

Project Task 3: Blog Post

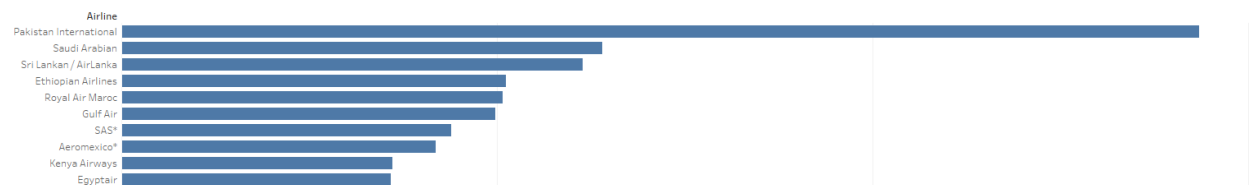
Jingru Zhang

This week is to create a blog post to public who are concerned about airline safety. Thus, I will focus on using graphs and data to refute that airplanes are no longer the safest way for travel then to give people more confidence.

First of all, I consider that it is normal people have the concern about airline safety.

1. Top 10 airlines death per avail seat

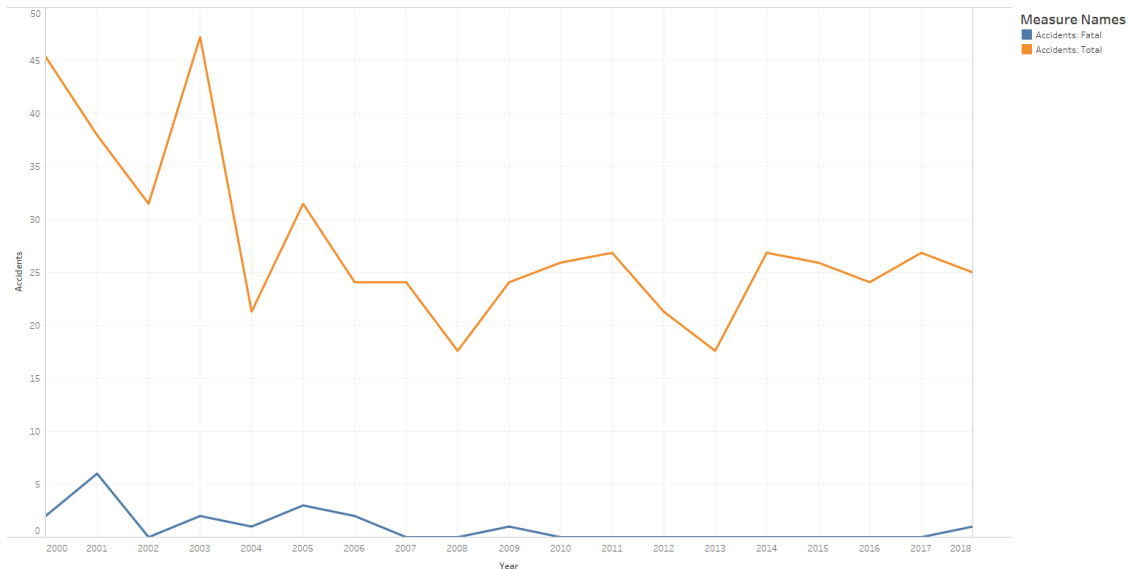
Top 10 Airlines Death per Avail Seat



There are airplane accident records all over the world. Overall, United States based airlines have fewer aviation accidents.

2. Airline accidents

Airline Accidents, 2000-2018

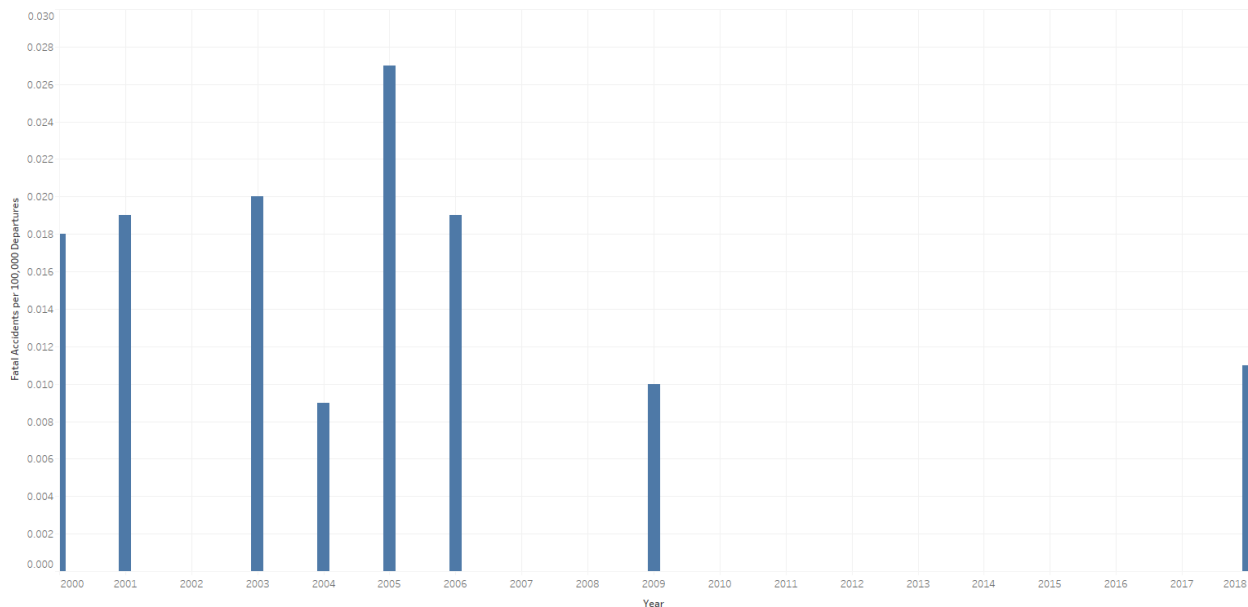


There are indeed aviation accidents, how many accidents occurred each year in United States? This line graph shows that the total accidents from 2000 to 2018, and fatal accidents at the same period in United States. You can see clearly that both decrease, especially, in recent years, the number of fatal accidents is almost 0.

According to Federal Aviation Administration, 16,405,000 flights flew each year in United States, 10,000,000+ scheduled passenger flights each year in United States. In the past ten years, there was no fatal accident in most of the years, for the years having fatal accidents, many recorded with only one fatal accident. In sharp contrast, 16,405,000 flights take off from the U.S. and land safely to all over the world each year.

3. Fatal accidents per 100,000 departures

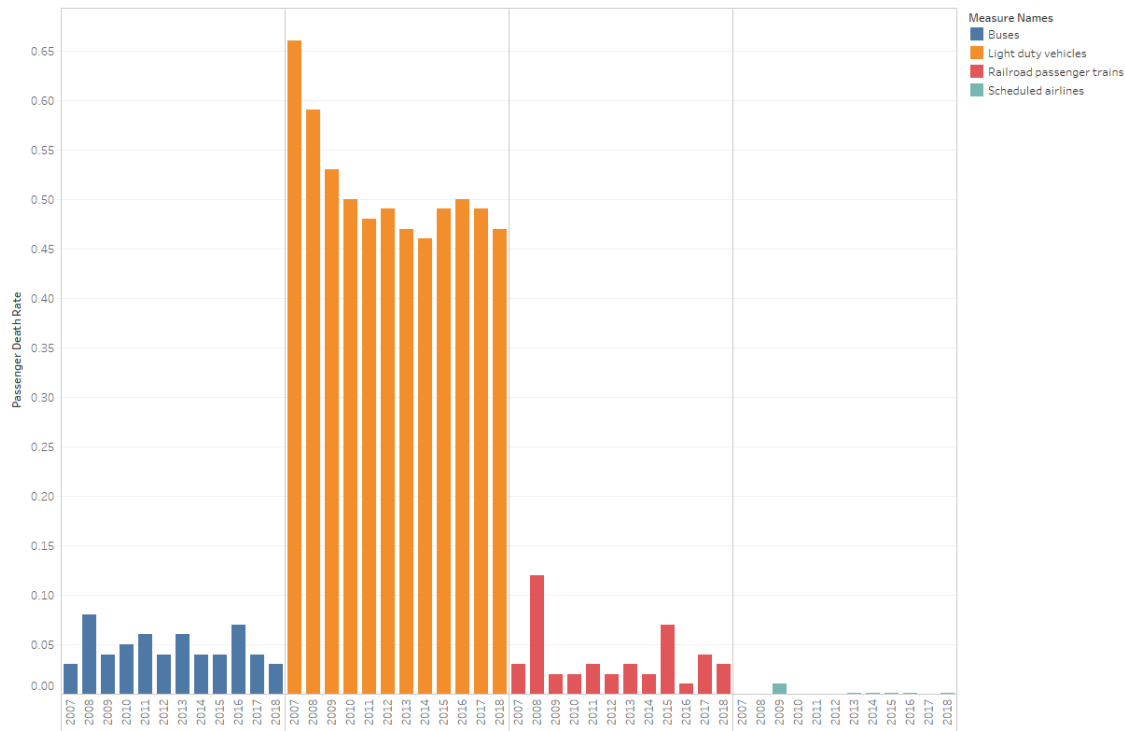
Fatal Accidents per 100,000 Departures, 2000-2018



As you can see from the graph, the probability of having a fatal accident for every 100,000 departures is less than 3%. And it has not happened in recent years. Nevertheless, you might say that there are still some accidents.

4. Passenger death rate

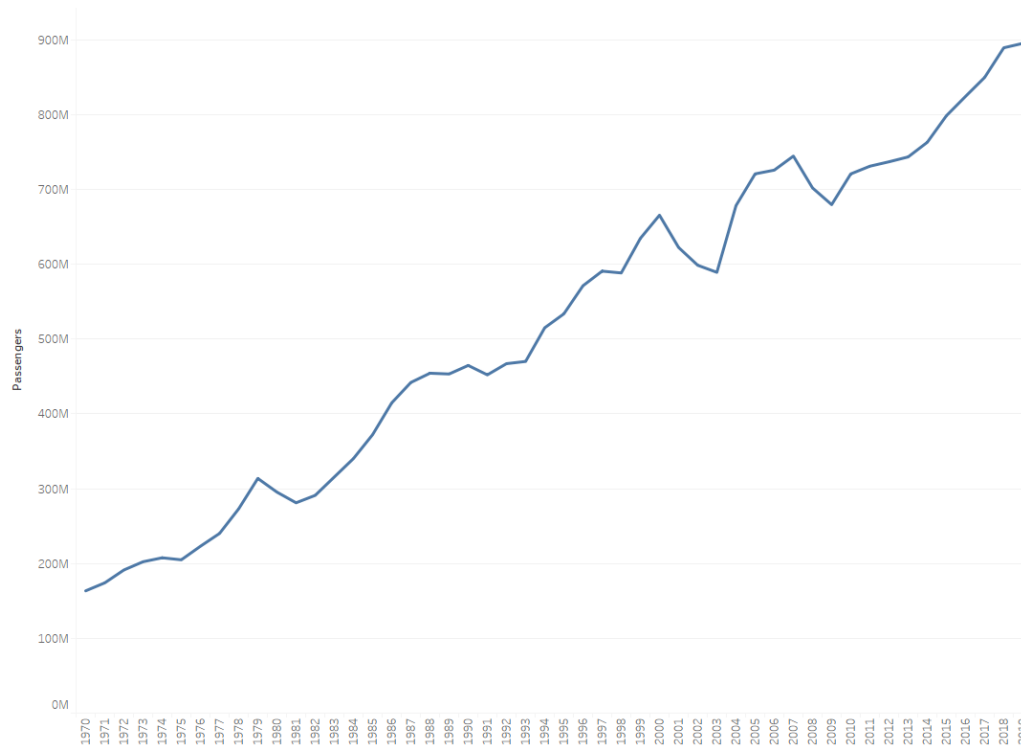
Passenger Death Rates, 2007-2018



As compared to buses, trains and cars, airplanes have the least passenger death rate. Specifically, the passenger death rate is much lower than the others. Airline is still the safest way for passengers.

5. Air passenger

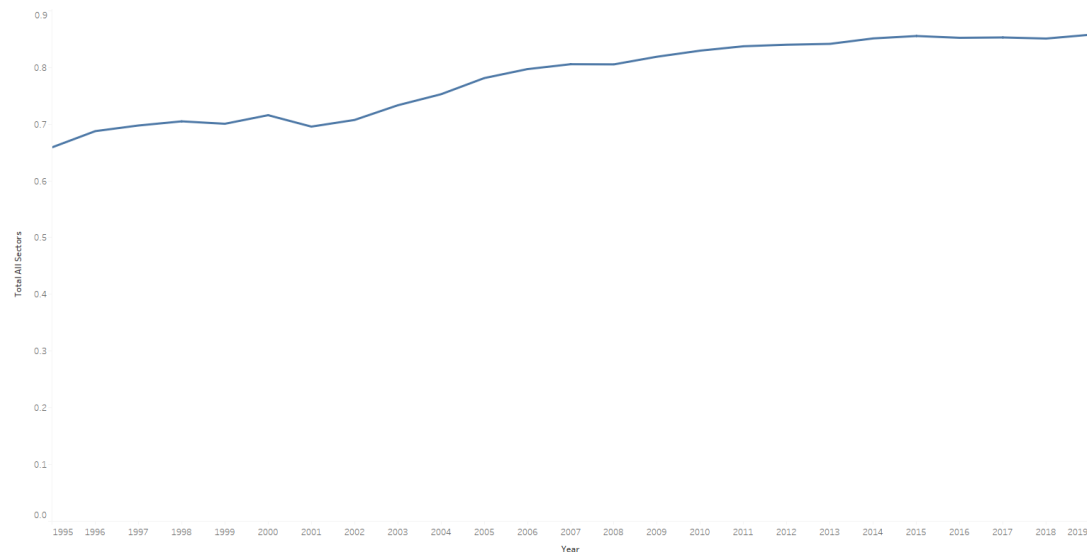
Airline Passengers, 1970-2019



This plot displays the number of air passengers in the USA from 1970 to 2019. The overall trend is rising. Especially, in the recent decade passengers continued to grow. More and more people chose to travel through air.

6. Increase in Aircraft Passengers

Domestic Load Factor, 1995-2019



Passenger load factor can be used to evaluate the efficiency of transportation providers to fill seats and generate fare revenue. This line plot displays that passenger load factor is increasing. Most people have their approval of the airline safety and are willing to choose airplanes for travel.

Data references:

- Airlines for America

<https://www.airlines.org/dataset/annual-results-u-s-airlines-2/#>

<https://www.airlines.org/dataset/safety-record-of-u-s-air-carriers/#>

- Airline data project

<http://web.mit.edu/airlinedata/www/Traffic&Capacity.html>

- Federal Aviation Administration

https://www.faa.gov/air_traffic/by_the_numbers/

- Injury Facts

<https://injuryfacts.nsc.org/home-and-community/safety-topics/deaths-by-transportation-mode/>

- Nation Master

<https://www.nationmaster.com/nmx/timeseries/united-states-number-of-air-passengers-carried>

- Aviation Safety Network

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

My GitHub Link: <https://github.com/Cristinazhang09/DSC640>

My blog post link: <https://jingru09.wixsite.com/mysite/post/is-airline-still-the-safest>