

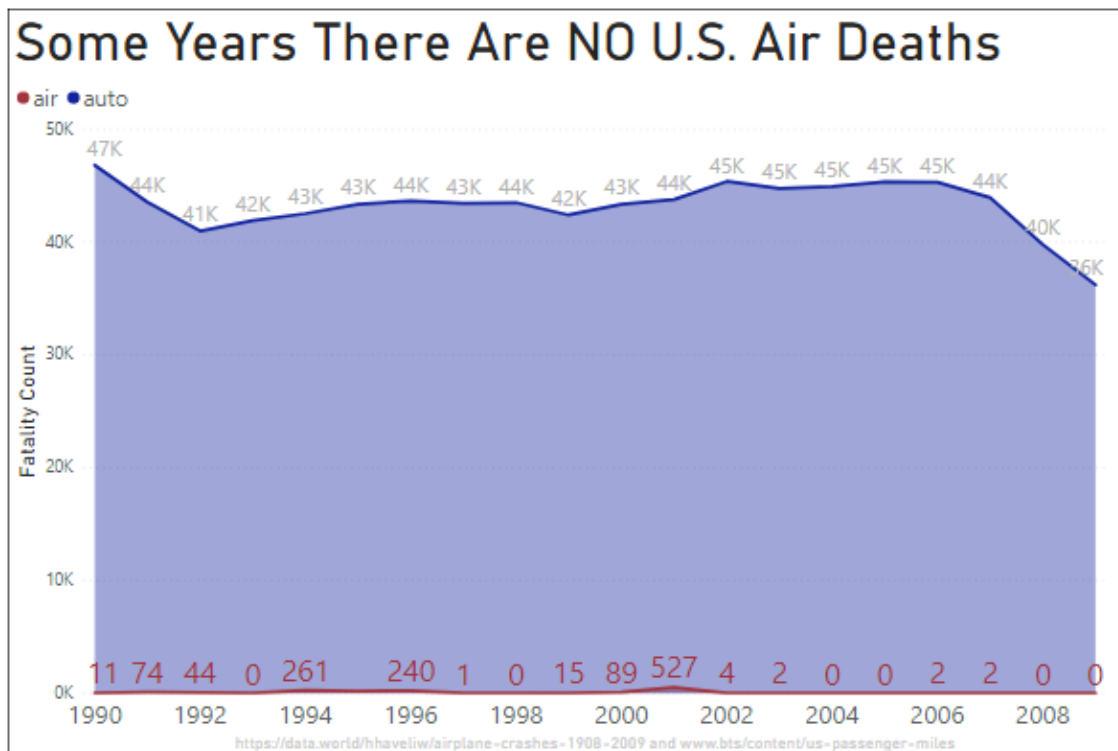
Title: Six New Metrics Visualized (Task 2)

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Course: DSC640

Date: January 24, 2021

Description: Six new metrics, with design methodology defended/justified, and sources



-used Power BI because I can use what I learn at work, where we do not have Tableau

-used stacked area chart that we are currently learning to prepare in Python and R

-bolded 'NO' to emphasize that point

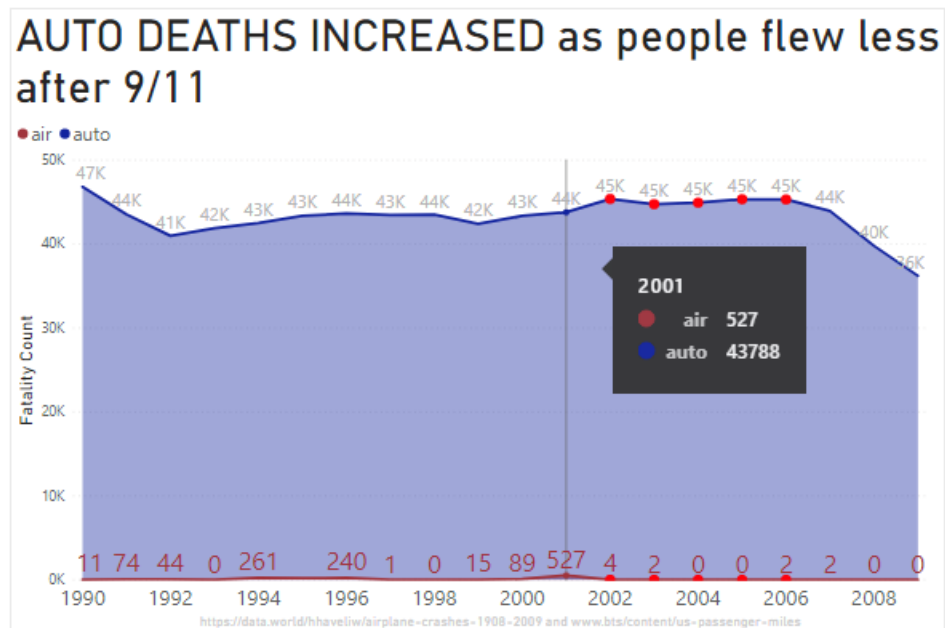
-changed air death line and data to red in attempt to make them stand out, as they are at the bottom of the chart, near the dates

-added source in lightest gray at bottom in attempt to not detract from chart

-lightened auto death datapoints, as that is not the area of first focus

-lightened all axis labeling in attempt to draw viewer's focus to the red air death numbers

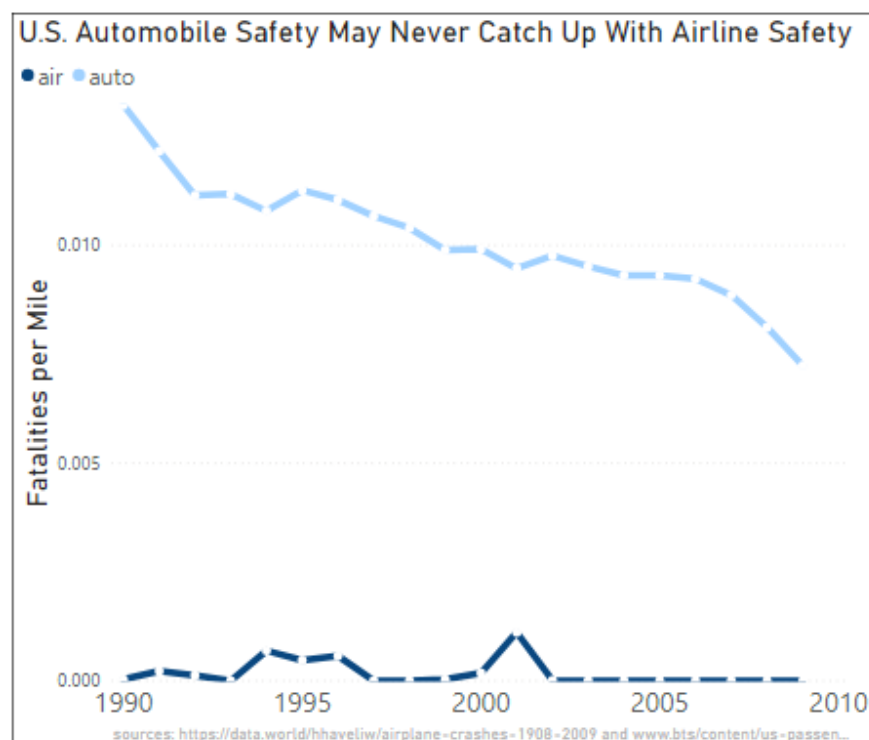
Same chart, different focus:



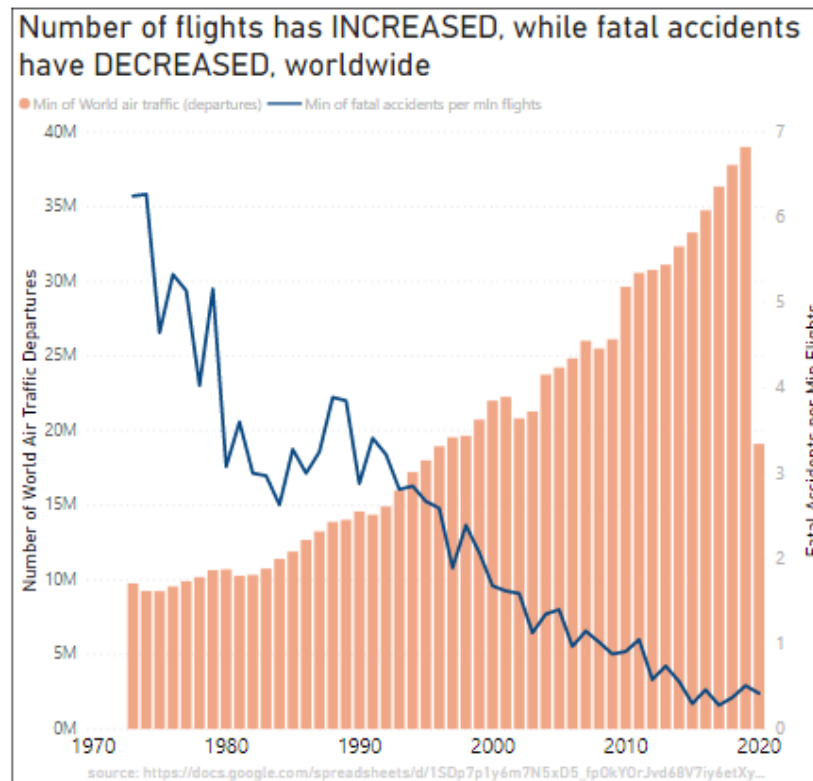
-added date to the legend, then turned it off, which enables a Power BI user to hover over the chart and see that element

-using red dots to point out that more people die (from auto accidents) when fewer people fly

-I did not see how to remove the red dots from the air death data points

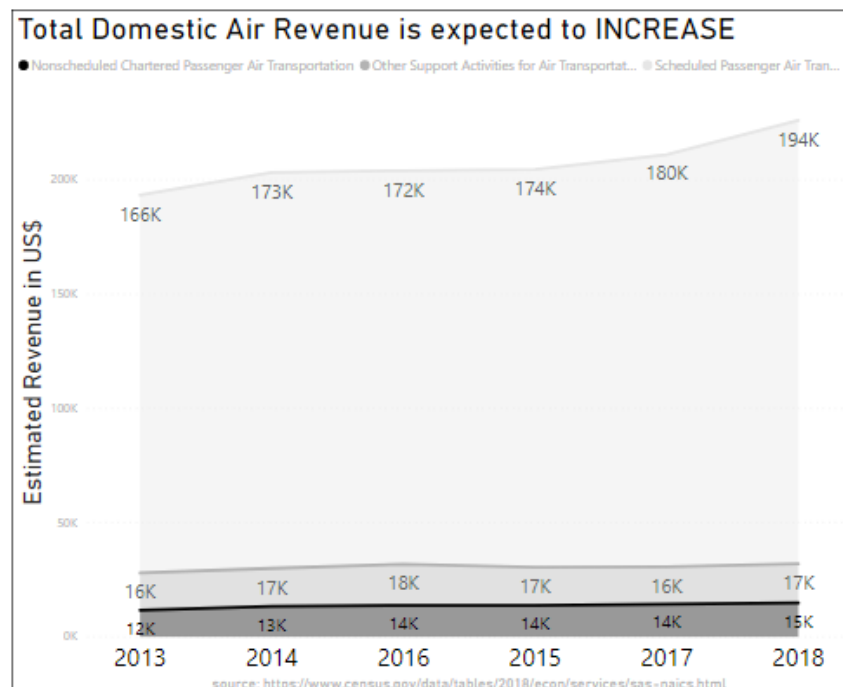


-experimented with white markers on these lines. I like how it makes it clear that the years 2002 forward are all zeros. (although it also might just look like a dashed line to people).



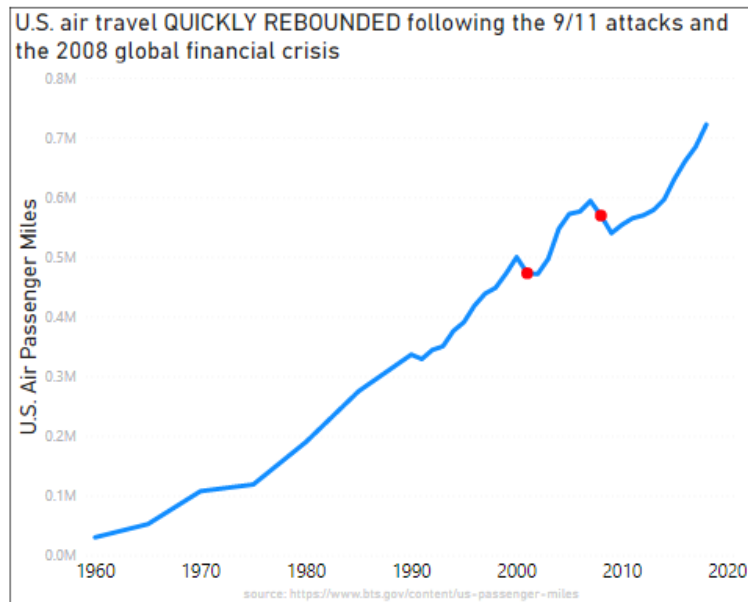
-I left the x and y axis titles small on this one, assuming that the viewer would be able to figure out which is which based on the title of the chart.

-I cannot figure out how to change the title of the legend and secondary y axis in Power BI. That 'Min' in there is confusing.



-tried stacked area chart with more variables, using data labels. Not sure if I like it.

-still do not know how to change the legend elements' names without changing the data table itself

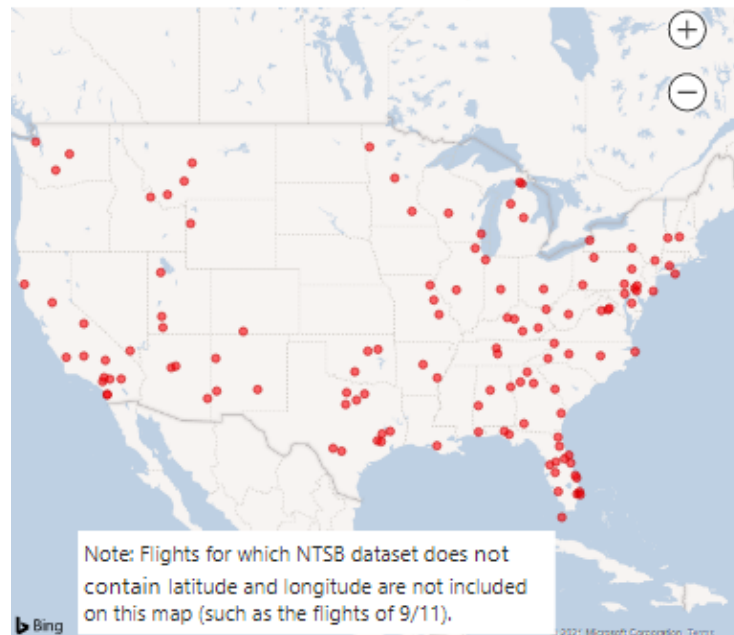


-lightened y axis values, as the movement of the line is what I want the eyes drawn to

-thought about coloring the *segments* of the lines after 2001 and 2008, but realized I would probably still need to call out the actual 2001 and 2008 data points anyway, so just left it at that

-made the line bolder to add at least a little visual interest to this chart

Location of Aviation Fatalities; 1990-2007

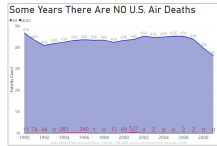


-I like the looks of this chart, but it requires a lot of explanation. I only included U.S. carriers, and I removed machines that were 'amateur built,' but I left in 'instructional,' 'recreational,' and 'private' purposes of flights. Helicopter accidents are also included.

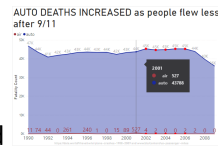
-used red dots for the contrast

-had to add the note when I discovered that some high-profile crashes in the NTSB dataset did not include latitude/longitude coordinates

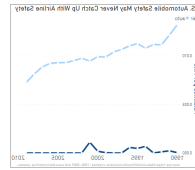
References:



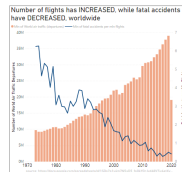
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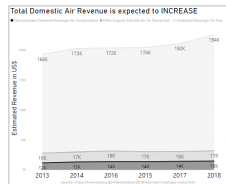
and



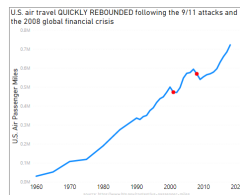
<https://data.world/hhaveliw/airplane-crashes-1908-2009> and www.bts.gov/content/us-passenger-miles



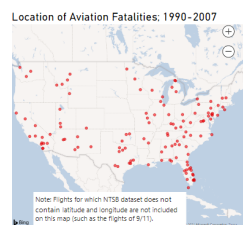
https://docs.google.com/spreadsheets/d/1SDp7p1y6m7N5xD5_fpOkYOrJvd68V7iy6etXy2cetb8/edit#gid=1448957446



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



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



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