

EXPLORING STATE DEMOGRAPHICS AS DETERMINANTS OF GUN OWNERSHIP AND GUN SALES

TEAM 10

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RESEARCH QUESTIONS

- On average, each state registers sales of about 100,000 new firearms each year.
- While there is a lot of research on the topic of the effect of gun sales, little is said about the determinants of gun sales.
- Our work is to find what demographics show correlations with gun sales.



DATA



FBI DATA :

- Permits, gun sales, background checks
- All US states and territories
- 1990-2021
- 15,300 observations

CENSUS DATA :

- Average Income, education level, age, sex, race, and ethnicity
- All US states and territories
- 2002 - 2019
- 47,000,000 observations (over 2 million observations per state)

STATS - FBI DATA

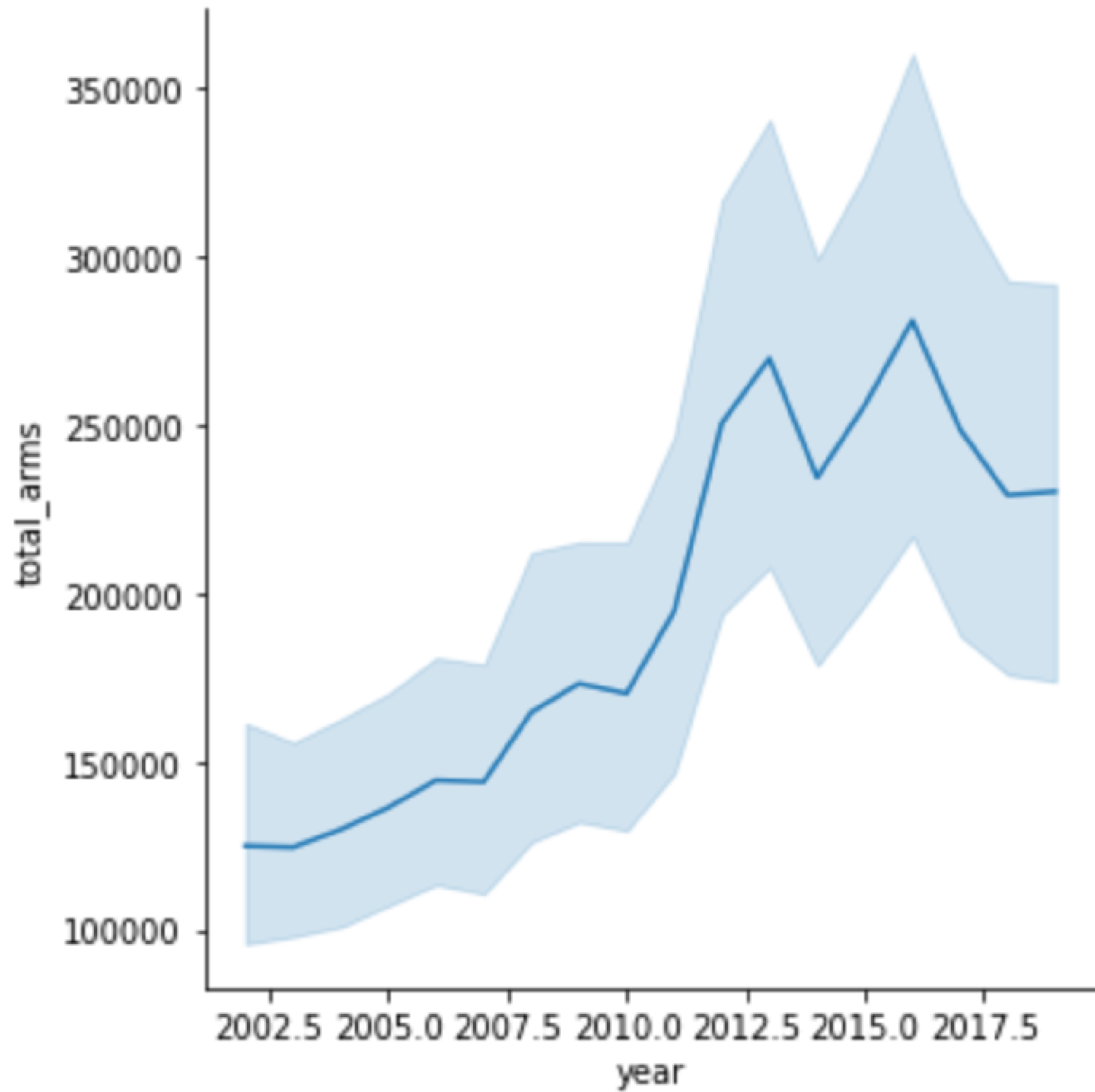


	permits	handguns	long_guns	total_gun	bg_checks
Min.	0	0	0	0	6,521
1st Qu.	35	20,362	38,242	62,771	91,197
Median	18,386	52,258	81,608	142,328	197,470
Mean	106,159	91,201	103,643	194,844	336,542
3rd. Qu	89,954	119,706	137,807	251,248	372,993
Max.	4,655,016	662,308	873,543	1,166,589	4,949,570

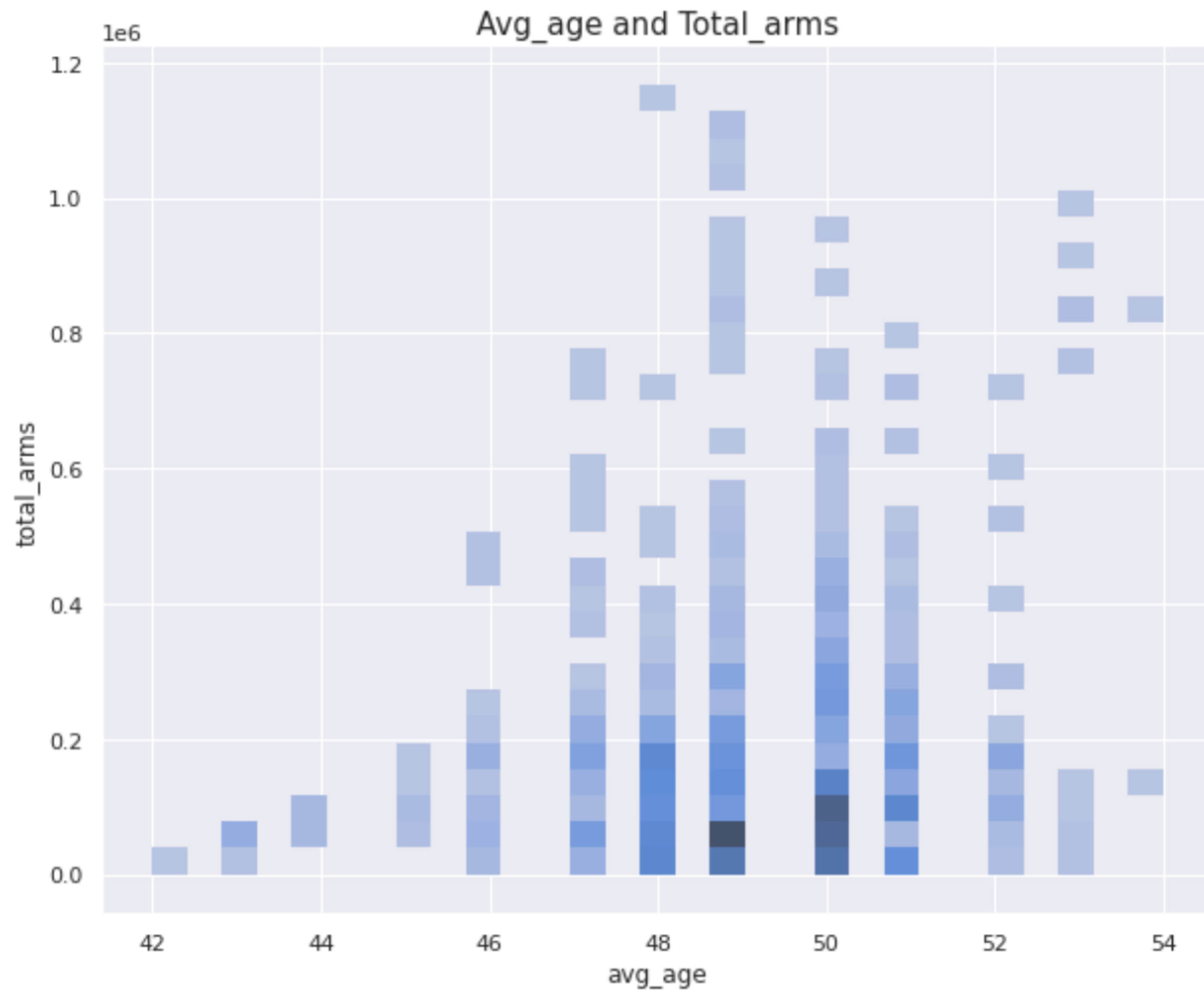
STATS - CENSUS DATA

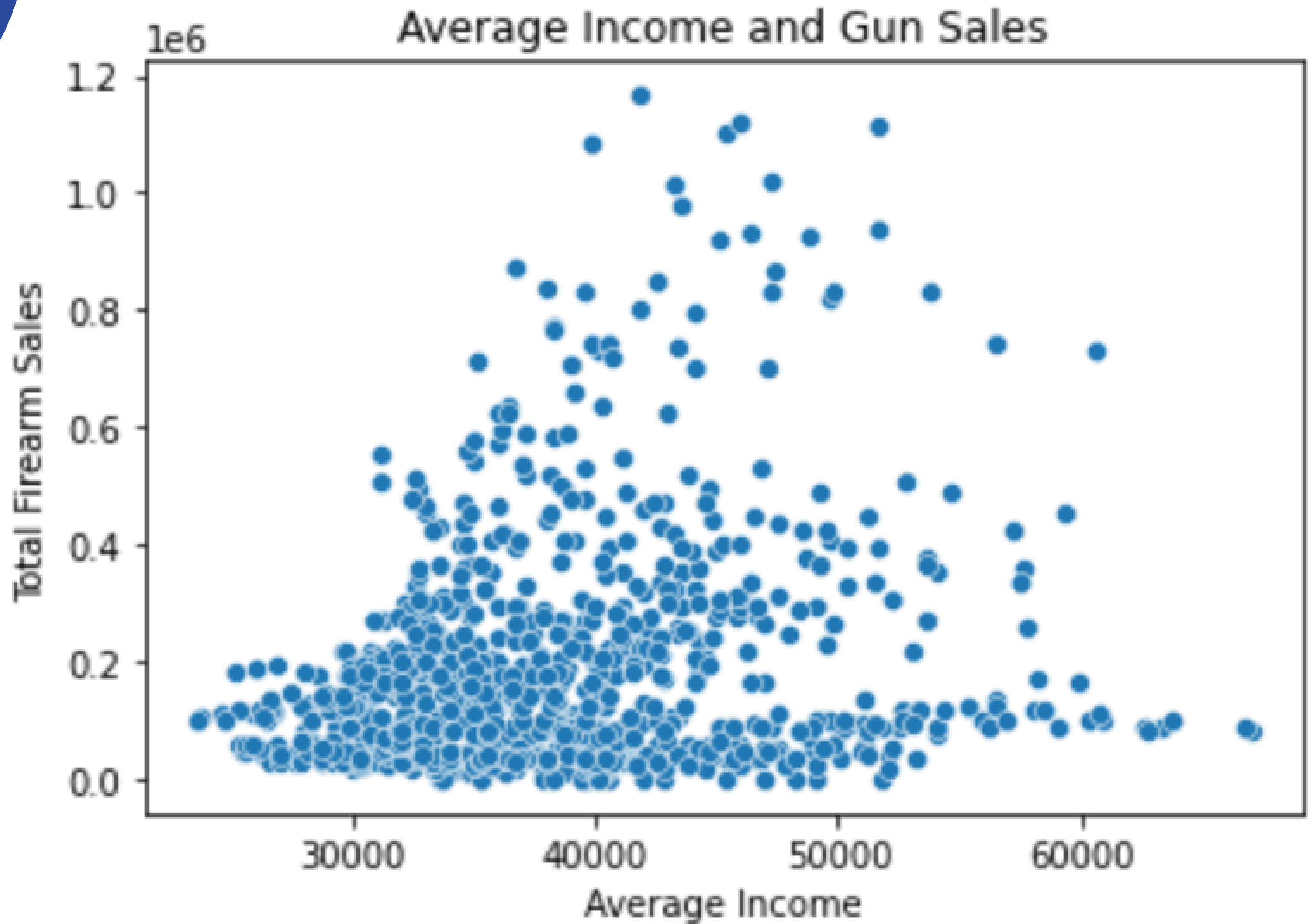


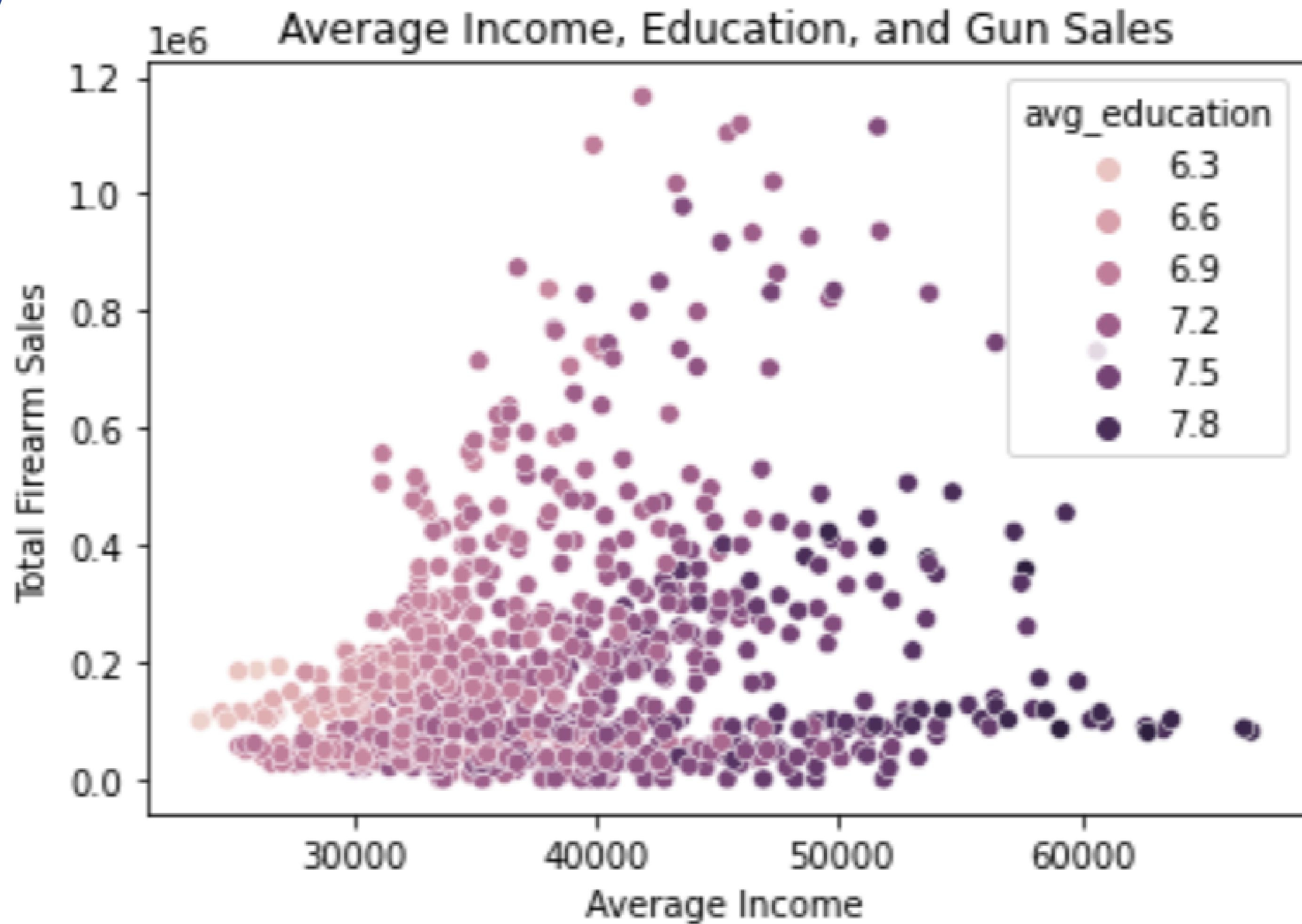
	avg_age	avg_ed	avg_inc	per_fem	per_white	per_black	per_nat	per_asian	per_hisp
Min.	42.24	6.198	23,626	0.46	0.26	0.002	0.001	0.003	0.005
1st Qu.	48.16	6.933	33,182	0.50	0.76	0.016	0.003	0.010	0.022
Median	49.33	7.140	37,597	0.51	0.86	0.052	0.005	0.017	0.042
Mean	49.14	7.148	38,465	0.50	0.83	0.076	0.018	0.036	0.068
3rd. Qu	50.33	7.345	42,575	0.51	0.92	0.110	0.012	0.034	0.074
Max.	53.88	8.032	67,002	0.54	0.98	0.340	0.323	0.568	0.382



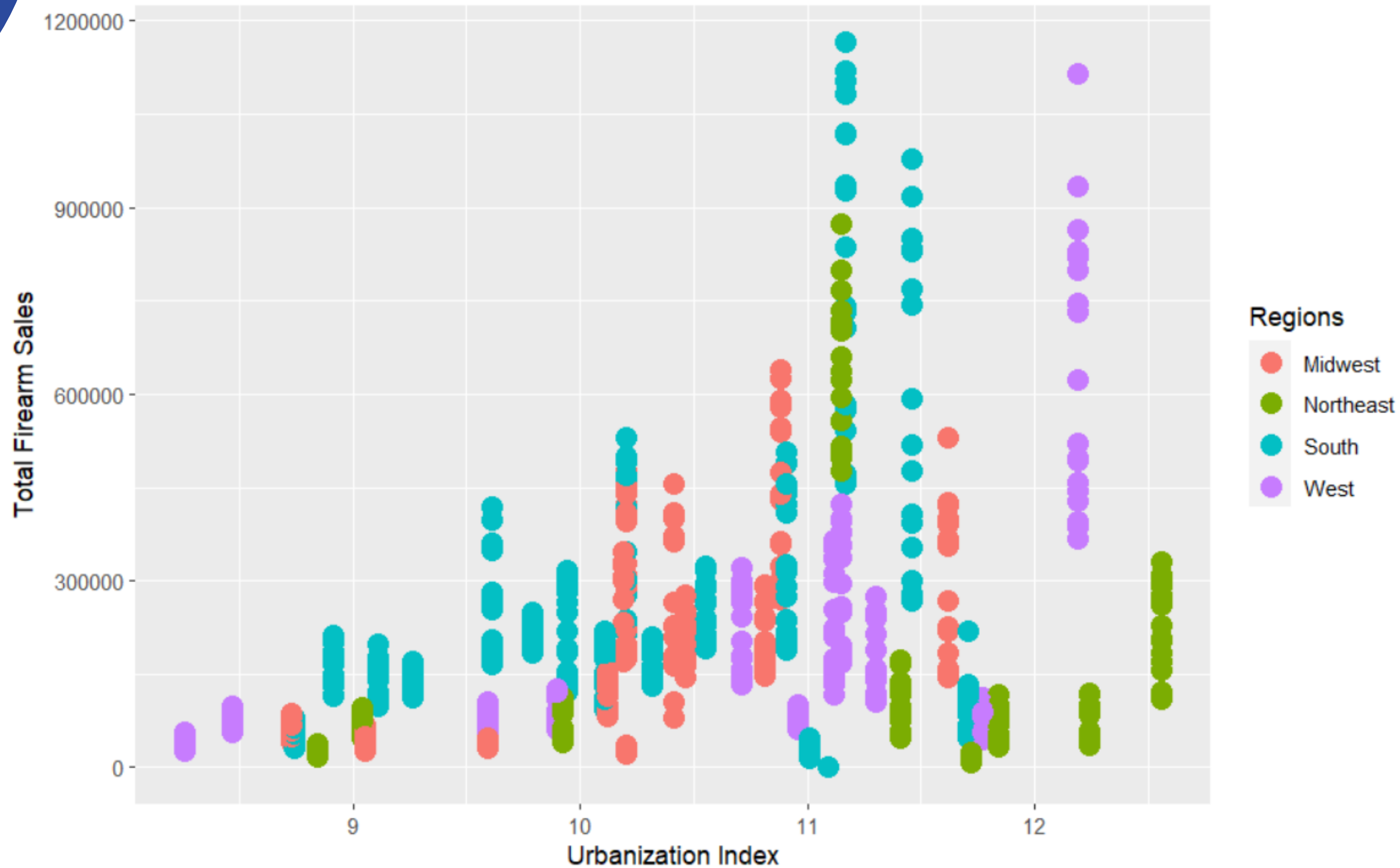




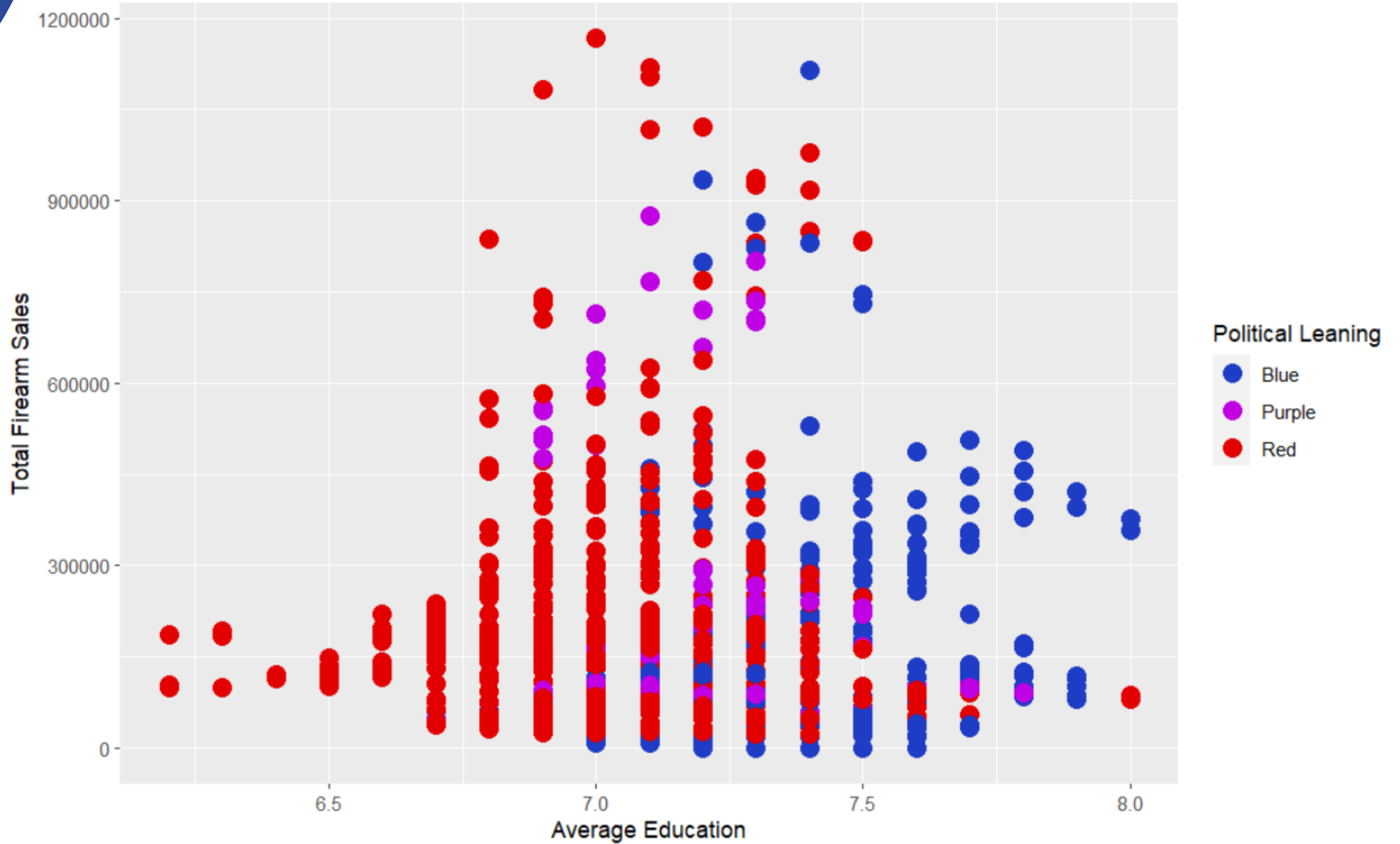




Urbanization Index, Regions, and Firearm Sales



Total Firearm Sales, Average Education, and Political Leaning



Inferences:



Factors which
contribute to
firearm sales



Education

Polictical Leaning



THANK
YOU!

The image features a vibrant blue background with abstract shapes in dark blue, white, and purple. On the left, a white browser window with a yellow header and three colored window control buttons (blue, pink, grey) contains the text 'THANK YOU!' in a stylized font. 'THANK' is in dark blue and 'YOU!' is in orange, both with decorative stars and dots. On the right, a cartoon character with a black cowboy hat, a red t-shirt, and black pants is running towards the left. The character has a black choker and is pointing with both hands. The overall style is modern and playful.