

Achraf Safsafi
Course: DSC 640-T303
3.3 Project Task 2: Executive Summary

Note: All Charts are made by

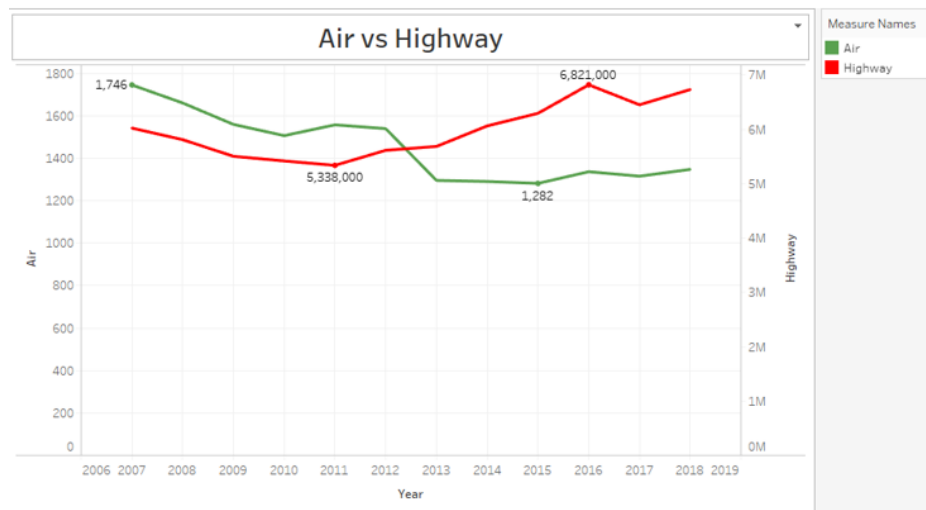


Problem Statement:

Due to recent unfortunate airline crashes, the media has been promoting statistics stating air is no longer a safe way to travel. However, this report includes statistics and facts extracted from reliable resources that will refute that media claim.

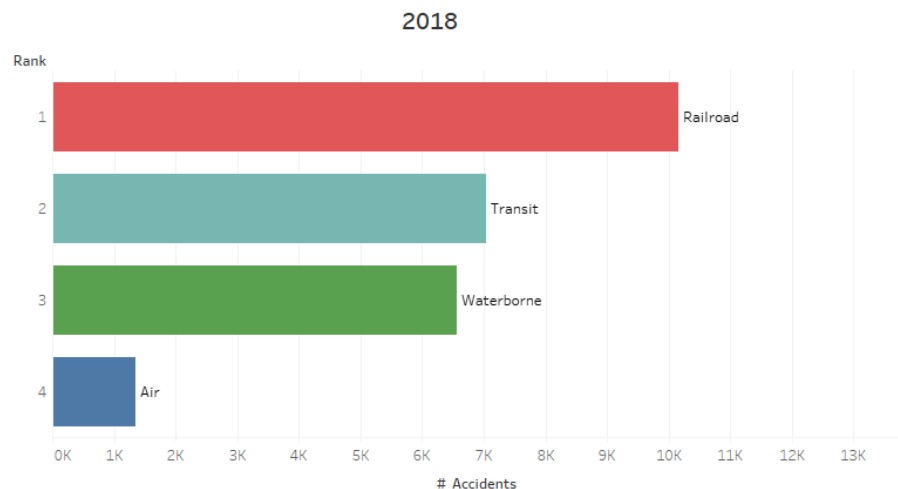
Finding and Analysis:

Statistics state that driving on the highway is the riskiest way to travel. Statistics between the period 2007 and 2018 show that most accidents occur due to driving on the highway. Besides, there is a massive difference between the number of highway accidents and air accidents. Highway accidents are valued in millions. The highest recorded value was in 2016 when it reached 6,821,000 accidents, while the highest recorded value of air accidents was in 2007 when it reached 1,746 accidents. Also, Air accidents have known a decrease in recent years, with 1,348 accidents recorded in 2018.



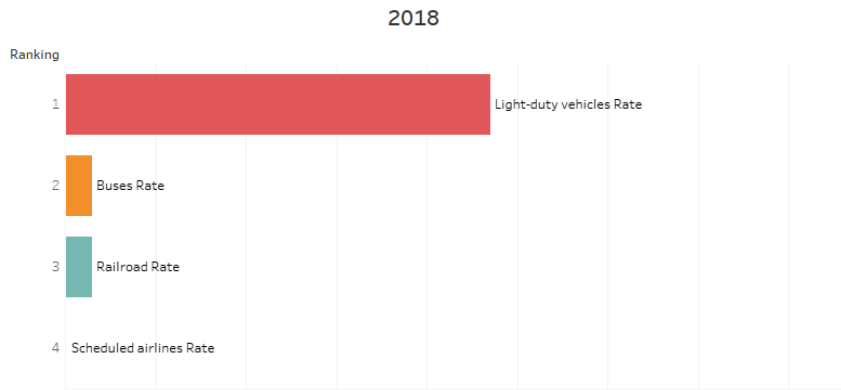
Transportation Accidents by Mode, United States, 2007-2018

When we compare traveling via airplane to other transportation systems, we found that the air mode is the lowest transportation mode that could cause accidents.



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Passenger Transportation Death Rates(Deaths per 100,000,000 passenger miles),
United States, 2007-2018



The chart shows that passengers' risk of death on a per-mile basis (Deaths per 100,000,000 passenger miles) varies hugely by transportation mode. Travel by personal light-duty vehicles shows the highest risk, while rail and bus travel have much lower death rates, and air travel has recording rates that are the lowest at any time of the observed period.

Conclusion:

Passenger Deaths , United States, 2007-2018

Light-duty vehicles Deaths	278,075
Railroad Deaths	87
Buses Deaths	364
Scheduled airlines Deaths	62

Media claims are false and unjustified. Flying Is the Safest Mode of Transportation when compared to the other Modes of Transportation. It leads to the lowest number of accidents and has the lowest death rates.

How I chose the charts:

As plotting many lines over the graph would make it cluttered and confusing to read, I chose to perform an animated bar chart race (see the PowerPoint). It helps us visualize the change in trends over time easily and understandably.

In the last data, I used a table instead of a pie chart. Exist of a large number could get a pie chart that is difficult to read. Also, it would be hard to see the smallest slices.

References:

Bureau of Transportation Statistics. (n.d.). U.S. general aviation safety data. Retrieved from <https://www.bts.gov/content/us-general-aviationa-safety-data>

Injuryfact. (2020, March 19). Deaths by transportation mode. Retrieved from <https://injuryfacts.nsc.org/home-and-community/safety-topics/deaths-by-transportation-mode/>