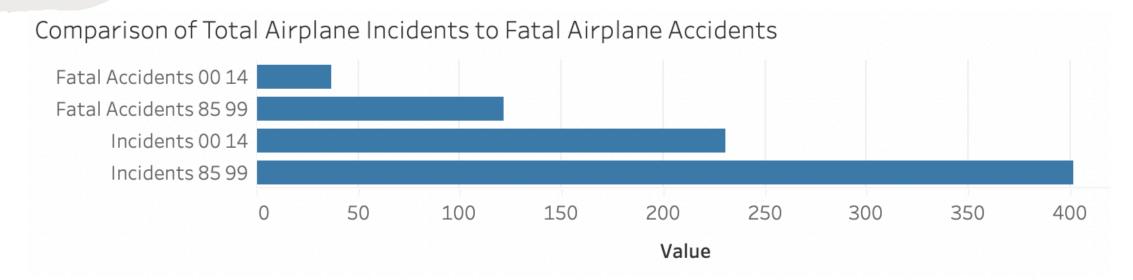


Airline Safety and Public Concern: Is Flying Really Safer?

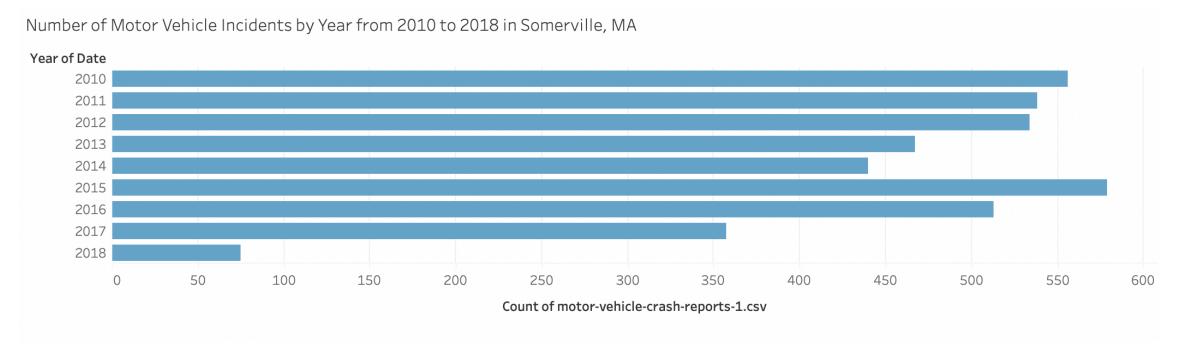
Megan Holford DSC 640 Winter 2021-2022 There has been growing concern about air travel and particularly media sentiment wondering how safe it is. But data shows that air travel has become more safe than in previous years.



Based on this graph, we can see the total number of air travel incidents and fatal accidents from 1985 through 1999 and from 2000 to 2014. We can see the total number of both incidents and fatal accidents was reduced in 2000 through 2014 than in 1985 to 1999.

Comparatively, we can see how motor vehicle travel compares in the number of yearly incidents one city has.





This chart shows us the yearly number of motor vehicles incidents in one town every year. The number of yearly incidents for motor vehicles is significantly higher than those for airplanes.

So, if there are more vehicle incidents that airplanes, why the sense of mistrust?

Total Number of Total Incidents by Airline from 2000 to 2014

delta/northwest*	us airways/america west*	tam	ae	roflot*	airt	rance	brit airw	sh ays*	sas*	
american*	pakistan international	aeromexico*		qantas* a		r ndia*				
american:	air new zealand*									
	southwest airlines			sri lankan / airlanka		royal	swiss*		air	
		alaska airlines*				air maroc				
united/continental*	turkish airlines			gulf air Iufthansa*				thai		
		ethiopian airlines								
saudi arabian all nippon airways ib	iberia									
				malaysia airlines	a					

This tree map shows the total number of incidents from 2000 to 2014 by airline. As we can see, many well known and popular US airlines make up a good portion of this chart, but these are the total incidents and are including non-fatal accidents as well. Even still, air travel has fewer accidents than vehicular travel.

We can see here that the number of fatalities and accidents had a decrease from the years 1985 to 1999 to the years 2000 to 2014, making air travel even safer than it used to be.

Number of Fatal Accidents per Airline 1985 to 1999

Airline =	
aeroflot*	14
delta / northwest*	12
united / continental*	8
us airways / america west	
china airlines	6
american*	5
ethiopian airlines	5
korean air	5
air france	4
philippine airlines	4
thai airways	4
avianca	3
egyptair	3
garuda indonesia	3
pakistan international	3
royal air maroc	3
tam	3
turkish airlines	3
vietnam airlines	3
alitalia	2
lan airlines	2
saudi arabian	2
singapore airlines	2
aeromexico*	1
air india*	1

Number of Total Fatalities per Airline 1985 to 1999

Airline

china airlines	535	1
japan airlines	520	ı
korean air	425	ı
delta/northwest*	407	ı
air india*	329	ı
avianca	323	ı
united / continental*	319	ı
saudi arabian	313	ı
thai airways	308	ı
egyptair	282	ı
garuda indonesia	260	
pakistan international	234	
swiss*	229	
us airways / america west*	224	
vietnam airlines	171	
ethiopian airlines	167	
south african	159	
iberia	148	
aeroflot*	128	
american*	101	
tam	98	
xiamen airlines	82	
air france	79	
philippine airlines	74	
aeromexico*	64	

Number of Fatal Accidents per Airline 2000 to 2014

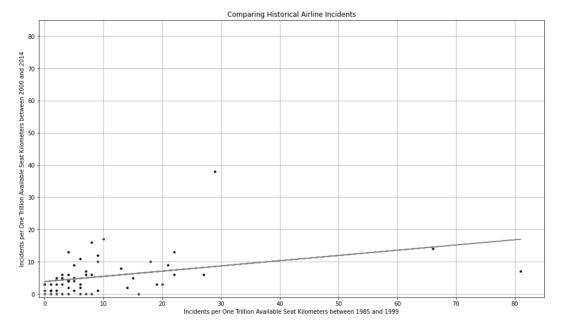
Airline

All lille		
american*	3	
air france	2	
delta / northwest*	2	
ethiopian airlines	2	
garuda indonesia	2	
kenya airways	2	
malaysia airlines	2	
pakistan international	2	
tam	2	
turkish airlines	2	
united/continental*	2	U
us airways / america west*	2	
aeroflot*	1	
air india*	1	
air new zealand*	1	
alaska airlines*	1	
china airlines	1	
egyptair	1	
gulf air	1	
philippine airlines	1	
sas*	1	
singapore airlines	1	
taca	1	
thai airways	1	
aer lingus	0	

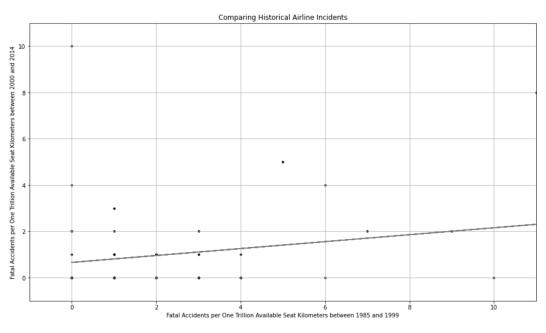
Number of Total Fatalities per Airline 2000 to 2014

Airline	F
malaysia airlines	537
american*	416
air france	337
kenya airways	283
china airlines	225
tam	188
air india*	158
gulf air	143
sas*	110
united / continental	* 109
ethiopian airlines	92
aeroflot*	88
alaska airlines*	88
turkish airlines	84
singapore airlines	83
delta / northwest*	51
pakistan internation	nal 46
us airways / america	a west* 23
garuda indonesia	22
egyptair	14
air new zealand*	7
taca	3
philippine airlines	1
thai airways	1
aer lingus	0

Based on the data, we can also look to see if there is a historical trend that may help predict future incidents or fatal accidents.



This is a graph representing the relationship of the number of incidents from 1985-1999 with 2000-2014.



This is a graph representing the relationship of the number of fatal accidents from 1985-1999 with 2000-2014.

Based on these graphs, we can see there is a slight correlation in the number of past incidents to future incidents, but there is no correlation showing for the number of fatal accidents.