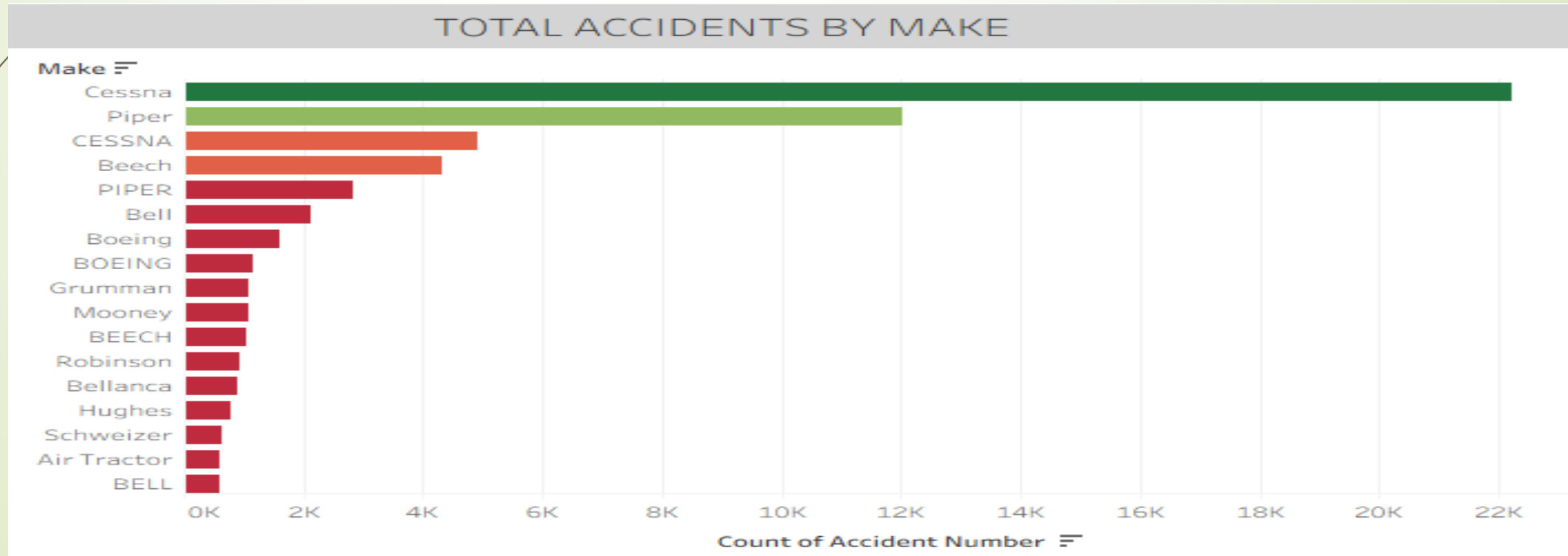


AIRCRAFT RISK ANALYSIS FOR BUSINESS EXPANSION

- The main objective is to identify low-risk aircraft Models and Makes in order to make Data-driven recommendation to support purchase decisions
- Aircraft safety matters to us because we want to make informed decisions in order to reduce liability and maintenance costs. Further more we also need to select aircraft with low safety risk.
- We used U.S National Transportation Safety Board (1962-2023) with 80,000+ aviation accidents and the key fields used is the Aircraft Make & Model, Date of Event, Purpose of Flight and Fatal,Serious,Minor Injuries.

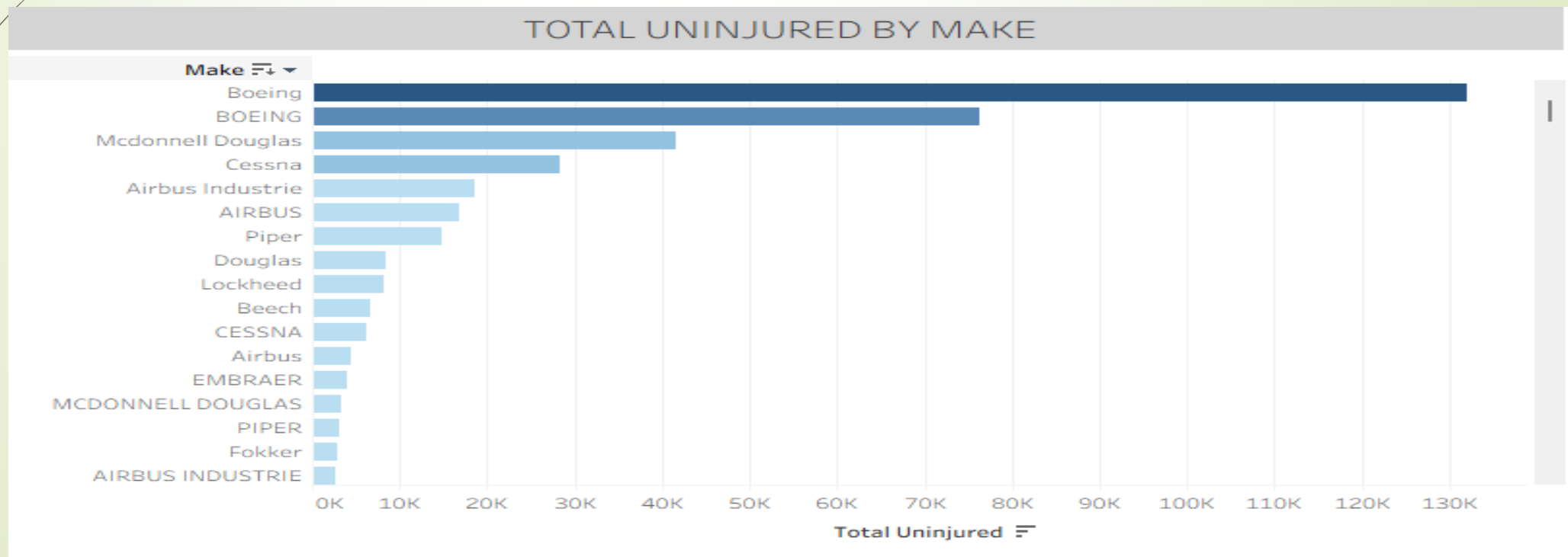
TOTAL ACCIDENTS BY MAKE

- This visualization shows the total accidents each make of an aircraft causes. The highest total accidents are caused by Cessna make with 22,227 accidents. This shows as an organization we should try avoid the aircrafts with this make.



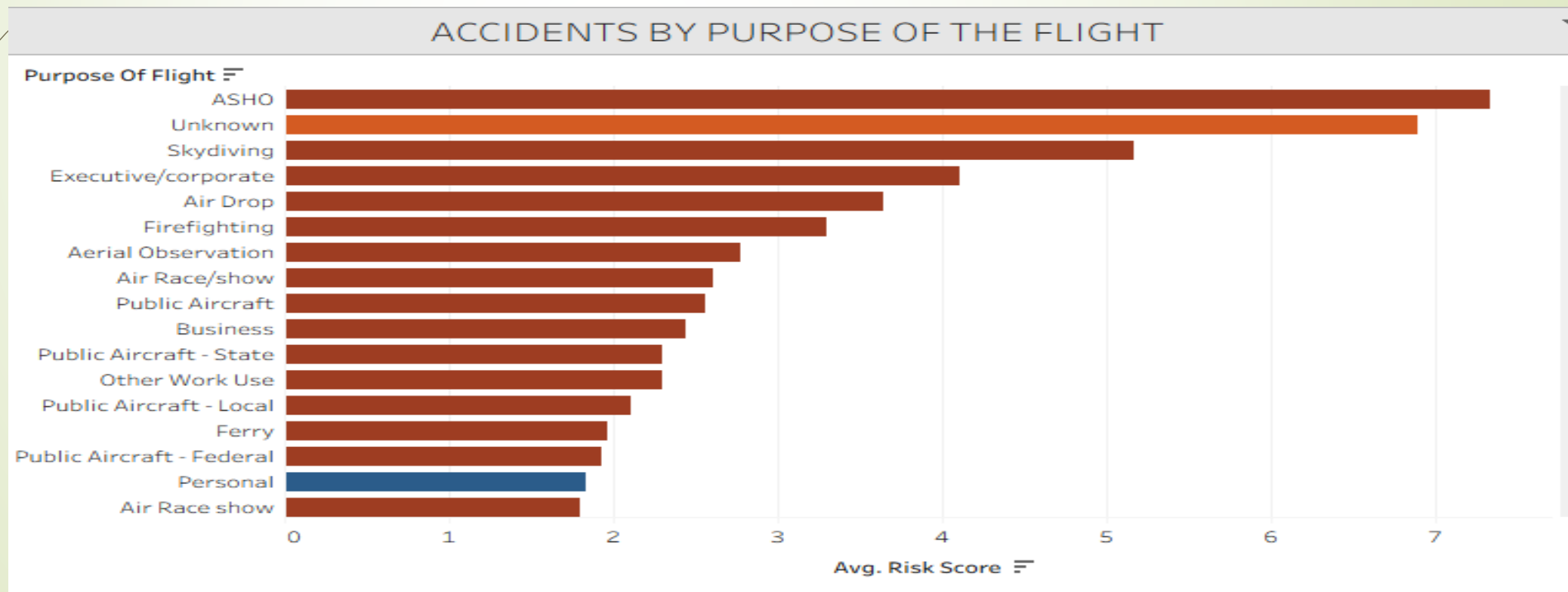
TOTAL UNINJURED BY MAKE

- This visualization shows the total uninjured each make of an aircraft has. The highest number of uninjuries is by boeing having a total of 132,037 uninjuries meaning it is one of the safest makes.



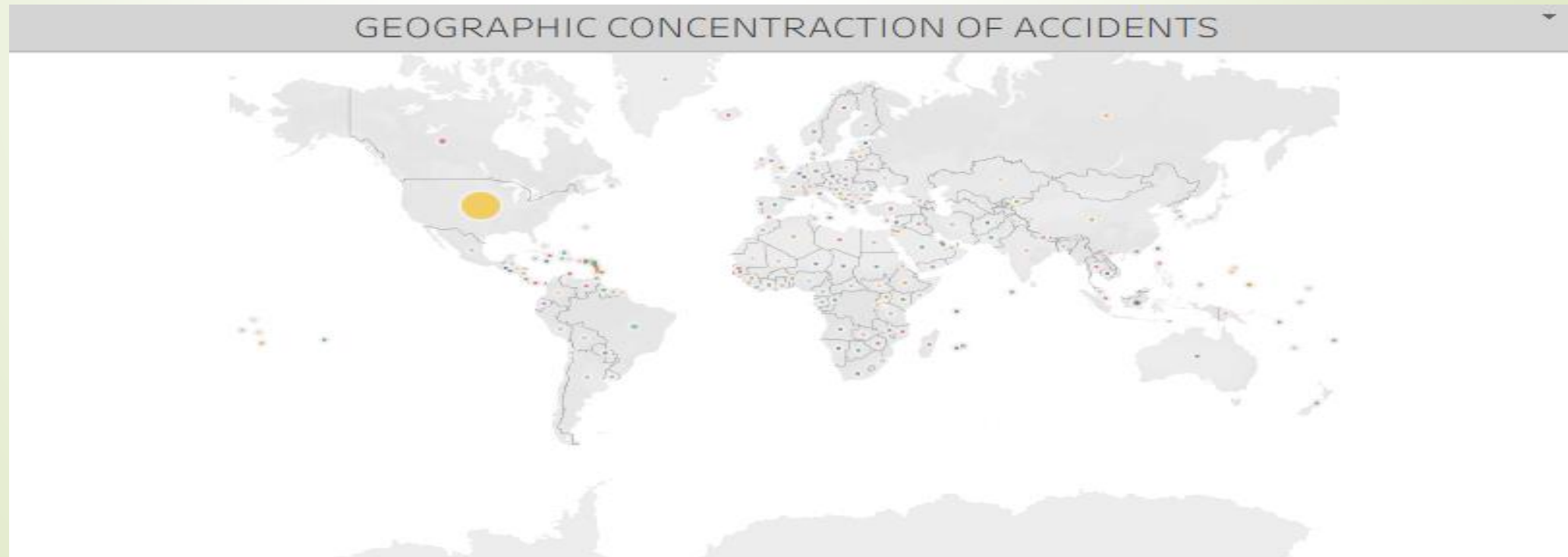
ACCIDENTS BY PURPOSE OF FLIGHT

- This visualization shows the accidents that are caused by the purpose of each flight and the risk scores for each purpose for example skydiving has high accidents and risk scores compared to business purposes.



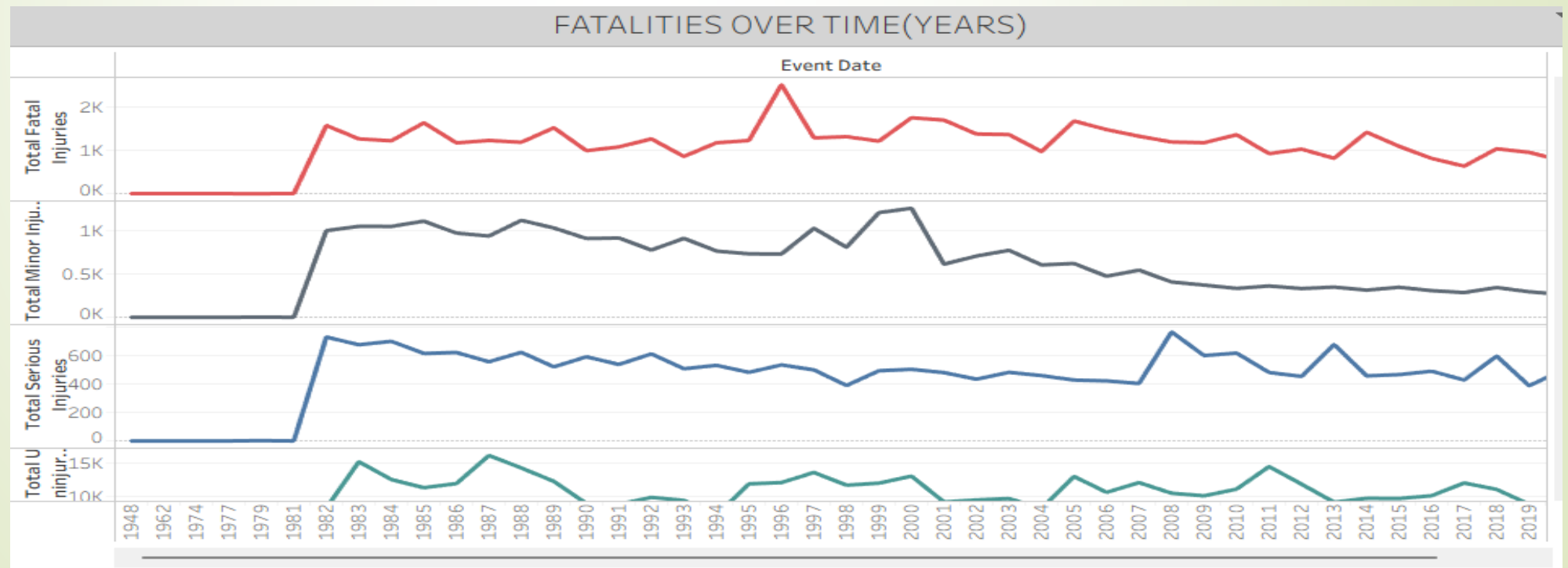
GEOGRAPHIC CONCENTRATION OF ACCIDENTS

- This visualization shows the geographic concentration of accidents and the risk scores meaning that the areas with high risk scores mostly have the highest number of aircrafts operating. This visualization shows that USA has the highest risk scores and highest number of accidents.




FATALITIES OVER THE YEARS

- This line graph shows fatalities over the years. And it shows that from 1948 to 1982 there were no fatalities and most of the fatalities started occurring from 1983. There was a spike of total fatal injuries in the year 1996.



CONCLUSION

The best make to purchase will be boeing and macdonnell douglas because they have the highest and second highest number of uninjuries.



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