Conclusions From My Analysis on the USA Gun Data

From the heat map generated from the number of background checks/permits applied for we can see that the state that has been selling the most guns. The visual should really be named as estimated sales by state. The heat map is actually an estimate of the guns sold as the formula I used counts a multiple permit check as two guns sold which is the average based on the information, got from the site we collected the data from:

[GitHub - BuzzFeedNews/nics-firearm-background-checks: Monthly data from the FBI's National Instant Criminal Background Check System, converted from PDF to CSV.](https://github.com/BuzzFeedNews/nics-firearm-background-checks)

Graphical user interface, application, map

Description automatically generatedFrom the heat map we can see the two states with highest overall sales in guns are Illinois at number one and Kentucky at the number two slot. This holds true for all three years we have data for. The number of guns Illinois sells is well above the average when you compare by state by a ridiculous margarine. Even Kentucky who sells around half as many guns as Illinois does is still above the average by several million.

Image below shows all estimated sales in the states for past three years with the darkest being the ones with the highest sales.

You can also see that states like Texas, California, Indianna and Florida also have high numbers of purchases compared to the rest of the country. Of course, this data might be skewed as some states have a higher population so there are more potential customers. More accurate would be purchases per population such as guns purchased per 100 people in a state.

Graphical user interface, application, table, Excel, bar chart

Description automatically generatedAnother graph we have is comparing average income for the last three years against the number of handgun and long gun background checks made that year which should equate to a sale in each case.

By analysing the data, we can see that in states with a low average income will be more likely to buy a handgun that they will a long gun. This holds true for when looking at the last three years or going by each year individually. There are a couple of exceptions where the numbers are pretty much equal but overall, this holds true and for each year it also holds true. Income used for this was between just over 47k to just under 61k.

It is also interesting that Florida a state with low average income has a high number of gun purchases when you combine insights from our heat map and this data set. Kentucky the second highest purchaser of guns also has a low income in fact when you filter more you see Kentucky on average for last three tears is in the ten lowest earning states and Florida in the twelve lowest. Also, you notice how Florida in this graph has higher numbers the Kentucky which suggests that Kentucky makes more gun sales in other areas of the market. Maybe people go for more multiple permits and such.

A screenshot of a computer

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A screenshot of a computer

Description automatically generated with medium confidenceBy just looking at the top three states for average earnings we see something very interesting in the data straight away. None of the top states for gun purchases are in the top twelve for average pay. So, no Texas, California, Indianna, Florida, Kentucky or Illinois in the top average earning states. Which means that they are either have a low average income or middle of the range average income. Also, we notice that the handguns and still more popular or just as popular. Furthermore, it appears several the highest earning states are among some of the lower purchasers of guns. A couple still have average to above average numbers on the heat map but nowhere near the high end. Again, probably more accurate if we could use gun purchases per 100 people in a state.

Chart, bar chart

Description automatically generated

In fact when you look into the data only two states do more background checks for long guns than they do hand guns which are New York State and A screenshot of a computer

Description automatically generated with medium confidenceNorth Carolina. With average pay around 74k and 64k respectively. Which is fairly middle of the average for average income.

Chart

Description automatically generatedChart

Description automatically generatedLooking at some of the individual states we can see trends like how some states like Mississippi have an increase in people applying for background checks for long guns around the christmas period. Suggesting that certain months around christmas are advantagous to sell long guns in the state of Mississippi. It may also indicate hunting season. Also Notice that it appears in 2020 during Covid handgun backgorund checks increased suggesting more people buying guns possibly because of a fear of instability due to Covid. Nevada and other states show this Handgun trend.