## **Term Project Milestone #1: The Dashboard**

Michelle Helfman

Bellevue University

DSC640-T302 Data Presentation & Visualizations (2243-1)

Catherine Williams

January 6, 2024

## The Dashboard

Commercial airlines have become one of the safest ways of traveling, and 2023 was one of the safest years in history, with zero fatal accidents involving passenger jets. Overall, there were only two fatal accidents compared to six in 2022. So why is there so much media coverage and concern over airline incidents compared to automobile accidents and fatalities?

Automobile accidents have become an inconvenient part of our day, but there were 36,508 fatalities compared with 173 fatalities from 20 airline accidents worldwide in 2021. Airline accidents are so rare that they are the top story for every media outlet for at least 24 hours, creating a fear of flying.

The statistics do not support the negative publicity. Millions of passenger flights flow annually; from 2011 through 2021, 2011 had the most accidents, with 36, and 2014 had 990 fatalities, primarily from three major accidents. Since 1945, there have been 3,392 civilian airline accidents worldwide, averaging less than 45 accidents per year. In the United States, between 2000 and 2014, there were ten fatal accidents, with 687 fatalities, including 213 passengers killed on September 11, 2001.

While airline accidents and fatalities dominate the headlines, they have not deterred from flying to their destinations. In the five years (2015 to 2019) before Covid-19, US-based airlines flew 10.5 million passengers and \$600 billion in revenue. In 2023, air travel returned to prepandemic levels.

My dashboard is letter-sized and contains six visualizations, limiting how much and what kind of information I could include. I could only present some of the information available. I had to limit the number of years and create additional summary columns within Tableau. When referencing individual airline operators, I only included United States-based passenger airlines,

which I will continue to use throughout this project. The dataset for this project was cleansed and formatted using Tableau.

I will describe my dashboard in more detail when presenting my findings to the internal team. I will give more context by expanding on the underlying information used in creating my visualizations. Finally, when referencing individual airline operators, I will focus on United States-based airlines because they are our direct competition.

## References

Accidents and fatalities per year, Retrieved December 25, 2023

https://docs.google.com/spreadsheets/d/1SDp7p1y6m7N5xD5\_fpOkYOrJvd68V7iy6etX

y2cetb8/edit#gid=1448957446

Airline.csv, Retrieved December 25, 2023

https://data.world/ndsouza/airlines

FARS Auto Crash Trends 1994 - 2021

National Transportation Safety Administration, Retrieved December 25, 2023

https://www-fars.nhtsa.dot.gov/Trends/TrendsGeneral.aspx

Passenger Revenue -- Total System Operations

MIT Global Airline Industry Program, Airline Data Project, Retrieved December 25, 2023

https://web.mit.edu/airlinedata/www/2020%2012%20Month%20Documents/Traffic%20a

nd%20Capacity/System%20Total/Passenger%20Revenue%20--

%20Total%20System%20Operations.htm

System Total Enplaned Passengers

MIT Global Airline Industry Program, Airline Data Project, Retrieved December 25, 2023

https://web.mit.edu/airlinedata/www/2020%2012%20Month%20Documents/Traffic%20a

nd%20Capacity/System%20Total/System%20Total%20Enplaned%20Passengers.htm

Worst Geographical Regions

Airline Safety Network, Retrieved December 25, 2023

https://aviation-safety.net/statistics/geographical/worst\_geo\_loc.php

Calder, Simon (January 2, 2024) Air safety 2023: Accidents and fatalities at record low

https://www.independent.co.uk/travel/news-and-advice/air-safety-accidents-record-low-

2023-b2471757.html