

First I plan to reassure my internal team that airline sales are continuing to grow globally, so if we nip this problem in the bud and better than our competitors, we will be in a good position financially. At the same time, the number of fatalities are decreasing, making the ratio decrease at a rapid rate. I used line charts for these two charts to show changes over time. I used green for the color of growing number of passengers per year to indicate positive change. I used blue and orange for the second chart so that you could easily tell the lines apart. I included trendlines for the data on fatalities and the number of people aboard crashes each year, to show the downward trend even though the numbers do bounce up and down.

Next, I wanted to do side-by-side comparisons of the number of fatalities and incidences per airline from 85-99, and from 00 - 14 to show how these numbers have changed between these two time periods. I used scatter plots for both of these to show multiple features in the data. The first two graphs show how the number of airlines with over 200 fatalities has gone down. I wanted those points with over 200 fatalities to stand out, so I plotted those in red and the rest in gray. I also wanted to point out that the averages for both the number of fatalities and incidences per airline has gone down between the time periods, so I added the average reference lines to the graph and labeled these lines.

Finally, I plotted the number of fatalities by location. I again plotted the top three locations in red to stand out and included the labels for these (Russia, Brazil, and Colombia). I included a box and whisker plot so you can see how high above the norm these numbers are. Russia has by far the highest number and I learned that Aeroflot, the largest airline of Russia (formerly the world's largest airline), has had five times more passenger deaths than any other airline. In 2013, AirlineRatings.com reported that five of the ten aircraft models involved in the highest numbers of fatal accidents were old Soviet models.

#### Reference:

Wikipedia. "Aeroflot accidents and incidents." Retrieved Feb 2020 from [https://en.wikipedia.org/wiki/Aeroflot\\_accidents\\_and\\_incidents](https://en.wikipedia.org/wiki/Aeroflot_accidents_and_incidents)

#### Supplemental Data Sources:

<https://data.world/data-society/airplane-crashes>

<https://data.world/hhaveliw/airplane-crashes-1908-2009>