

Airplanes are still the safest say to travel

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Fear of Flying? Catastrophic events in air travel, like the tragedy of Malaysia Airlines Flight 370 (which disappeared along with its 239 passengers and crew) may explain why 1 in 3 Americans either feel anxious or scared to fly. Plenty of people have a debilitating fear of airplanes. Devastating events such as plane crashes grab our attention, induce fear, and tend to stick in our minds, giving us the false impression that these events are common occurrences no matter how infrequently they happen. If you're already getting sweaty palms thinking about your next big vacation, take a deep breath. As Popular Science reminds us, flying is actually the safest way to travel, statistically speaking.

The fact is, plane crashes make the news in part because they are so rare. An average of 3287 people across the world die in car crashes every day. In addition to the 1.3 million people who die in road crashes each year, the Association for Safe International Road Travel estimates that 20 to 50 million more are injured or disabled. As part of the current analysis, I have taken the dataset that focuses on the last 30-year period. The dataset is divided into two halves: first from 1985 to 1999, and then from 2000 to 2014.

Figure 1 summarizes the analysis based on the average number of fatalities per year for air crashes from all major airlines vs motor vehicle accidents in US alone. The study clearly highlights that the fatalities from air crashes are significantly lower than those from the motor vehicle crashes. This supports the fact that airline travel is still among the safest modes of travel.

Average Fatalities - Airline Travel Vs Road Travel

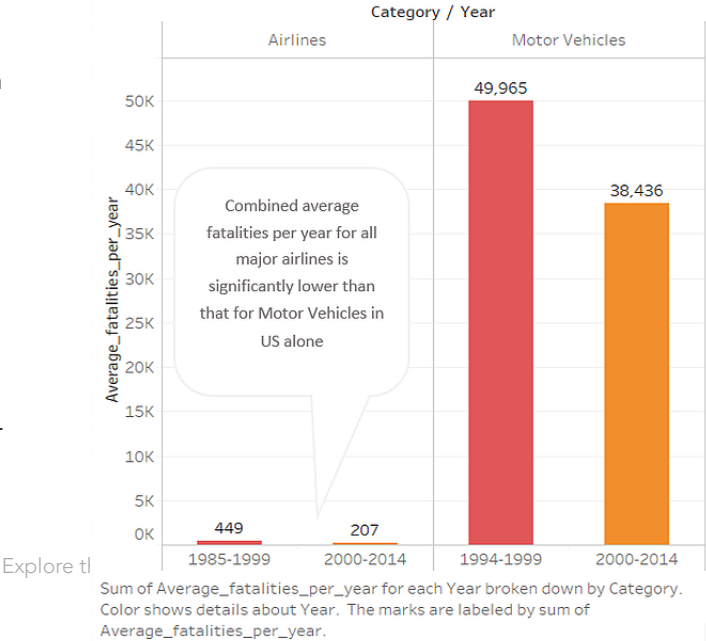
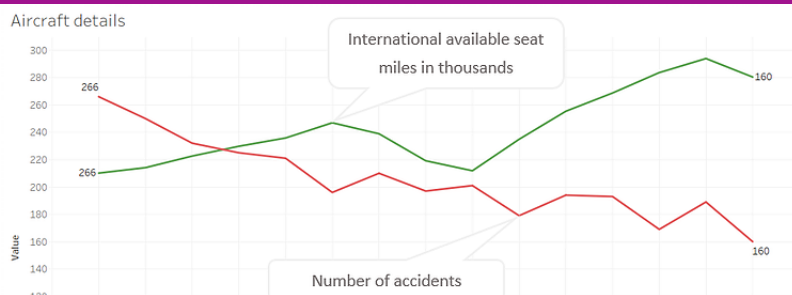


Figure 1

Figure 2 summarizes the analysis that tries to compare the Available Seat Miles (ASM), defined as the number of seats multiplied by the number of miles the airline flies, and number of air crashes or accidents. Even though the ASM has increased drastically, the number of air accidents has dropped in recent years. The last fatal crash involving a North American-registered commercial passenger aircraft occurred in 2009.

Canada experienced its last major commercial accident in 1998 when Swissair Flight 111 crashed off the coast of Nova Scotia. The last Canadian fatal commercial accident before that was in 1989. Accidents



perception of safety to fatal crashes alone narrows our appraisal of risk. As security expert Frederic Lemieux notes, aviation from this perspective appears to be very safe. The outcome of this analysis also supports the conclusion that air travel is still among the safest.

International Air Transport Association recently noted that "future safety gains will come increasingly from analyzing data from the more than 38 million flights that operate safely every year, rather than just the handful of flights where something goes wrong."

Figure 3 summarizes the analysis focusing on change in the number of fatalities as the performance metric. Analysis clearly highlights that most of the airlines have improved their performance represented by the green bars. In addition, the analysis also highlighted that even a single accident will have a major impact on the performance of the airlines. As an example, Kenya Airways was fatality-free until 2000, however, two major accidents during 2000-2014 have significantly impacted the airline performance and pushed the performance rank down to the lowest.

Additional observations include few carriers in the middle of the chart were able to maintain the same level of performance. Further research highlighted that commercial airlines are subject to extremely stringent safety standards, and the same standards are applied to all airlines from the same country or region.

Richer countries, in air travel and many other aspects of public planning, can afford to buy more safety in the form of higher prices and more expensive regulations.

Overall, commercial airline travel is an extraordinarily safe means of transit. However, travelers or passengers should exercise caution and avoid choosing airlines on blacklists, such as the blacklist periodically published by the European Union.



Figure 3

So if you're really worried about your safety while traveling, skip the road trip and head for the airport.

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