Citizens for Juvenile Justice: Deliverable 1

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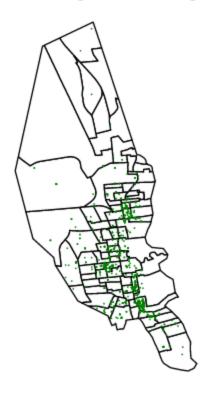
An abundance of data have been collected for the "Citizens for Juvenile Justice" Project, and the preliminary analyses up to this point have primarily focused on police incidents in the Massachusetts city of New Bedford. The first dataset we're analyzing describes all of the "field incident reports" filed by New Bedford police officers from 2015 up through a few months ago, which are records of when a police officer stops someone on the street because they're suspicious that that person might be committing a crime, or in possession of a weapon, or doing something else illegal (more commonly referred to as stop-and-frisks). Specifically, we have utilized the numerous variables associated with the interactions in the police reports, including, but not limited to, location of incidents, age of civilians involved in incidents, and geographic locations of incidents. Below is a visualization of the city (divided into census block groups) with a plotting of each of the 4,997 police incidents that occurred from 2015 through the date the data was collected in 2020:

Field Incident Report Locations

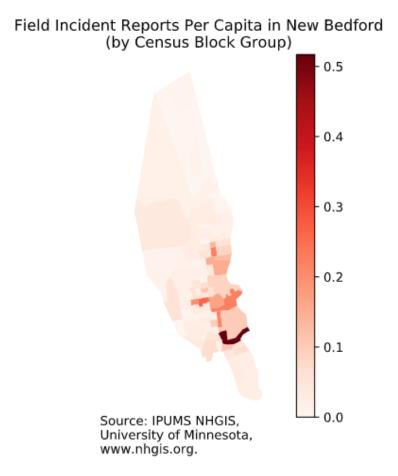


Using some of the variables included in the data, a variety of meaningful visualizations could be created. For instance, one mapping shows all of the incidents that involved people aged 20 years or younger, which is particularly important for our client because their main priority is advocacy about how youths are treated by Massachusetts's justice system:

Locations of Field Incident Reports Involving Persons Age 20 or Younger

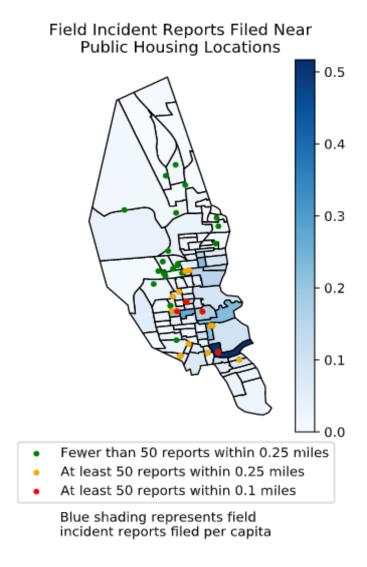


This next map resulted from an attempt to control for the populations of each census block group in New Bedford, showing how frequently field incident reports were filed from 2015 to 2020 relative to the total population in that area.



One interesting question that we focused on was the potential relationship between location of police incidents and location of the public housing properties in New Bedford.

Plotting the coordinates of the properties in relation to the incidents could give us a better understanding if interactions between the police and citizens are more likely to occur near certain public housing areas than they are near others.



Based on this plot, it is apparent that four properties had particularly high numbers of incidents occurring very close to them, including three locations which are all quite close to one another. Although the plot is further proof that many incidents in New Bedford are occurring in the southern region of the city, this particular map could allow for an analyst to potentially inform the owners of specific properties that have historically been at the center of many police-related incidents. Our client had hypothesized that police officers might be focusing their

patrols on public housing properties and disproportionately performing stops near public housing as a result, and the above map provides some preliminary evidence that this could be happening.

Lastly, we are determined to discover if any racial disparities exist in the incident reports. Indeed, of all of the incidents that occurred over the nearly half-decade time span, more than 46% involved civilians who were black and/or African American. According to "World Population Review", blacks and African Americans make up just 6.59% of New Bedford in 2020, demonstarting that this racial group is clearly overrepresented in police incidents. On the other hand, whites, who make up a majority (65.34%) of the city, accounted for less than 36% of the incidents. The clear difference in incidents based on race could lead to further analysis surrounding the topic. Namely, we plan to examine specific officers who were involved in a comparatively high number of incidents with people of certain races in an attempt to better understand why such officers were involved with so many people of specific race(s).