Assignment 4.3, Project Task 3: Blog Post

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DSC640: Data Presentation & Visualization
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Following from Task 2, the company I work for (Southwest Airlines) has decided to publish some materials emphasizing the safety of airline travel in an effort to alleviate any concerns of the general public. I envision this as a three-part series of posts, each emphasizing a different aspect of airline safety. In this first post the goal is to emphasize the relative safety of airline travel to other modes of transport and to demonstrate how airline safety has increased over time and continues to do so. The following posts would cover what goes into airline safety and then how much safer the top safest countries to travel in (which includes the US) relative to other areas.

One ethical concern I had was in selecting the bar chart that compared the safety of airline travel relative to other modes of transportation. I had three different charts, by distance, by trip and by time and airline travel was only the safest by distance. I selected by distance however because it is the industry standard when comparing safety between these industries.

From a design perspective, I made some minor modifications to my graphs in order to fit them better to the blog post, but I stuck with using the Southwest Airlines company colors in the charts. I primarily used the blue when referring to air travel and the red for other industries or as an accent color when I needed to draw the eye to something. I don't know that it is reflected very well in the pdf, but I used Blogger to create the post, which had it's own challenges, especially since it doesn't accept SVG images. Since the audience for this post is the general public, I also tried to create more of a narrative with the text in order to draw people in and tell a story, rather than just regurgitating the relevant information.

How Safe is Air Travel?

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February 04, 2022

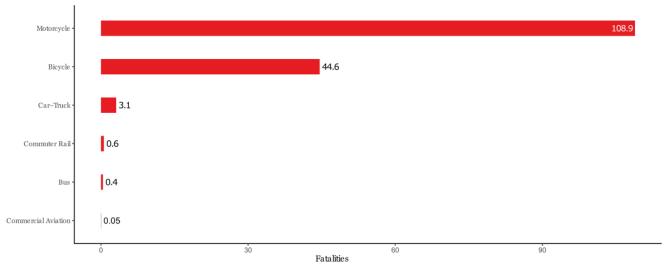
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As months turn into years of being cooped up in our homes and we slowly run out of creative ways to keep ourselves entertained, the desire to travel grows evermore at the forefront of our minds. And then we see terrible accidents happening on the news, like the recent and very public incidents in Indonesia and Pakistan, where dozens of people were killed in unfortunate airline crashes.

When we travel, we want to know that our families are going to be safe from harm and so we want to make the safest available choices when selecting not just our destinations, but also our means of travel. What if I told you that flying is the safest choice you can make?

Safest Mode of Transport



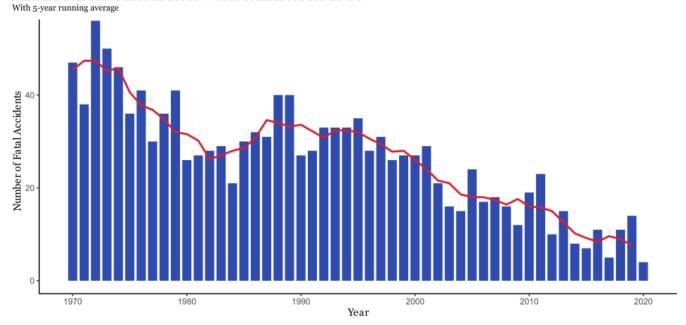


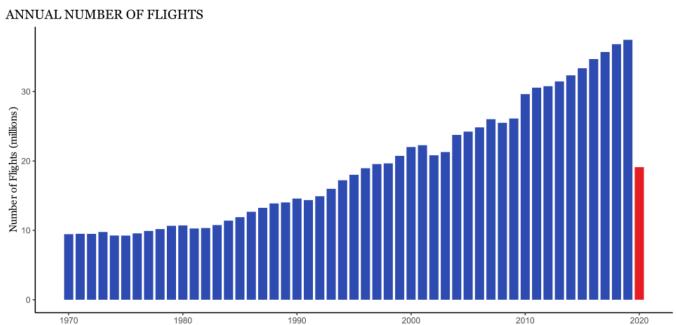
Compared to other modes of transport, commercial airlines are not just one of the safest, but the safest means of travel. When we take a bus we don't worry about whether or not we're going to make it to our destination safely, but mile-for-mile air travel is almost an order of magnitude safer than traveling by bus.

Ever Declining Number of Accidents

In the last 50 years we have not only seen airline accidents decrease almost continuously on average, but this is in spite of the fact that the number of flights has been steadily increasing at an almost exponential rate. This is of course with the exception of the dramatic decrease we see starting in 2020 as a result of the COVID-19 pandemic.

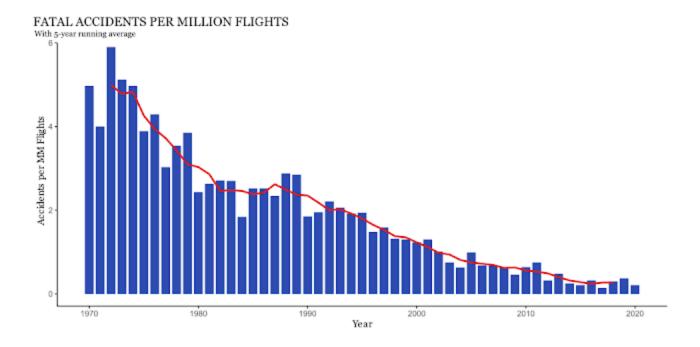
YEARLY PASSENGER FLIGHTS WITH FATAL ACCIDENTS





Couple the continually decreasing overall number of accidents with the ever increasing number of flights and we get a very low ratio of accidents to flights.

Year



So not only is flying safer than it's ever been, but the risk continues to decrease as flying becomes safer every year.

Sources

Beck, L. F., et al. "Motor Vehicle Crash Injury Rates by Mode of Travel, United States: Using Exposure-Based Methods to Quantify Differences." *American Journal of Epidemiology*, vol. 166, no. 2, 2007, pp. 212–218., https://doi.org/10.1093/aje/kwm064.

Ranter, Harro. "Aviation Accident Database." Aviation Safety Network, 20 Nov. 2021, http://aviation-safety.net/.

Vodden, Gregory. "Which Mode of Transportation Is the Safest?" *Bus.com*, 28 July 2020, https://www.bus.com/blog/safest-mode-of-transportation/.