If you believe Airline travel is **NOT** a safe mode of transport, I have great land for sale in Florida!

Heard the negative press about airline travel being unsafe? Unsafe compared to what? Vehicular travel, motorcycle travel, or horse and cart? The stories are just that. It is negative publicity to discourage people from flying. The claims are unwarranted and are baseless. I am here to show you that airline travel is a far safer mode of transportation than driving a vehicle. During the remainder of this blog, I present the facts and figures comparing the years 2000 – 2019 for airline and vehicle miles per year, the number of fatalities, and average statistics. Additionally, I include a table from the National Safety Counsel that shows the ranking, in terms of the odds of dying from several causes.

Miles Driven and Flown

Some interesting facts from the (fhwa, n.d.) Federal Highway Administration show that the average number of vehicle miles driven by US households, for 2019, is 16,550 for males and 10,142 for females. Most of the miles are driven with an average of 15,291 by people ranging in age from 35-54. The next largest age group with an average number of miles, 15,098, are the 20–34-year-olds. This stands to reason as these age groups represent most of the workforce. Figure 1 Mileage Comparison shows the mileage per year for Domestic Airline and Motor Vehicles. For vehicular miles driven, the average number of miles is approximately 4.5 billion per year. Whereas the average number of miles flown for Domestic Airlines is approximately 584 thousand per year.

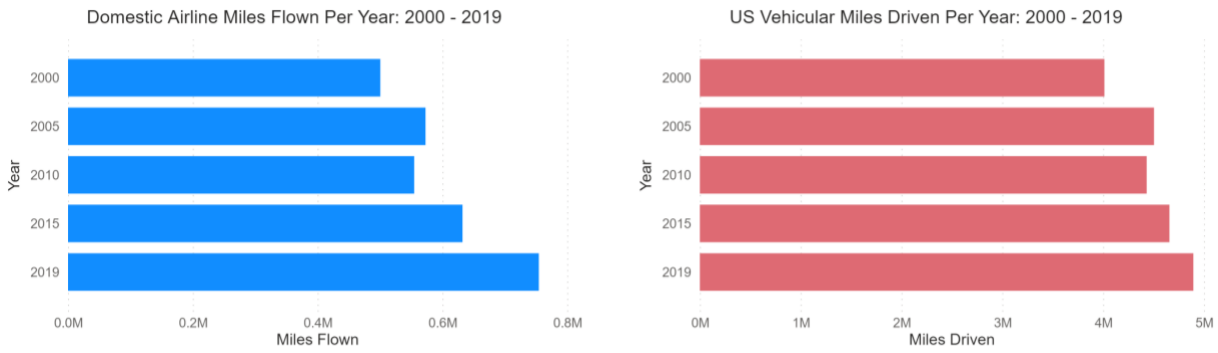

Figure 1 Mileage Comparison

Source: National Transportation Safety Board Aviation Accident Statistics. Bureau of Transportation Statistics. *Automobile Profile.*

Fatalities

According to the Federal Highway Administration (FHA, n.d.), as of 2020, there are 231.6 million licensed drivers in the US. This figure represents over 89% of all adults over the age of 24. The Bureau of Transportation Statistics (Bureau of Transportation Statistics, n.d.) reports for 2019 there were over 117 million vehicle registrations. In comparison, the number of US aircraft for 2019 is close to 211 thousand (Statista, 2021b). These numbers put the fatality amounts in perspective. As shown in Figure 2 Fatalities, the two graphs show the number of fatalities for vehicles and airline accidents from 2000 – 2019. For both modes of transportation, the figures have decreased since 2000 with slight increases over the years.

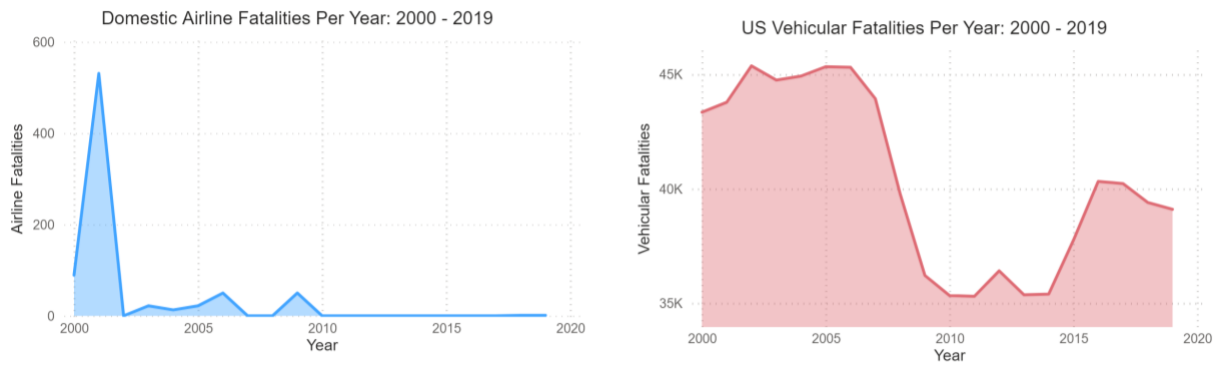

Figure 2 Fatalities

Source: *National Transportation Safety Board Aviation Accident Statistics.*

Comparisons

To compare the number of vehicle and airline accidents I computed the fatality rate. This number represents the percentage of fatalities for each group. The fatality rate is computed by dividing the number of fatalities by the mileage number. The numbers in Figure 3 Fatality Rate shows the average miles per year from 2000 – 2019 and the average number of fatalities per

year during the same time frame. As shown the Fatality Rate for Airlines is far lower than the Vehicle Fatality Rate.

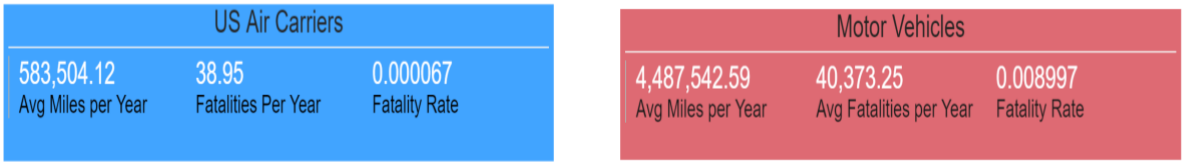

Figure 3 Fatality Rate

Conclusion

From the comparisons of vehicle and airline mileage and fatalities, the numbers show that airline travel is much safer than vehicle travel. Considering the number of vehicles on the road, the number of licensed drivers, and the fact that most of us spend an hour or so each day driving increases the risk of getting into an accident is much greater in a vehicle than as a passenger on an aircraft. In fact, the National Safety Council (NSC) reports the odds of dying in an airline accident, for 2019, as non-reportable due to the lack of events (National Safety Council, 2021). In contrast, the odds of dying in a motor vehicle accident is 1 in 107. The NSC lists motor vehicle accidents as the 8th cause of dying. Figure 4 Odds of Dying show the ranking of the causes of death with the odds ratios.

Position	Cause of Death	Odds of Dying
1	Heart disease	1 in 6
2	Cancer	1 in 7
5	Suicide	1 in 88
8	Motor-vehicle crash	1 in 107
9	Gun assault	1 in 289
10	Pedestrian incident	1 in 543
11	Motorcyclist	1 in 899
12	Drowning	1 in 1,128
13	Fire or smoke	1 in 1,547
14	Choking on food	1 in 2,535
16	Sunstroke	1 in 8,248
18	Electrocution, radiation, extreme temperatures, and pressure	1 in 13,394
20	Cataclysmic storm	1 in 58,669
21	Hornet, wasp, and bee stings	1 in 59,507
23	Dog attack	1 in 86,781
25	Railway passenger	0
26	Passenger on an airplane	0

Figure 4 Odds of Dying

Source: National Safety Council

References:

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