

CSCI 4502: Flight Delays and Cancellations

David Ingraham, Robert Kendl, Jordan Peters, Julio Lopez

Why Flight Delays and Cancellations?

According to the Bureau of Transportation, 16-24% of flights are delayed on average yearly, with 1-2% being cancelled entirely.

We wished to find patterns in these delays to help aid future travelers when they fly with certain airlines or to certain airports.



Research Questions

1. Which airlines had the most cancellations and delays?
2. Do all airlines follow similar delay and cancellation patterns?
3. Which airlines cancel and delay flights the most due to weather?
4. Which airports have the most delays and cancellations?
5. Does the distance of the flight matter for likeliness of a delay or cancellation?
6. What is the most common cancellation reason?

Data Preparation

- DataCleaner: clean up the empty data points
- SQL: allowed us to query the data and removed unwanted attributes
- Python: Find patterns in queried data
- Excel: Use patterned data to create graphs



Final Results

Vast majority of cancellations happen on the East coast

Delta Airlines and American Airlines cancelled the most due to weather. Virgin America and Hawaiian airlines rarely cancelled.

American Eagle Airlines cancelled the most out of any airline.

Flight delays happen most often between June and September