**Data Viz Individual Project Problem Statement**

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**I. Background**  
While literature and news articles show that in recent years there has been an increase of high-profile shootings in the US, a New York Times articlefrom 2015 (<https://www.nytimes.com/2015/10/09/upshot/gun-deaths-are-mostly-suicides.html>) states that over 60% of gun-related deaths are actually suicides, not homicides. This is consistent with graph 10 in the Vox article, which shows that more gun deaths are suicides rather than homicides. The article also brings up a good point: despite being more common, suicides draw less attention because they are lower profile and are usually not covered by media.

**II. Data Product**Because suicides due to gun violence do not draw as much awareness from the public as homicides do, I decided to focus on graph 10 from the Vox article, which compares the suicide numbers to homicide numbers. Using and improving on graph 10 is a good way to show how data can draw awareness where it is otherwise lacking, given the visualization is generated properly.

Graph 10 initially looked like one of the better graphs in the article because it was relatively clean and simple, but then I realized some aspects that made it less impactful: the bubbles on the lines are too big. This is distracting and leads to inaccurate comparisons by eye. Additionally, I thought the changes from year to year could be emphasized more by stretching out the scale. One thing I really like about graph 10 is that the numbers for the two lines show up when the mouse hovers over the points. This is a quick and easy way for the reader to compare numbers for specific years.

I would like to retain the hovering effect, but I would create a smooth line graph without any bubbles. The Y-scale can also be changed to 1K instead of 2K so we can more easily observe smaller changes. Additionally, I would label every other year on the X-axis instead of every 3 years. This would make it easier for the reader to get an intuition about time.

I have found data on gun violence homicides and suicides for the US from 1999 to 2015, obtained from the CDC WISQARS site. This data is missing 2016 but other than that, it should be the same as the one used for Graph 10.

**III. Deceptive Data Product**To create a deceptive version of Graph 10, the Y-axis could start at something like 6K rather than 0, which will make some changes over time seem overly exaggerated. Additionally, the graph could be decomposed into two separate line graphs, each with a different Y-scale, which will be very misleading.