STAT 501: Methods of Applied Statistics	Fall 2023
Project Proposal	

Group Members

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Topic

Airlines Delay On-time Performance

Source

https://www.transtats.bts.gov/OT_Delay/OT_DelayCause1.asp

Flight delay data collected for the latest 6 months from the above site for the top 4 frequent airlines and busiest airports. Dataset contains delays in arrivals and departures, date, airline id, expected flight time, actual air time, distance, origin and destination.

Statistical Analysis

We are planning to do a linear model for the best single / combinations of variables from the dataset to predict the arrival / departure delays.

Estimate the mean of arrivals / departure delays of airline / airports with a confidence interval.

Hypothesis test about difference between airlines /airport proportion delays to check if weekends have more delays than weekdays.

ANOVA for our analysis.