

DSC 640 – Project Task 2

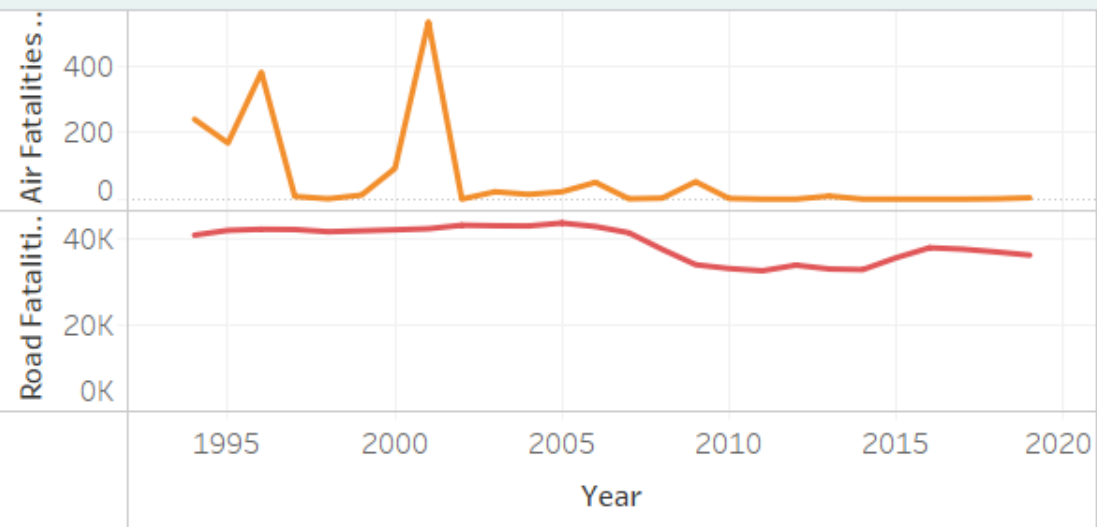
Pushkar Chougule

T-301

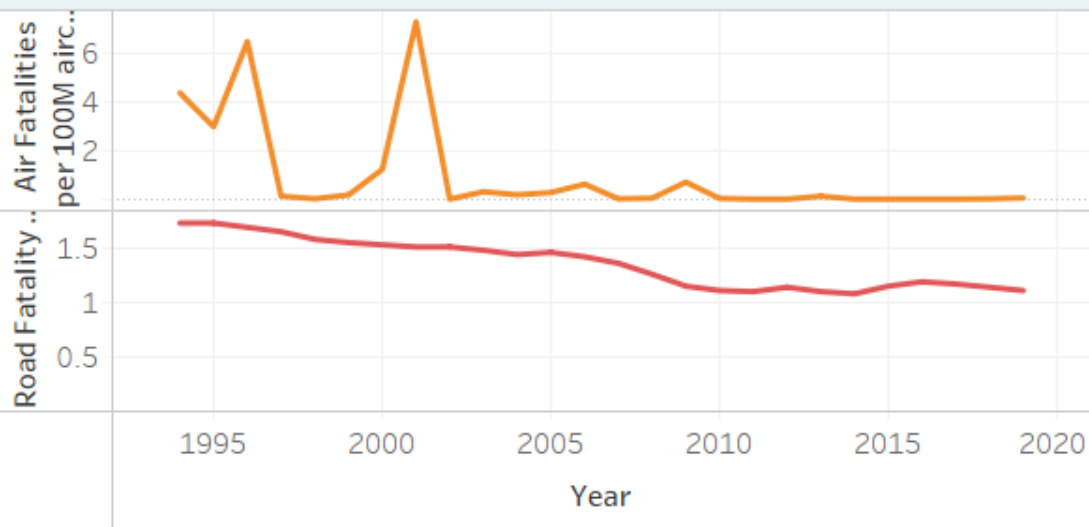
Executive Summary Dashboard

- Totals of Air Fatalities vs. Road Fatalities in US (1994 – 2019)
- Fatality rates per 100 million miles of travel comparison for Air and Road Travel in US (1994 – 2019)
- Air fatalities counts by World-wide Airlines (lowest to highest: 1985 - 2014)
- Total seat kilometers flown per week by World-wide Airlines (highest to lowest : 1985 - 2014)
- World Airline fatalities snapshot (1985 – 2014)
- World Airline incidents and fata accidents snapshot (1985 – 2014)

US Air vs. Road Total Fatalities by year

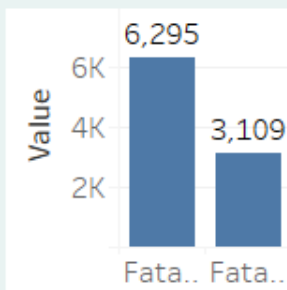


US Air vs. Road Fatalities / 100M miles

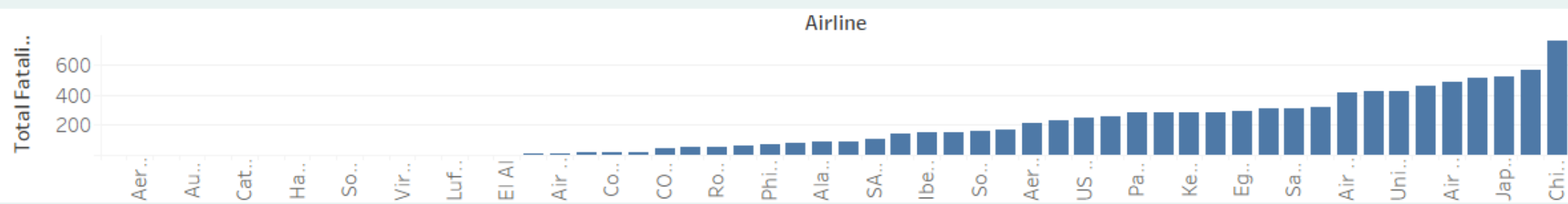


Highlight Airline
No items highlighted

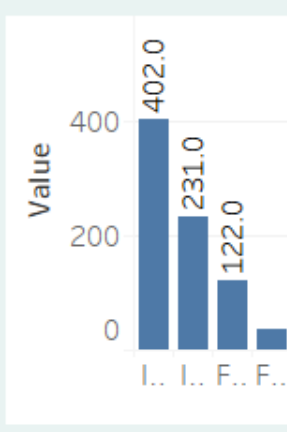
World
Airline
Fatalities



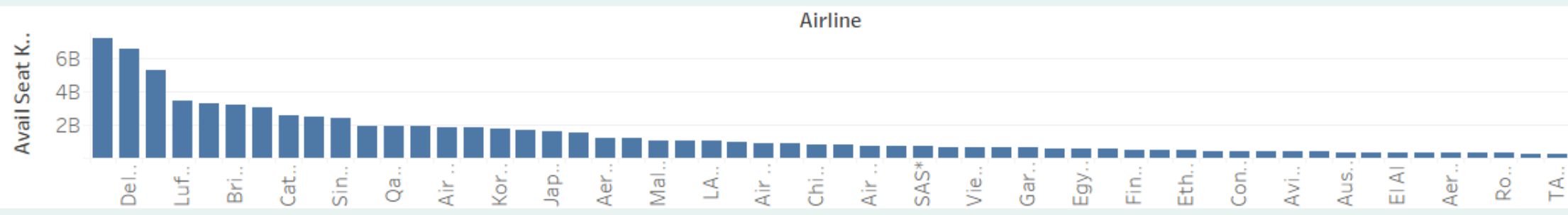
Total Number of Fatalities by Airlines



World
Airline
Incidents
and Fatal
Accidents



Available seats kilometers per week



U.S. Air Fatalities vs. Road fatalities

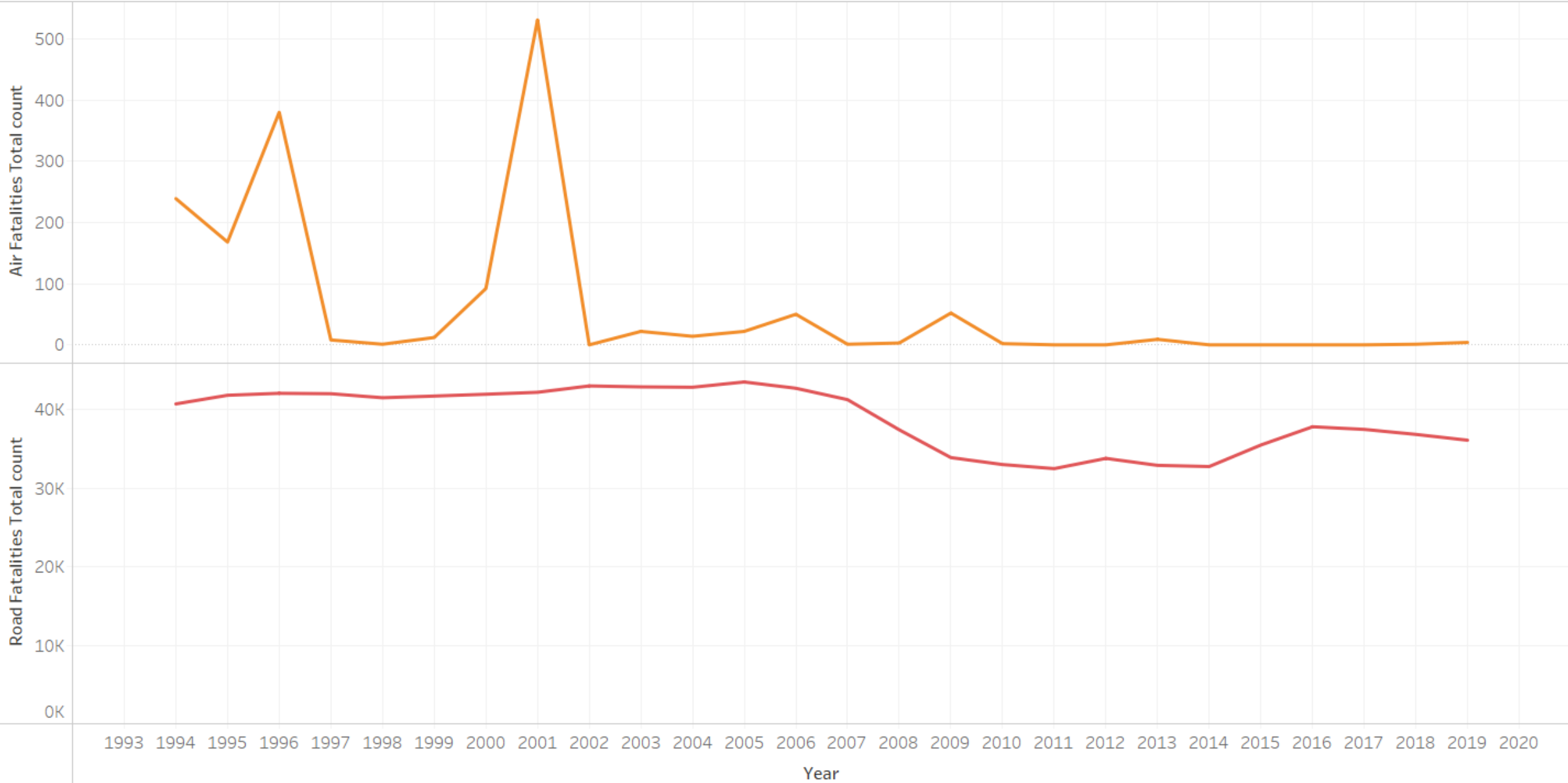
Much lower fatalities for Air travel in U.S.

- The peak of 531 back in 2001
- The declining trajectory ever since and near 0 counts in recent years 2019

Fairly higher fatalities for Road travel in U.S.

- The peak of 43510 back in 2005
- Still lingering around 35,000+ up until 2019

US Air vs. Road Total Fatalities by year



U.S. Fatality rates
per 100 million
miles of travel
comparison Air vs.
Road. Air Fatalities
vs. Road fatalities

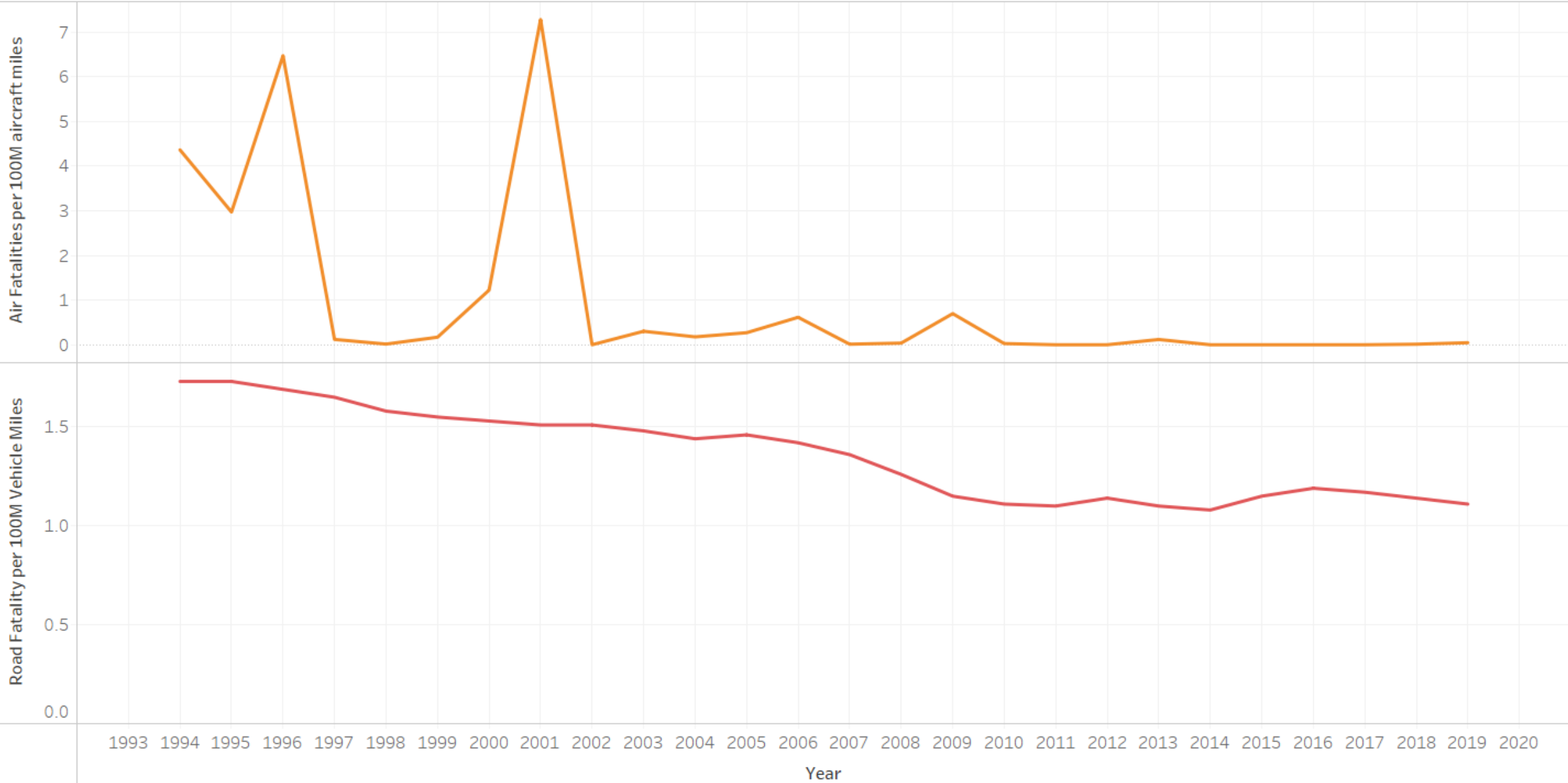
Much lower fatalities rates per 100 millions of aircraft miles for Air travel in U.S.

- The peak of 7.28 back in 2001
- The declining trajectory ever since and near 0 rate in recent years 2019

Relatively higher fatalities per 100 millions vehicle miles for Road travel in U.S.

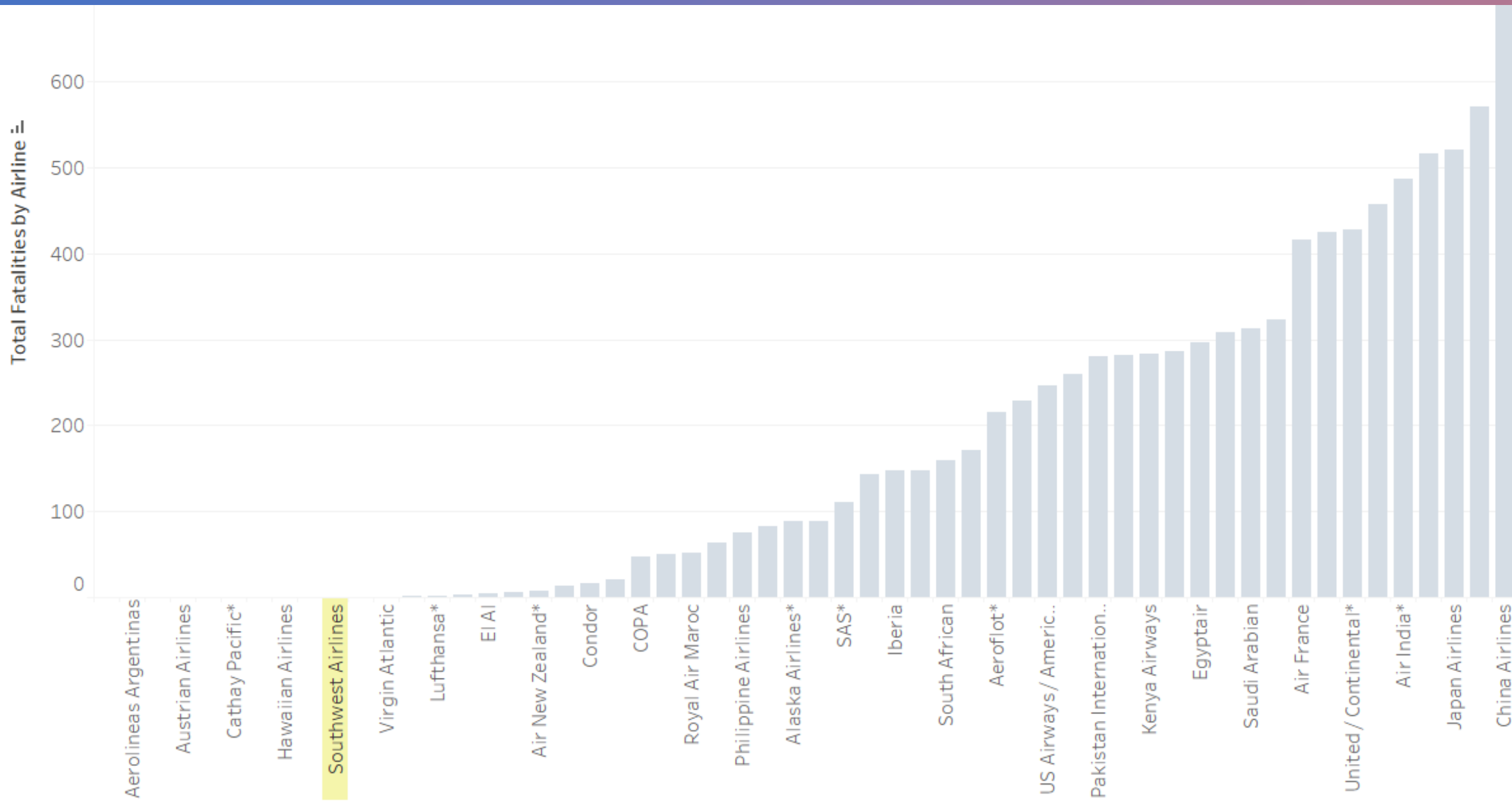
- The peak of 1.73 back in 1994
- Has only managed to come down up to 1.1 until 2019

US Air vs. Road Fatalities / 100M miles



World-wide Airlines – Total Fatalities (1985 – 2014, Lowest to Highest)

- Southwest amongst the very few airlines with 0 fatalities between 1985 - 2014

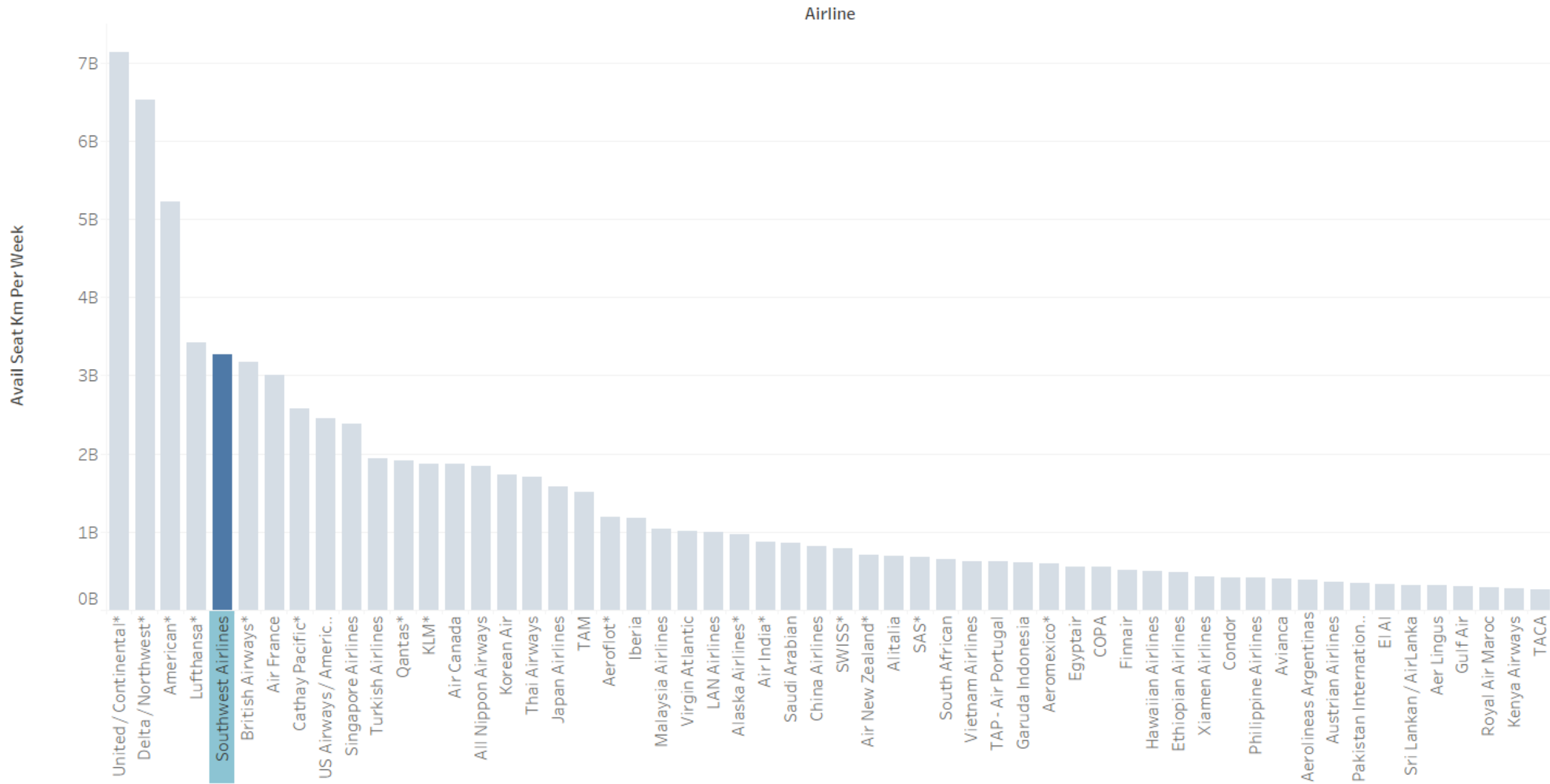


SUM([Fatalities 85 99]) + SUM([Fatalities 00 14]) for each Airline. The view is highlighted where Airline contains "Southwest Airlines".

World-wide Airlines – Seat Kilometers flown per week (1985 – 2014, Highest to Lowest)

- Southwest Airline amongst Top 5 airlines in terms of seat kilometers flown per week, at the 3.27 Billion kms between 1985 - 2014

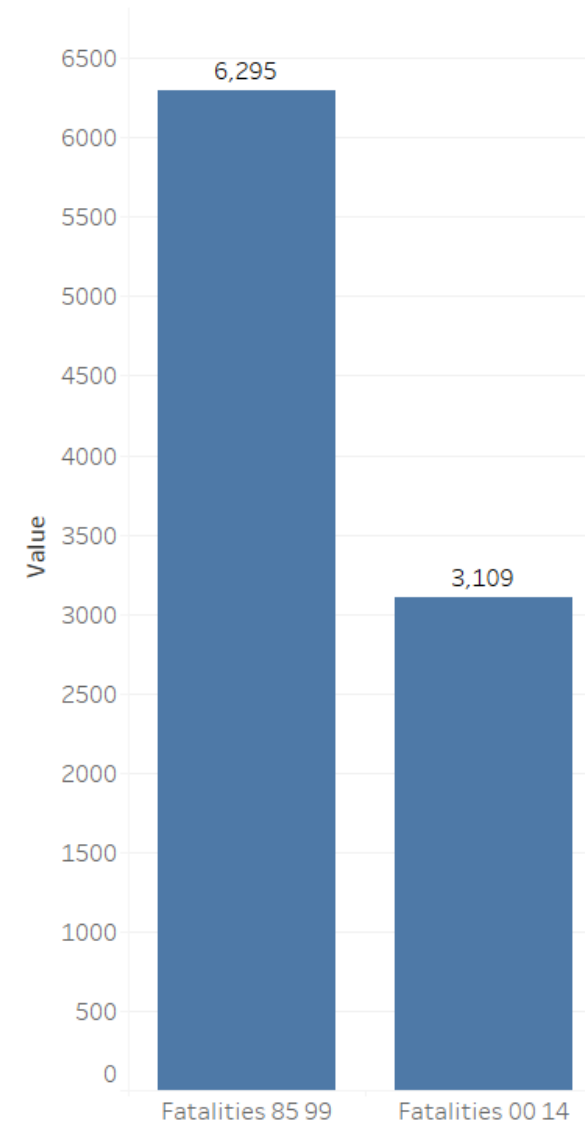
Available seats kilometers per week



Avail Seat Km Per Week as an attribute for each Airline.

World-wide
Airlines Fatalities
– Reduction in
fatalities by 50%
(1985 – 1999 vs.
2000 – 2014)

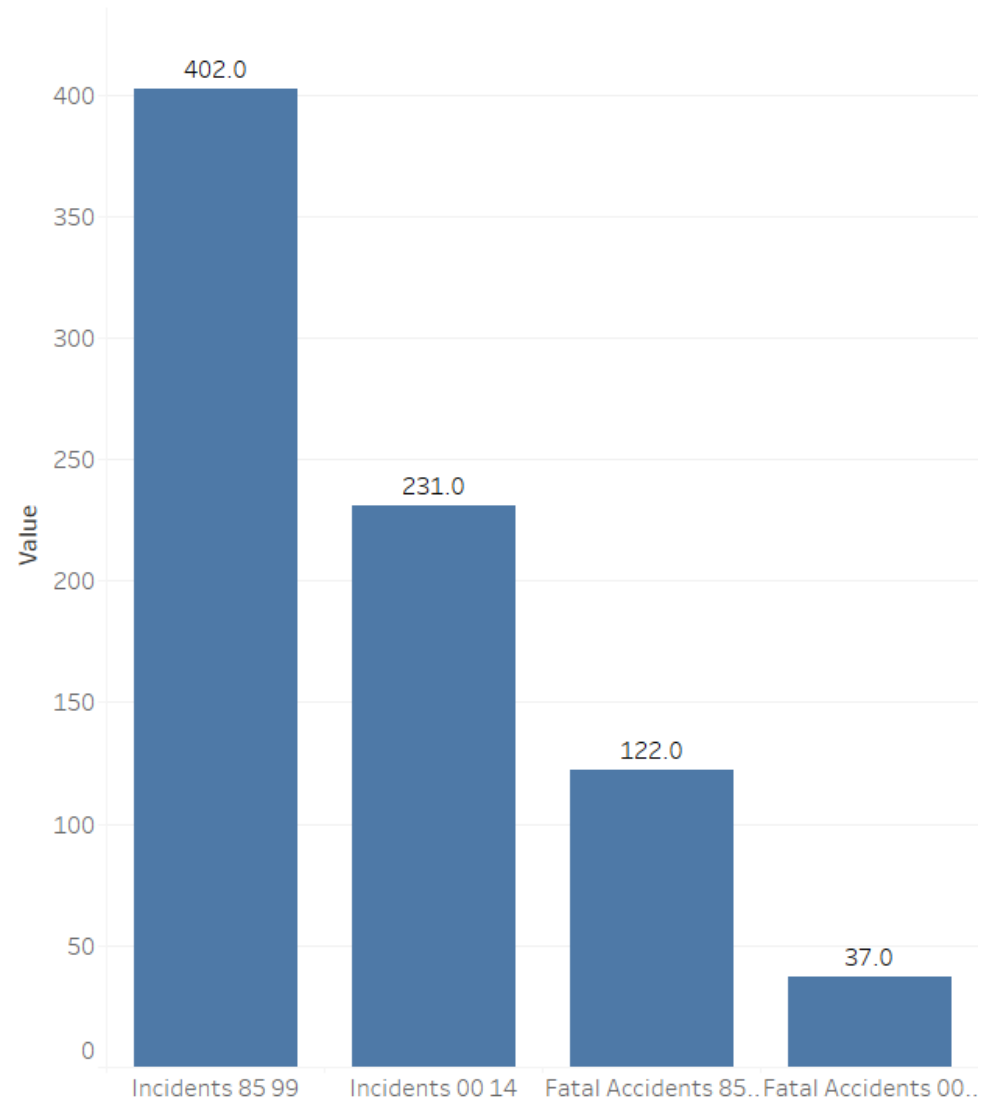
World Airline Fatalities



Fatalities 85 99 and Fatalities 00 14.

World-wide Airlines Incidents and Fatal Accidents – Huge Reductions (1985 – 1999 vs. 2000 – 2014)

World Airline Incidents and Fatal Accidents



Incidents 85 99, Incidents 00 14, Fatal Accidents 85 99 and Fatal Accidents 00 14.

Conclusion

- The information highlights the higher safety in Air travel as compared to Road travel – when it comes to total fatalities or the fatality rate per 100 million miles of travel
- Southwest Airline is amongst the very few airlines world-wide with total of 0 fatalities between 1985 – 2014
- Southwest Airline is also amongst the Top 5 airlines world-wide in terms of total seat kilometers flown per week
- We can see the decreasing trend in terms of incidents and fatal accidents and fatalities with the world-wide airlines

References

- fivethirtyeight/data. (n.d.). GitHub. <https://github.com/fivethirtyeight/data/tree/master/airline-safety>
- Fatality Analysis Reporting System (FARS), FHTSA. <https://www-fars.nhtsa.dot.gov/Trends/TrendsGeneral.aspx>
- <https://www.bts.gov/content/us-air-carrier-safety-data>