## **Individual Project**

## **Problem Statement**

This literature used 17 maps and charts as support to discuss America's unique gun violence problem. Most of the visualization product is effective; it gave me a clear understanding about what the author is trying to explain was, their label and the axis is clear, and description section also very helpful for understanding the concept. However, I think some of the graphs are not very effective, like #1, #15, #16 and #17. For graph #1, the chart uses person's figure make the graph looks impressive, but I feel it is a little waste of space, I need to scroll up and down couple times to have a full vision of the graph. I believe a simple, more objective design for visualization process is essential. For graph #16, it involves lots of words, I feel it lost the meaning of the visualization, and wordiness gives me a hard time to follow the author's idea.

After the first few charts, I felt confused about what is the purpose of this article and what all the graphs want to support. No guns? More restrict gun control policy? Or political issues between republican and democracy? Until I carefully review the whole article, I still cannot have a clear answer this question. Hence, I have the following thoughts about visualization process:

• First, as an author, I need to define what is the purpose of this article, then break down the big topic into several small categories and use visualization tool to support each category and step by step to reach my primary purpose.

- Understand the "customer." In this case, customers are the readers. Then I need to know
  the characters of my readers. Are they students? Technical experts? or financial analyst?
   For different customer group, I may need to use different strategies to approach primary
  main focus. Also, for each small category, the graph style and the presentation content
  will be different depends on different customer group.
- Conclusion first or conclusion last? There are mainly two ways, if the author states conclusion first, then readers will have an apparent understanding about what this article about is at the very beginning, and method could keep readers in the right track of what's all the graphs are about to support. If the author states the conclusion last, this could let readers generate their thought about the primary purpose of this article through all the graph. The positive part is once the reader reached the idea by themselves, the concept in their mind will keep in deep. However, the risky part is that some customers may merge away from what the author about to say. For example, in this article, after I carefully reviewed all the content, I am still confused by what is this author want to support. No guns? More restrict gun control policy? Or political issues between republican and democracy? Etc.
- No matter what kind of the audience is, the graph should be correctly representing the author's point, and at the same time, the graph should be as simple as possible. If one figure takes me more than 10 seconds to understand the x-y axis and the shape, I will consider that as an inadequate visualization.

• A colorful and well-designed graph may have a negative impact on the result. A reader may forget the number or purpose of the graph, because of there are other interesting things or beautiful figures for your brain to remember. You may not intentional remember that, but your mind always automatically keeps that on track. That's why we cannot forget so many beautiful things in our life, like my first kiss. I didn't tell my brain to remember this. It's just itself, help me to make my life more colorful.