The firearm suicide epidemic has been growing, with the firearm suicide rate increasing 12.5% over the last decade (2010-2019). While females are more likely than males to attempt suicide, males are four times more likely to die by suicide. Across all demographics, males have higher rates of firearm suicide and suicide overall. This is primarily due to the fact that males are more likely to use a more lethal suicide attempt method, such as firearms. Suicide attempts among males are eight times more likely to involve firearms than attempts among females. Firearm suicide rates vary substantially across the country. Suicide rates (both overall and by firearm) are generally higher in places where household firearm ownership is more common. In 2019, New Jersey had the lowest firearm suicide rate, while Wyoming had the highest. I am very interested in answering the following questions:

Are firearm related suicides influenced by median household income or statewide poverty rates? Are firearm related suicide rates influenced by how easy it is to obtain a firearm legally within each state? Has there been an increase in firearm related suicides over time?

To answer this question, I will be combining two separate data sources. To obtain the median household income and poverty rates, I will be using the US Census API for all years for which firearms related suicide data are available, <https://api.census.gov/data/timeseries/poverty/saipe> . For firearm related suicide and ownership data I will be using the database compiled by the Rand Corp. that includes those data by state for the years 1981 – 2002, <https://www.rand.org/research/gun-policy/analysis/essays/firearm-availability-suicide.html> .

The motivation behind this project is one of a personal nature for me, a good friend in our circle was having mental health issues and ended up taking his own life with a firearm. I plan to utilize ggmap as my new tool to show suicide rates across the entirety of the Unite States in a map format. I will combine this with other visualizations to address the questions I set forth to answer.