Executive Summary

Andrea Fox

January 24, 2021

DSC640-T301 Data Presentation & Visualization

Today we are gathered to discuss the most recent media coverage regarding airline crashes and the potential safety of those onboard. The main dataset used for evaluation of metrics is the airline-safety csv (Mehta, 2014). Additional datasets came from Airlines from America and are included in the References listed below. All information used in evaluation is currently stored in Github to be opened at your leisure (Fox, 2021).

First, it is important to note that incidents are "an occurrence other than an accident, associated with the operation of an aircract, which affects or could affect the safety of operations." (49 CFR 830.2 - Definitions, 1988) While it is important to keep current on airline incidents, which are on a downward trend, it is more important to focus on fatalities relating to accidents. The reason we are not focusing on total fatalities is because this includes any fatality that occurs on an aircraft. For example, if a passenger had a heart attack and died it would be considered an airline fatality. With the focus on fatalities related to airline accidents, we can say that this is on a downward trend compared to earlier years recorded. There are some notable exceptions that include: 9/11 where planes were hijacked and used as weapons, Malaysian airlines crashing in Ukraine and one aircraft that completely disappeared, and a French aircraft that crashed due to an automation error.

Second, the number of departures has increased both in the United States and across the world. This means that more tickets are being sold and more passengers are using the airlines. Net profits have also been on an upward trend. Though there are some spikes downward those can all be easily explained. In 2001, when 9/11 happened this caused air travel to completely stop for several days in the United States, and then passengers were more cautious of traveling in the immediate aftermath. In 2008, there was a major financial recession in the United States that led to many not traveling for leisure. Since these two major events, net profits have continually increased with a slight drop in late 2019 due to Covid-19.

Overall, airline metrics are on a positive trend. This means that even though the media is reporting air travel as unsafe, the passengers are using their best judgment and continue to utilize airlines for one of their main methods of travel.

References

- 49 CFR 830.2 Definitions. (1988, September 23). Retrieved from Cornell Law School: https://www.law.cornell.edu/cfr/text/49/830.2#:~:text=Incident%20means%20an%20occurrenc e%20other,affect%20the%20safety%20of%20operations.&text=(2)%20The%20aircraft%20has% 20a,greater%20and%20sustains%20substantial%20damage.
- Annual Financial Results: U.S. Passenger Airlines. (n.d.). Retrieved from Airlines for America: https://www.airlines.org/dataset/annual-results-u-s-passenger-airlines/#
- Annual Financial Results: World Airlines. (n.d.). Retrieved from Airlines for America: https://www.airlines.org/dataset/annual-results-world-airlines/#
- Fox, A. (2021, January 23). *Weeks 5&6*. Retrieved from Github: https://github.com/anfox86/DSC640---Data-Presentation-and-Visualization/tree/main/Projects/Weeks%205%266
- Mehta, D. (2014, February 9). *Airline Safety*. Retrieved from Github: https://github.com/fivethirtyeight/data/tree/master/airline-safety
- U.S. Airline Traffic and Capacity. (n.d.). Retrieved from Airlines for America: https://www.airlines.org/dataset/annual-results-u-s-airlines-2/#
- World Airlines Traffic and Capacity. (n.d.). Retrieved from Airlines for America: https://www.airlines.org/dataset/world-airlines-traffic-and-capacity/#