Dashboard Synopsis:

The though process behind the design and making of this dashboard was to put spotlight on the following:

1. How safer is airline travel when compared motor vehicle?
2. Compare the fatality of airline crashes of American carriers' vs fatality in motor vehicle road accidents!
3. Is fatality decreasing with technological advancement?
4. Which are the airline amounting to most number of accidents and fatality? With that further analysis can be started to drill down on why!
5. How much airlines directly contribute to employment and economy?
6. Look at the trend of global airline crash fatalities since 1908.

With these questions and thoughts in mind, I started to look for the available data sources which can be easily imported. Airline safety dataset gave a good starting point and allowed to compare accidents and fatalities between 1985-1999 vs 2000-2015. That chart showed that both number of fatal accidents vs fatalities decreased during 2000-2015, and that may be contributed to better airline safety practices and technological advancements. Another visualization I've is bar chart which shows airlines with most number of fatalities. That would allow us to focus on those airlines fleet (aging), safety practices, pilot flying hours, volume of aircrafts and miles. Another visualization I've is to show the trend of increasing labor costs since 1975. Apart from airlines industry's indirect contribution to economy, labor cost would related to employment it has been creating. I've to admit, I didn't have the ideal dataset to demonstrate it! Also, I added 2 line charts to compare the yearly fatalities between US airlines carriers vs fatality in road accidents. That shows that airlines are still much safer way to travel compared to motor vehicles on road. I've another line chart to show the fatalities in global airline crashes starting 1908. And looking at the trend, it seems to on lower side until 1940s, probably due to lower volume of airline travels. And as aviation industry boomed, accidents and fatality increased. We are seeing a decline starting 2000s, again most as a result of technological advancements and better safety practices.

As far as choice of charts are concerned, wherever I had to show a trend (continuous), I choose line chart. And used bar charts when I had to draw clear comparisons. For choice of colors, I tried not to use flashy colors, keeping color blindness also in mind.

Data Sources/References:

Github - ranjaninv/Data-Visualizations

Administration, N. (n.d.). FARS Encyclopedia. Retrieved January 10, 2021, from https://www-fars.nhtsa.dot.gov/Trends/TrendsGeneral.aspx

Grandi, S. (2016, September 09). Airplane Crashes Since 1908. Retrieved January 10, 2021, from https://www.kaggle.com/saurograndi/airplane-crashes-since-1908

Safety Record of U.S. Air Carriers. (n.d.). Retrieved January 10, 2021, from https://www.airlines.org/dataset/safety-record-of-u-s-air-carriers/#