**A statistical analysis on**

**Airline Safety: Facts and Figures**



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**Abstract:**

Identify if airlines are still a safe travel option, do a data-based analysis to answer this question and compare the incidents, fatal accidents and fatalities of air travel Vs Motor vehicle road travel.

**Into/Background:**

Due to recent unfortunate airline crashes, what was previously thought as the safest way to travel, especially when compared to automobiles, is now being perceived by the public as one of the most dangerous mode of travel. But what does the facts and figures tell us

**Number of Airline passengers is increasing**

The data clearly indicates that the number of passengers in the airlines had been seeing a steady increase pre COVID.



(data.worldbank.org, n.d.)

Distribution of passengers in airlines across the globe



(data.worldbank.org, n.d.)

With the given distribution we can see that America, Europe, China are the countries with the most passengers using airlines.

**Is really Driving Safer?**

The data clearly indicates the fatalities on road are multi fold when compared to airline fatalities.



Airlines continues to remain safer than road travel though media is paining a different picture.

**Are Airline fatalities increasing?**

We can see that there had been a consistent decline in the fatalities in airlines from the early 80s.



(airplane-crashes-since-1908, n.d.)

There has not been an increase in the fatalities in air travel.

Fatalities per Airlines



(airplane-crashes-since-1908, n.d.)

**Airplane Fatalities 2000 to 2014 per One Trillion Kilometers**



(airplane-crashes-since-1908, n.d.)

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From the graphs we can see that

* **180 Airplane Fatalities VS ~15K Car Fatalities per One Trillion Kilometers -In years 1985 to 1999.**
* **306 Airplane Fatalities VS ~11K Car Fatalities per One Trillion Kilometers - In years 2000 to 2014.**
* **180 Airplane Fatal Accidents Vs ~2.2 MM Car Fatal Accidents per One Trillion Kilometers - In years 1985 to 1999**
* **62 Airplane Fatal Accidents Vs ~1.7 MM Car Fatal Accidents per One Trillion Kilometers - In years 2000 to 2014.**

**Conclusion:**

From the above analysis we can conclude that airlines are still very much safer than road travel. Both the data of air travel vs motor travel from periods 1985 to 1999 and 2000 to 2014 confirms this fact.

**Data used:**

The data of airlines are from (fivethirtyeight, n.d.).

And supplemental dataset for motor vehicle is from (motor-vehicle-safety-data, n.d.)

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