

Analysis of Aviation Accidents

Project proposal

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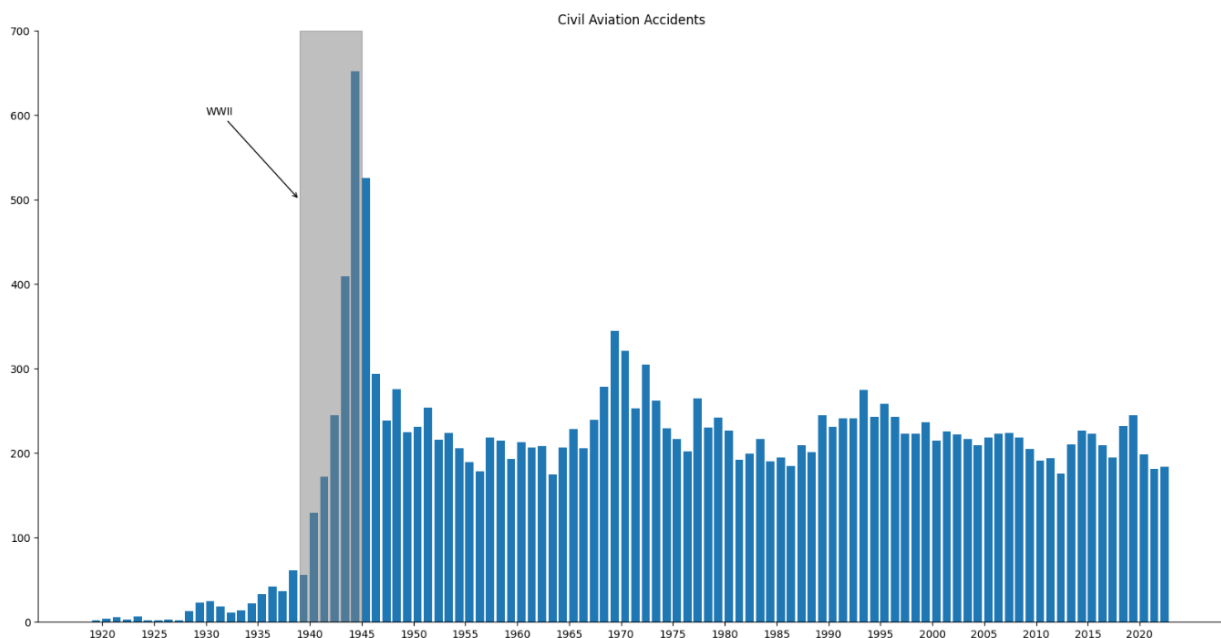
Questions to be addressed

There are lots of transportation accidents that happen every year, and aviation accidents are one that most people focus on. According to research, the safest way to travel is by taking aircraft. Based on that, our group wants to find out whether the number of accidents changes yearly, if so, what factors lead to the variation of accidents.

Data

The dataset used is the global base Civil Aviation Accidents data. It's from Aviation Safety Network (ASN). The unit of observation is each single aviation accident. The dataset covers the accident from 1919 to 2023 which includes more than 100,000 accidents. There are several variables that are important for the analysis, for example, the operator, the category of the accidents, and the location where the accidents happen, the most important variable is the category of the accidents since it can help to clarify what extent the number of accidents changed. The dataset also has some insufficiency, there are some observations containing null values in the variables, some of the locations are not recorded, and there are categories that the reason for the accidents is unknown.

Proof of concept



The graph shows the counts of accidents for each year and highlights the time period when World War II happened, which somewhat explains the high accidents cases occur in that period of time.