



# BEST AIRCRAFT PURCHASES

# Project Overview

01



This project aims to provide data driven insights which will allow a smooth entry into the aviation field by the company. Through these insights the company will purchase aircrafts with the lowest risk associated with them from accident data.

# Business Utilization

02



By venturing into a new company branch, the insights provided will aid in reducing company losses and inform the company division head of the best aircraft purchases with minimum risk.

# Data Overview

Data collected from the National Transportation Safety Board which focuses on aircraft related accidents was utilized in this project with the following fields having strong influence on the insights:

- Aircraft Make and Model
- Engine type
- Number and Severity of Injuries
- Purpose of flights

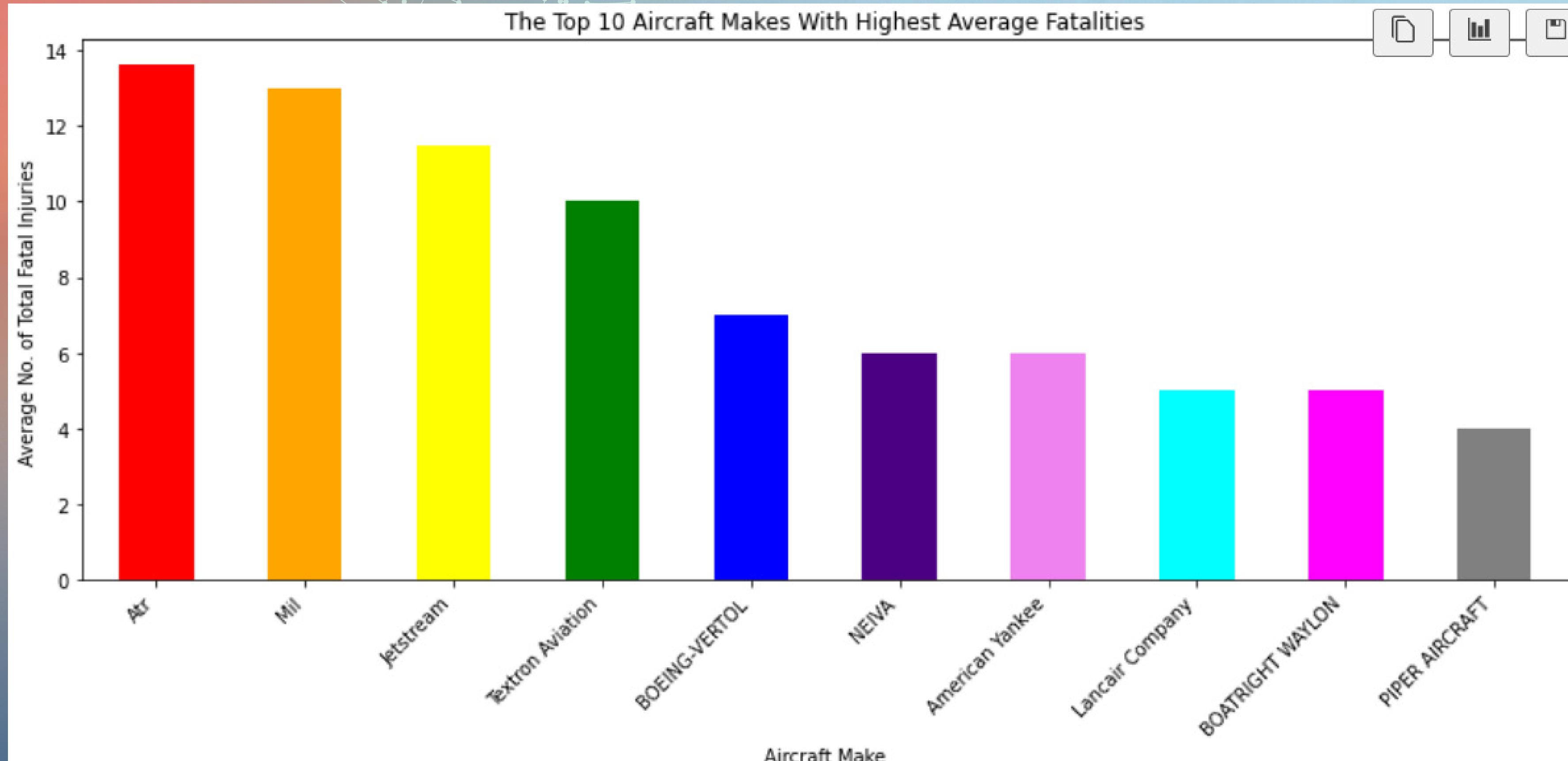
# Data Preparation

A composite image featuring a man in a blue shirt and yellow safety vest working on the engine of an aircraft. He is wearing a cap and safety glasses. The background shows the sky and part of the aircraft. Overlaid on the image is a complex network graph consisting of numerous small, glowing white nodes connected by thin lines, forming a dense web-like pattern.

The Aviation Data was cleaned and repurposed to fit the business plan for the company.

# Visualizations

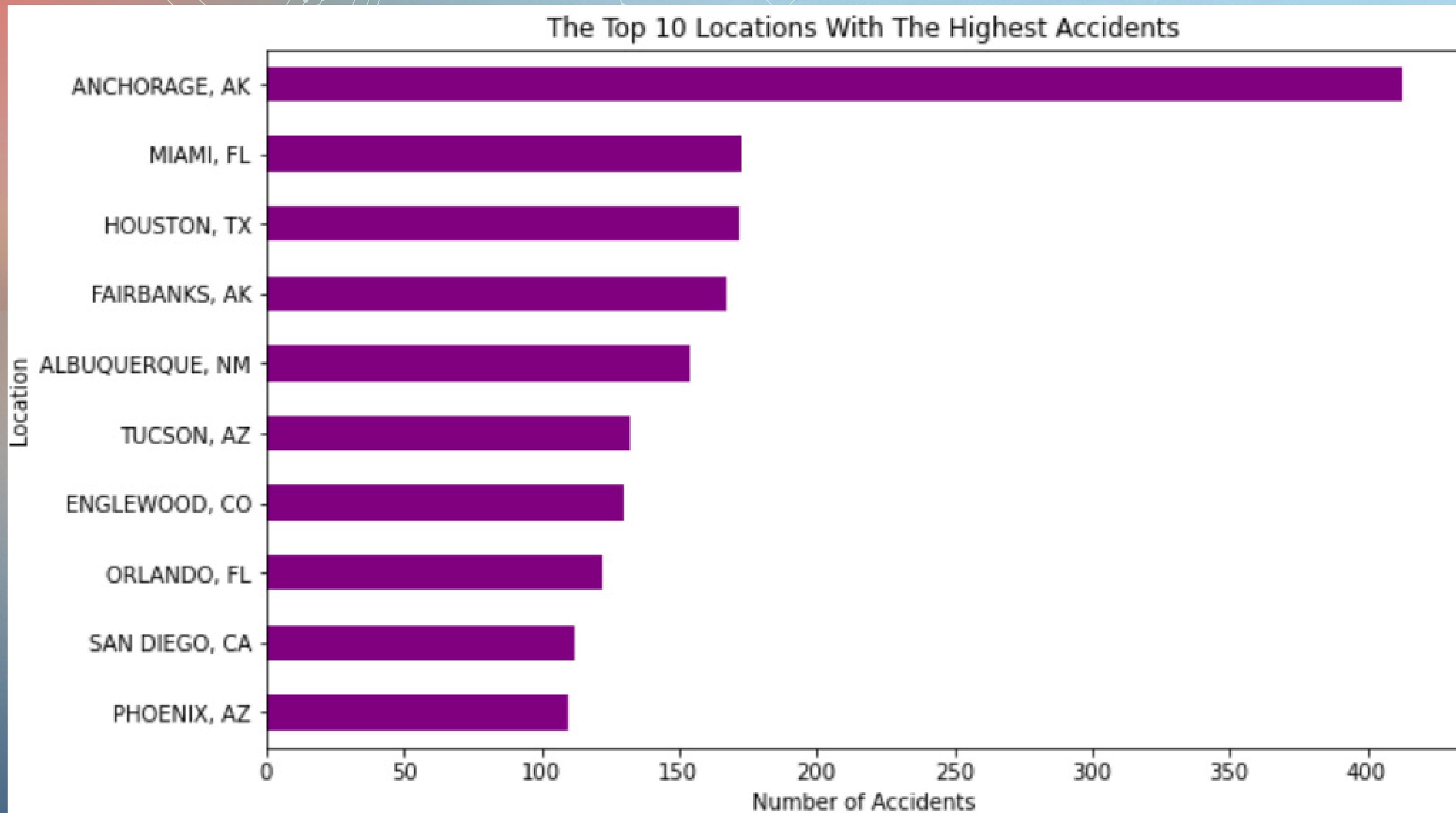
A show of the aircraft makes with the highest fatalities.



# Visualizations

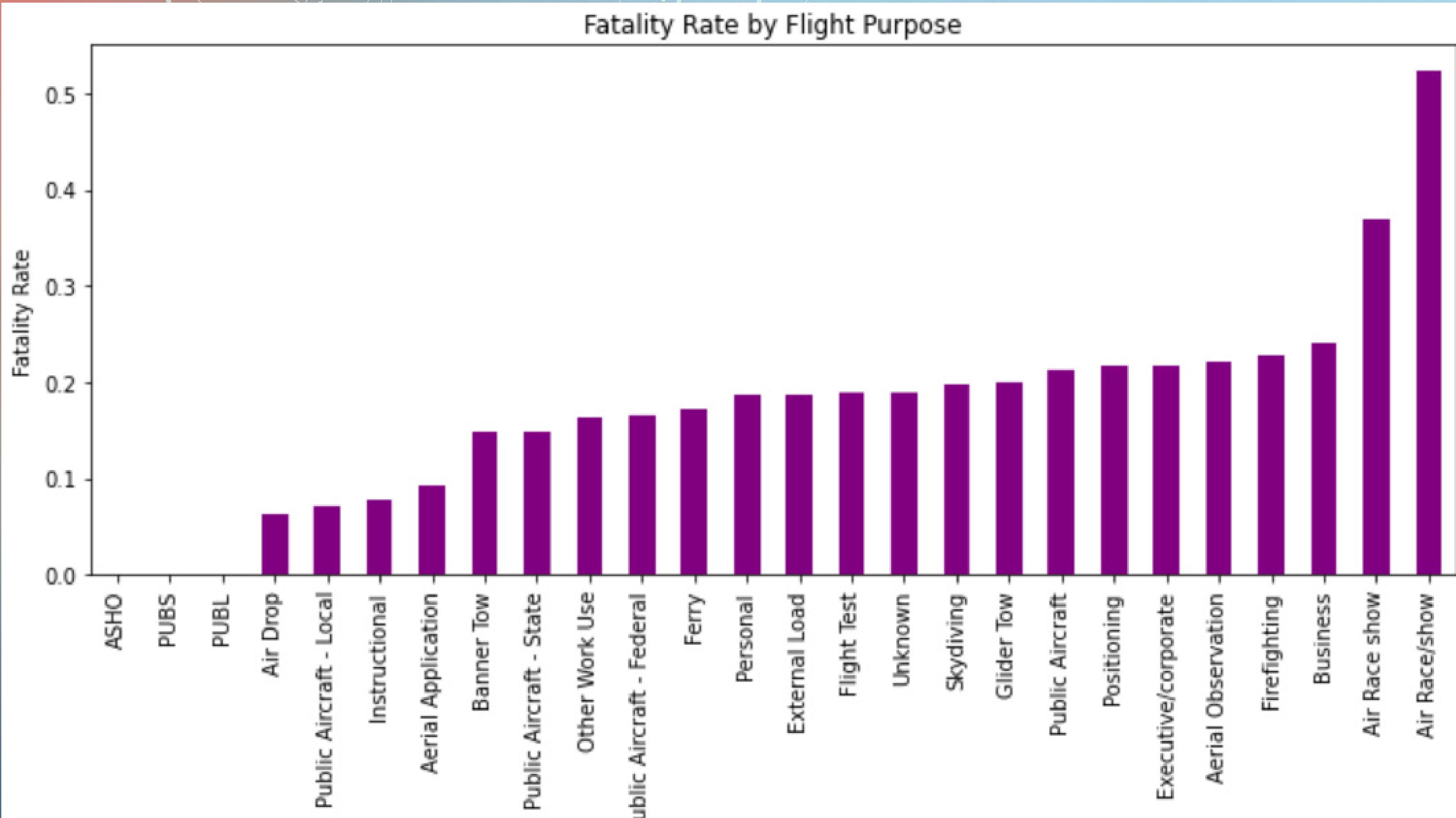
A show of the locations with the most incidents.

The Top 10 Locations With The Highest Accidents



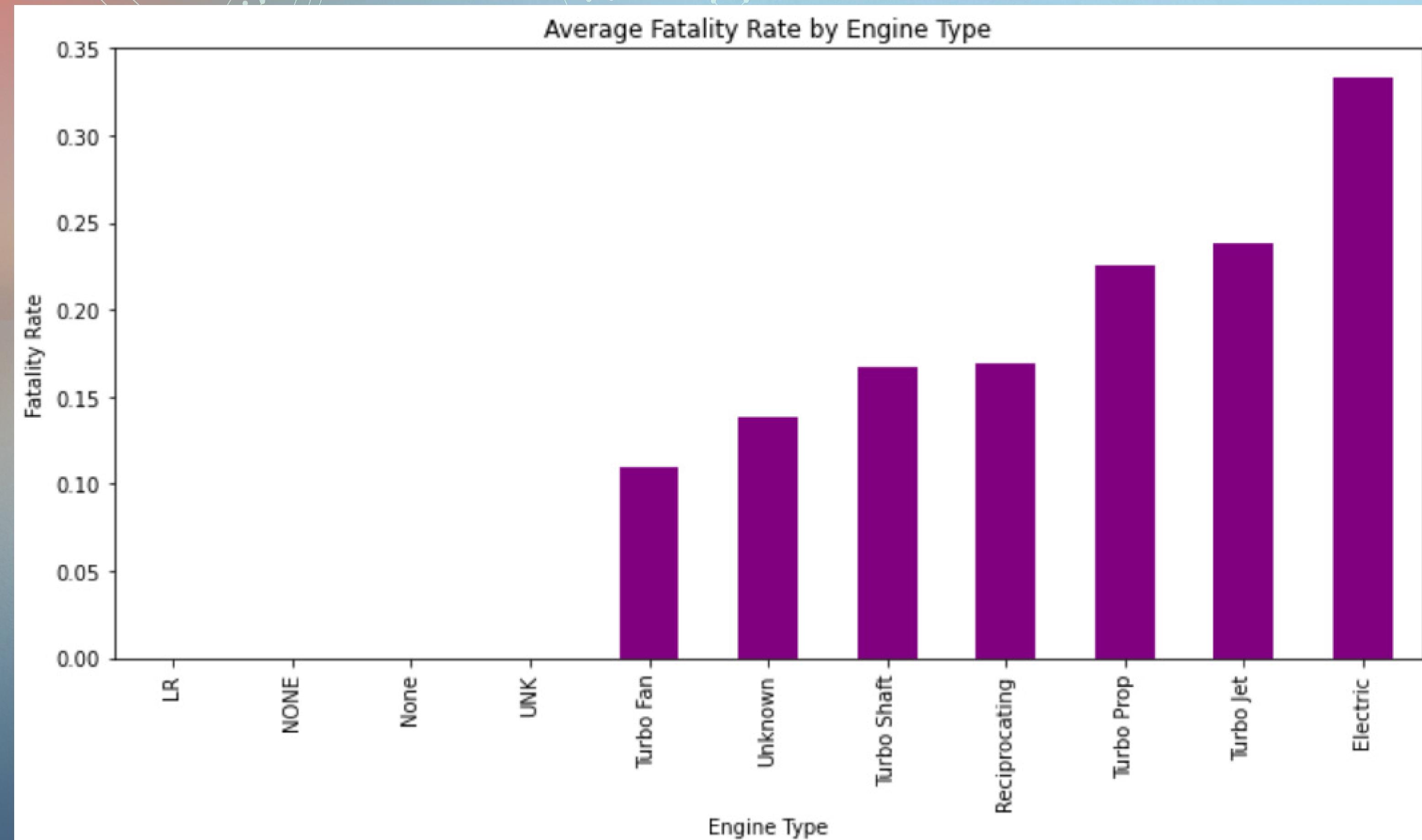
# Visualizations

Fatality Rate by Flight Purpose



# Visualizations

A show of varying fatality rates across different engine types.



# Recommendations

- 1. Avoid aircraft makes with the highest fatality rates.**
- 2. Limit flights to the locations with the highest number of incidents.**
- 3. Purchase aircrafts with engines associated with almost a null value of fatality cases.**
- 4. Prioritize well trained and experienced pilots for all the purchased aircrafts.**

# Any Questions?

