

Due to the recent unfortunate airline crashes and the news and media bombarding the public with reports and figures about airline safety trends to prove air is no longer a safe way to travel. As a data science student, I have visualized the data using six different matrices using tableau software to find airline safety insights.

An infographic is a collection of imagery, charts, and minimal text that gives an easy to understand overview of a topic. Basically, it helps us to communicate quickly and clearly. Infographics are essential tools for visual communications to our stakeholders or audiences. Creative infographics are always significant to draw the attention of the audiences. Hence, I think it is one of the most influential arts of communications. So I have created one infographic for better, quick, and clear communications to audiences about recent airline safety concerns.

Definitely, color matters while creating infographics. To draw audiences' attention and make more readable and understandable to audiences, I have used different colors such as fatalities as red, decreasing fatalities as light red, increasing revenue, profit, and airlines' seats as green). Similarly, to make the presentation more effective, chosen best-fit visual methods based on the available datasets such as bar chart, area chart, treemap, and a line charts.

Several matrices are available to describe the airline safety measures; among them, I have mentioned in the following ways.

- 1) Airline's fatalities: Fatalities are one of the essential matrices to measure safety. Based on the airline data, It is proportionally decreased by 33.25%. In comparison to 2010, it was reduced by above 65% in 2017.
- 2) Revenues of airlines: Revenue is the best matrix to see the increasing popularity of air travel. The revenue statistics show revenue is increasing each year. From 2010 to 2019, it has increased by around 3 million each year.
- 3) Safety record: Based on all primary US airline data, fatal accidents are decreased to almost zero (0) after 2010, indicating major US airlines' current safety measures.
- 4) Departed seats: Due to the increasing popularity and safety measure, more people are traveling through airlines so they are increasing available seats each year.
- 5) Motor vehicle fatalities vs. airline: Relie on the statistics, road accidents are far more than air accidents. The curve shows road fatalities are consistent around 35 to 40 thousand, while airline fatalities are decreasing each year by around 500.
- 6) Operating profit and operating revenue: Operating profit has been increasing each year since 2010, and operating revenue has also grown since 2000.

Conclusion or findings:

Hence, despite having a few accidents and fatalities, air travel is extremely safe and has been consistently safe due to the following finding.

- 1) Airline revenues are continuously growing.
- 2) Airline fatalities and incidents are far lower than a motor vehicle.
- 3) Airline operating profit and revenues are increasing.
- 4) Airline departed seats are continuously growing.

References:

- 1) Airline Safety, Aviation Safety Network
- 2) Crash Datasets, <https://data.world/datasets/crash>
- 3) Traffic and Capacity by Operating Region, Airline data project.
- 4) Revenue data (https://www.transtats.bts.gov/Data_Elements.aspx?Data=3)
- 5) US (<https://www.airlines.org/dataset/safety-record-of-u-s-air-carriers/#>)
- 6) <https://venngage.com/blog/what-is-an-infographic/#1>