

Expanding into Aviation

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Purpose:

**Make three business
recommendations for a
company looking to expand
into the aviation industry**



What are we looking for?

Which **aircraft** will be best to use?

What **areas** are best to fly in?

What **purposes of flight** are the best to get involved in?

Most import consideration: **uninjured passengers**



The Data





The Data

Dataset from the National Transportation Safety board from 1962 - 2023

The total dataset contained information on 88,889 accidents/incidents

Out of those, we used 26,689 entries in our analysis



Airplane Makes and Models





Best Airplane Make

Total Uninjured Passengers

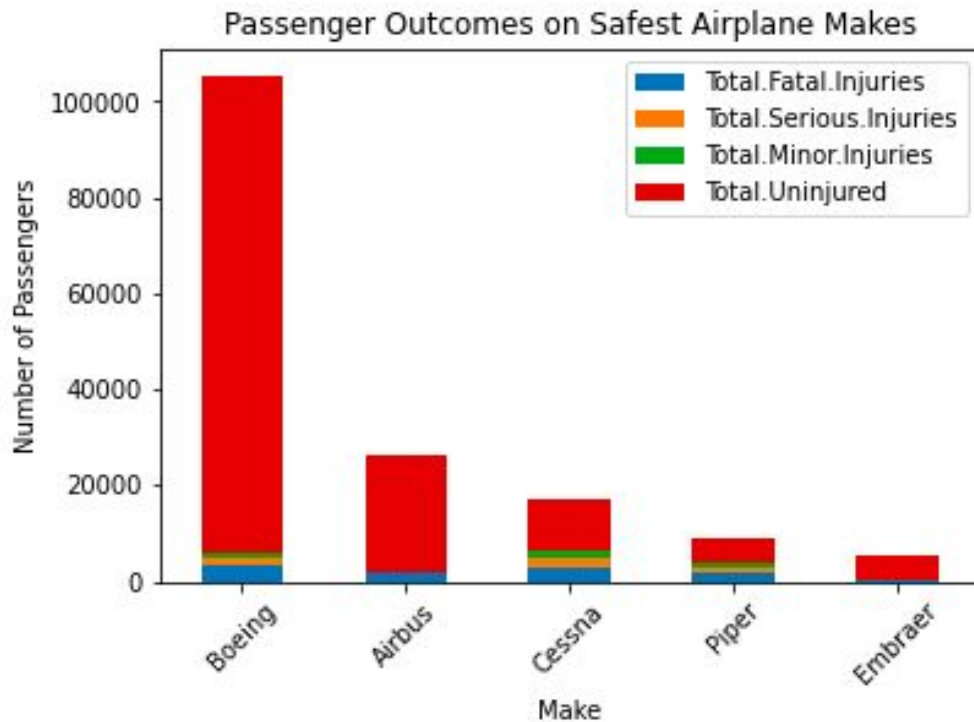
Boeing - 99,683

Airbus - 24,551

Cessna - 10,735

Piper - 5,522

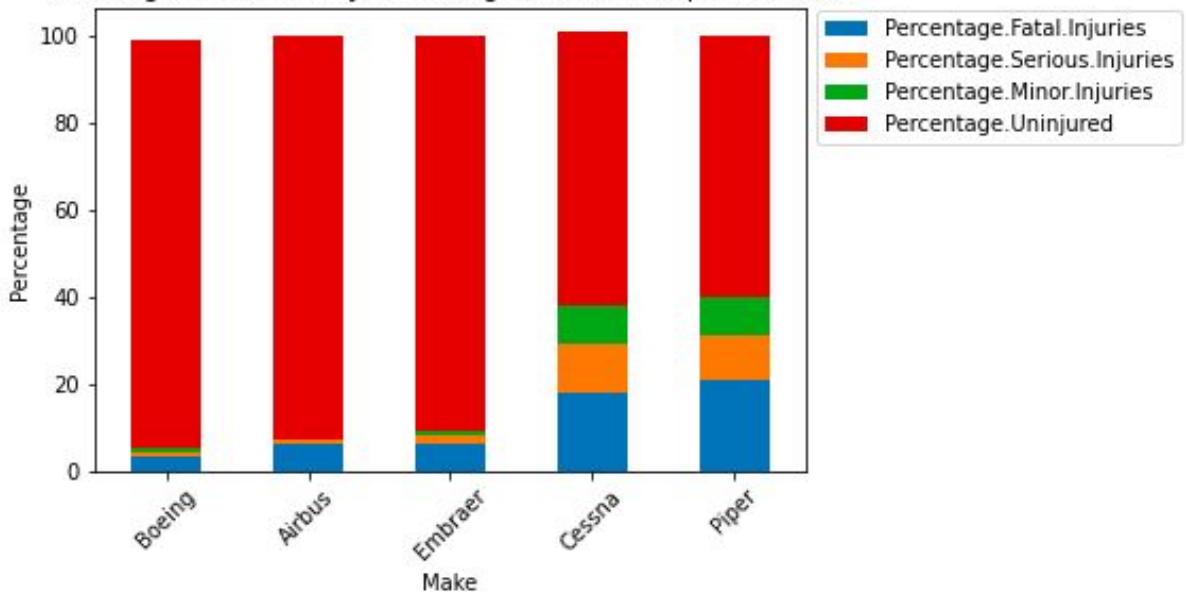
Embraer - 4,801





Best Airplane Make

Passenger Outcomes by Percentage on Safest Airplane Makes



Percentage Uninjured Passengers

Boeing - 94.41%

Airbus - 92.52%

Embraer - 90.55%

Cessna - 62.71%

Piper - 59.97%



Best Airplane Model

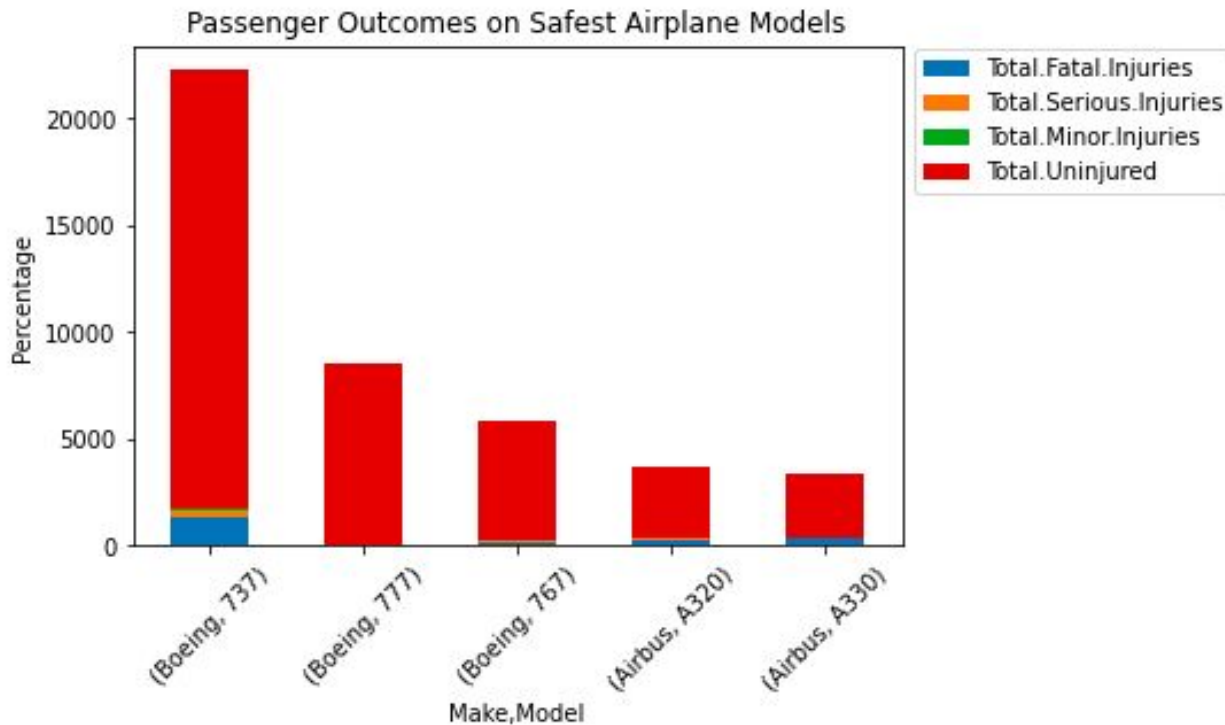
Boeing 737 - 20,529

777 - 8,525

767 - 5,521

Airbus A320 - 3,358

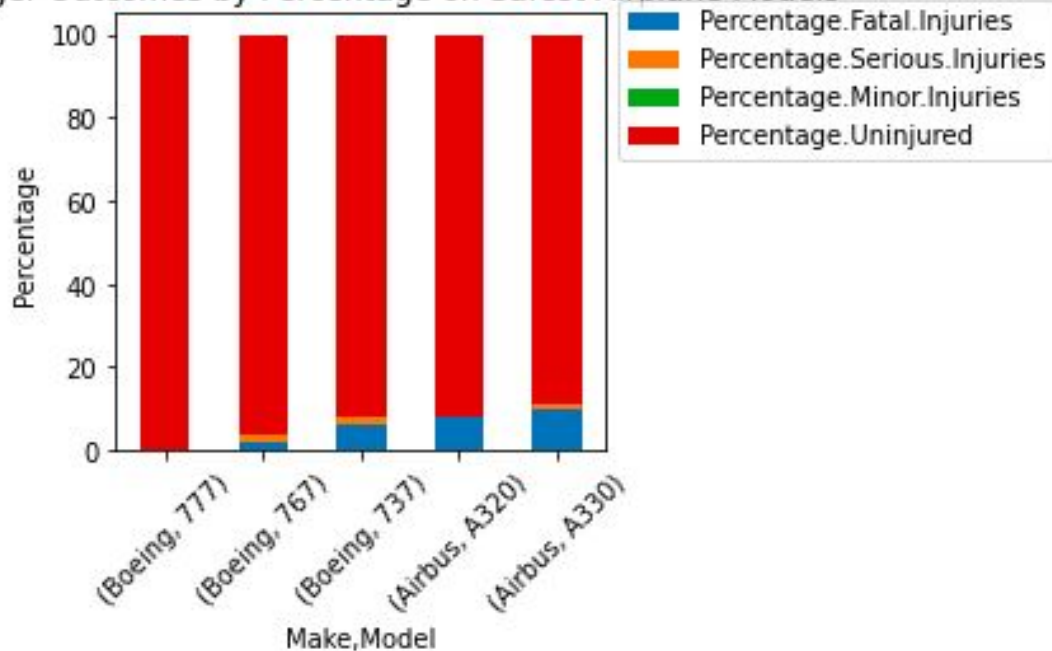
A330 - 2,991





Best Airplane Model

Passenger Outcomes by Percentage on Safest Airplane Models



Boeing 777 - 99.67%

767 - 95.52%

737 - 92.09%

Airbus A320 - 91.62%

A330 - 88.89%



Regional Analysis





Best Region

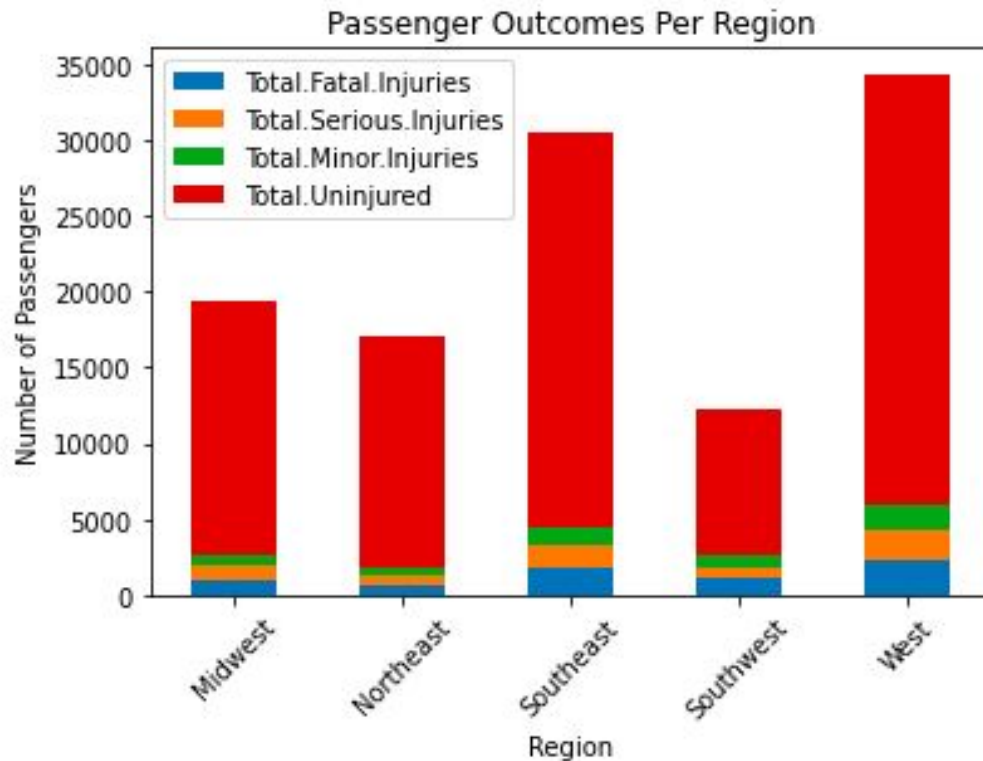
West - 5,882

Southeast - 4,440

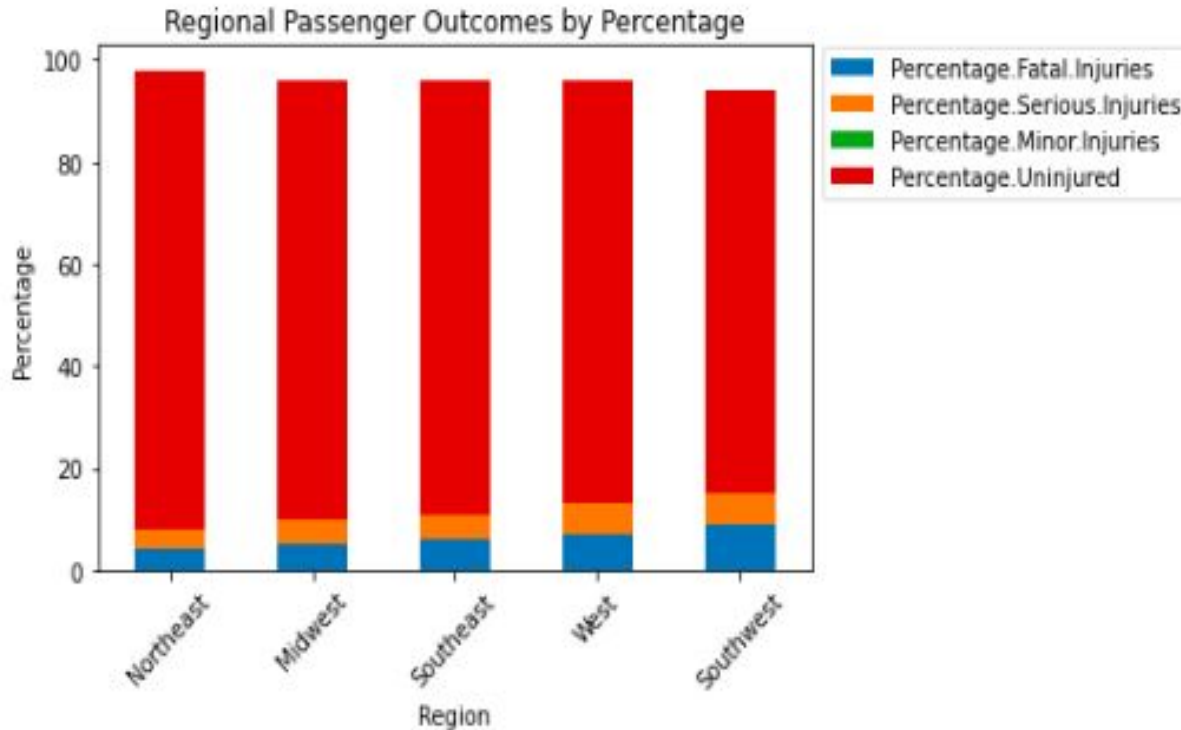
Southwest - 2,561

Midwest - 2,673

Northeast - 1,773



Best Region



Northeast - 89.57%

West - 82.90%

Southeast - 85.45%

Southwest - 79.16%

Midwest - 86.19%



Airplane Usage





Best Purpose of Flight

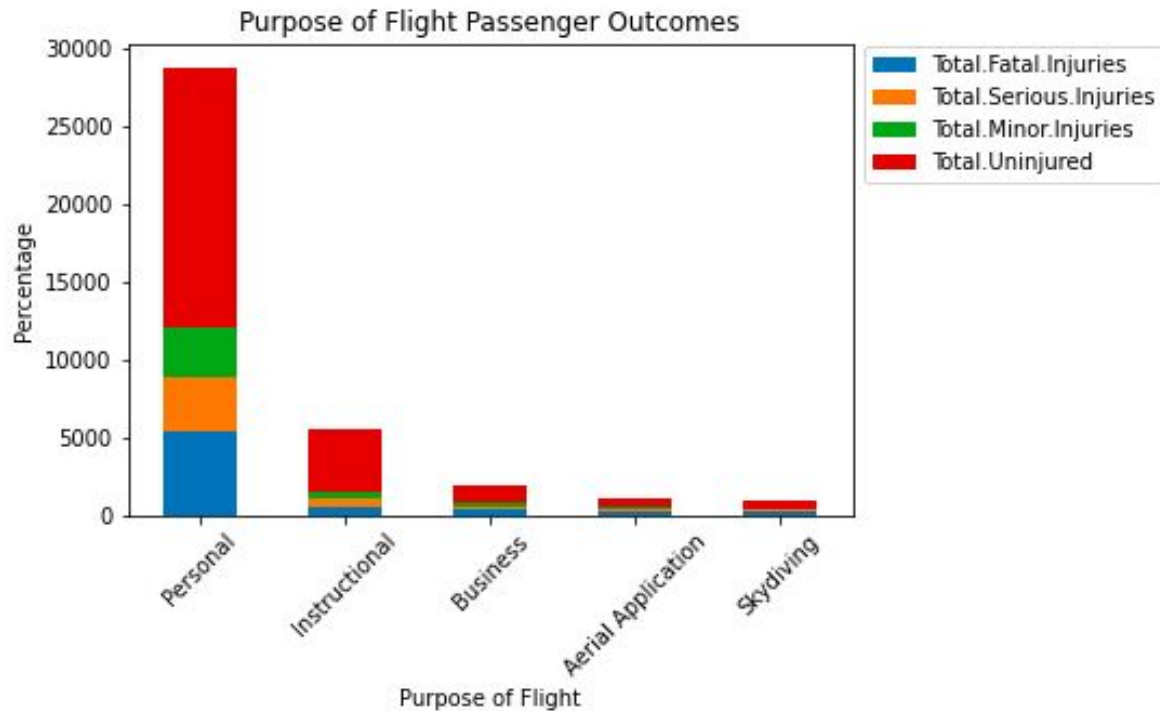
Personal - 16,816

Instructional - 3,958

Business - 1,225

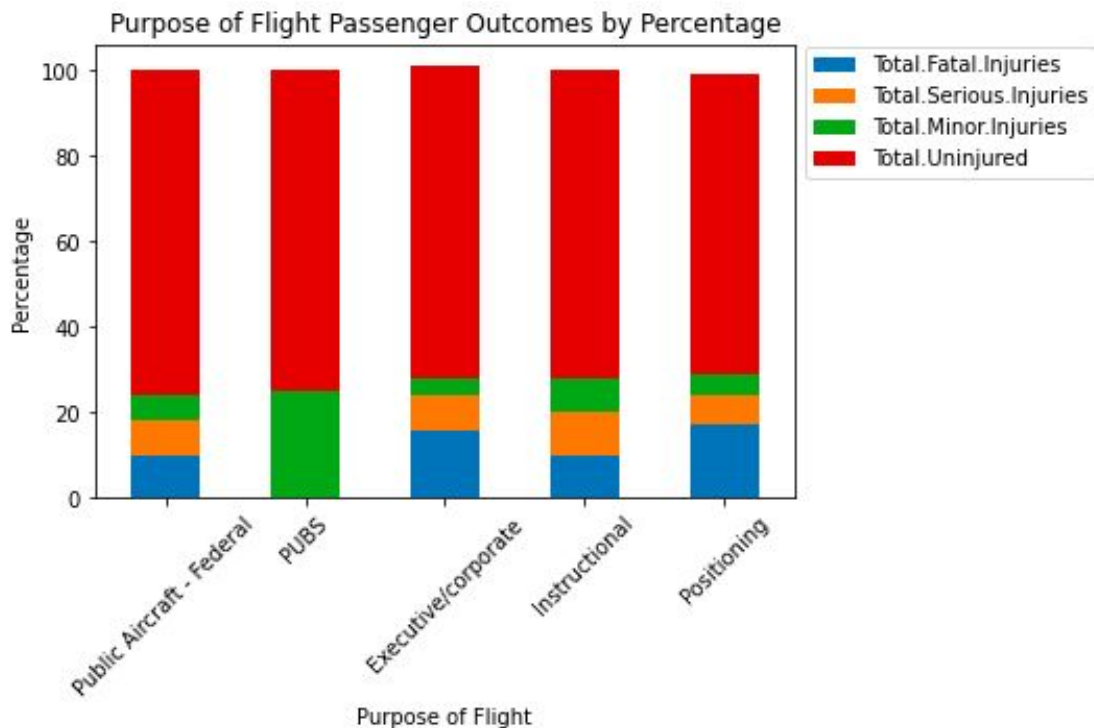
Aerial Application - 639

Skydiving - 524





Best Purpose of Flight



- Public Federal - 75.68%
- PUBS - 75%
 - Probably not easily entered
 - Same with PUBS
- Executive/Corporate - 73%
- Instructional - 72.19%
- Positioning - 70%

Start with Executive/Corporate flights



Summary of Conclusions



Three Recommendations

1. Purchase Boeing 777s
2. Fly in the Northeast
3. Focus on flights for Executive/Corporate Purposes



Limitations and Next Steps





Limitations

- To be in the dataset, the plane had to have an accident
- Wide range of years
- Broad approach to company goal
- Practicality

Next Steps

- Narrow down company goals
- Bring in data on overall flight outcomes

Questions

Thank You!

**For further discussion,
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