As the PowerPoint shows, much of the recent misgivings for safety among airlines is unfounded. While we must always strive for the highest standard of safety when concerning air travel, the data points toward the conclusion that air traffic across the world is safer now than in the twentieth century.

Looking at the data in detail, the mean was examined across all airlines for both the number of fatalities and number of fatal accidents during the periods of 1985-1999 and 2000-2014. The mean was used to smooth out the differences that existed between individual airlines and give a view of the overall picture. The average number of fatal accidents and fatalities decreased a large amount over the time periods, giving evidence to the efficacy of the modern safety practices. This examination was then standardized for the distance travelled to remove total flight distance as a confounding variable and provide a more authentic picture. This too saw a large decrease with a reduction of just over 50%.

To show the public our dedication to safety, we have identified the 5 deadliest airlines from both time periods. In doing this, we hope to further explore what factors made these airlines so dangerous in their respective time periods and publish a case study on the mistakes that we have been able to learn from the past as well as what we can do in the future.

As a final aside, while looking through this data, a trend was identified that may be of interest. In the past 5 years, the net margin of US airlines as been stagnant, while the labor costs have been on the rise. This is a pattern that should be looked for in our own company to ensure that implementation of additional safety measures will not put a burden on a possibly stretched out labor force.

Datasets used

Aviation Safety Network: <https://github.com/fivethirtyeight/data/tree/master/airline-safety>

Airlines for America: <https://www.airlines.org/dataset/annual-results-u-s-passenger-airlines/#>