What:

We used the following data sets
WorldBank Data:
https://data.worldbank.org/indicator/IS.AIR.PSGR?end=2020&start=1970&view=chart
Aviation Safety Network
https://www.geckoboard.com/blog/6-data-visualization-techniques-to-display-your-key-metrics/

The ASN dataset did not need much transformation. It contains data for 56 international airlines. These airlines were in the global top 100 list as of 2012. Data shows incidents, fatal accidents and fatalities spanning 30 years starting from 1985 ending 2014. Data for each category is divided to 1985-1999 and 2000 to 2014. We created 6 metrics from this table which we will describe below.

The world bank dataset contained data for number of passengers traveled worldwide from 1960 to 2020. The data set has this data for every country in the world as well as a total for the world. We transformed the table to two columns-Year and Passenger traveled worldwide. We used this transformed table to create a metric for the presentation. The details of the metrics are described below.

Why:

We decided to show the fatalities and incidents in four metrics on top of the screen. This is to get the audience's attention first. Going from left to right, they will see number of fatalities from 1985 to 1999, then number of fatalities from 2000 to 2014, then the number of incidents from 1985-1999 followed by incidents from 2000 to 2014. The font size for the number are same for all metrics.

We then decided to present the correlation between fatalities and incidents for the two periods. We felt putting the airline names on the graph would draw attention to disparity of relationship between them and the country of origin. We decided to show a trend line to demonstrate that fatalities are unpredictable, but incidents somewhat are predictable.

We decided to show the number of passengers traveled worldwide from 1980 to 2020. We wish to demonstrate that airline travel increases year after year and the two dips in early 2001 and 2019 are attributed to the 9/11 terror attack and the beginning of the Corona virus pandemic. We also decided to remove the y-axis and instead put the number of passengers travel on the graph itself. We felt, the audience would be able to see the increase and declines faster. We felt a trend line would not add any value and would be a distraction.

On the color scheme, we decided to show each of the three rows in the presentation in a distinct color. The goal was not to use overwhelming colors so as to not distract attention.

We plan to demonstrate that the fatalities and incidents do not deter flights. We can show that with the current data. Using more data, we could show that rise and decline in flights has to do with many factors, and accidents and fatalities are just one factor.