



# *Flight Damage Stats*

ANALYSIS FINDINGS & RECOMMENDATIONS

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# SUMMARY

As part of our company's strategic expansion into new industries, we are venturing into the aviation sector, aiming to acquire and operate aircraft for both commercial and private purposes. However, understanding the risks associated with different aircraft types is crucial for making informed purchasing decisions.

The Flight-Damage-Stats project addresses this challenge by analyzing historical data on airplane damage to identify which aircraft types represent the lowest risk. By leveraging data visualization and statistical analysis, this project aims to provide actionable insights that will guide our new aviation division in selecting the safest and most reliable aircraft for our business.

# PROJECT OUTLINE

- Project Statement
- Data
- Methods
- Results
- Conclusions

# Problem Statement

- 1.To Investigate the risks involved with the Aviation Industry
- 2.Analyse the Real Data provide.
- 3.Come up with an informed decision business recommendation for the business to move forward with its Aviation Opportunity
- 4.Come up with visualizations to help the organization come up with Data driven decisions .



# DATA

Data Source

[https://www.kaggle.com/datasets/khsamaha/aviation-accident-database-synopses\)](https://www.kaggle.com/datasets/khsamaha/aviation-accident-database-synopses)

# METHODS

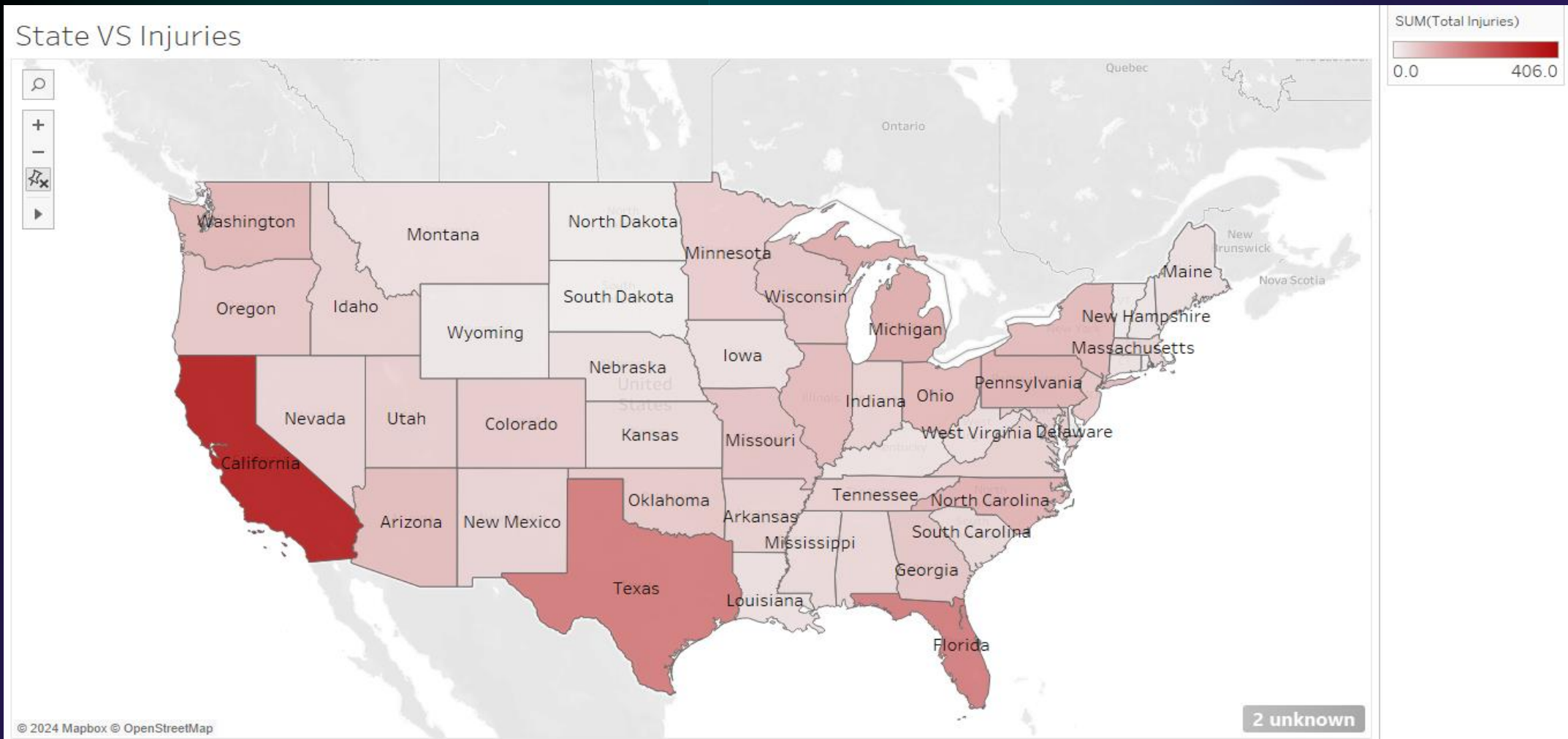
```
df = pd.read_csv("AviationData.csv",encoding='latin1')
```

```
df1 = pd.read_csv("USState_Codes.csv")
```

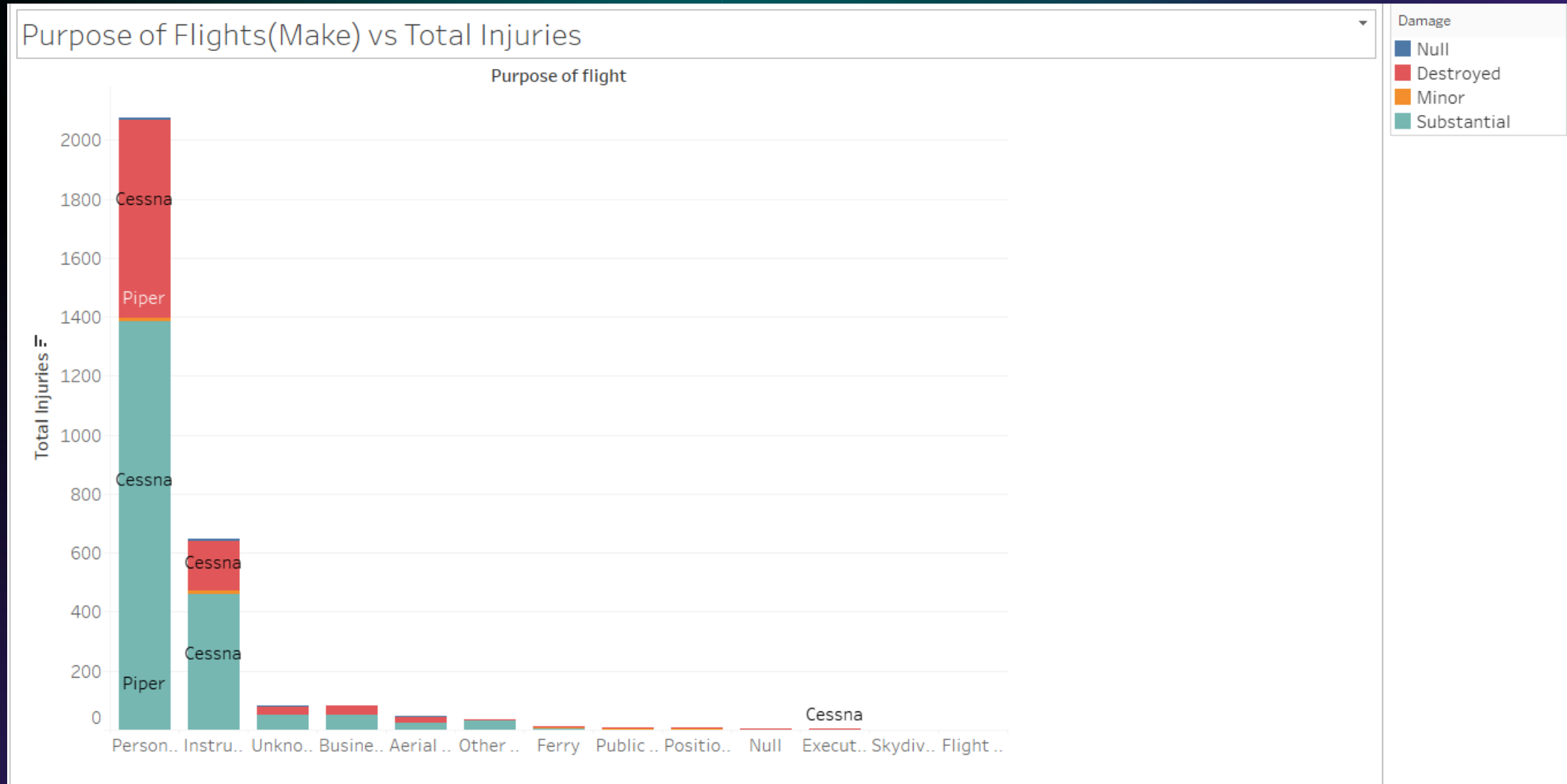
```
Data =pd.read_csv("Clean_AviationData.csv")
```

# RESULTS

A visualization of the States VS Total Injuries

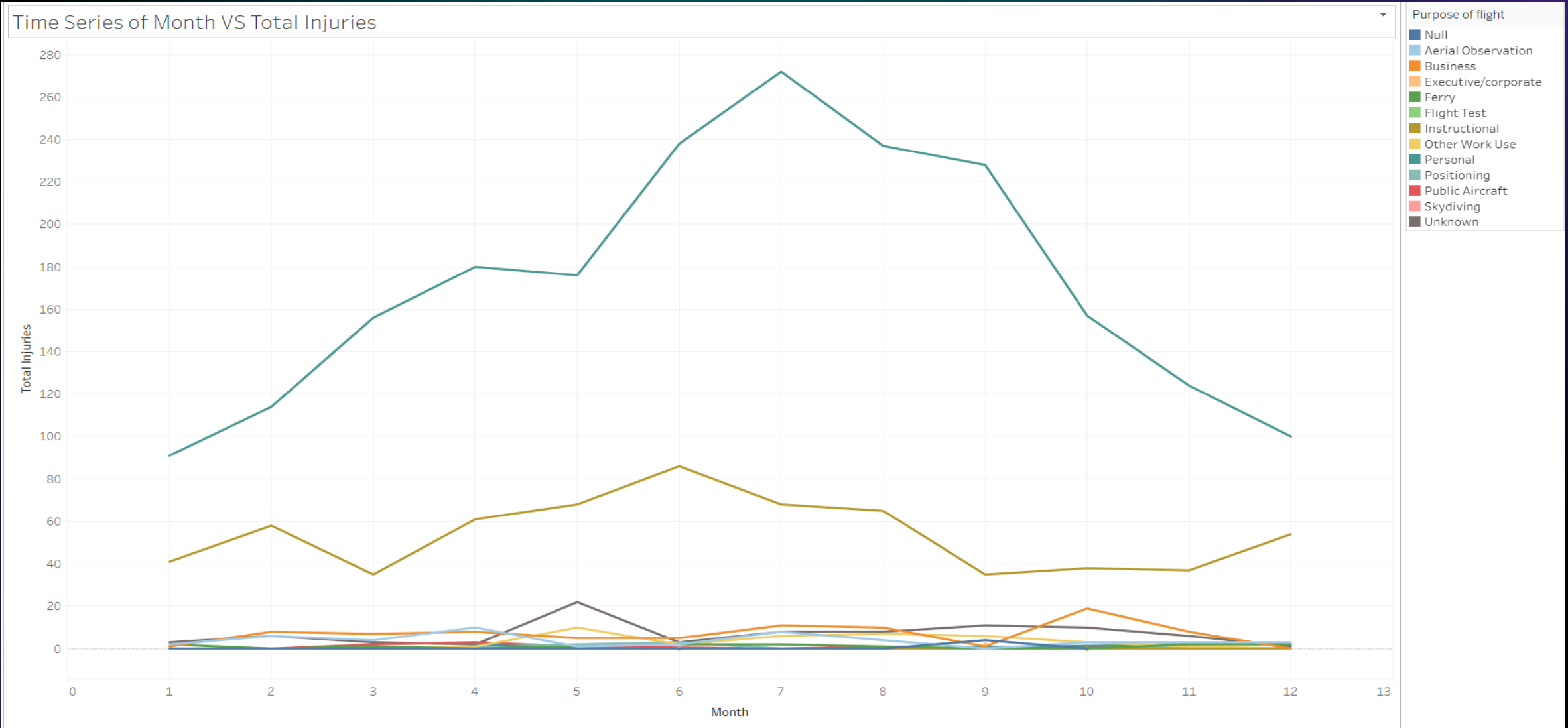


## A visualization of Purpose of flight with the Make VS Total Injuries



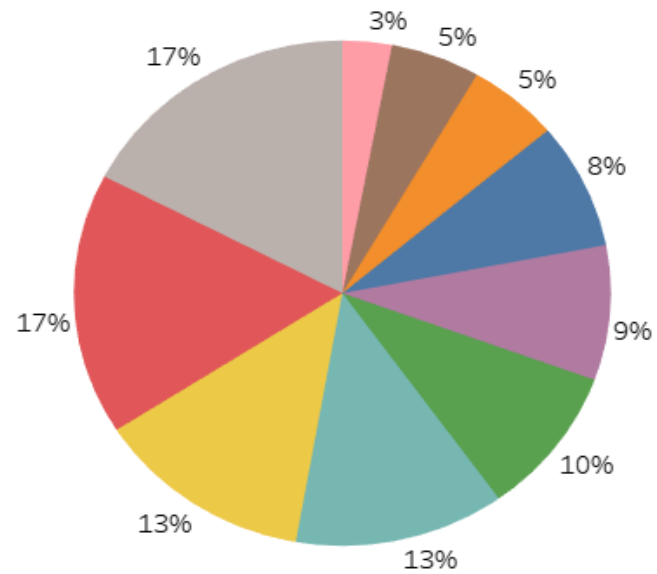


# A Time Series presentation of Month VS Total Injuries with the Purpose of flight



## A pie-Chart presentation of Model vs Injured Totals

Model VS Injured



Model

180  
182  
150M  
150  
172P  
172M  
172  
172N  
152  
PA-28-140

SUM(Total Injuries)

3,003.0

A line Graph presentation of all Accidents from 1982

