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DSC\_640(Dashboard)

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 created the dashboard using tableau software to answer the following question regarding airline safety as transportation media.

Has air travel become more dangerous over time?

How does the safety of air travel compare to other modes of travel?

How is airline revenue trending over time?

Do their accidents and fatalities are increasing over time?

Do their departed seats are decreasing?

Is it still safer than other modes of transportation?

To answer these questions, we have to go through different parameters or indicators, so I have downloaded five other datasets from the following data sources.

- 1) Airline Safety, Aviation Safety Network
- 2) Crash Datasets, https://data.world/datasets/crash
- 3) Economic Impact of Commercial Aviation By State, Airlines for America
- 4) Traffic and Capacity by Operating Region, Airline data project.
- 5) Data Catalog, Data.Gov

After completing the initial analysis, I have chosen different colors, such as red color for fatalities, blue for progress, and other good indicators of the datasets. To make the presentation and visualization more effective, chosen best-fit visualization methods based on the available dataset.

In addition, to review the work, I will be sharing with the internal team and executive leadership, so a straightforward walkthrough of each chart or graph explains the process and insights.

**Available seats:** These bar charts show the trends of the available seats over the periods since 2010 to 2019. It is increasing over time; it means more people are traveling through airplane.

**Total revenue**: It is another way of looking into its progress. According to the chart, it is increasing each year. It means airlines are making more profit each year.

**Airline fatalities**: Here, I have created area charts to compare the fatalities over time. It seems fatalities are decreasing each year.

**Vehicle verse airplane**: Another mostly used transportation media is a vehicle. So compared both fatalities over time (2008-2019). Here I have compared worldwide air fatalities with vehicle fatalities in the USA. Still, vehicle fatalities are a lot more.

**Accidents**: It shows the actual air accident over time (1985-1999 and 2000-2014). The charts show excellent progress to make it low.

**Plane fatalities**: Displaying each year fatalities from 2010 to 2019. It seems outstanding progress and decreasing each year.

Hence, despite having a few accidents and fatalities, air travel is extremely safe and has been consistently safe. These findings and visuals can amplify the voice for safety in the airline industry and stop the negative bombarding regarding air travel safety.