Homework 1 Discussion

All 3 of these maps are quantile representations of the amount of something in each zip code of New York City, including the number of fireworks complaints per each NYC zip code, the amount of 311 complaints per each NYC zip code, and the percentage of Fireworks complaints out of the total amount of 311 complaints per each NYC zip code. These maps can present different trends and different inferences depending on how you look at them. If you look at the 311 complaints or the fireworks complaints maps individually, one can look at trends and see if there are parts of the city that have really high amounts of complaints. This can then be compared to other data, such as socioeconomic status or population data, to figure out if there is an underlying problem. That information can then be used to address the problem. For a map like the one of the percentage of fireworks complaints out of the total amount of 311 complaints per each NYC zip code, one can use that to scope out if there are firework problems in particular neighborhoods and use that information to target particular neighborhoods with bigger firework related issues to try and address the problem. Looking at each of the first 2 maps individually can give us some information but looking at the 2 maps combined (like the 3rd map made combining the first 2) can tell more of a story and people using the maps can gain more valuable information from combinations of the data.

Looking at the maps together, we can see that central Brooklyn, upper Manhattan, and the lower Bronx have the most 311 complaints and fireworks complaints. Using that information, we can target those areas to get additional data and solve the applicable problems. Very upper Manhattan and central Brooklyn have the highest percentage of fireworks complaints in comparison to the amount of 311 complaints. Using that information, those areas could be targeted for firework prevention.

In order to improve these visualizations, a few things could be done. The zip code map could be given zip code labels to make it easier to figure out which of the zipcodes have more of the issues. Also, if there were more space for a bigger legend, creating smaller bins for the data could give more accurate representations of how many complaints are filed in each zip code. Additionally, adding more data to each map could give more valuable information. For example, overlaying average annual income with the amount of fire work or 311 complaints could show that socioeconomic status may be a big factor of the amount of firework or 311 complaints there are in a zip code.