Title: Supporting Documentation for Data Scientists

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Course: DSC640

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Description: Project data for critical review by Data Science colleagues, link to Github repository

"Given the expected worldwide air traffic of 36.8 million flights, the accident rate is one fatal passenger flight accident per 7,360,000 flights in 2017, according to the Aviation Safety Network (ASN)." (https://www.facebook.com/tripsavvytips, 2020).

To determine if air travel is safer than automobile travel in the U.S., aviation deaths per 100,000 passenger miles from National Transportation Safety Board were compared with automotive deaths per 100,000 miles from the National Safety Council. In 2018 the aviation rate was 0.000012 and the automotive rate was 0.001216, which is more than twice as much. (https://www.ntsb.gov/investigations/data/Pages/Data_Stats.aspx) (https://injuryfacts.nsc.org/all-injuries/historical-preventable-fatality-trends/standardized-rate/)

There were 1115 North American commercial airline fatalities from 1985-89. There were 687 from 2000-2014. There were nearly 40% fewer fatalities in 2000-14 as in 1985-89. (https://github.com/fivethirtyeight/data/tree/master/airline-safety)

All preliminary findings suggest that U.S. commercial air travel is safe. A person traveling cross country is much more likely to die in an automobile than in an airplane. (https://www.nhtsa.gov/content/nhtsa-ftp/280561). No large carriers stand out as outliers.

According to estimates from the U.S. Census Bureau, U.S. Air Transportation revenue is expected to increase from $189,150M (USD) in 2013 to $225,785M (USD) in 2018. (https://www.census.gov/data/tables/2018/econ/services/sas-naics.html).

References:

https://www.facebook.com/tripsavvytips. (2020). A Boeing list shows which planes are the world's safest. TripSavvy. https://www.tripsavvy.com/the-safest-aircraft-54428

https://www.ntsb.gov/investigations/data/Pages/Data_Stats.aspx

https://injuryfacts.nsc.org/all-injuries/historical-preventable-fatality-trends/standardized-rate/

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

https://www.census.gov/data/tables/2018/econ/services/sas-naics.html

Jolene's Github repository:

https://github.com/jobranch2019/DSC640_Airline_Safety