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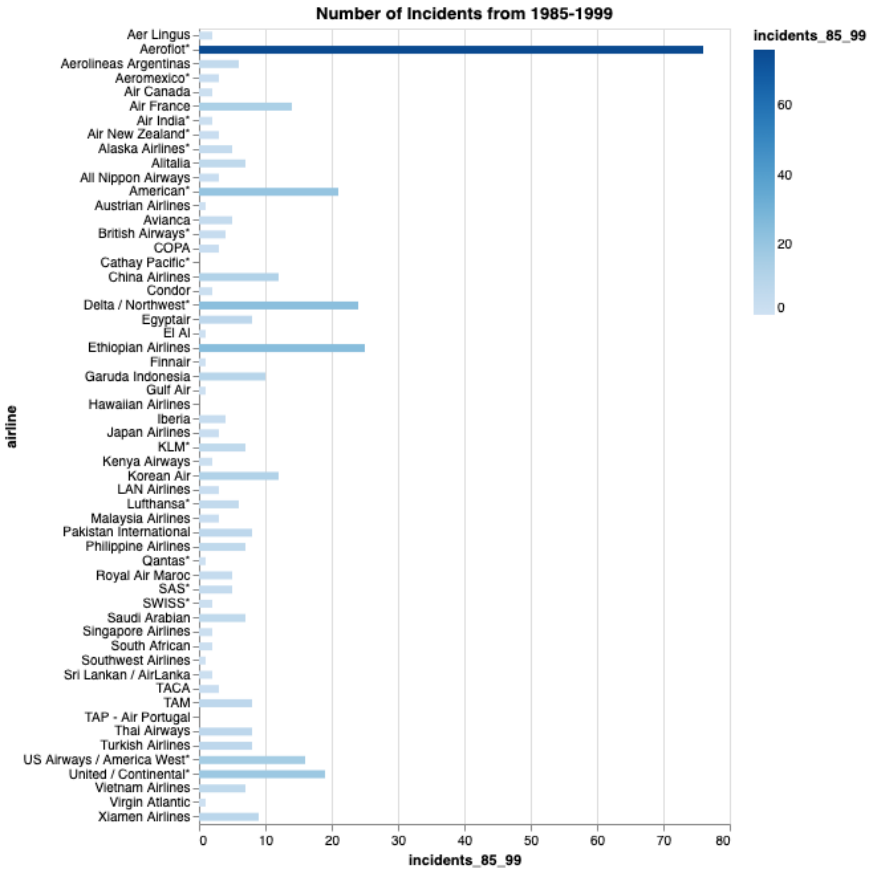
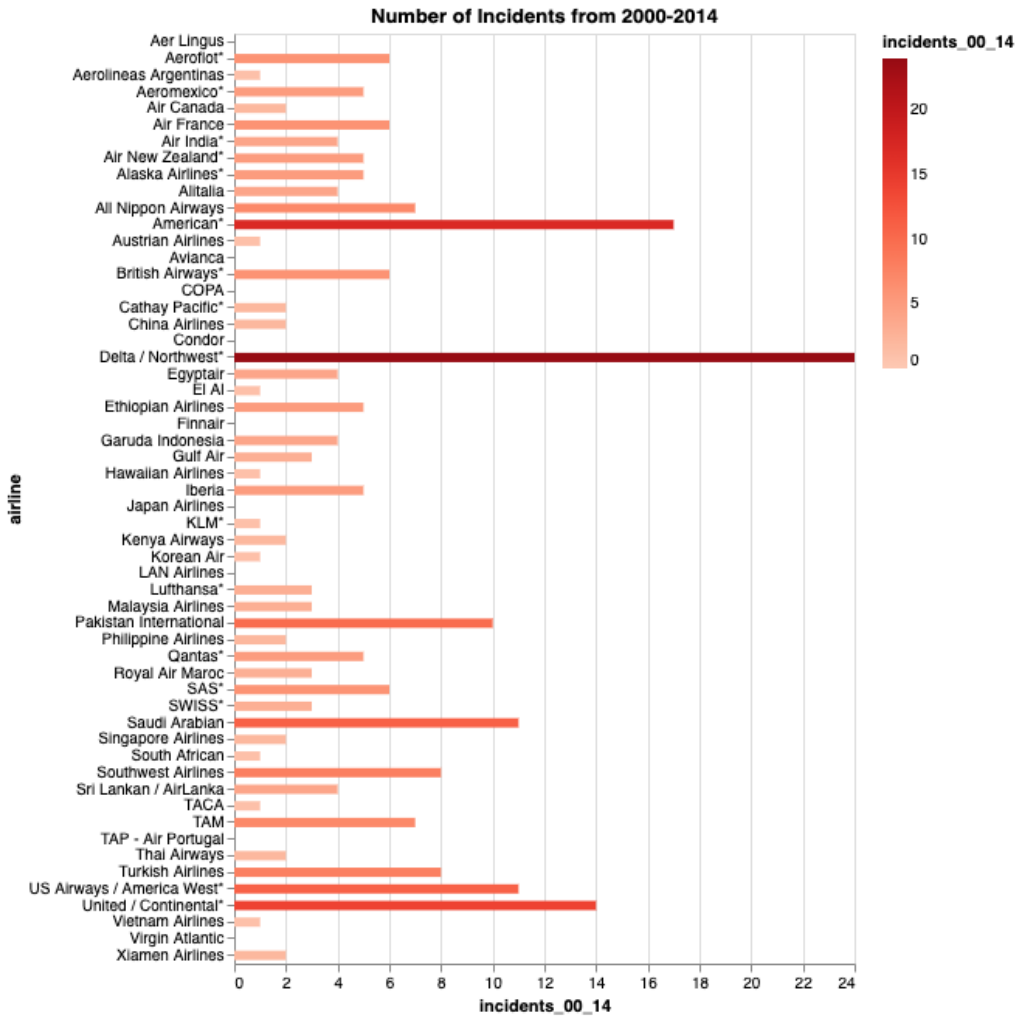
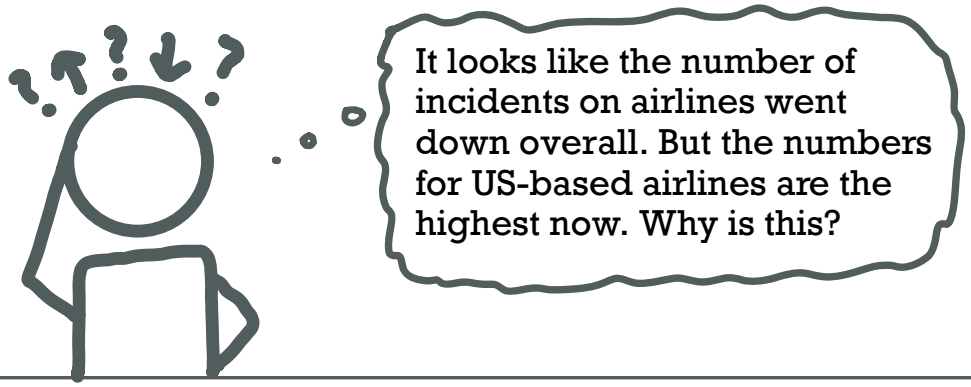
Let's look at the number of incidents for each airline from 1985 to 1999...



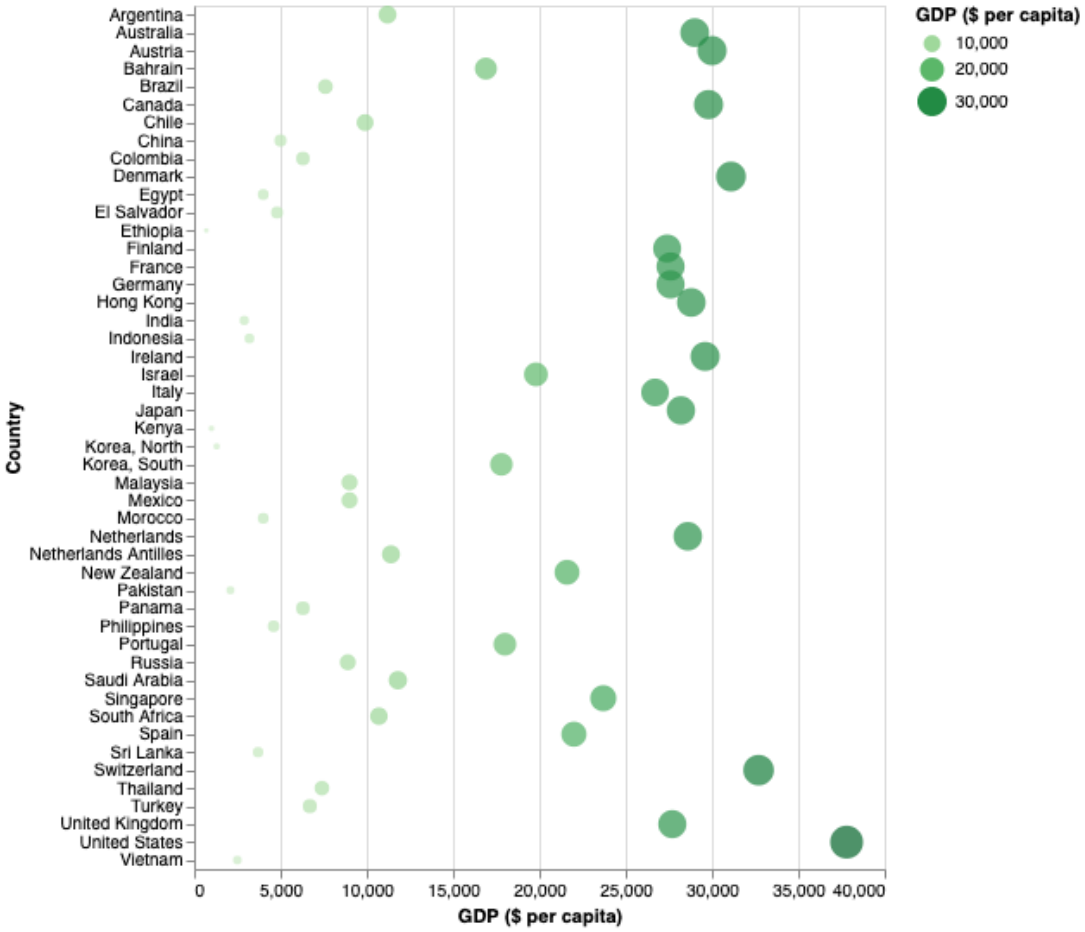
It appears Aeroflot had the most incidents…but that was 20 years ago.

Let's look at more recent data from 2000 to 2014…

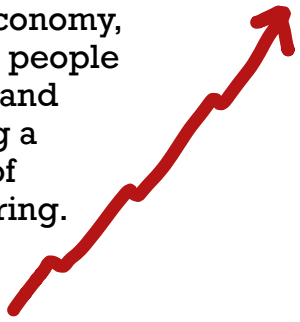




Let's look at a graph of the GDP per capita of each airline's home country to help us answer this…

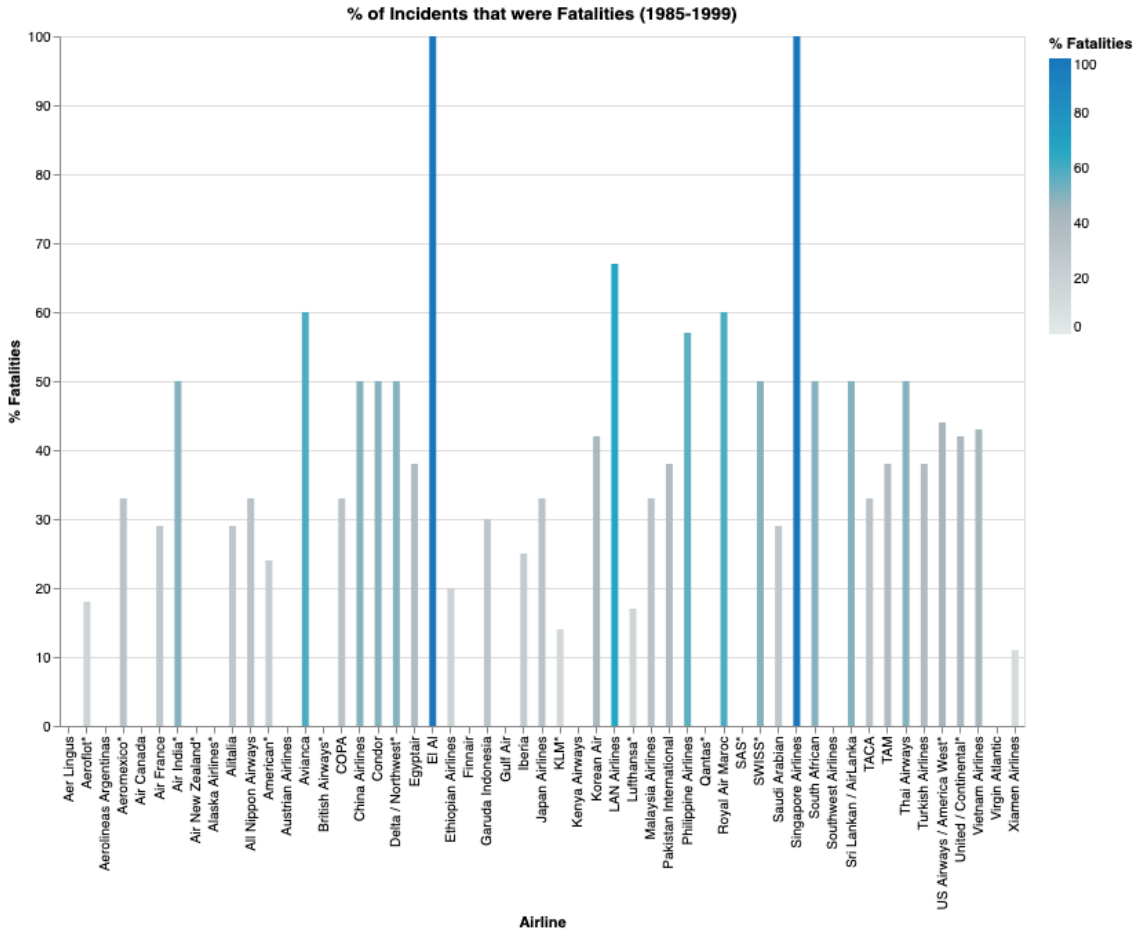


Airlines with home countries in the US have the highest number of incidents because the US has the highest GDP. This means the US has the healthiest economy, leading to more people choosing to fly, and therefore having a higher chance of incidents occurring.

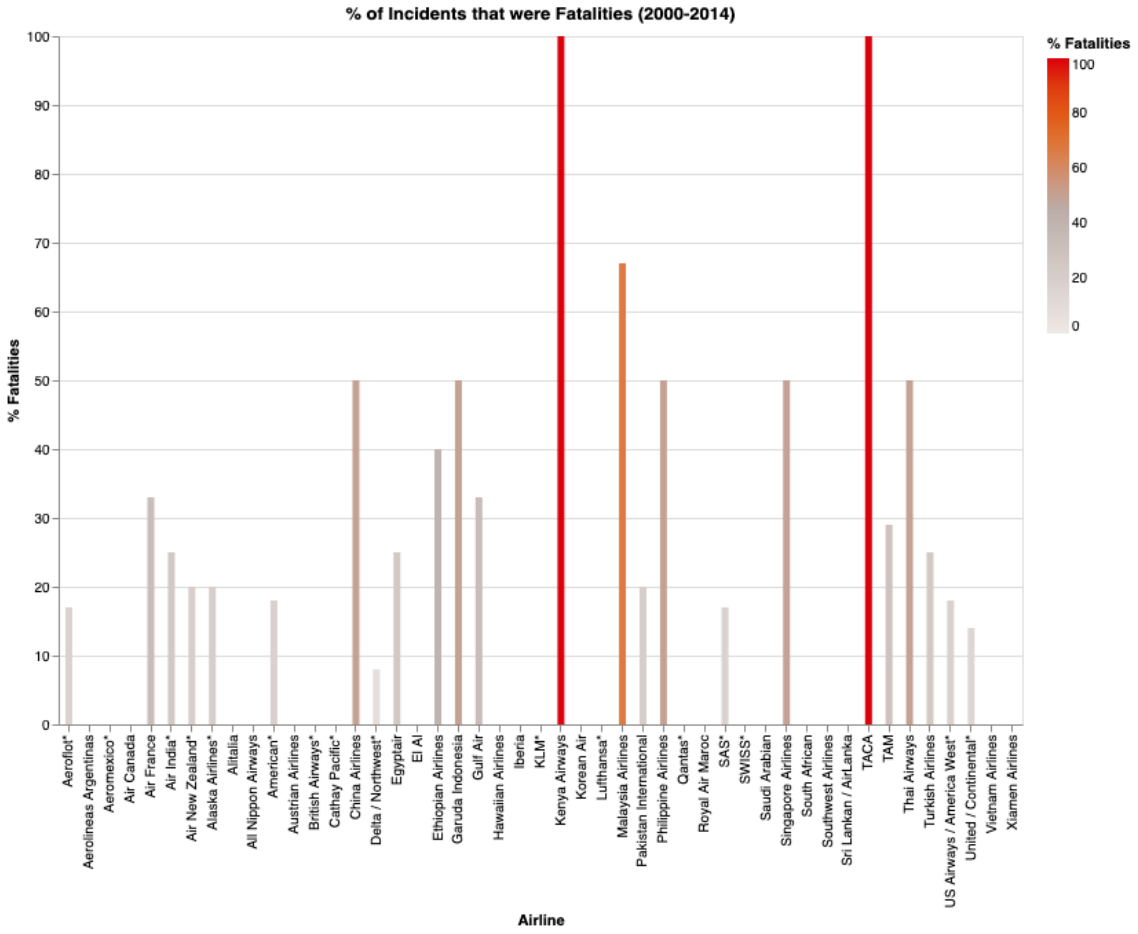


I see...now in terms of safety, how many of these incidents resulted in fatalities?

Let's look at what percentage of incidents resulted in fatalities from 1985-1999...

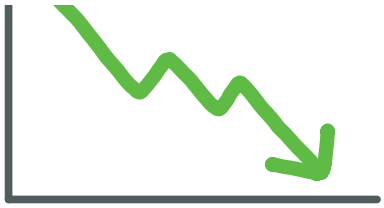


Now let's look at the percentage of fatalities from 2000-2014...



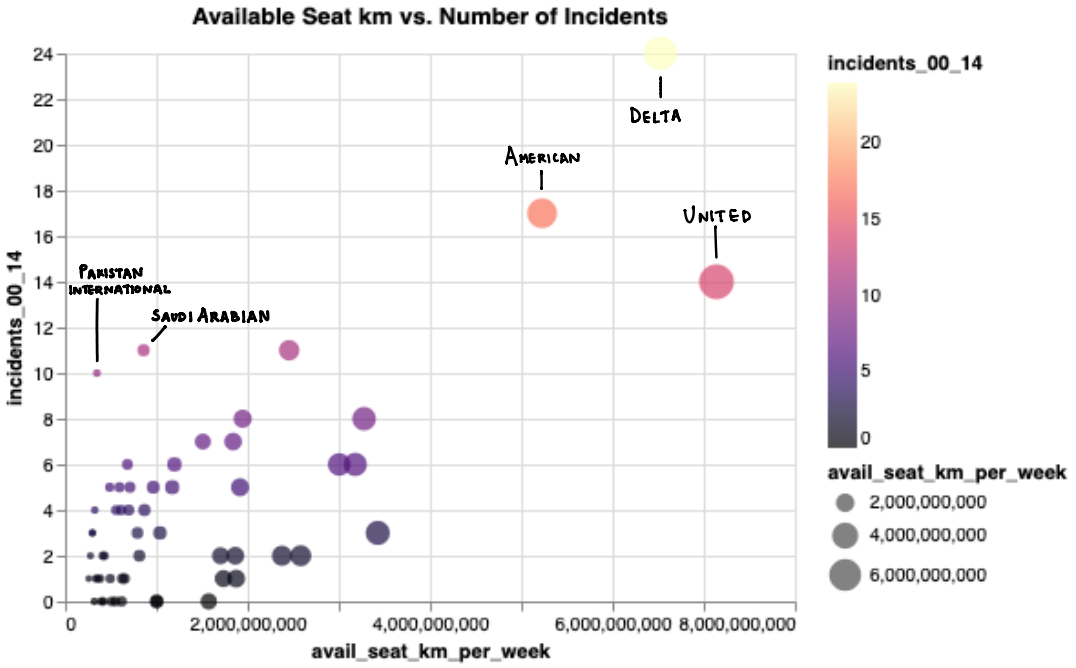
Wow, fatalities on Kenya Airways rose from 0% (1985-1999) to 100% (2000-2014). On the other hand, the percentage of fatalities for American, Delta, and United went down by 6%, 42%, and 28%, respectively. This is good news, especially since we just speculated that the number of passengers most likely rose for these airlines from 2000-2014. Overall, the percentage of fatalities appears to have decreased for most airlines.

I think I'll fly since both the number of incidents and % of fatalities have decreased significantly over the past 20 years. Now, which airline should I choose?



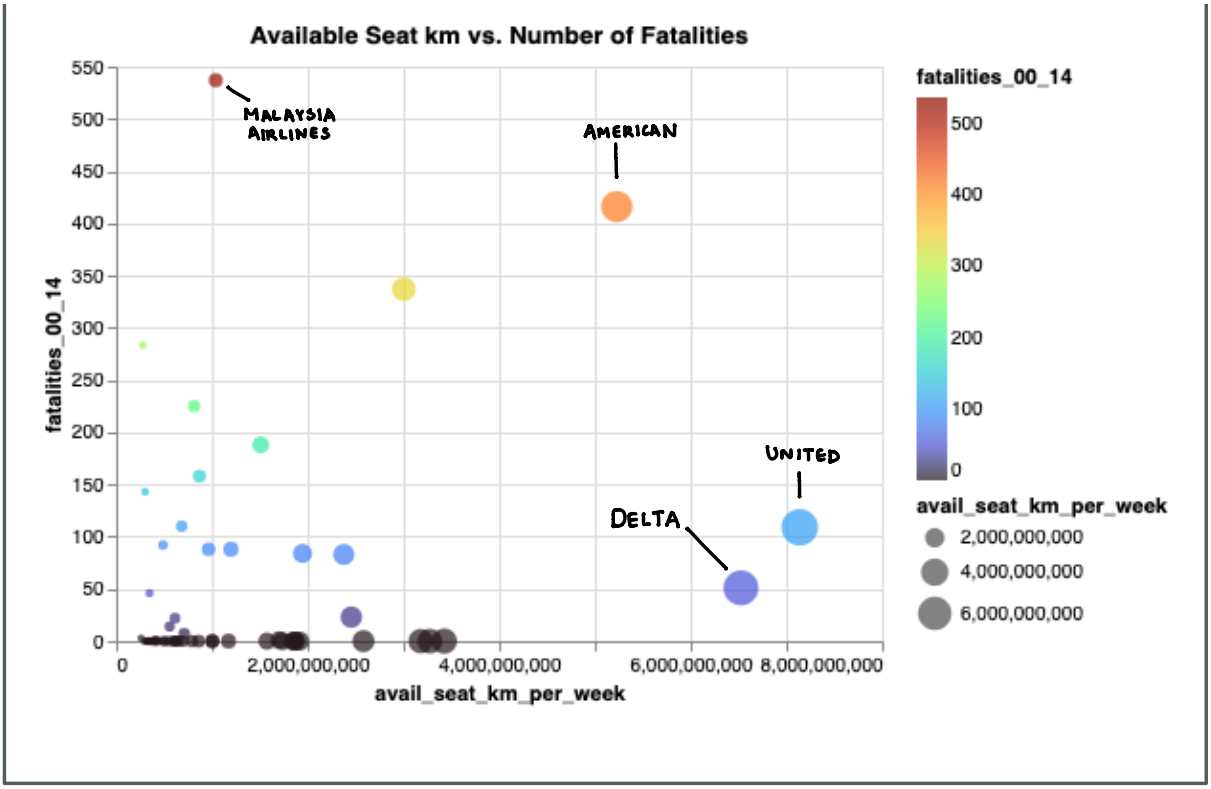
Let's look at a graph of the number of available seat kilometers* vs the number of incidents from 2000-2014 (most recent data) to help us answer this.

*Available seat kilometers = # of seats * # km an airline flies

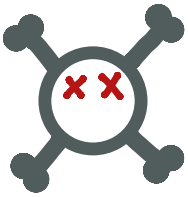


Based on the above visualization, it doesn't seem ideal to fly on Saudi Arabian airlines or Pakistan International because their number of incidents is relatively high for their number of available seat kilometers. Delta has the highest number of incidents, but it has the second highest number of available seat kilometers. United and American look the most appealing.

I wonder what the fatality-to-available seat kilometer ratio is for these airlines...



This visualization shows an alarmingly high number of fatalities for Malaysia Airlines considering it's relatively low available seat kilometers. American Airlines has a higher number of available seat kilometers, but still has a considerable amount of fatalities. Delta and United seem to be the safest since they have the most available seat kilometers and relatively low amounts of fatalities.



Based on the data that's been visualized, I think I'll fly on United because its incident-to-available seat kilometer ratio and fatality-to-available seat kilometer ratio are both low. In addition, United's home country is in the US where GDP is highest, meaning it has access to technological advancement to make flying safer!