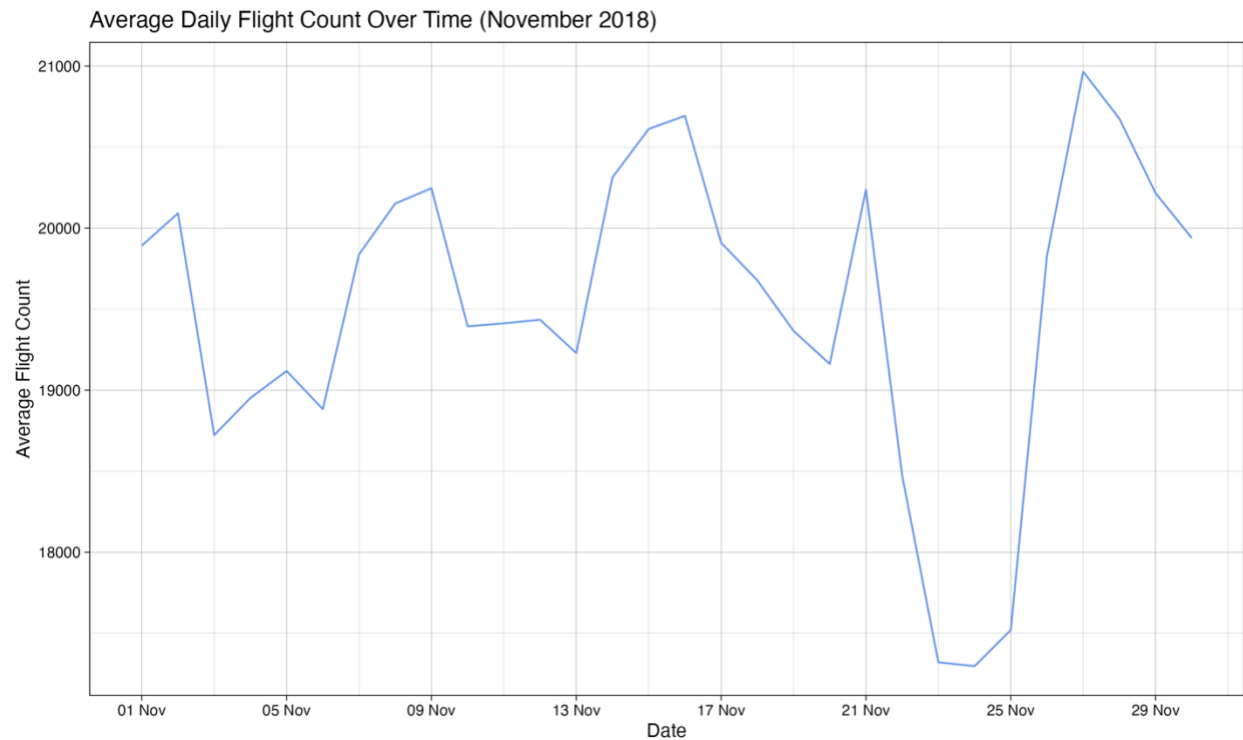


Figure 6: Average daily number of flights through November 2018.

November 27 had the highest average flight count while November 24 had the lowest. Thanksgiving Day fell on Thursday November 22, and many people also get the Friday after off of work. Therefore, November 24 is the Saturday after Thanksgiving and most people were probably spending it with friends and family so there was no need to fly. Additionally, the reason for November 27 having the highest average flight count may be due to people returning from their Thanksgiving trips, perhaps after taking a few days off of work for a long weekend.

Conclusion

This report highlighted several key insights about flight performance in the United States in November 2018. The flight with the longest departure delay was an American Airlines flight. United Air Lines had earliest departing flight this month. Friday is the busiest day for airports across the US due to the highest volume of flights, and Saturday was the least busy. ExpressJet and SkyWest Airlines recorded the highest average delays, and they were delayed most from Quad City International Airport in Moline, IL, and Plattsburg International in Plattsburgh, NY, respectively. Alpena County Regional Airport in Alpena, MI was the airport with the highest average departure delay. Chicago O'Hare had the most cancellations and due to weather. The days with highest and lowest average flights were November 27 and 24 respectively.

With more time and resources, we could do more analyses on each one of the topics and evaluate the trends over the course of a year and beyond to gain a more comprehensive picture.