### Problem Statement

### Summary

The argument given here is that gun problem in America is larger and much more complicated that other developed countries.

The article starts off with a video comparing America has a larger gun violence problem than other developed countries. Further it elaborates the same point with the help of more charts and graphs giving a detailed explanation of the comparison. It also states the frequency of this violence over a time trend which adds a support to the argument.

The leaders speaking about the gun violence problem sets the mood of the viewers giving them a sense of the gravity that the issue is much larger and complicated. The video then states what are the possible reasons of the gun violence. One main reason is that more guns in country leads to more deaths – mostly homicide and suicides as compared to other developed countries.

The literature has 17 maps and charts which gives the information about what the violence looks like as compared to the rest of the world, the reasons behind it and why it is difficult to fix. The usage of maps and charts were highly effective such as the direct correlation of gun ownership and gun deaths is concise and effective which communicates the message directly. It also states further that as more number of guns leads to more suicides which is illustrated by chart that is straight forward and effective.

The maps and charts used that shows an impact of gun violence could have been more concise and effective. Since the topic deals with death and violence use of red color in several maps and charts makes the visualization deceptive and ineffective. At some places numbers could be used instead of percentages. The use of calendar showing each day a mass shooting is highly misleading since there are a lot of days which are represented as 0 which means no shooting.

The last 3 charts show information such as more police killed on duty with higher number of guns and information about gun ownership laws - failed to make an impact on the issue being discussed at hand. The most misleading point which the article showed is that higher profile shootings don’t appear to lead to more support for gun control in the long term which goes against the argument and impact the minds of the reader in opposite direction. Information stating that possessing more guns might have deterred crime takes the entire argument in another direction which is not the motive of the argument of the article.

When we view the data product from another perspective probably it wants to be more neutral and exploratory when giving out information. However more information can always lead to more confusion if it is not in the correct direction. Hence the data product was totally effective until some extent however in the end I think it missed out the overall point and failed to make an impact on the viewer.

### Redesign Data Product

The literature topic here is America’s has a unique gun problem. Following are the starting points I would consider when redesigning this data product: -

* I would like to identify what type of viewers would read this article? Am I targeting any special group of people?
* Anticipate what kind of questions will a viewer have while reading this article?
* Focus my data visualization around these questions.
* What is the message I want to give the viewers?
* What all spectrums can I view my data on? Is it more declarative or exploratory? Do I need to persuade my viewers to take a stand? Does my data visualization support an argument to take a stand?
* Do I need to recommend any strategies? Does my data have to be actionable or be neutral?

Ideally the viewers of this article are generally well-read people who would like to take a stand on whether guns laws should be stricter. As a viewer I would start by anticipating the type of questions that would come in a viewer’s mind which are as follows: -

* Impact of gun violence in US
* Possible reasons that why US have a unique gun problem
* Data Visualization focused on giving possible reasons and impact
* I might want to take a stand about gun laws
* Are there any specific measures that one can take to avoid these gun violence problems?
* I would want to look at solutions to the proposed problems

My data visualization product will focus on the above broad points. I would use better colors, graphs and data layout to improve the overall impression and give a more direct message to the viewer which helps them to take a stand at the end of the article. I would remove the last 3 charts since the information given is digressing from the topic. I would design a more strategy or action-oriented data product rather than leave the viewer in the dilemma about whether I should support right to gun laws or be oppose it.

Thus, my overall strategy to redesign the data product to develop a more comprehensive understanding about the issue at hand, what are the possible reasons and what could be potential measures or strategies that could be implemented which could allow the viewers to take a stand on the issue.

### Data Sources

Following are the data sources which I extracted from the given article:

<http://www.gunviolencearchive.org/>

<https://www.vox.com/a/mass-shootings-sandy-hook>

<http://injuryprevention.bmj.com/content/early/2015/06/09/injuryprev-2015-041586.full>

<https://www.vox.com/policy-and-politics/2017/11/9/16618472/mental-illness-gun-homicide-mass-shootings>

<https://webappa.cdc.gov/sasweb/ncipc/mortrate10_us.html>

<https://ajph.aphapublications.org/doi/abs/10.2105/AJPH.2015.302749>

Although there are other sources mentioned in the article which could be used to redesign the data product in more comprehensible, concise and efficient manner.