Assignment 1.3 Dashboard Summary

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This dashboard was created to exemplify the overall decreasing number of accidents and fatalities in the airline industry, as well as the considerably smaller number of fatalities associated with airplanes in contrast to vehicles.

The presentation of this dashboard focuses on several different metrics, notably the number of fatal accidents and fatalities for airlines. As part of an internal team for an airline, it is important to understand how safe the public believes air travel is. Initially, we will be focus on the number of fatalities and fatal accidents between 1985 and 1999 and then the same stats for 2000-2014. With a total number of 244 fatal accidents and 12,590 fatalities between 1985 and 1999 and only 74 fatal accidents and 6,218 fatalities between 2000 and 2014, the overall number of fatal accidents and fatalities is dramatically less. Additionally, we can compare this to the steadily decreasing number of overall accidents (non-fatal and fatal) that occurred between 1946 and 2022.

I also wanted to draw attention to the large difference between vehicle fatalities and airplane fatalities. This is an area where I think it is important to highlight the importance of ethics. The number of vehicle fatalities are larger than airplane fatalities, but there are many more people driving every day than there are flying (I don’t have a source for this and I’m not sure how it would be possible to quantify the difference). I would like to use some metric such as accidents per miles driven vs accidents per miles flown. However, this also seems like it would be problematic to obtain relevant data for. Even without this data, I still think that it is an important metric for internal use. Internal employees are more likely to understand the nuances of this metric. However, I would not employ this graph for public use.

The last part of the dashboard that I want to discuss is the different regions where accidents occurred. This is an interesting graph in that most of the areas have very few accidents (except for North America in 2019). This can be beneficial to our team to identify areas that are historically more dangerous to fly in.

I went with a blue color scheme because it is a neutral color. I did not want to use any red, orange, yellow, or green hues because of the connotation they can carry with an audience. I wanted it to look consistent throughout and showcase that over time, accidents and fatalities have both been reduced. In the line plots, I chose to add a trend line so that the overall direction is perceived more easily by the audience.

Overall, I am happy with how this dashboard turned out. Some of the graphs were challenging to make, but as I improve my efficiency and understanding with Tableau, I am sure it will become easier. I would have liked to incorporate more aspects of the vehicle dataset but was at a loss for how to correlate them with the airline data. I ended up focusing more on airline statistics because with limited space, I felt that those statistics were the most important for an internal team at an airline company.