



Death by Police

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1 Introduction

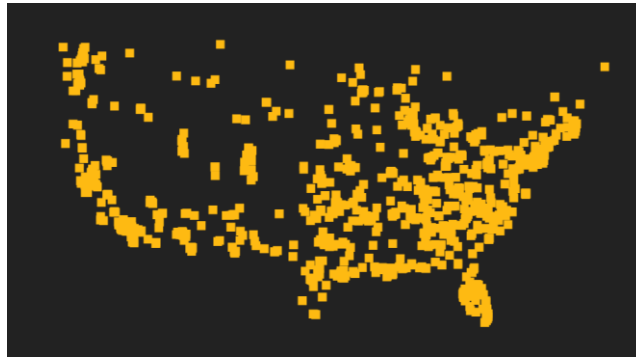
With the rise in reports on police brutality and the media's attention on police officers who make the unfortunate decision to use their firearm in the line of duty, it seems that the data behind the story is often lost. News headlines such as "White Officer Guns Down Black Man" often make it seem like police officers are hunting down black citizens. My question is "that really the case?" this project's aim is to isolate variable from a data set of police killing in 2015 to see what the major contributing factor for a death by police.

2 Related Work

The Guardian supplied the data, and also broke attempted to isolate certain variables to consider, such as location, and ethnicity. While the Guardian put plotted each location of a death and showed percentages of each race on a map of the United States, I will be taking a different approach. The goal is to take the existing data that the Guardian has supplied and apply different models to get a more accurate depiction of the data is saying.

3 Data Set

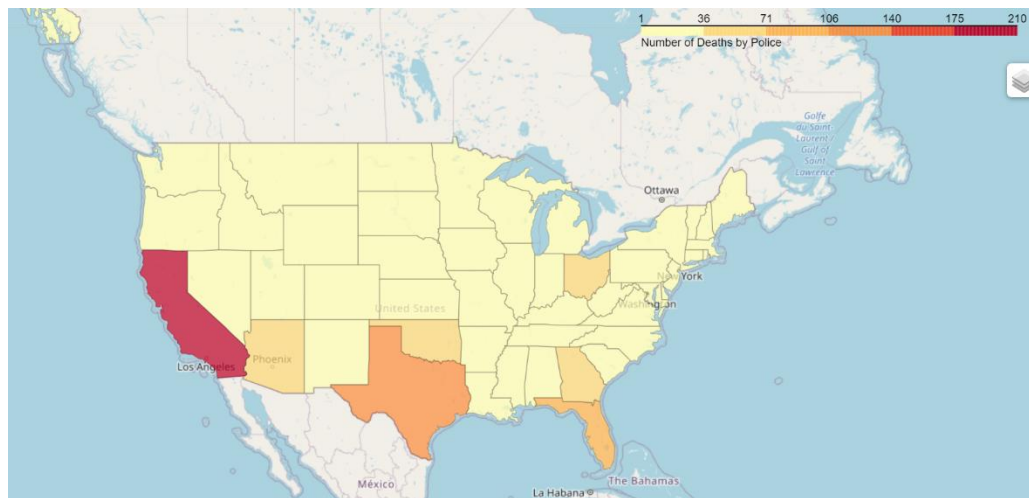
The main source of the data as stated is from the Guardian. The data includes 1142 different cases of police killings as well as different factors of the person such as their age, race/ ethnicity, gender, state, armed and more however these are the factors I will be focusing on



Here is the Guardians supplied map, at first glance it seems as if the phenomenon is wide spread throughout the country and the only place we are safe from police is in the middle of the country.

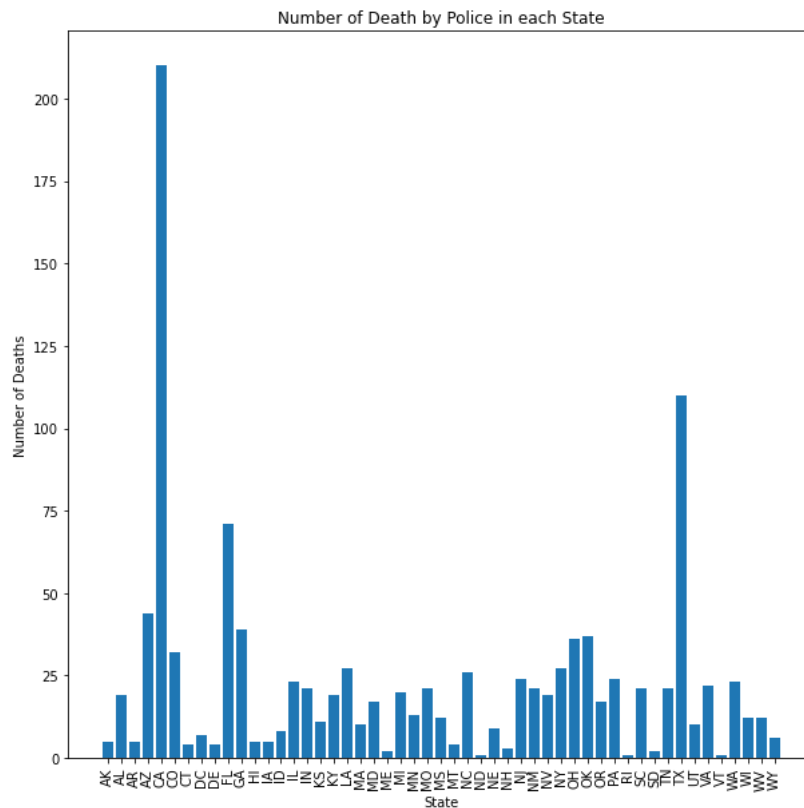
3.1 Remodel the Data

The graph from the Guardian does not accurately represent where these killings are taking place. In an effort to more accurately represent the locations of these tragedies, I remodeled using a heat map



This map shows that most of the police killings happen in California and it's not even close. Texas has half as many police killings and it is the closest to California.

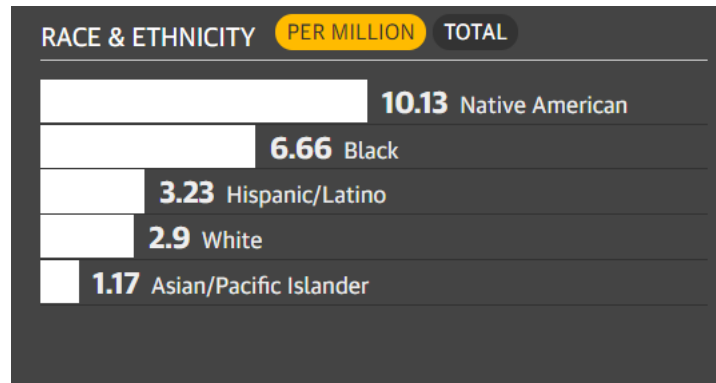
To further show the difference I also created a bar graph here we can see that no other state went



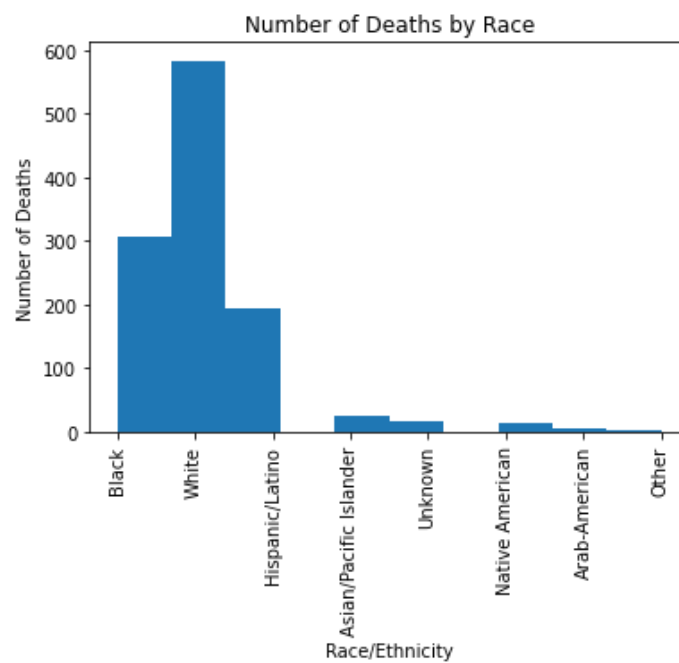
above 75 in the year of 2015.

3.2 Remodeling racial data

The Guardian created a bar graph modeling for race per million, I definitely agree with this method however I was not able to see their model for total so I made my own



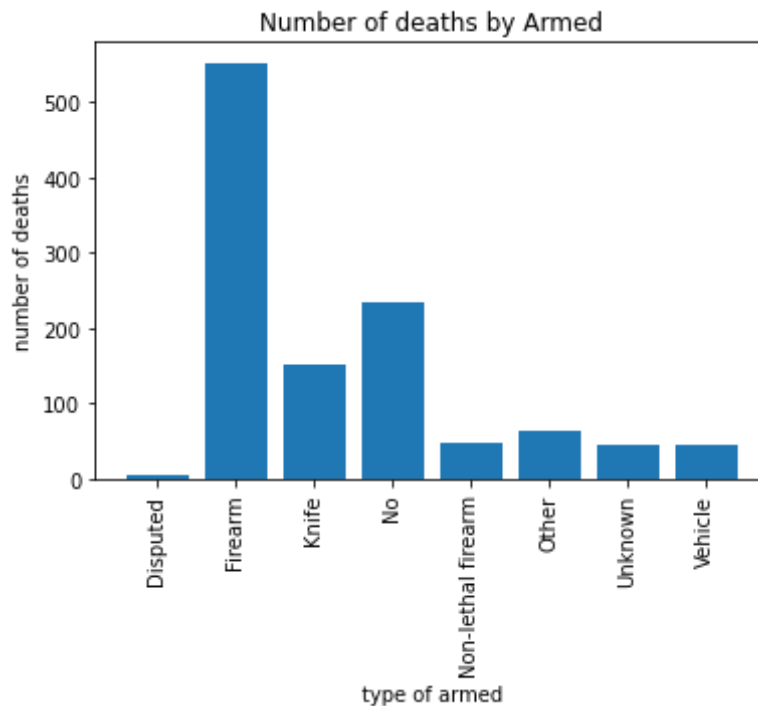
This is an excellent way to show the relationship between population and deaths however if we focused on this it would leave out part of the story.



While the highest percentage of Native Americans were killed, is no where near that of Black and White Americans.

3.3 New Modeling

I was fairly disappointed after seeing that the only factors that the Guardian broke the data down by were “Race” and “State” so I decided to look into a couple other factors such as whether or not the suspect was armed, or the a combination of factors.



This was the most interesting graph I generated the I did not expect not armed to be as high as it is and might suggest that police officers are using excessive force, but the question still remains, “is it racially motivated?”

	raceethnicity	armed	0
0	Arab-American	Firearm	1
1	Arab-American	Knife	1
2	Arab-American	No	1
3	Arab-American	Unknown	1
4	Asian/Pacific Islander	Firearm	9
5	Asian/Pacific Islander	Knife	7
6	Asian/Pacific Islander	No	4
7	Asian/Pacific Islander	Other	3
8	Asian/Pacific Islander	Unknown	1
9	Black	Disputed	3
10	Black	Firearm	140
11	Black	Knife	38
12	Black	No	79
13	Black	Non-lethal firearm	8
14	Black	Other	14
15	Black	Unknown	8
16	Black	Vehicle	17
17	Hispanic/Latino	Disputed	1
18	Hispanic/Latino	Firearm	82
19	Hispanic/Latino	Knife	34
20	Hispanic/Latino	No	39
21	Hispanic/Latino	Non-lethal firearm	9
22	Hispanic/Latino	Other	16
23	Hispanic/Latino	Unknown	7
24	Hispanic/Latino	Vehicle	6
25	Native American	Firearm	5
26	Native American	Knife	1
27	Native American	No	4
28	Native American	Other	2
29	Native American	Vehicle	1
30	Other	Firearm	1
31	Unknown	Firearm	8
32	Unknown	Knife	3
33	Unknown	No	1
34	Unknown	Non-lethal firearm	1
35	Unknown	Other	1
36	Unknown	Unknown	2
37	White	Disputed	1
38	White	Firearm	306
39	White	Knife	68
40	White	No	106
41	White	Non-lethal firearm	29
42	White	Other	28
43	White	Unknown	26
44	White	Vehicle	20

Breaking it down even further it seems that it is not. While the total number of unarmed citizens being shot by policing is shocking and needs to be addressed as a whole it does not appear to be racially motivated

4 Conclusion

while any police killing is alarming and should be addressed and investigated it seems as if the narrative of police gunning down might have some weight with the seconded highest factor as to what the suspect was armed with is “not armed”. However I do not have the data to look further into this my suggestion would be for better training of police officers and higher accountability.

Sources

Davis, Kenan, et al. “The Counted: the Definitive Map of US Police Killings in 2015.” *The Guardian*, Guardian News and Media, www.theguardian.com/us-news/ng-interactive/2015/jun/01/the-counted-map-us-police-killings.