Flight Safety Analysis

DSC640 Milestone 2

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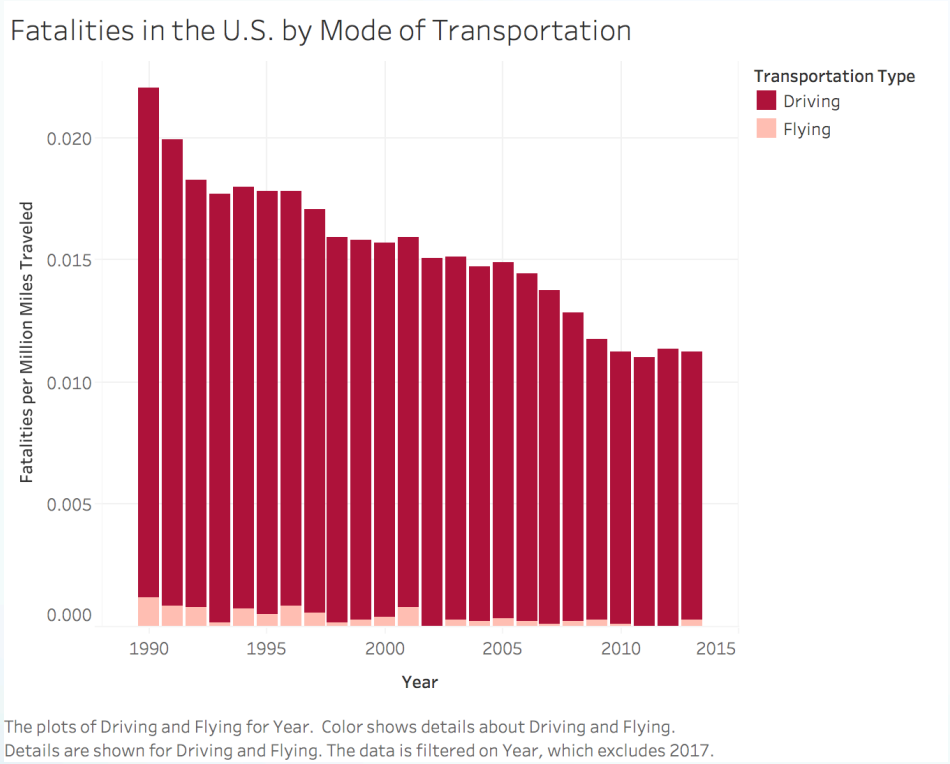
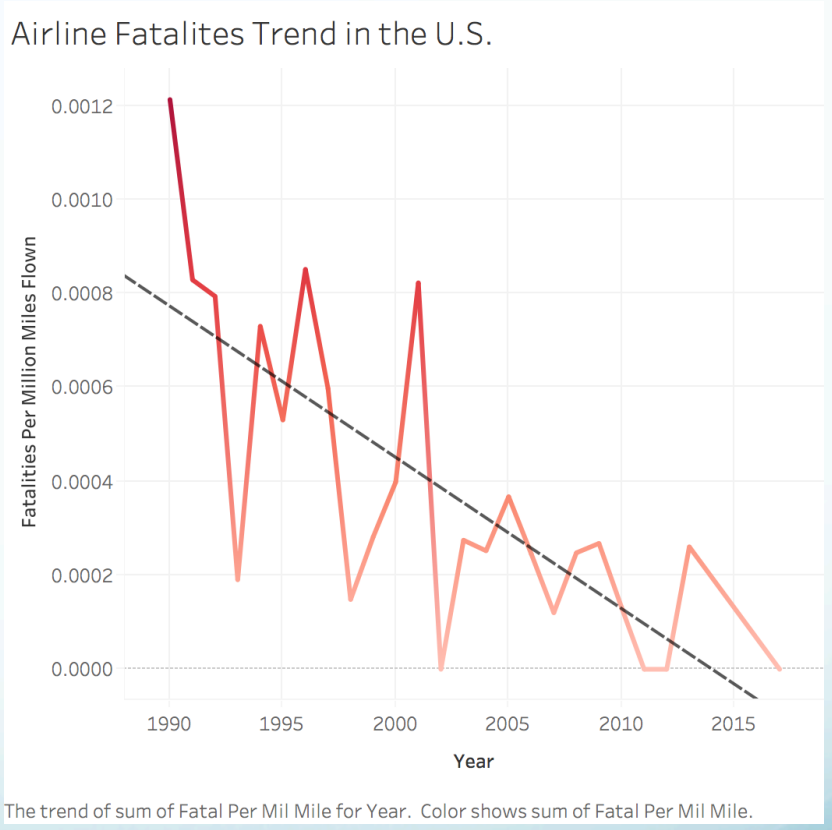
Traveling by Air is a Safe Form of Transit.

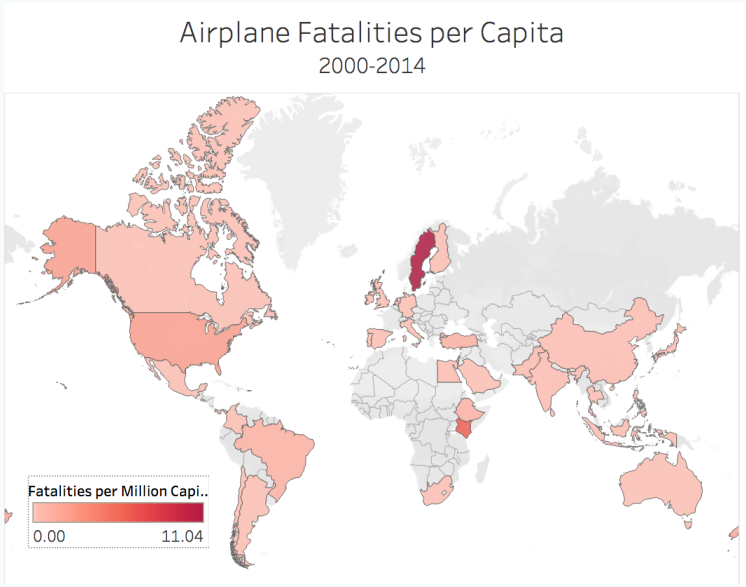


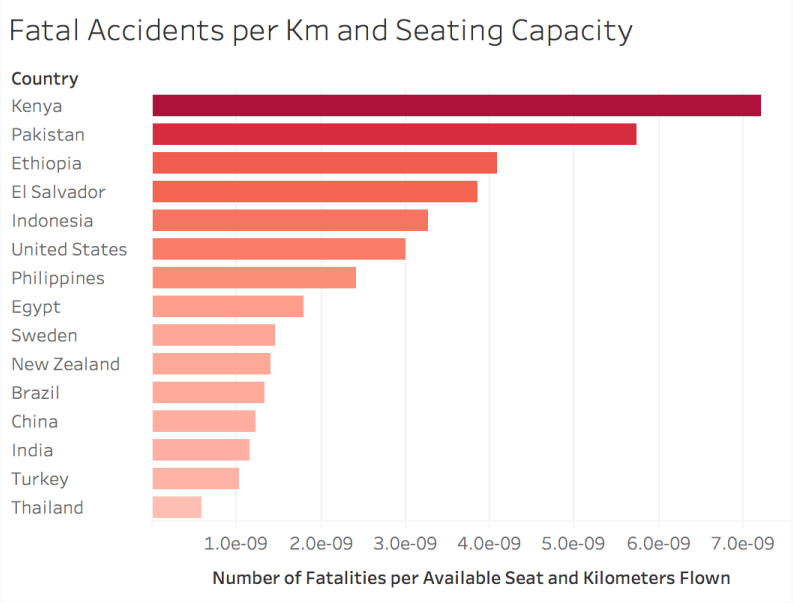
The number of airplane fatalities is at a steady decline in the U.S.

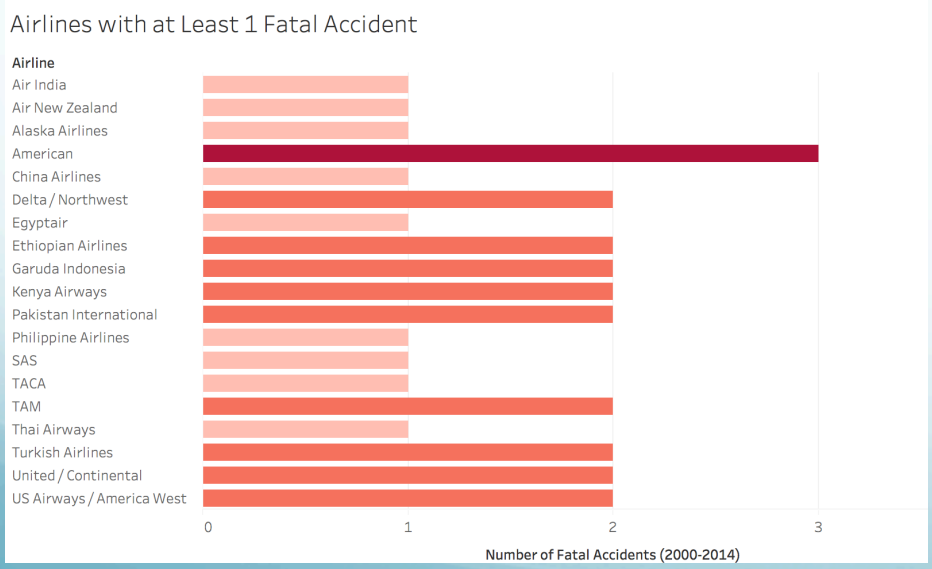


When considering the number of fatalities per mile traveled, driving accounts for 40 times more fatal accidents than flying each year.

Global Statistics on Airplane Fatalities







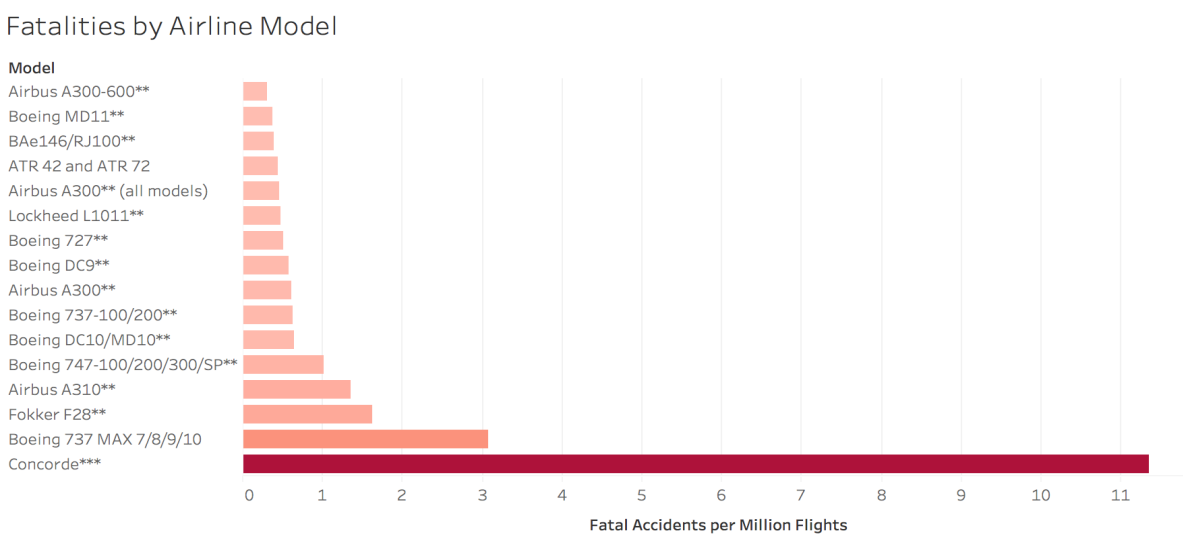
American had the highest number of fatal accidents between 2000 and 2014. However, two of these accidents were a product of 9-11.

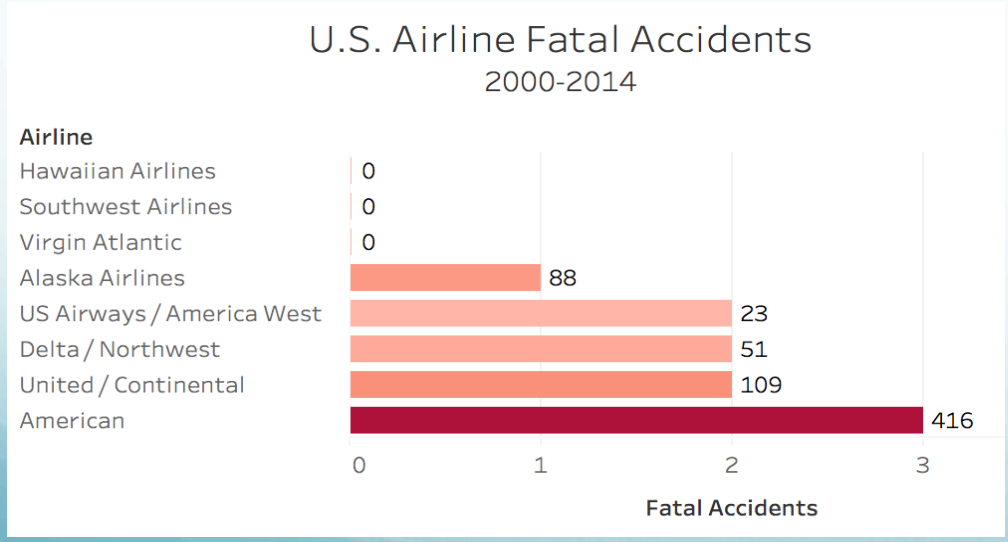
The U.S. had the 6th highest fatality rate when the distance traveled and number of seats per plane were accounted for.

Fatalities by Model and Airline

These airplane models present the highest risk. Many of them are no longer in production, but continue to be used in commercial flights.

** This aircraft is no longer in production
*** This aircraft is no longer used in commercial service





The bar length on the x-axis shows the number of fatal accidents for each airline. The value next to each bar indicates how many total fatalities occurred due to the accidents

Methodology

- Hues of red were used to highlight the severity of each metric. The darker the color, the greater the value. Bar graphs were used in many of the metrics to show comparative data.
- The driving vs. flying metric is used to show that flying is still much safer than driving. The darker red emphasizes how much greater the risk is for driving.
- Global statistics on airplane safety show how the U.S. compares to other countries.
- The U.S. airplane crash statistics show which domestic airlines are most likely to experience a fatal accident.
- Airplane model statistics show the aircrafts with the highest crash rates. These planes should be avoided for use in commercial service.
- These metrics were chosen to show: the safety of air travel compared to driving, how the U.S. stacks up to the rest of the world, and which airlines and airplane models may need to be inspected to find the cause of the fatalities