

**Ryan Long**  
**DSC640**  
**4.3 Blog Post**

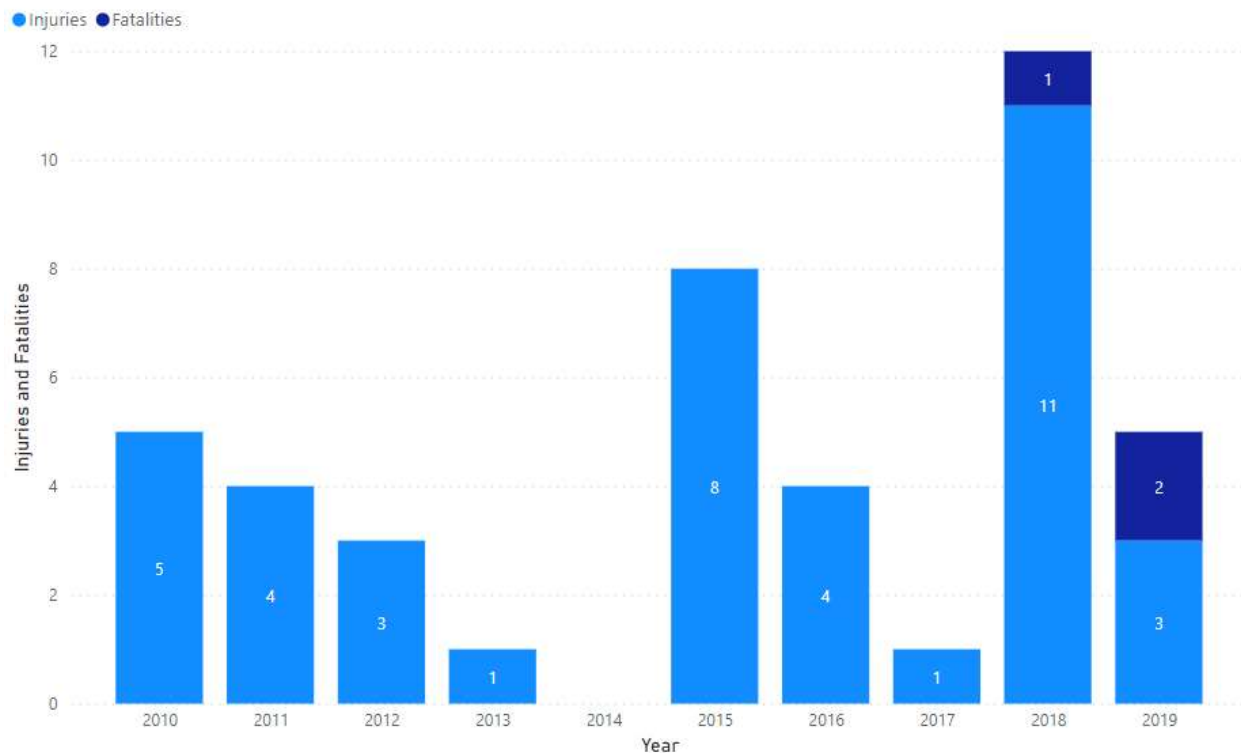
**Commercial Air Travel, Safer Than You Think!**

Posted January 28, 20XX by RPL

You may have been hearing how airlines are not a safe way to travel. There are unsubstantiated claims circling around in the media lately and we here at ABC Airlines want to set the record straight with facts and data.

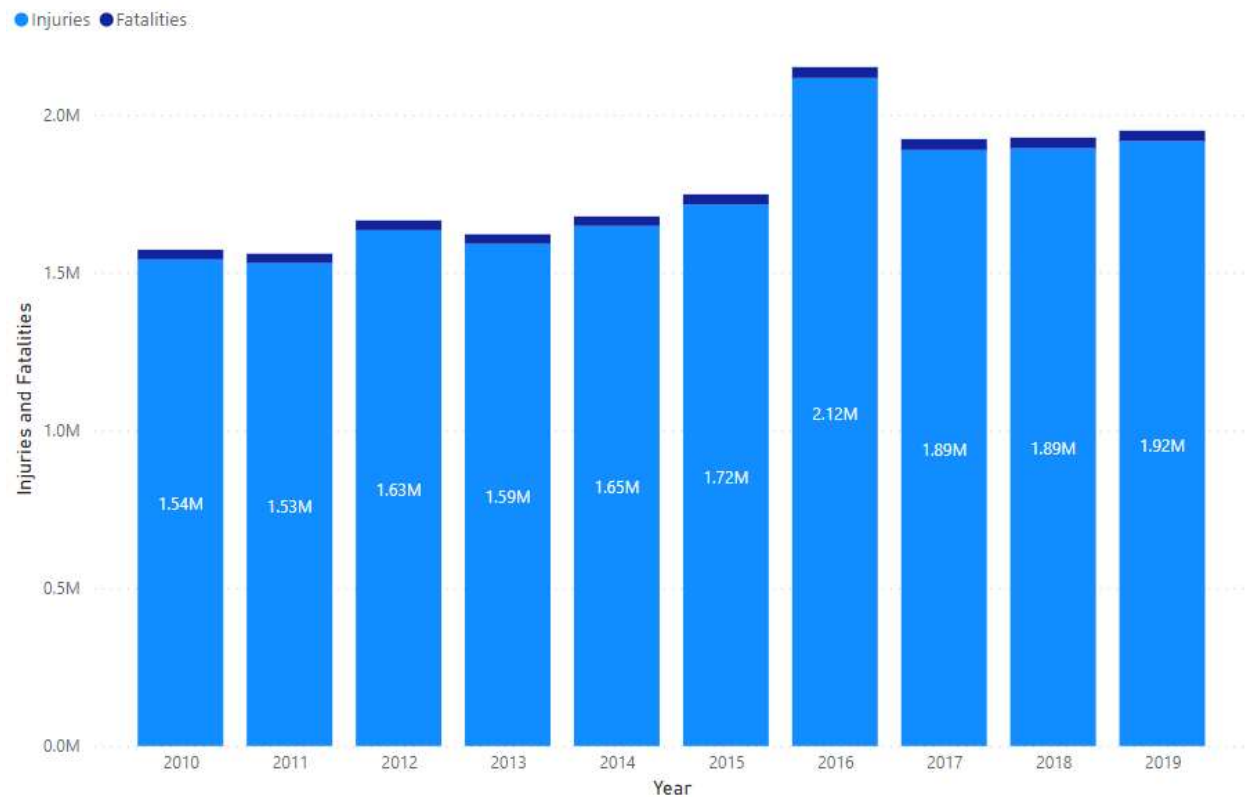
Airline travel has been the safest mode of transportation and will continue to be for years to come. According to data from the the National Transportation Safety Board (NTSB), over the past 10 years injuries or fatalities are very rare occurrences in commercial air travel. For the period 2010-2019 there were only 3 fatalities and 40 injuries, see the chart below.

Airline Injuries and Fatalities 2010-2019

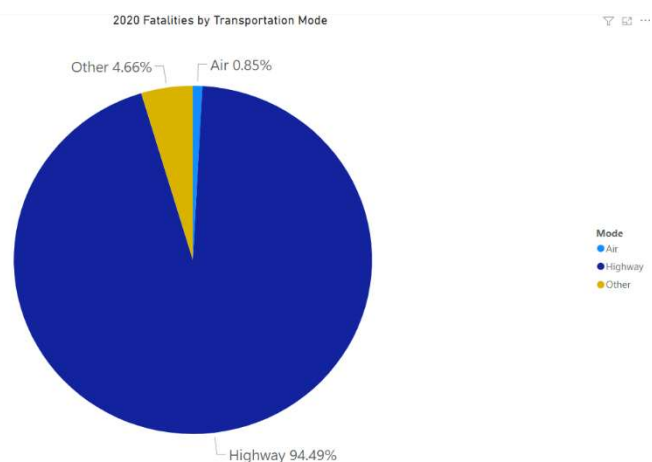


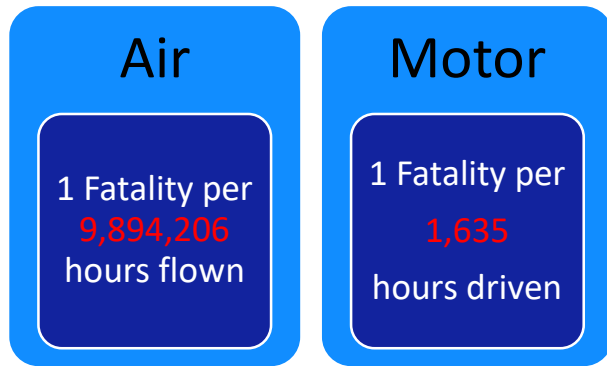
The NTSB also has data on motor vehicle travel as well. This mode of transportation has had injuries in the millions and fatalities in the thousands over the same period, 2010-2019.

## Motor Vehicle Injuries and Fatalities 2010-2019



More recent data, displayed to the right, issued by the Bureau of Transportation Statistics (BTS) indicates there were no fatalities in 2020 on US Air Carriers. There were 349 deaths in the air, but those were in the commuter carrier, on-demand taxi, general aviation subcategories. Comparatively, there were 40,587 deaths for Highway and other [1] modes of travel in the same year.





Statistically speaking, when comparing the fatalities by hours [2] of travel for each mode, it clearly shows fatalities are likely to occur more frequently when driving compared to flying.

The current media cycle is blurring incidents in the commuter carrier, on-demand taxi, and general aviation subcategories with commercial air. Given the information discussed above, commercial airline travel has been and will continue to be the safest method of travel despite the misrepresentations circulating in the media. As a US based commercial air carrier, ABC airlines is committed to the highest degree of safety and training to maintain the welfare and loyalty of our customers.

Footnotes:

[1] Other categories include Pipeline, Railroad, Transit, Water

[2] Hours driven is calculated from miles traveled in 2019 at an average of 60 mph

References:

<https://www.nts.gov/safety/Pages/research.aspx>

<https://www.nts.gov/safety/data/Pages/AviationDataStats2019.aspx>

<https://www.bts.gov/content/transportation-fatalities-mode>

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**4.3 Summary**

### **Visualizations**

The first sets of visualizations for the blog post include stacked bar charts for both airline and motor vehicle travel. These are simple depictions and easy to digest by a reader and when shown in sequence provide a drastic difference of injuries and fatalities between the modes of transportation. I used a pie chart from my executive summary but simplified it by consolidating the lesser known modes of transportation into an “Other” category. I elected to consolidate these categories as they may distract from the narrative of comparing airline travel to motor vehicle travel. More on this below in the ethical discussion. The final visualization is shaped boxes to display the simple of statistics of fatalities per hour of mode of transportation.

I maintained a similar color scheme throughout the blog post and leveraging the specific hex color for the visuals to ensure consistency. The graphs are all titled, labeled, and could stand on their own aside from the pie chart clarification which is footnoted. I broke up the layout of the second portion of the blog post to add variation and be able to display the pie chart and statistics in a smaller footprint.

### **Differences from Previous Internal Campaigns**

The significant difference is the use of a narrative within this project compared to the prior. Previously, the dashboard was a straightforward visualization only, meant to drive internal conversation. The executive summary included a few more visualizations and considered additional angles and impacts of the media information. This blog post focuses on a comparison between the modes of transportation and is more directive message in nature.

The overall outline of the post references my interpretation of the guidelines discussed by Knaflic in Chapter 7 of *Storytelling with Data*. The *setup* is established in the first two sentences, related to the media information and how there is other information to prove otherwise. The *conflict* shows the difference between the modes of transportation and how air travel is not nearly as dangerous as motor vehicles. And finally, the *resolution* is the media may be confusing the issues with other modes of air travel with commercial air. Despite that confusion, commercial air is a safe mode of travel, and this airline is committed to the safety of its passengers.

### **Overall Findings**

A couple of challenges relate to the information available. My primary sources were the National Transportation Safety Board (NTSB) and Bureau of Transportation Statistics (BTS). The data I found was either not as current as desired or often didn’t allow for the best comparison between the modes of transportation. This is obviously a real-world challenge and one that must be recognized when preparing information for consumption.

I am pleased with how this task has turned out and felt prepared based on the previous tasks to create a defensible, logical, and concise stance on the problem statement.

### **Ethical Considerations**

The two instances I took discretionary liberty were the combination of “Other” travel categories in the pie chart and the calculation of the fatalities per number of hours driven in the statistics section. To overcome my hesitation on presenting the data in this manner I made sure to provide an explanatory footnote. Not doing this could be interpreted as misrepresentation, which was the stance I was subtly taking with the media reports. Transparency is integral to maintain credibility in these situations.

Working through the BTS information for the pie chart is when I thought of the potential angle of the media mis-representing commercial air travel with the lesser-known air transportation modes. Those had far more deaths per year than commercial. This made me realize how easily unethical intentions can be supported by data, either by omission of key facts or explanations. Even when data comes from authoritative sources reader should try to understand what is being represented and what biases the authors may have.

References used for blog post:

<https://www.nts.gov/safety/Pages/research.aspx>

<https://www.nts.gov/safety/data/Pages/AviationDataStats2019.aspx>

<https://www.bts.gov/content/transportation-fatalities-mode>