Title: Six New Metrics Visualized (Task 3)

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Course: DSC640

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Description: Six new metrics, with design methodology defended/justified, sources, link to blog post and Github repository

I wanted to make the upward segments right after the red dots green in color (to signify a gain) but was not able to figure out how to do it in Inkscape. When I did it in Excel, the dates would not justify with the number of miles when I put the x axis at 10-year intervals. So even though this chart has a typo, I have to live with it because if visualizes the data the best and I cannot seem to re-create it.
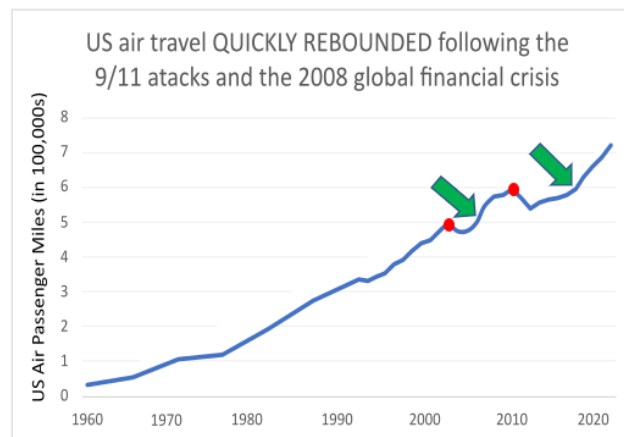

The original version of this horizontal bar chart had some of the data labels inside the bars and some outside, with white text inside and black text outside. I corrected that and added the source to the chart.
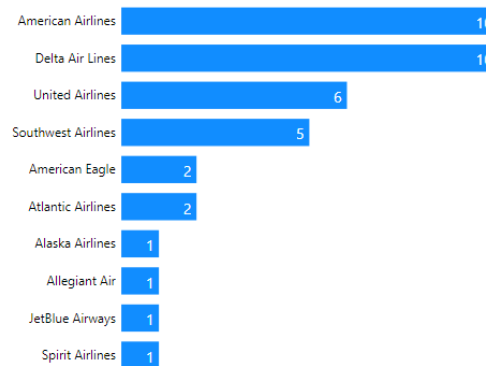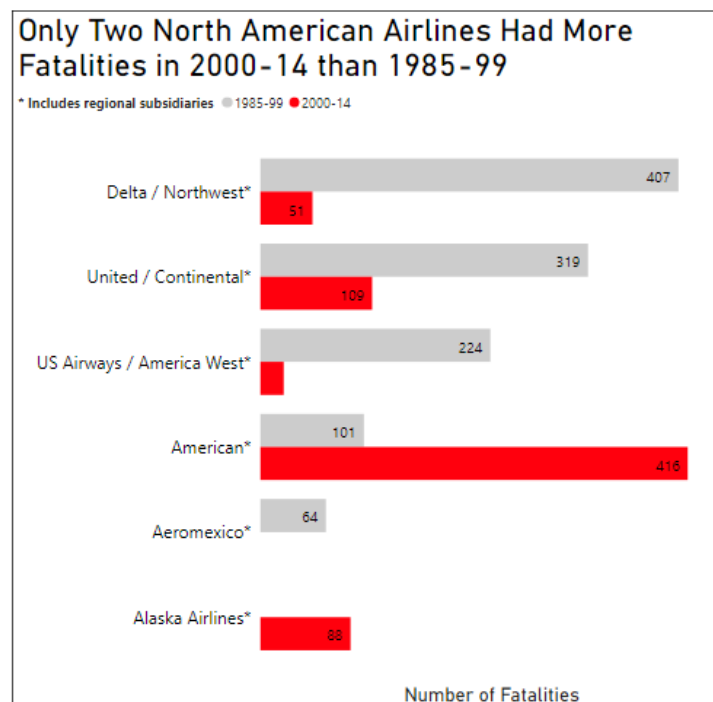
My original chart had a couple things that needed correcting, including forced truncation of airline names and no explanation for the *'s.

Only Two North American Airlines Had More Fatalities in 2000-14 than 1985-99

● 1985-99 ● 2000-14
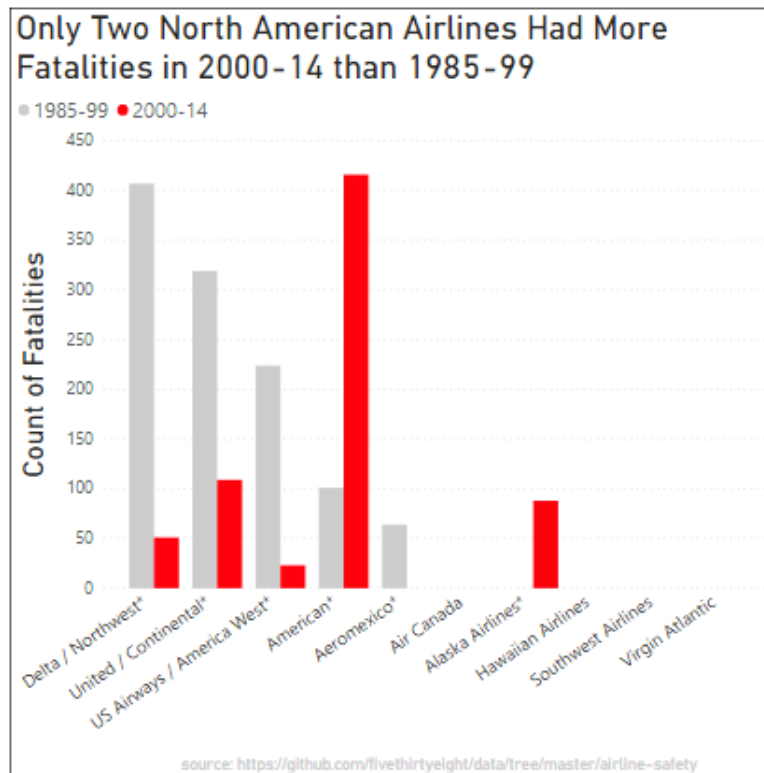
After fixing the obvious gaffes, I decided to try it as a horizontal bar chart. I also omitted the 'zero event' airlines. I like the looks of the horizontal chart for this data:

Only Two North American Airlines Had More Fatalities in 2000-14 than 1985-99

* Includes regional subsidiaries ● 1985-99 ● 2000-14

Delta / Northwest* — 407, 51
United / Continental* — 319, 109
US Airways / America West* — 224
American* — 101, 416
Aeromexico* — 64
Alaska Airlines* — 88

Number of Fatalities

For the tree chart, I will have to put the title on the PowerPoint slide. I did not like how it forced the numbers in the rectangles to be smaller. Also add source:
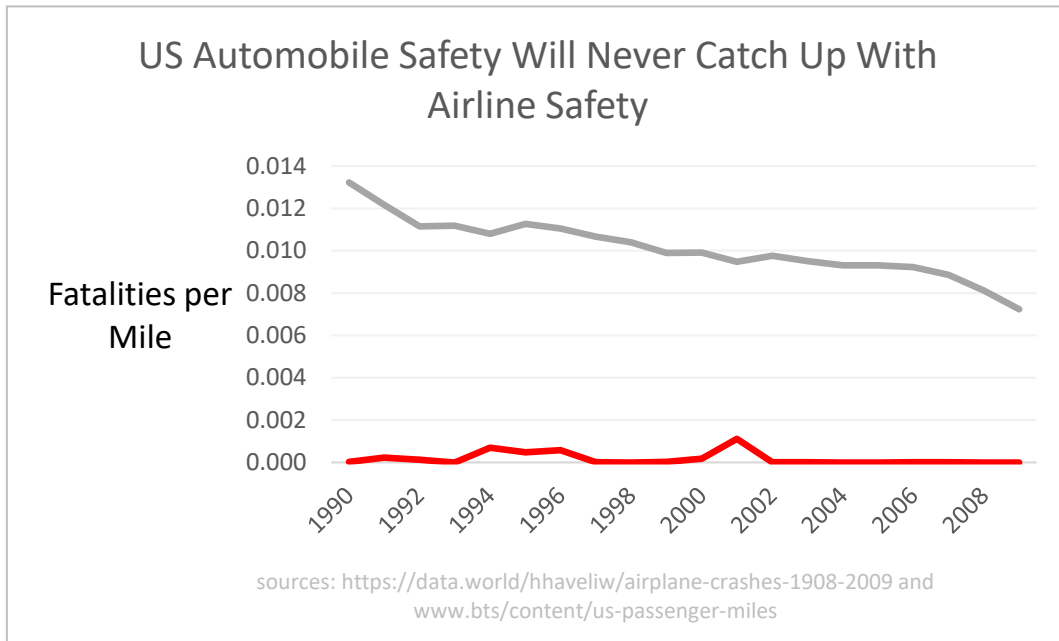
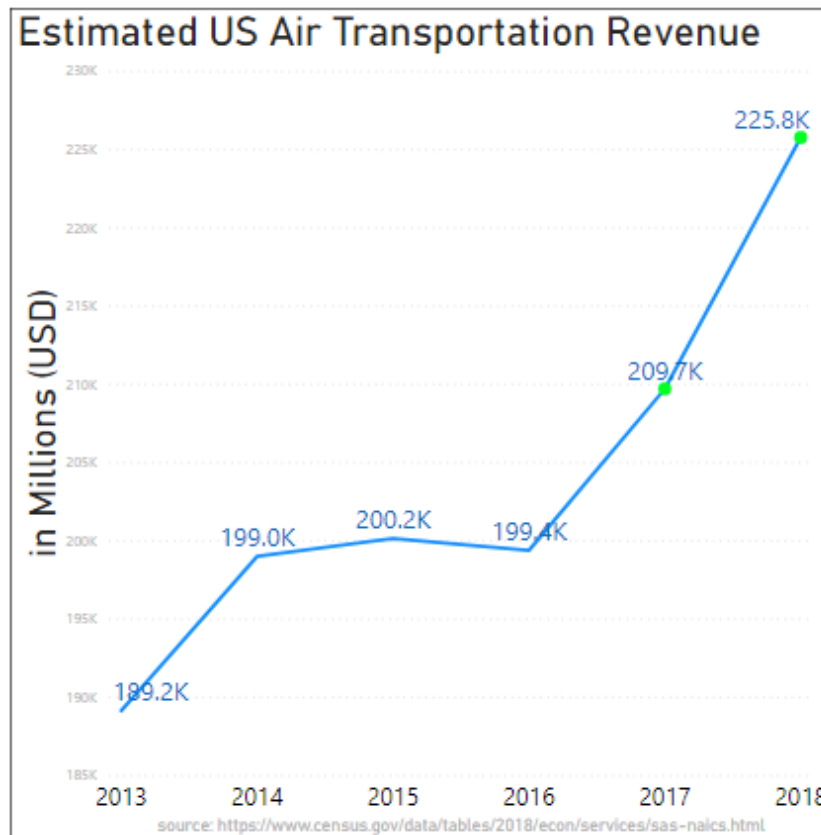US Airline Fatal Incidents 2001-2018
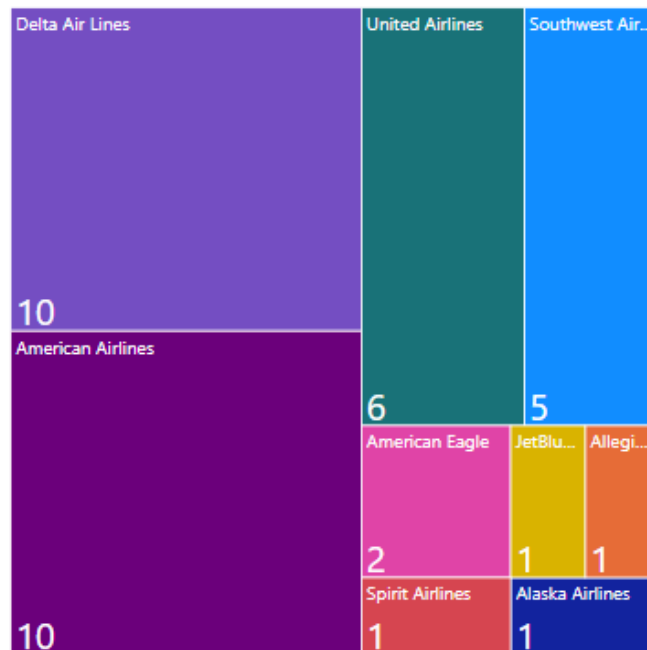
This is a subset of data from my original chart, which seemed to emphasize East Coast deaths, of which many listed were due to things like cliff gliding and airplane-assisted bungee jumping. (I made that one up).
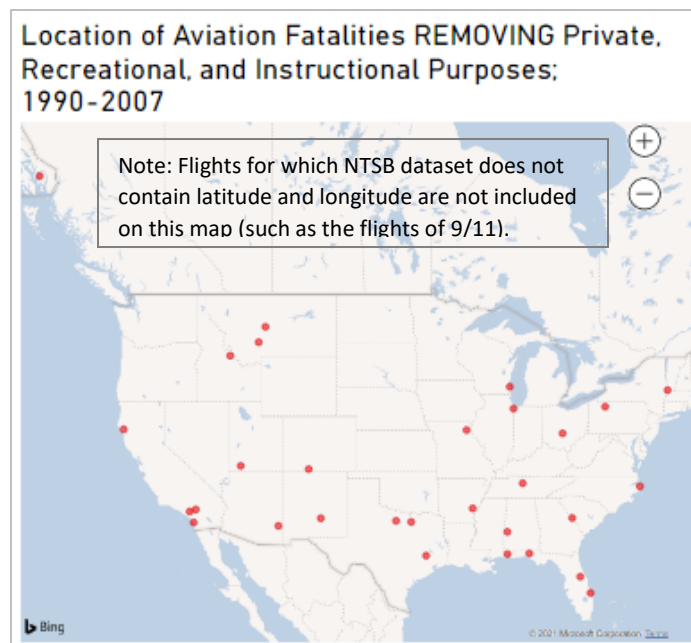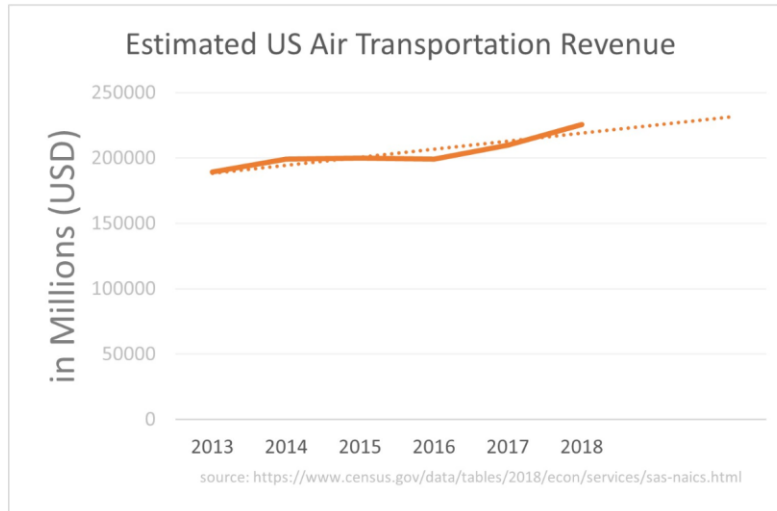

Sometimes I get tired of trying to read vertical text. I did not include this in the blog post, but I do find it easier to read. The problem, I think, is that is emphasizes the y axis title over the data itself.

US Automobile Safety Will Never Catch Up With Airline Safety

Fatalities per Mile

I made a couple simple changes to a simple chart. Spell out 'estimated.' Add green dots to what appears to be astronomical growth points.

Estimated US Air Transportation Revenue

in Millions (USD)

225.8K

209.7K

200.2K

199.0K

199.4K

189.2K

2013   2014   2015   2016   2017   2018

I realized that the estimated revenue chart above was misleading due to the narrow range of the y axis. When I changed the starting point to zero, the chart loses emphasis, but gains credibility:
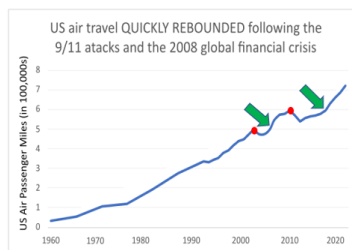
Estimated US Air Transportation Revenue

source: https://www.census.gov/data/tables/2018/econ/services/sas-naics.html

I also added a projection line.

Blog post location:

https://consultationbybranch.blogspot.com/2021/02/overcoming-media-induced-fear-to-put.html

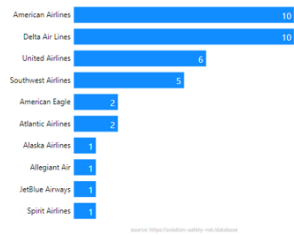**Github:** https://github.com/jobranch2019/DSC640_Airline_Safety

References:

Deane, S. (2020, September 29). *Fear of Flying Statistics (2020 Data)*. Stratos Jet Charters, Inc. https://www.stratosjets.com/blog/fear-of-flying-statistics-trends-facts/.
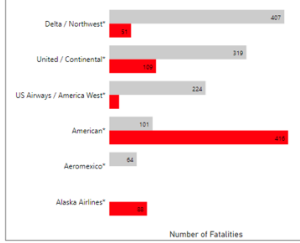

US air travel QUICKLY REBOUNDED following the 9/11 atacks and the 2008 global financial crisis

https://www.bts.gov/content/us-passenger-miles

Incidents Reported to ASN 2001-2018

https://www.aviation-safety.net/database

Only Two North American Airlines Had More Fatalities in 2000-14 than 1985-99

data/airline-safety at master · fivethirtyeight/data · GitHub

US Airline Fatal Incidents 2001-2018

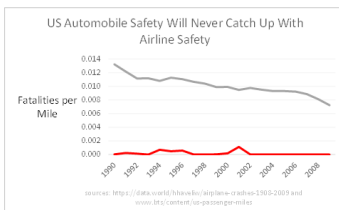https://www.aviation-safety.net/database
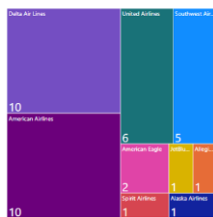
Location of Aviation Fatalities REMOVING Private, Recreational, and Instructional Purposes; 1990-2007

https://www.ntsb.gov/_layouts/ntsb.aviation/index.aspx

US Automobile Safety Will Never Catch Up With Airline Safety

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

and www.bts/content/us-passenger-miles

Estimated US Air Transportation Revenue

https://www.census.gov/data/tables/2018/econ/services/sas-naics.html