**Airline Industry Analysis Documentation**

The purpose of this presentation is to demonstrate how passengers consider airlines a safe mode of transportation and revenue rates are increasing year over year domestically and internationally.

**Design Methodology**

Colors: I noticed the colors in my last presentation were bright, and I wanted to make sure that someone who is color blind would not have any issue with coloring. I used the darker colors suggested by Tableau and preferred to use blue.

Chart types: The charts used are Line, Tree Map, Box and Whiskers and Bar graph. Each of these were chosen because they represent the data accordingly.

**PowerPoint Presentation**

**Slide 1:**

**Total Incidents Per Airline from 2000-2014: This Tree map shows the airlines with the most accidents with the top 4 in red and the rest of the airlines with accidents are in blue. Out of the top 20 airlines only 4 of those airlines were US ones. The stark difference in accidents between airlines shows how the problem is not because of airplanes but the airlines and management of planes.**

Slide 2:

US Airline Incidents Comparing 1985-1999 to 2000-2014: I wanted to dive deeper into US airline incidents and compare the years 85-99 and 00-14. Incidents have drastically decreased by 34%. A total of 1168 incidents occurred from 85-99 and 769 from 00-14. These incidents show how much US airlines are improving.

Slide 3:

**Revenue per Domestic Passenger 2002-2016: This dataset allows us to visualize how revenue per passenger is increasing in the United States. Considering the impacts 9/11 terrorist attacks had on the US and the 2008/2009 economic crash commercial flights have steadily increased domestically and proving passengers feel safe to embark on planes.**

**Slide 4**

**Revenue per International Passenger 2002-2016: Using the same dataset we can see revenue per international miles flown. International miles have steadily increase at a faster rate than domestically and having even surpassed domestic revenue by $51 million dollars in 2016. Passengers feel safe in airlines to travel overseas and for long periods of time.**

Slide 5

Domestic and International Passengers from 2002-2016: A Box and Whiskers plot shows the average number of passengers. 650 million domestically and approximately 160 million internationally. The goal of this graph is to demonstrate the scope of people that are using airlines.

Slide 6

Revenue and Projected Revenue until 2040: This graph shows projections for the future of air travel until 2040. We can see a growth rate of about 2% for domestic travel and double for international travel. This correlates with the revenue amounts in slides 3 and 4.

**Sources**

**Global Fatal Accidents from 1985-2014 & Total Incidents Per Airline from 2000-2014**

<https://github.com/fivethirtyeight/data/tree/master/airline-safety>

**Revenue per Passenger 2002-2016**

<https://www.kaggle.com/shellshock1911/us-commercial-aviation-industry-metrics?select=all_airlines_all_airports.csv>

**Revenue and Projected Revenue until 2040:**

**https://www.statista.com/statistics/194368/growth-of-rtms-of-us-commercial-air-carriers/**

**GitHub**

**https://github.com/evelyntc/DSC640\_Projects**