

Problem Statement

Increasingly, attacks targeted at the airline industry have steadily arisen in recent years. Stemming from multiple sources, these criticisms aim to bring attention to conceived ideas of a decline in safety across the aviation industry, citing claims of increased incidents, fatalities, and a consistent comparison to other means of transportation as safer, more regulated areas of the market, specifically that of the automobile.

With these public lamentations, we aim to assist in clarifying, for the use of the industry as a whole and airlines individually, a few questions. Namely:

- What is the trend in airline usage?
- Based on said usage, what is the trend in airline fatalities?
- With fatality trends confirmed, how does this line up to alternate transportation methods?

Findings

Through our various datasets, we can identify answers to each sub question and get a better understanding of the industry and credibility of the public claims. First, we can see that the number of passengers and distance traveled for airlines has rapidly increased. Barring COVID-19's effects on the industry (which we hope turns around soon), more and more passengers are climbing aboard planes each year, and more flights are going out each day. With that being said, if we hypothesize for a moment that more passengers, if airlines are indeed unsafe, would result in more fatalities annually, we'd be sorely mistaken. As we can see in our charts, the overall trend of fatal accidents aboard aircraft has steadily declined, almost a quarter in the years 2000-2014 in comparison to that of 1985-1999 and declining further since. Lastly, the comparisons to alternative methods of transportation (trains & boats) show similar fatality numbers, however, their trends are more stabilized or increasing while airfare continues to lower these values. Adding in the favorite comparison of automobiles? The number doesn't even compare. Astronomically different in size and discounting the different mileage and population numbers differing between the transport subsets, we still see trends staying equal over time.

Recommendations

As illustrated in our findings, respective safety trends show a steadily declining rate of accidents over time with regards to aviation. Consistent attention to increasing safety measures has shown that the industry remains committed to keeping their clients protected, and continuing this path will only lead to greater comfort for passengers. Leveraging these simple visuals to a greater audience should allow for increased knowledge base among the public and any forward-facing interviews regarding this information, armed with these stats, can lead to diminishing the negative attention.

Conclusion

As the industry continues to see liftoff in passenger counts, their disposition towards increased security has led to a steady descent in fatalities and incidents. Our goal, now knowing the statistics behind it, is to get the word out and capitalize on the information and data depicted here in an effort to combat the ignorant misinformation currently in circulation.