

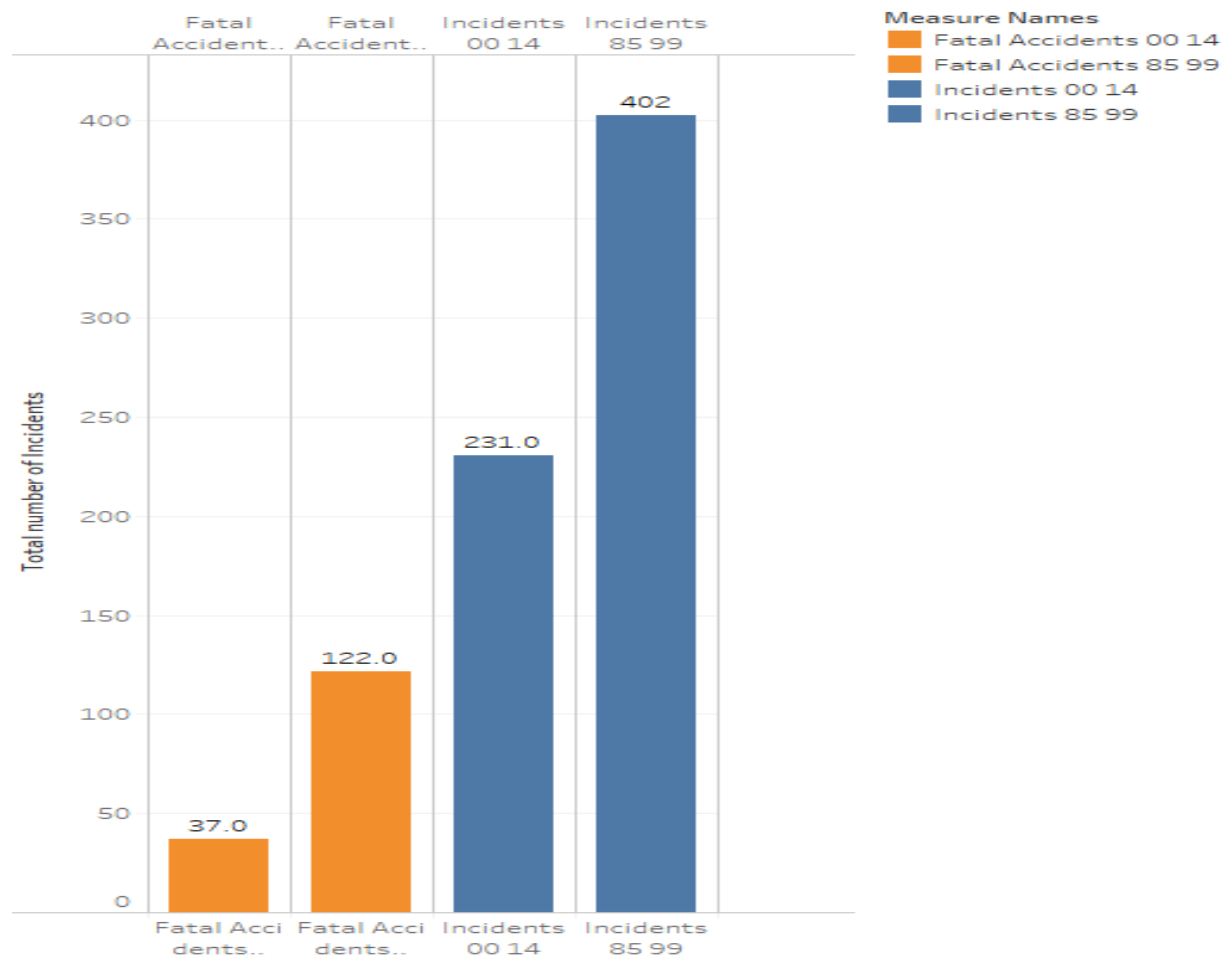
Project Task 1: Dashboard

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This week we discuss airlines' condition. Due to the unfortunate airline crashes, the media reported airplanes are no longer safe ways to travel.

1. Incidents and fatal accidents trend

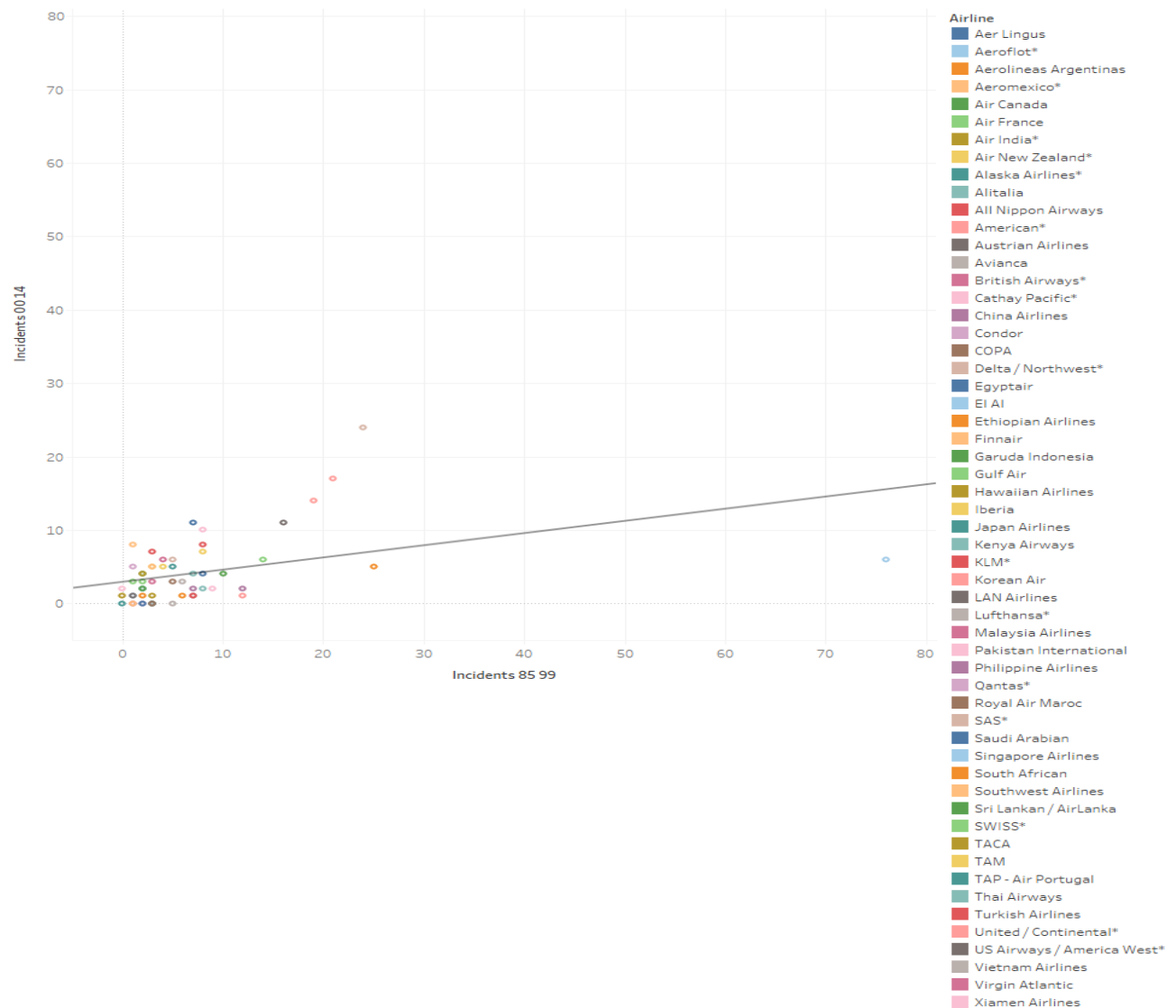
Airline Incidents Decrease



This bar chart shows the total incidents from 1985 to 1999 and total incidents from 2000 to 2014, the fatal accidents from 1985 to 1999, the fatal accidents from 2000 to 2014. Obviously, we can see not only the incidents, but also fatal accidents decrease remarkably. Noticeably, fatal accidents are much lower during 2000 to 2014 as compared to 1985 to 1999.

2. Incidents by Airlines

Incidents by Airline Are Slightly Predictable

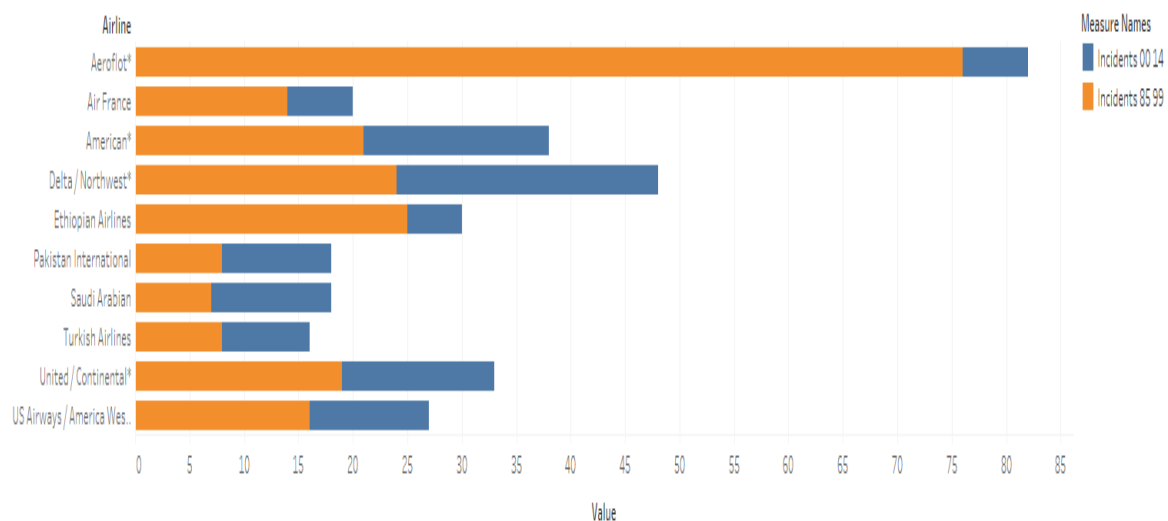


I want to find the correlation between the rate of incidents form one period to the next period.

It shows that expect some outliers, for example, Aeroflot, Pakistan International etc., most of data show a positive correlation, indicating less dangerous is expected when you taking the airline has a lower incidents rate.

3. The top 10 total incidents

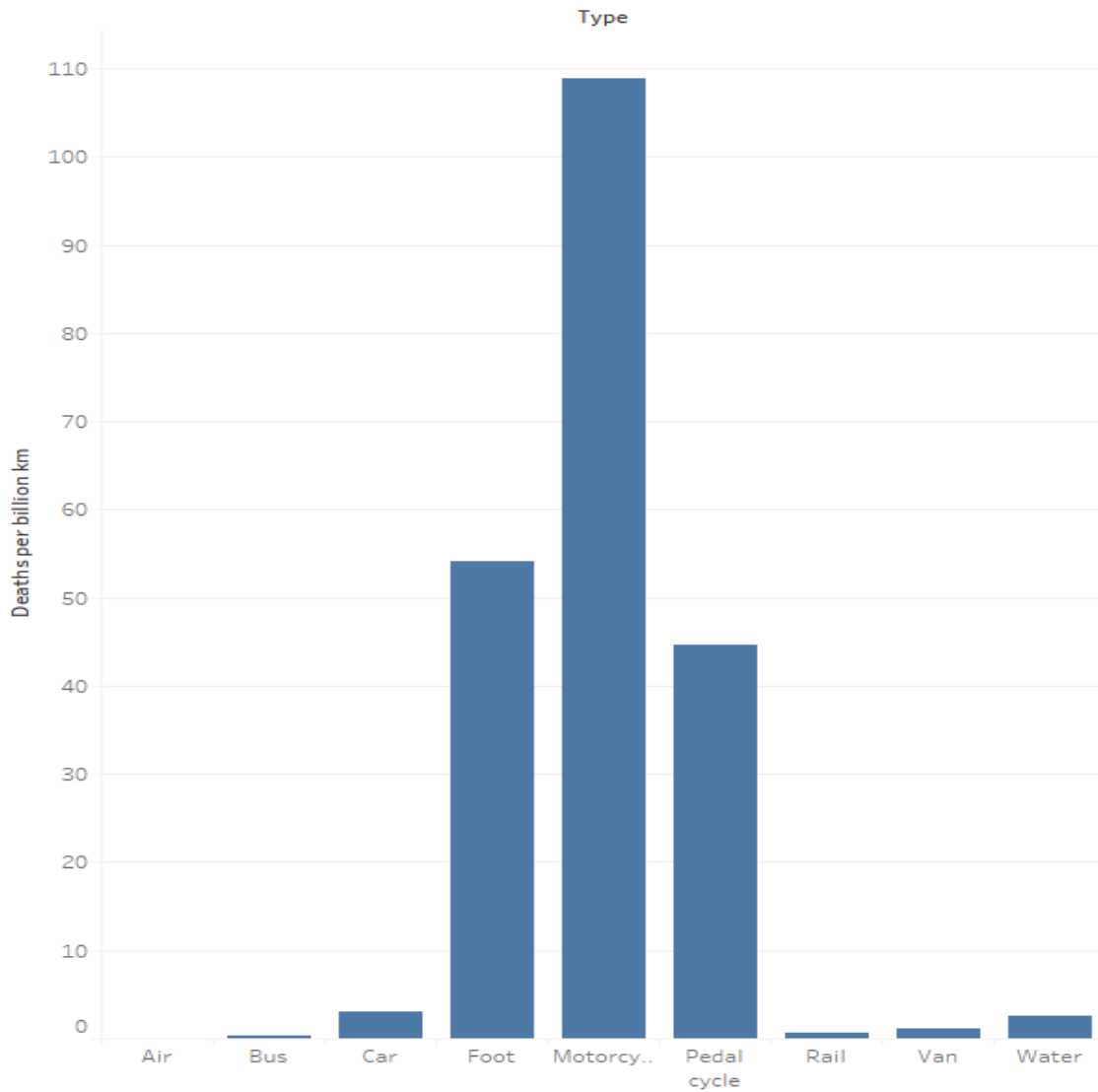
The Top 10 Total Incidents From 85_99 and 00_14 By Airlines



Aeroflot airline has the max incidents during both time periods. Some US based airlines are in this list, partly because they have greater available seat kilometers, however I believe there is still room for improvement to lower the incidents.

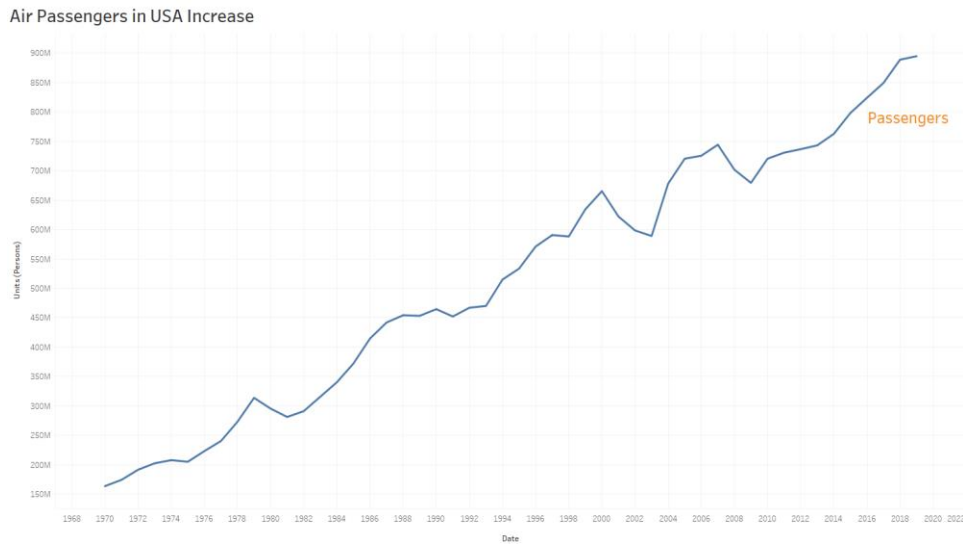
4. Death per billion km traveled

Death Per Billion Km Traveled



This bar plot displays deaths per billion kilometers traveled. Among all of types of transportation listed, air has the significantly lower death rate as compared to other transportations. Thus, it is suspicious to question the safety concern regarding air transportation recently.

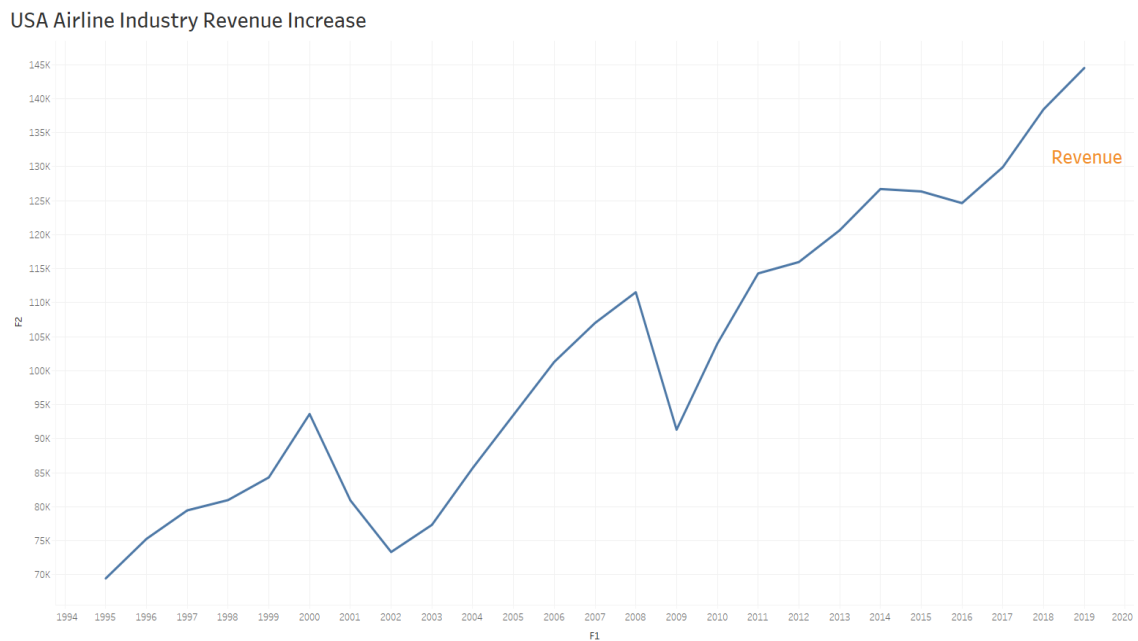
5. Air passengers' trend



This plot displays the number of air passengers in the USA from 1970 to 2019. The overall trend is rising. Especially, in the recent decade passengers continued to grow.

More and more people chose to travel through air.

6. USA airline industry revenue trend



This plot shows the airline industry revenue from 1995 to 2019 in USA. The overall trend is rising. Both the number of passengers and revenue are increasing. Therefore, sales of air are headed up.