



Responding to the Media: Airplane Safety

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Executive Summary

Problem

1. The media claims that air is no longer a safe way to travel.
2. The public is bombarded with charts that question airline safety.

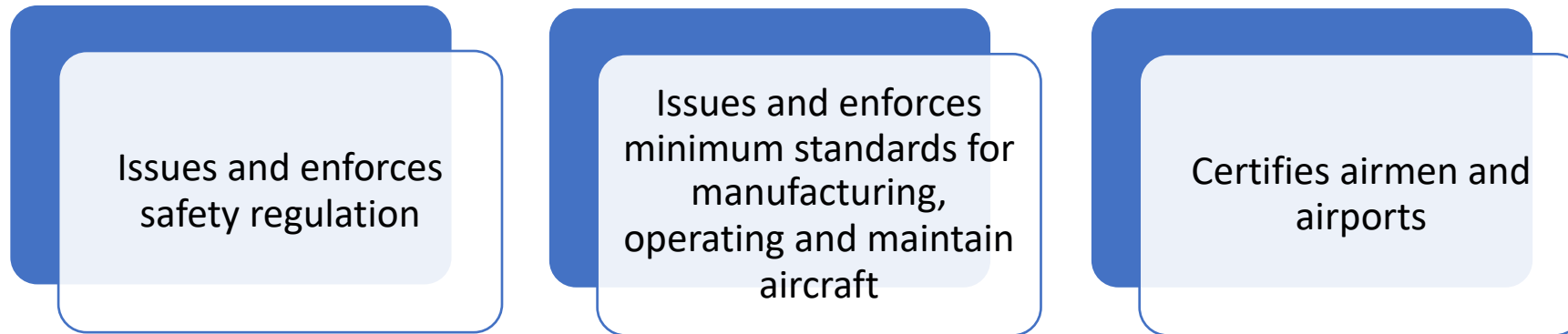


Safety Regulations

First and foremost, it is important for consumers to recognize that aircraft use is regulated in the United States

Civil aircraft safety is regulated by the Federal Aviation Administration (FAA).

The FAA:



Other responsibilities of the FAA

This administration manages:

- **Safety Regulation**
- **Airspace and Air Traffic**
- **Air Navigation Facility Construction**
- **Civil Aviation Abroad**
- **Commercial Space Transportation Regulation**
- **Research, Engineering, and Development**

Take away: **aircraft safety is not treated lightly.**

Aircraft Accident Trends

Contrary to the reports from the media, trends regarding aircraft accidents and fatalities are optimistic.

Number of Airplane Incidents by Time Period



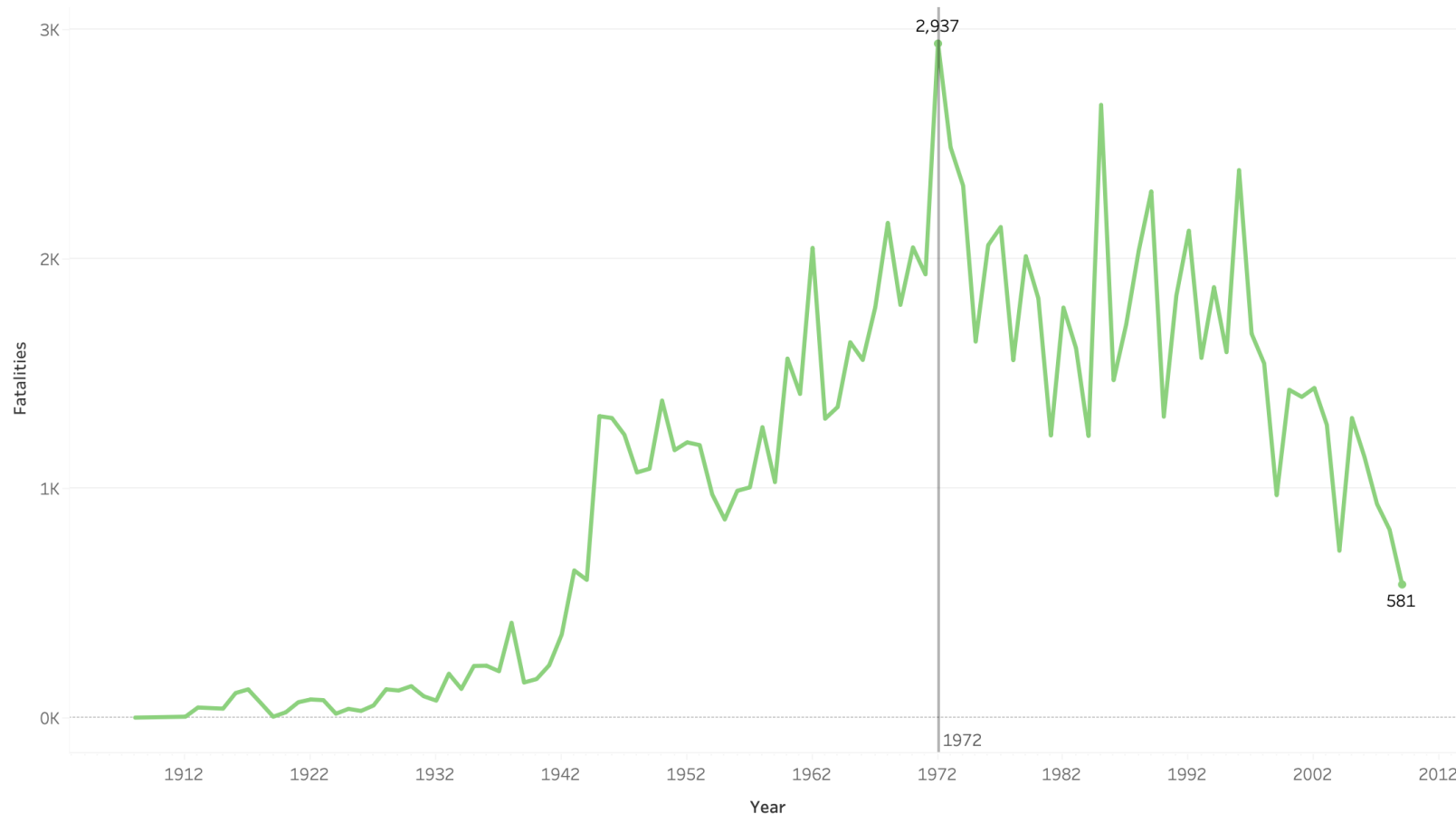
Incidents (1985-1999) and Incidents (2000-2014). Details are shown for Incidents (1985-1999) and Incidents (2000-2014).

Since 1999, there has been a significant decline in commercial airline *incidents* globally.

The same trend of decline has been observed with aircraft fatalities.

Declining Aircraft Fatalities

Airplane Fatalities Decrease in Recent Years



The trend of sum of Fatalities for Date Year. The marks are labeled by sum of Fatalities.

The following chart shows global aircraft fatalities from all operators including civil and military operators.

There has been an **80.22%** decline in fatalities since the peak in 1972.

But..

Aircraft fatalities still occur.

This raises the question:

How can present day fatalities levels be reduced?

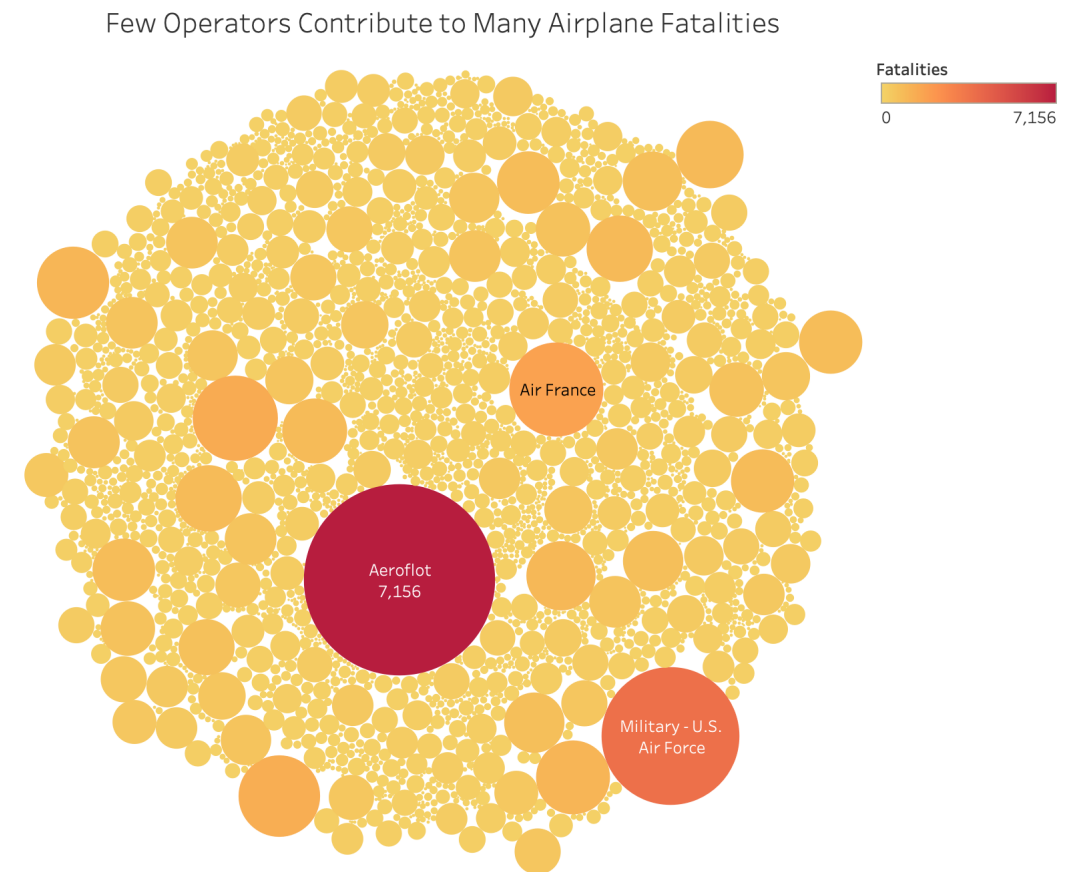
Accountability

Perhaps the responsibility of airline fatalities should fall more heavily on individual operators

Out of 5250 aircraft operators, the top **three (.0005% of operators)** in fatalities **account for 11.93%** of total fatalities.

The operator with the most fatalities has nearly twice the number of fatalities than the runner-up.

Negative media attention is good at raising awareness, but this attention should be directed at specific operators with inadequate safety records.



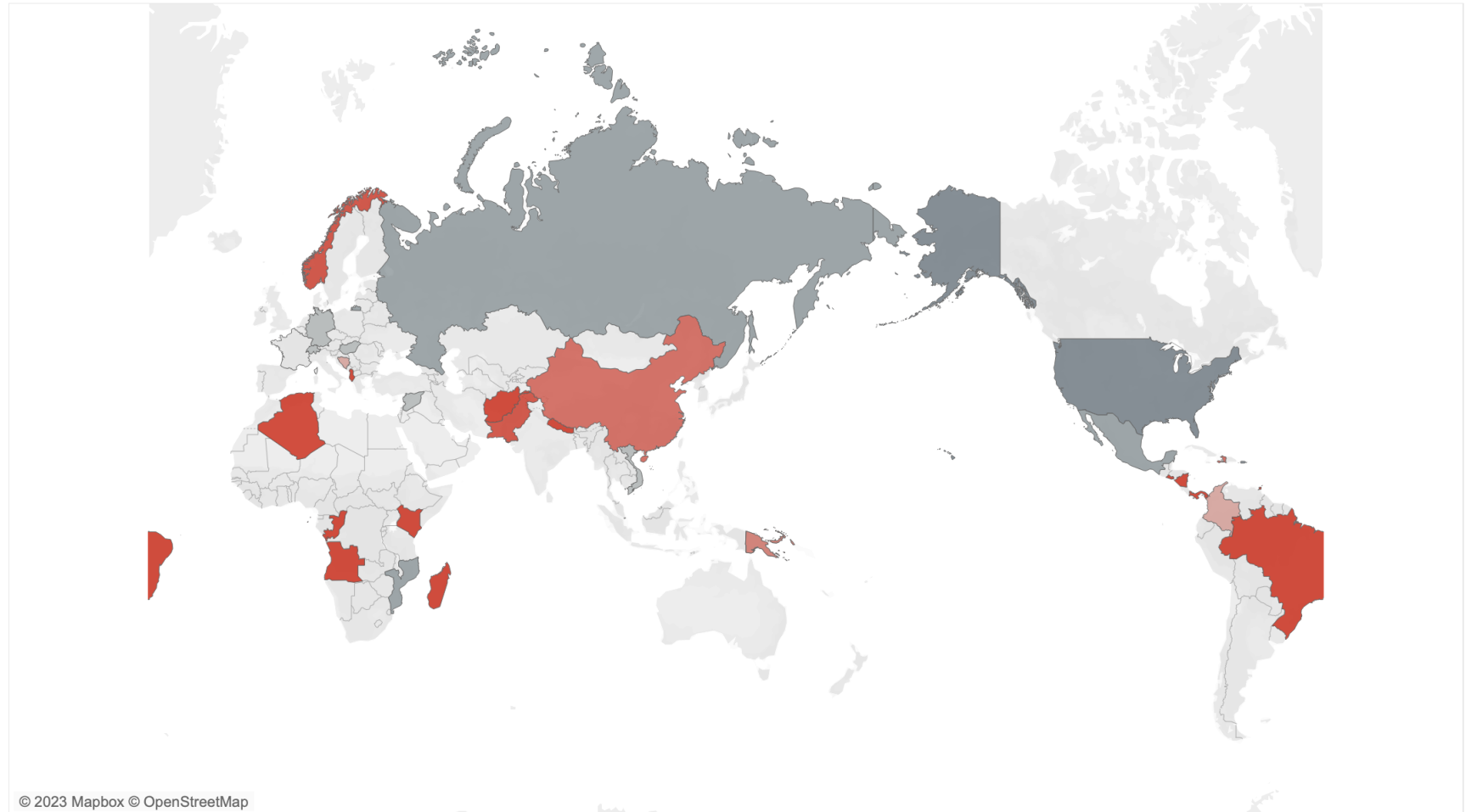
Operator and sum of Fatalities. Color shows sum of Fatalities. Size shows sum of Fatalities. The marks are labeled by Operator and sum of Fatalities. The view is filtered on sum of Fatalities, which keeps non-Null values only.

Accident Location

It should also be noted that aircraft accidents are concentrated in specific locations.

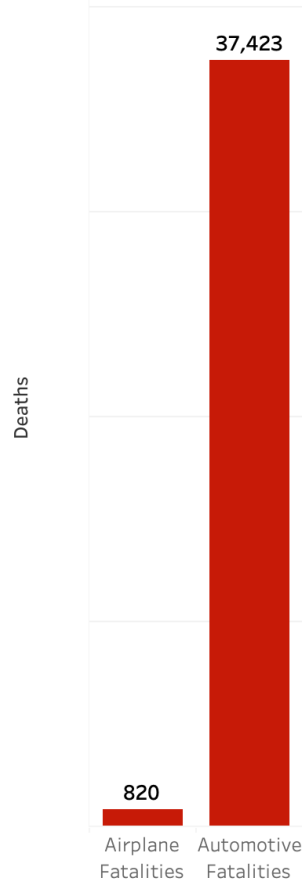
Regions such as the United States see less aircraft fatalities than other regions.

Percentage of Fatalities by Location



The Automotive Alternative

Airplane Fatalities
vs.
Automotive
Fatalities (2008)

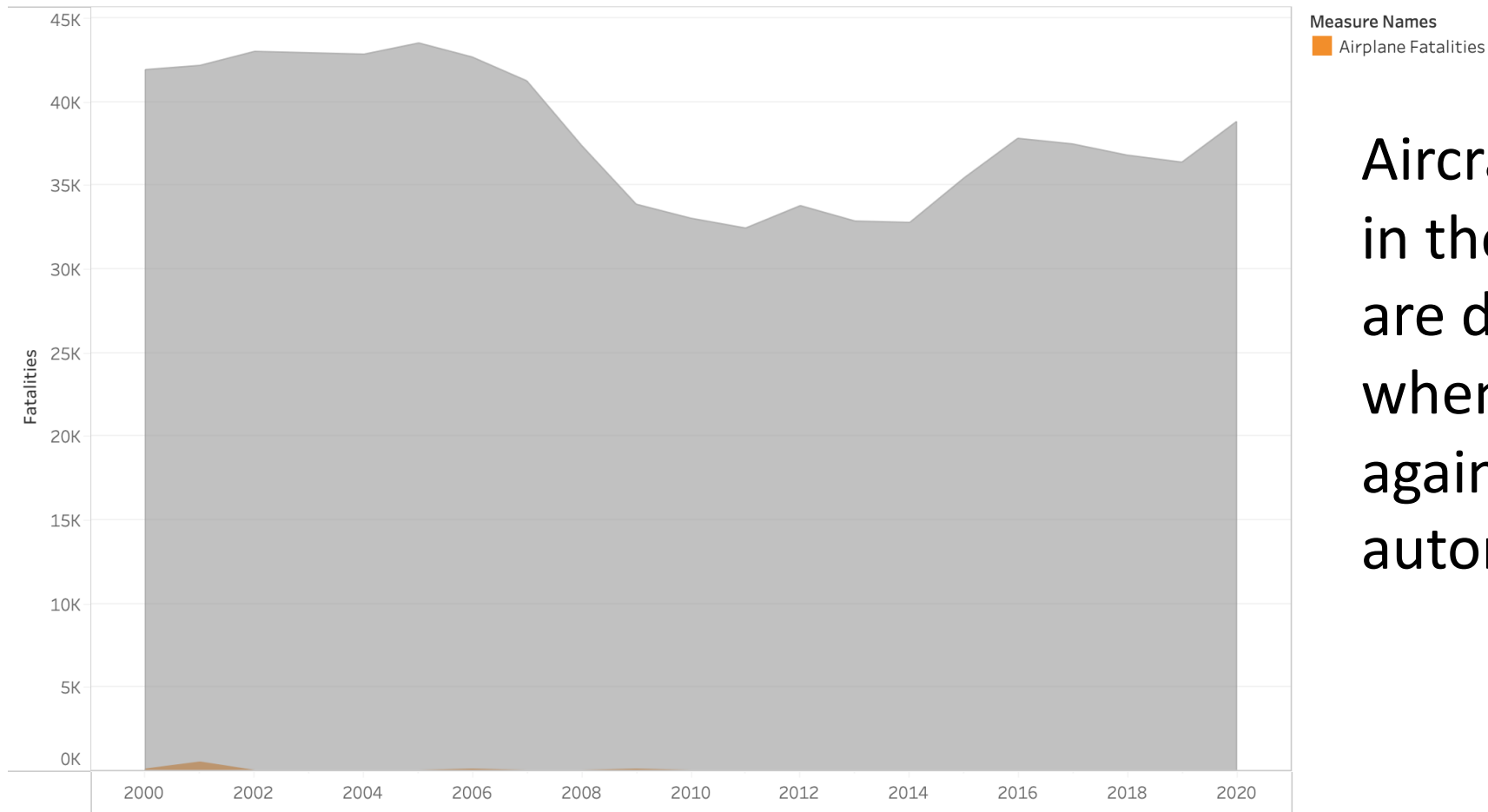


When the number of aircraft fatalities globally,
is compared to the number of automotive accidents in United States,
The risk of automotive travel is transparent.

1/3 of Americans travel for the holidays
They shouldn't risk a fatal accident

The Safer Way to Travel

United States Automotive Fatalities vs. United States Commercial Airline Fatalities



Aircraft fatalities
in the United States
are dwarfed
when plotted
against
automobile fatalities.

Future of Travel Safety

This text chart shows the fatality numbers used to generate the previous area chart. It compares the automobile fatalities in the United States with the commercial aircraft fatalities in the United States.

In more than 50% of the reported years there were 0 fatalities from domestic commercial flights.

Tableau's forecaster anticipates similar fatality numbers for the next three years of data - consumers can be confident of commercial flight safety.

	Automobile Fatalities	Airline Fatalities	Forecast indicator
			Actual
			Estimate
2023	36,574	3	
2022	36,574	3	
2021	36,574	3	
2020	36,574	3	
2019	36,355	1	
2018	36,835	1	
2017	37,473	0	
2016	37,806	0	
2015	35,484	0	
2014	32,744	0	
2013	32,893	0	
2012	33,782	0	
2011	32,479	0	
2010	32,999	0	
2009	33,883	50	
2008	37,423	0	
2007	41,259	0	
2006	42,708	50	
2005	43,510	22	
2004	42,836	13	
2003	42,884	22	
2002	43,005	0	
2001	42,196	531	
2000	41,945	89	

Strategies for Addressing Media Claims

1. Reassure consumers that with safety regulation in place, aircraft incidents are on the steady decline.
2. Redirect negative attention to the operators that need to address aircraft safety.
3. Highlight that commercial flights are a safer way to travel than automobiles.



Sources

Diaz, Aixa. (December 2022). Away from Home for the Holidays. AAA *Newsroom*. Retrieved from: <https://newsroom.aaa.com/2022/12/nearly-113-million-people-will-travel-from-december-23-to-january-2/>

Federal Aviation Administration. (June 2016). What we do. *United States Department of Transportation*. Retrieved from: <https://www.faa.gov/about/mission/activities>