Airline Executive Summary

The objective of this project is to analyze the data and confirm or deny the concerns surrounding airline travel. The goal is to convey the message that Airline travel is not any more dangerous than vehicular travel by showing a comparison of similar metrics. From the research and analysis of the data, the conclusion is Airline travel has a greater safety record than vehicular travel.

Considering vehicular travel is the largest mode of transportation in the United States and over 3 billion miles are driven each year, the likelihood of a person being involved in an accident is greater than with airline travel. Additionally, American drivers, on average, spend 1 hour per day behind the wheel of a car driving for approximately 30 minutes per trip with the typical family vehicle driven for 16,000 miles annually. Each year the number of licensed drivers increases with an average of currently over 220 million drivers. Add to these factors the density of urban and suburban traffic, increases the likelihood of accidents.

Airline safety statistics show for the period from 2000 - 2014, there were only 10 fatal accidents involving domestic airline carriers. Considering domestic airlines fly approximately 650000 miles per year and carry and average 200 million passengers per year, the likelihood of passenger encountering a fatal accident is almost nil.

The negative publicity against airline travel is unwarranted and cannot possibly rely on thorough statistics and analysis. The metrics in the briefing illustrate the comparisons between airline and vehicular statistics. They clearly show the advantages that airline travel has over vehicular travel.

Project: Create a Power Point briefing to present the facts and figures relating to Airline Safety from 2000 – 2019. The objective is to analyze the data and confirm or deny the concerns surrounding airline travel. The goal is to convey the message that Airline travel is not any more dangerous than vehicular travel by showing a comparison of similar metrics.

Design Methodology: Present a comparison of Airline and Vehicular metrics. The metrics include a comparison of airline miles flown and vehicular miles driven. Another metric illustrates the number of airline passengers per year and the number of licensed drivers. The final metric compares the number of fatal accidents of General Aviation fatalities and the number of vehicular, driver and passenger, fatalities per year.

Each segment has its own color to visually separate the metrics. The subdued hues of blue and red, provide the contrast and distinction for the graphs. There is a balance of white space around all objects to provide for an uncluttered landscape. The fonts and lettering are consistent across all graphs to provide symmetry and cohesiveness.

Datasets: The datasets for this project are:

- F. (n.d.). *data/airline-safety at master · fivethirtyeight/data*. GitHub. Retrieved September 26, 2021, from https://github.com/fivethirtyeight/data/tree/master/airline-safety
- National Highway Traffic Safety Administration. (n.d.). *FARS Encyclopedia*. NHTSA. Retrieved September 26, 2021, from https://www-fars.nhtsa.dot.gov/Main/index.aspx
- BTS. (n.d.). *U.S. General Aviation Safety Data*. Bureau of Transportation Statistics. Retrieved September 26, 2021, from https://www.bts.gov/content/us-general-aviationa-safety-data
- BTS. (n.d.). *U.S. Airline Passengers by Carrier Type: 2003–2015*. Www.Bts.Gov. Retrieved October 10, 2021, from https://www.bts.gov/content/us-airline=passengers=carrier-type-2003%E280%932015
- www.fhwa.gov. (n.d.). *Highway Statistics Series - Policy | Federal Highway Administration*. Retrieved October 10, 2021, from https://www.fhwa.dot.gov/policyinformation/statistics.cfm

Github Link: https://github.com/cjorosco/DSC640/tree/main