

An illustration featuring a pilot in a dark suit, red tie, and cap standing behind a wooden desk. A large yellow speech bubble originates from the pilot, containing the text 'Don't you see it's raining? Your flight is delayed due to bad weather...'. To the left, a white airplane with blue accents is shown in flight. The background consists of a grey sky with stylized clouds, including one that is raining. The bottom of the image is a dark blue wavy line representing the ground or sea.

**Don't you see it's raining?
Your flight is delayed due
to bad weather...**

By Amy Su



Methodology

1

Data

- Flight data from Bureau of Transportation Statistics
- Weather data from DarkSky API

Modeling

- Logistic Regression
- Random Forest Classifier
- XGBoost

3

2

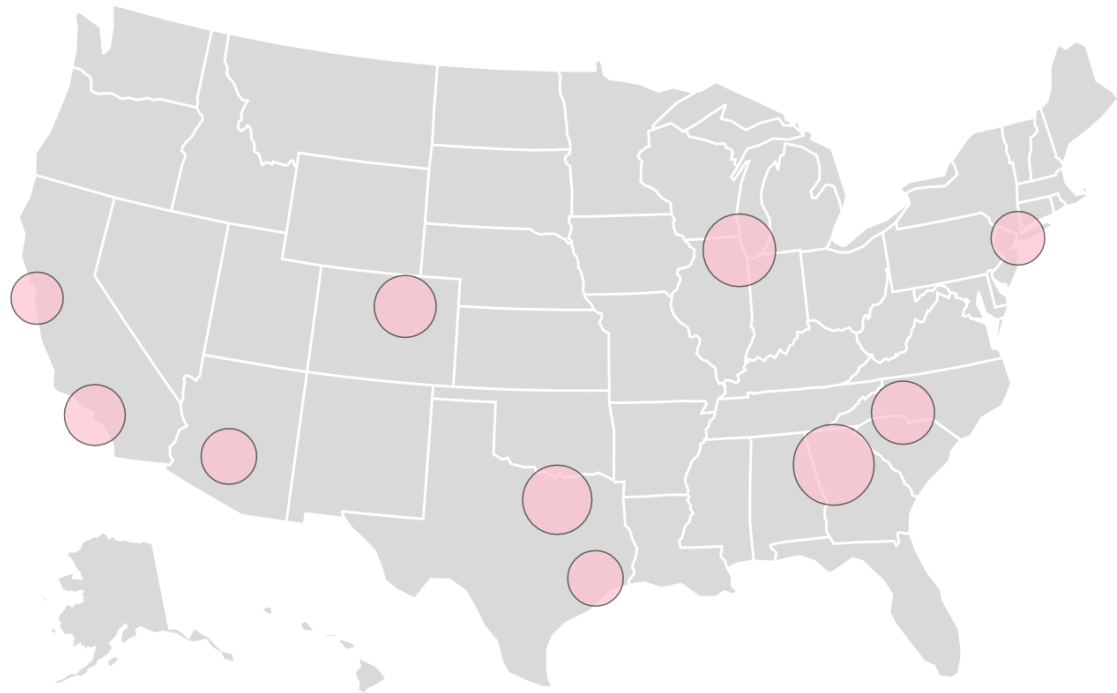
EDA and Feature Engineering and Selection

4

Results and Conclusions



Top 20 Busiest Airports by Traffic



ATL

ORD

DFW

CLT

DEN

LAX

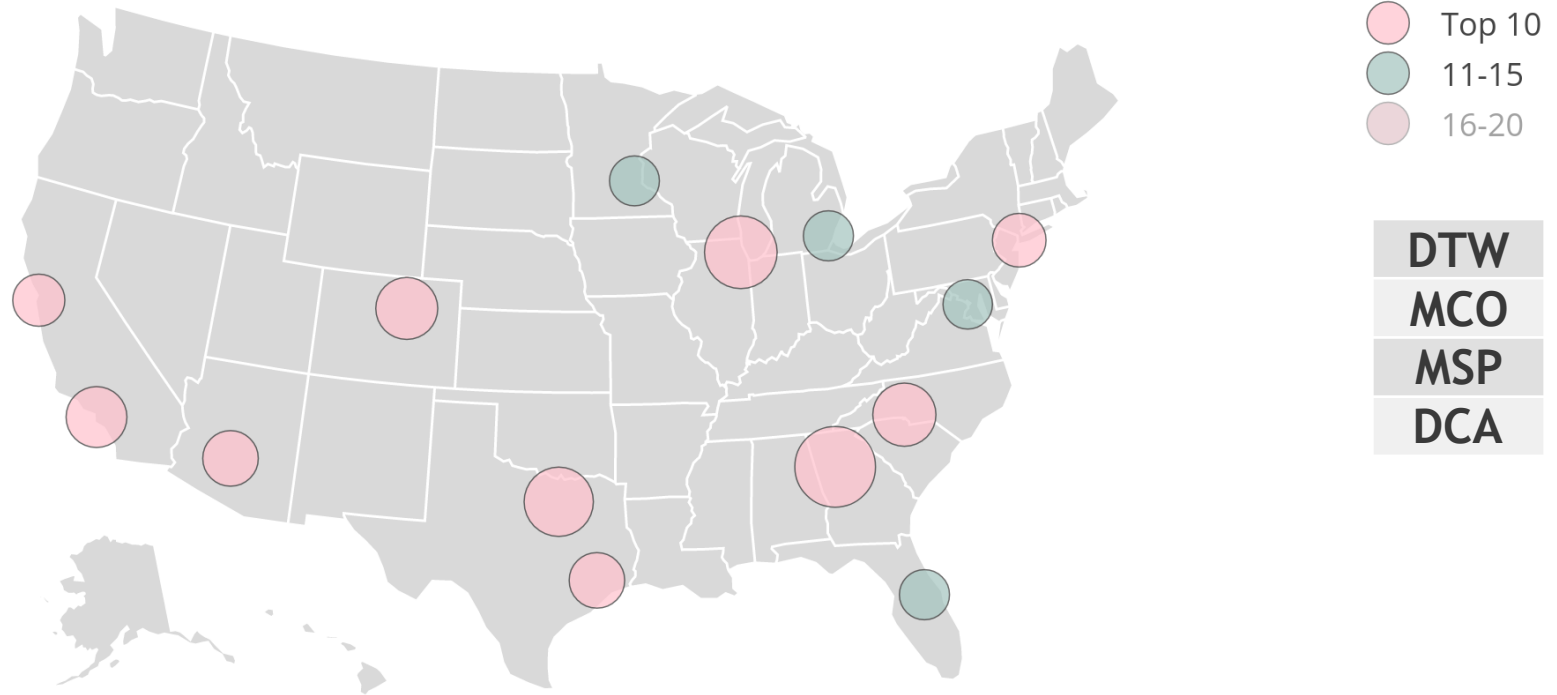
PHX

IAH

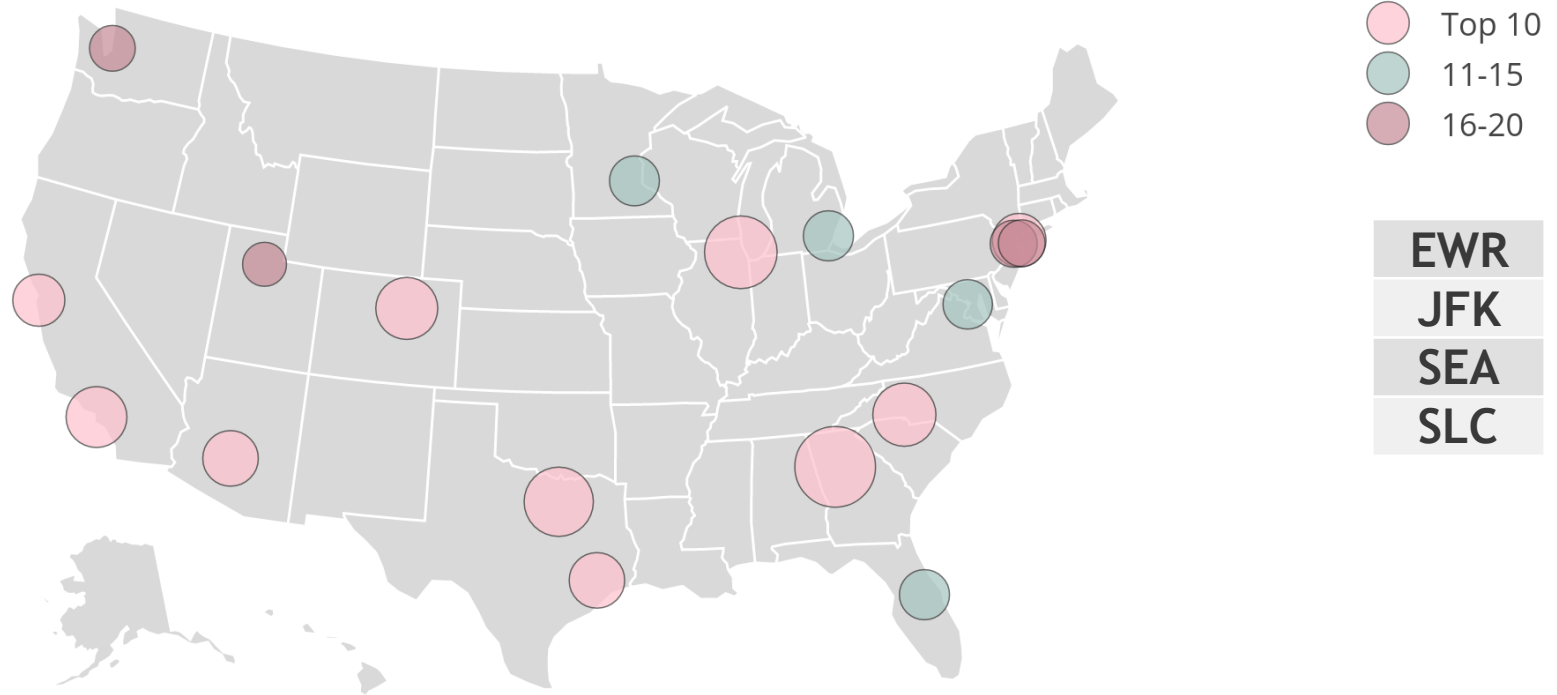
LGA

SFO

Top 20 Busiest Airports by Traffic



Top 20 Busiest Airports by Traffic



Results



F1 Score: 0.71
Accuracy: 0.90





LGA LAGUARDIA
AIRPORT



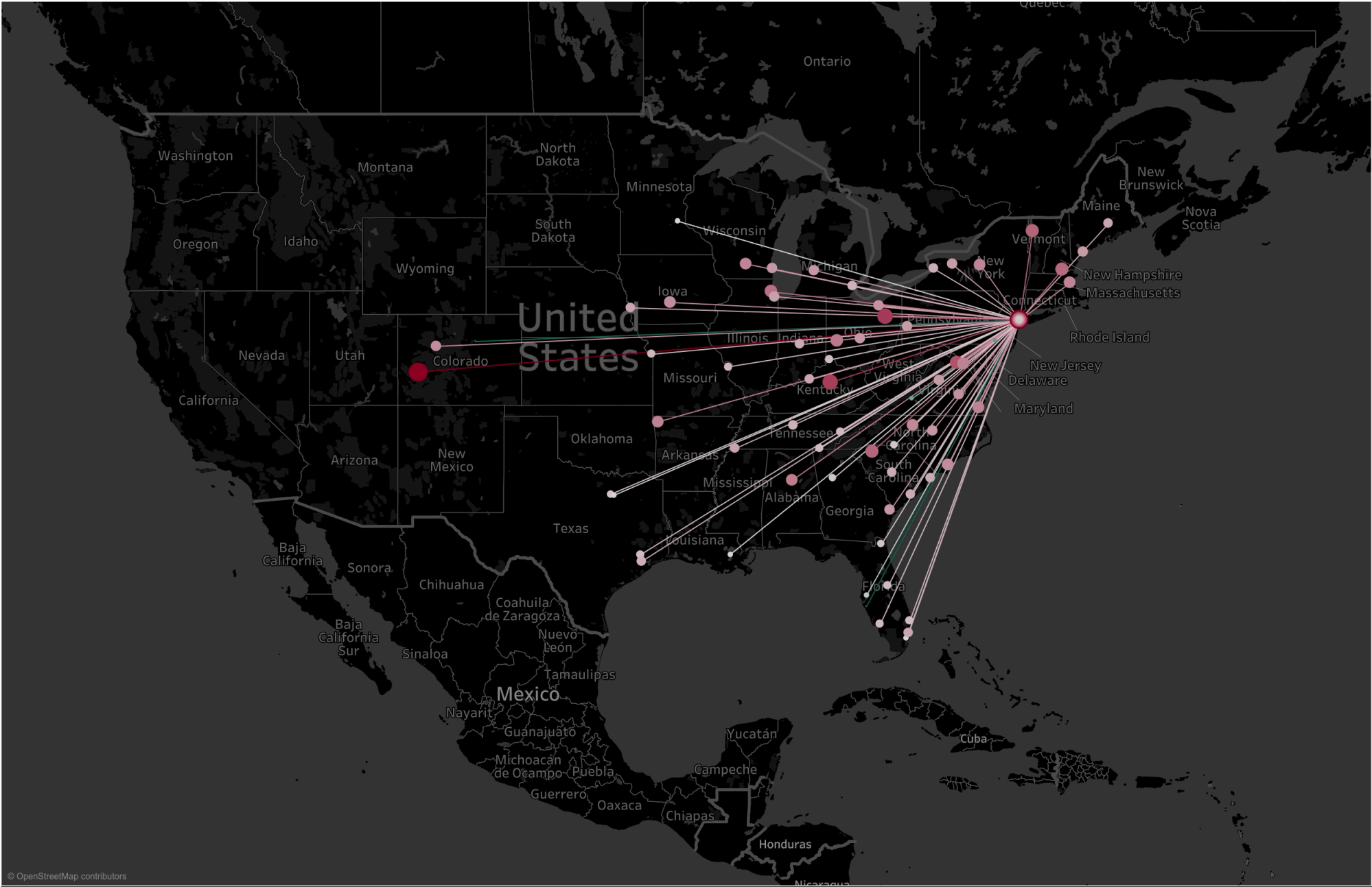
DELTA



Hartsfield-Jackson
Atlanta International Airport



Average Delay (in minutes) by Airport



Origin
LGA

AVG(Arr Delay)
-7.38 75.00

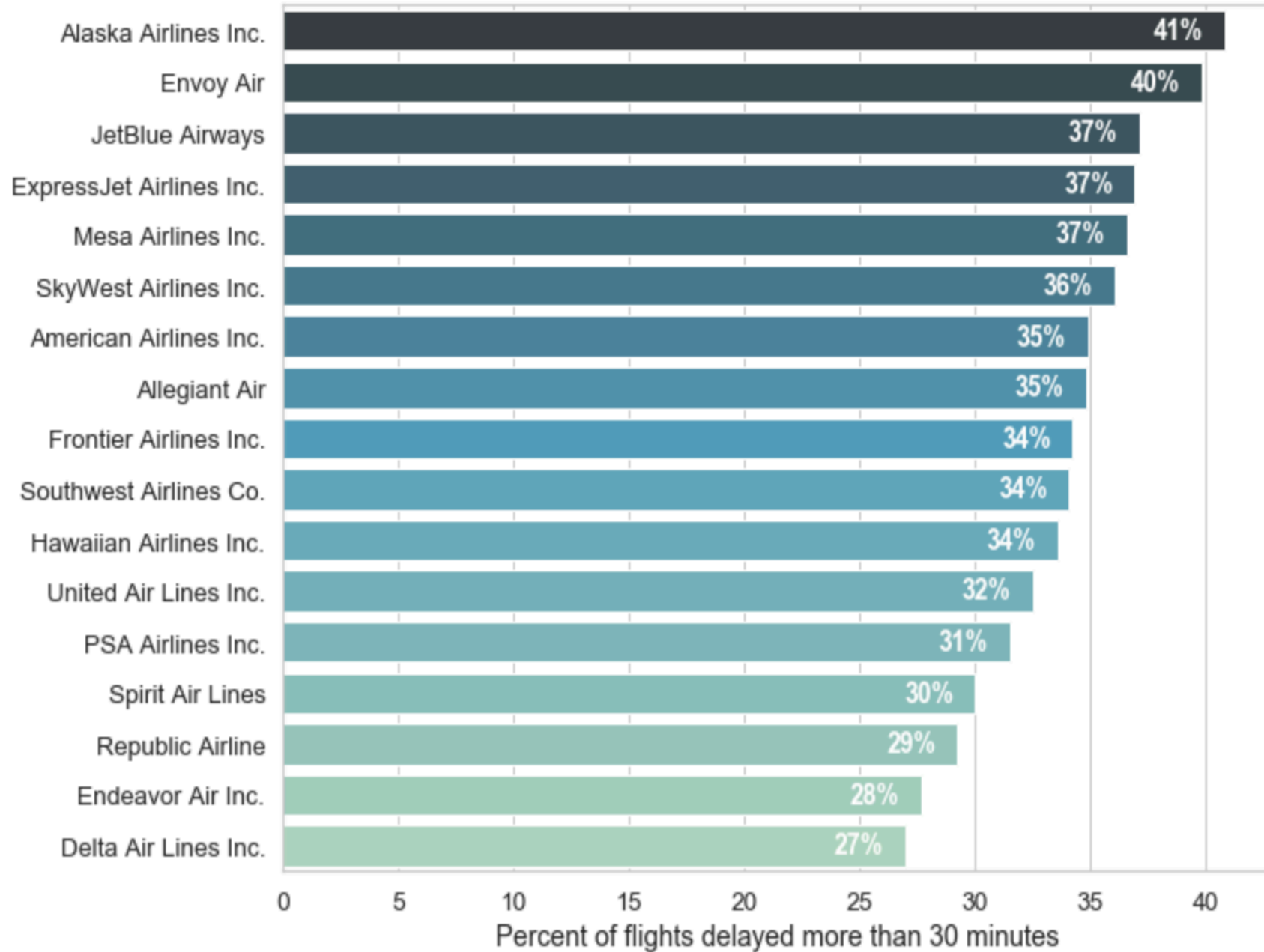
Thank You



Appendix



Top 20 Airlines and Percent of flights delayed more than 30 minutes



Top 20 Airports and Average Delay in Minutes

