

# The Sandy Hook Project

Getting to the truth about gun-related violence in the US

## Linking Legal Gun Ownership and the Proliferation of Illegal Guns

I began working with ATF tracing data earlier this year to understand the relationship between illegal guns and gun-related violence. Through this research I learned how massive a problem illegal firearms are in the US. In the publication, *Firearms Stolen during Household Burglaries and Other Property Crimes, 2005–2010*, the US Bureau of Justice estimates that 1.4 million firearms were stolen during the period covered in the report. What is worse is that as of November 2012, 80% (1.1 million) of those firearms had yet to be recovered. While there is no verifiable method to estimate the number of illegal firearms in circulation, it is reasonable to assume that number is in the millions.

The publication also indicates that a majority of the thefts that include stolen firearms occurred in the South. "...Households in the South accounted for 37% of all households in the U.S., but 56% of all burglaries and 59% of other property crimes involving the theft of a firearm. Similarly, a disproportionate percentage of households in rural areas experienced burglaries involving the theft of a gun (34%), compared to the overall percentage of households in rural areas (17%)."

I had observed similar patterns while working with ATF tracing data, and had also noticed that the leading sources of illegal guns were frequently states that were recognized as strong supporters of gun rights and pro-gun legislation. This raised the question: Do states that are "pro-gun" contribute disproportionately to the number of illegal guns in circulation?

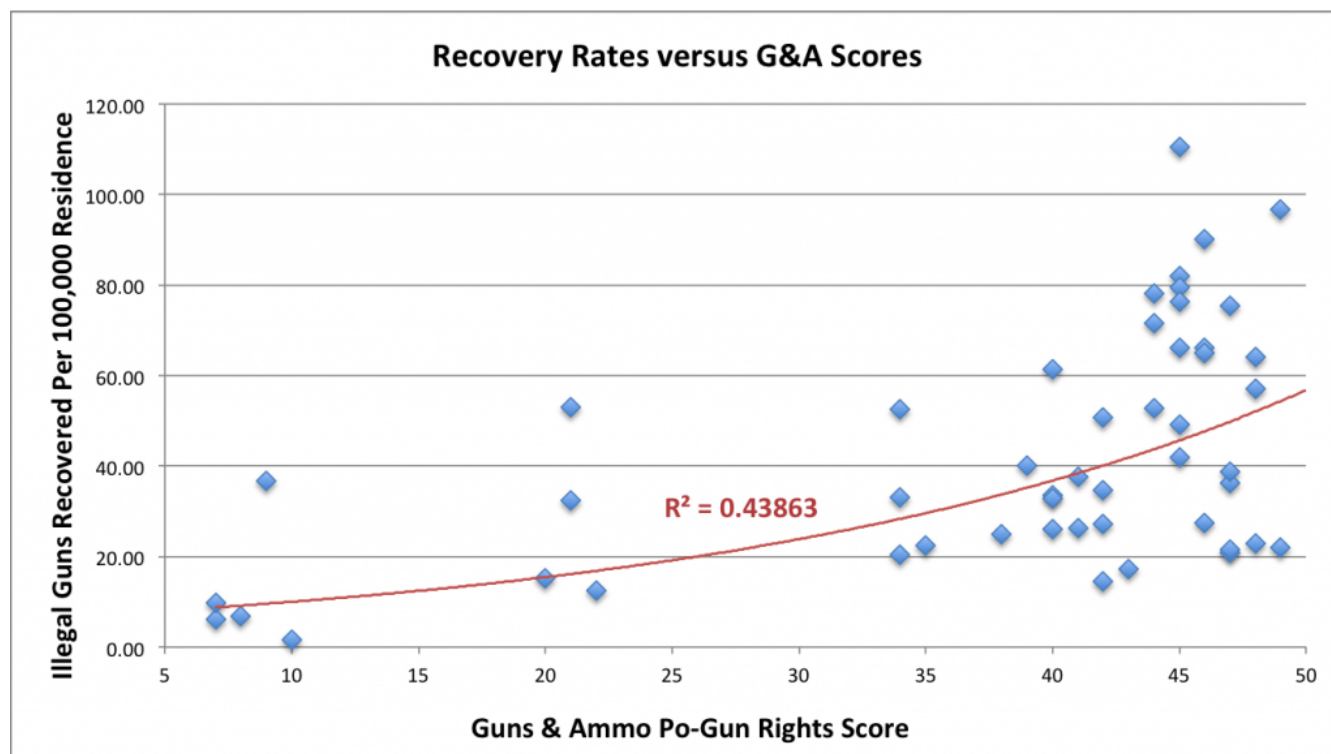
Performing this analysis would require a method for quantitatively describing a state's support for gun ownership. In searching for such a method, I found this article: *Laws for Firearms: Best States for Gun Owners in 2013*, published in the March 2013 issue of *Guns & Ammo*. I thought it would be interesting to determine if the characteristics that made a state attractive to legal gun owners also affected the availability of illegal guns.

*Guns & Ammo* scored each state on a scale from from zero to fifty. The score is a composite, calculated based on the following factors:

- Legislation limiting or supporting individual rights to own and carry handguns
- Legislation limiting or permitting ownership of “modern sporting rifles” (commonly referred to as assault weapons)
- Legislation limiting or permitting the ownership of class III devices, as defined by the National Firearms Act of 1934/1968
- Legislation and legal precedent regarding the Castle Doctrine defense (Stand your Ground) in criminal and civil cases
- Gun ownership as a percentage of population
- Pro- or anti-gun sentiment demonstrated by the current state government and officials

The District of Columbia, with its prohibitions against carrying handguns and ban on assault weapons, was given a score of zero. Vermont and Arizona, with state constitutions supporting ownership and bearing of arms, were given the highest scores (49 out of 50).

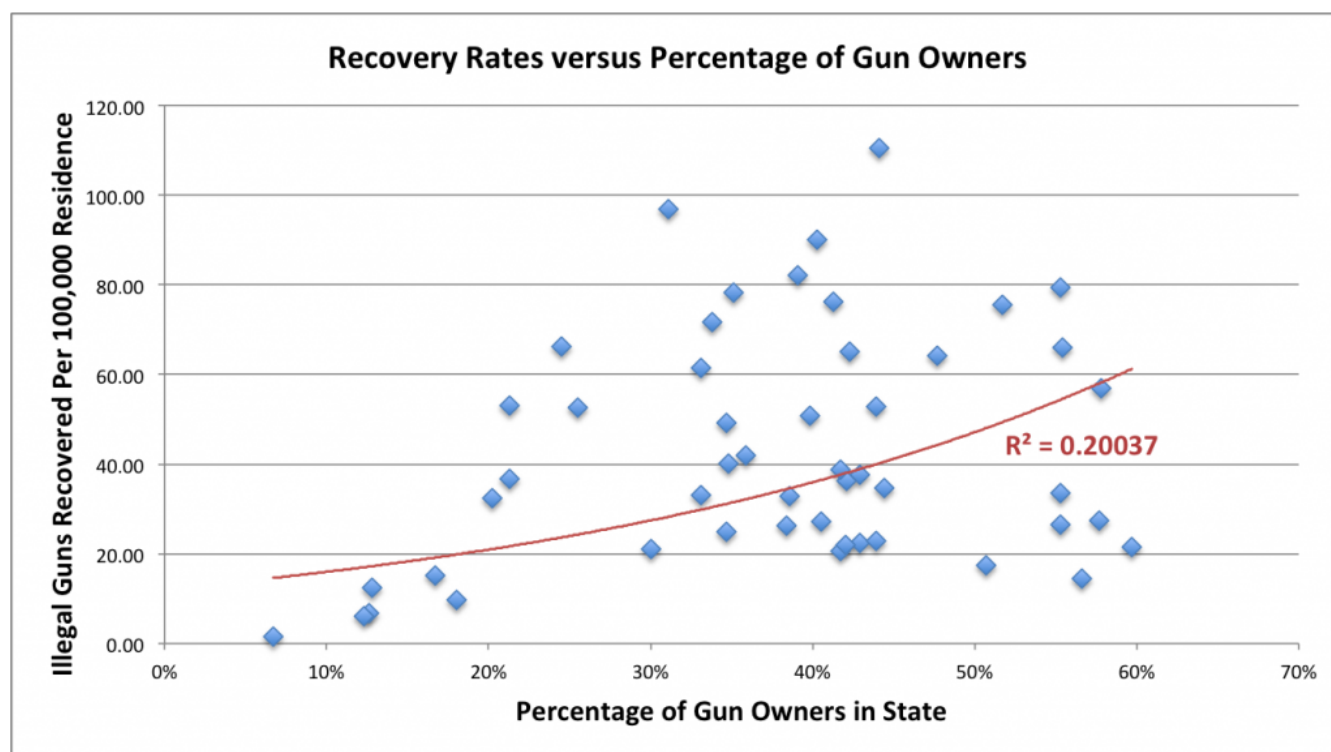
I plotted these scores against what I have described as “Recovery Rate.” This is the number of illegal guns originating from a single state per 100,000 residents of that state. For this analysis I calculated the mean recovery rate of each state for the last five years (2008-2012) from the tracing data published by the ATF:

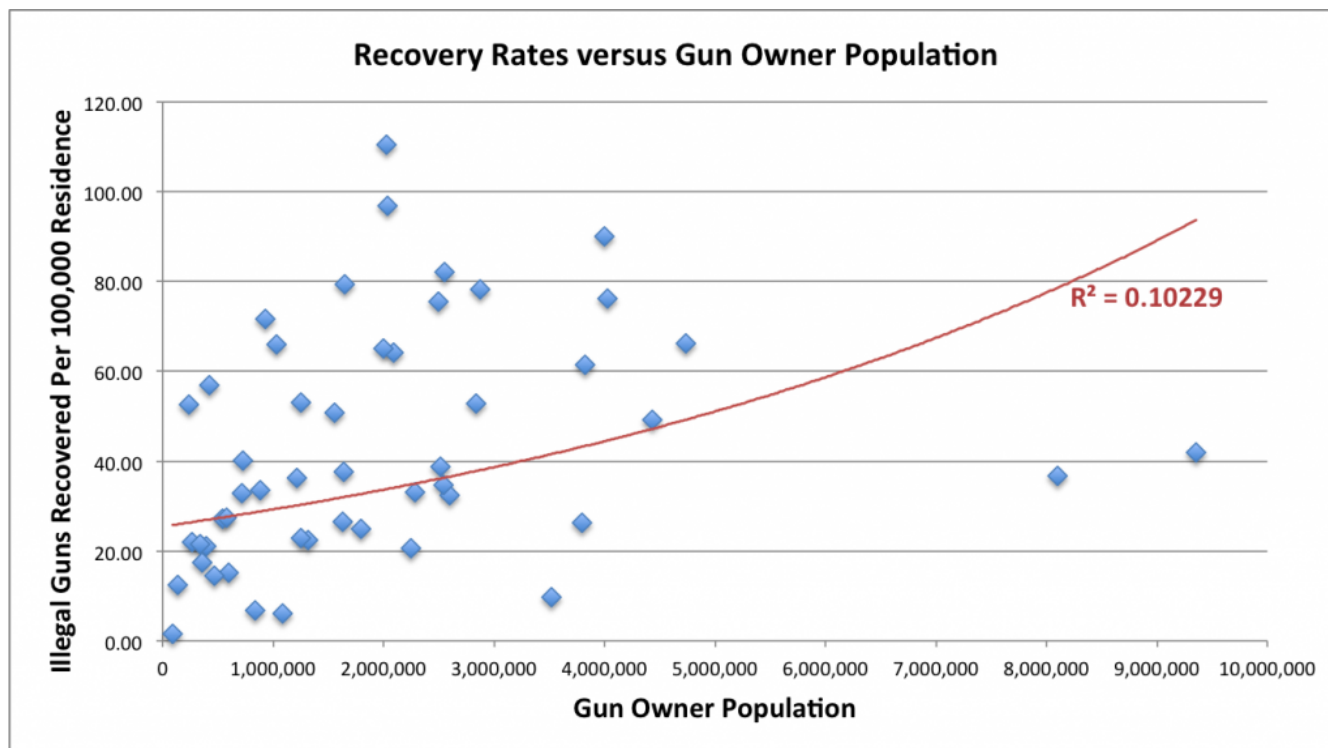


This plot demonstrates a moderate correlation between the *Guns & Ammo* score assigned to a state and the number of illegal arms traced to that state. Of the sixteen states that scored below forty, fourteen states (87.5%) reported numbers of illegal guns traced that were below the national average. Seventeen of the thirty-one states (54.8%) that scored forty or higher reported recovery rates that were above the national average. It is clear, too, that the highest scored states produce a significant percentage of illegal guns that

were recovered. States ranking 45 or higher represent roughly 47.5% of the population, but are the source of over 57% of the illegal guns traced in the US. States ranking 40 or higher represent 65% of the population, but are the source of nearly 78% of the illegal guns traced in the US.

But are these rates truly disproportionate, or are they in line with the number of gun owners in each state? It would be reasonable to expect states that are considered supportive of gun ownership to possess a larger population of gun owners, and therefore a greater likelihood of gun theft. To explore this, I plotted recovery rates against both the percentage of gun owners and the the total number of gun owners in each state. For this calculation I employed percentages from a 2001 survey performed by the North Carolina State Center for Health Statistics. This survey is old, and presents a significant margin of error due to the nature of the survey, but it is the same data that was employed by *Guns & Ammo* to generate the scores.





While correlations do exist, they are considerably weaker than the correlation between recovery rates and the *Guns & Ammo* score. This would indicate that while the number of gun owners in a state is a factor in these higher recovery rates, it does not fully explain why these states produce higher numbers of illegal guns.

The flood of illegal guns is a huge and complex issue, and one that will be difficult to solve. Any solution must include reducing the source, and this requires recognizing the factors that lead to the proliferation of illegal guns. While this in no way demonstrates a causal relationship between gun-rights legislation and recovery rates, it does demonstrate that a greater number (and proportion) of illegal guns originate from states that, in the opinion of *Guns & Ammo*, possess policies that protect the rights of legal gun owners.

Unfortunately, the NRA refuses to recognize any relationship between the legal availability of guns and crime. Instead, they have invested significant time and money to restrict any such analysis or refute their findings, often with outdated or confusing statistics. As long as the NRA is able to maintain its power over federal and state governments, exploration of this relationship, and any gun control reform driven by this relationship, will not occur.

The data for this analysis can be found [here](#).

This entry was posted in *Illegal Guns*, Uncategorized on January 16, 2014  
[\[http://www.TheSandyHookProject.org/?p=415\]](http://www.TheSandyHookProject.org/?p=415) .