

Data Understanding and Analysis

- Source of Data: Aviation incident data from 1962 to 2023, provided by the National Transportation Safety Board
- Description of Data: Aircraft type, incident type (serious, non-fatal, fatal, etc.), location, make, model, weather, build, type of engine, number of engines, and more

• Visualizations:

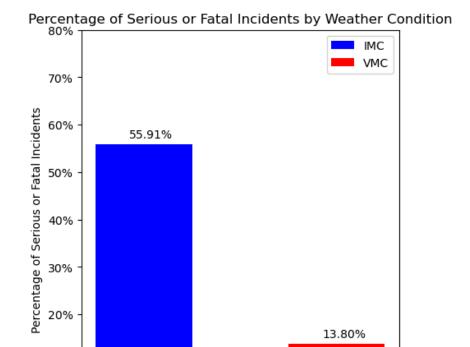
10%

0%

i.

ii.

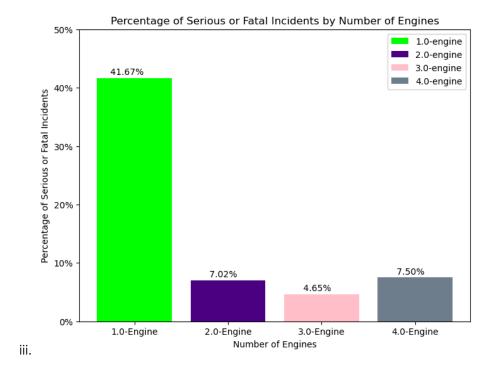
IMC



Percentage of Serious or Fatal Incidents by Engine Type 40.0% Electric Percentage of Serious or Fatal Incidents 35.0% Geared Turbofan Reciprocating 30.0% Turbo Fan Turbo Jet 25.0% 23.23% Turbo Prop Turbo Shaft 19.33% 20.0% 15.58% 15.0% 9.09% 10.0% 7.70% 5.0% 0.00% 0.00% 0.0% Turbo Shaft Geared Turbofan Reciprocating Turbo Fan Turbo Jet Turbo Prop Electric **Engine Type**

Weather Condition

VMC



Conclusion

• Summary of Conclusions:

- i. Pricing should be adjusted upwards during IMC (Instrument Meteorological Conditions) when pilots must rely exclusively on their instruments due to low visibility.
- ii. Turbofan engine airplanes are the least risky and should be prioritized for use.
- iii. The selected turbofan engine airplanes should be equipped with multiple engines for enhanced safety.

Links

- Tableau Dashboard
- Google Slides Presentation