

## **Topic and Motivation**

The United States of America has been a country that throughout its history has had a *love hate relationship* with drugs. In the 19<sup>th</sup> and early 20<sup>th</sup> century opium dens littered San Francisco and cocaine was used to cure many ailments before drugs became stigmatized leading to stringent law enforcement measures. The crack down and punitive measures exponentially increased over the years with President Richard Nixon's war on drugs which took hold in the 1970s followed by Nixon's Anti-drug Abuse Act which penalized crack possession in higher order than that of its powder-based alternative.

As with the rest of the United States, New York City has also followed similar drug use patterns, accompanied by harsh enforcement to control it. In the 1980s, NYC, especially the South Bronx was overrun with heroin and other narcotic drugs, therefore police adopted a "zero tolerance" approach to policing. This meant inflicting immediate and harsh punishments on perpetrators. In recent years, as narcotic drug crimes have waned, law enforcement procedure has changed. In the late 1990s, the NYPD initiated quality of life (QOL) policing, which targeted non-criminal and minor offenses. This type of policing along with zero tolerance created surging arrest rates. Most importantly, these arrest rates increased largely for minority offenders.

As NYC has transitioned to a less harsh "neighborhood" policing model, the discrepancies in arrest rates by race have not subsided in recent years. The inequality in arrest rates are most prominent for drug related crimes. An article published by the *New York Times* in May 2018 asserts that "... black people were arrested on low-level marijuana charges at eight times the rate of white, non-Hispanic people over the past three years... Hispanic people were

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arrested at five times the rate of white people”, exposing the fact that race does play a role in an arrest decision.

While the previous statistic highlights the disparities in low-level marijuana arrests; for our project, we would like to see if there are discrepancies in arrests across all drug-related crimes. Drawing inspiration from the *New York Times* article along with other research, we want to examine how different demographic factors, as well as neighborhood level characteristics, such as 311 and 911 complaints influence arrests.

### **Main Topic:**

**Does the prominence of drug arrests relate to race across different drug class severity levels?**

### **Tentative Methodology**

When looking at the data and the problem at hand there appears to be needed layering in how the data should be processed analyzed and eventually fed into a model. In the beginning it will be beneficial to do some spatial exploration in programs such as QGIS to understand the geographic layout of the occurrences in the dataset. Post mapping general visualization and the observation of compiled summary statistic should be created in hopes of observing general averages and trends specifically demographic ones. This can also be aided by a initial cluster analysis, to see patterns within the data as well as help with the possibility of pointed data reduction if necessary. The final step will be the creation of a model or many models. I could be interesting to create a model with a categorical based race dependant variable along with another

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model that shows the probabilistic increase associated with different demographic variable for perpetrators.

### **Potential Data Sets**

<https://data.cityofnewyork.us/Public-Safety/NYPD-Arrest-Data-Year-to-Date-/uip8-fykc>  
(NYPD Arrest Data YTD)

<https://data.cityofnewyork.us/Public-Safety/NYPD-Arrests-Data-Historic-/8h9b-rp9u>  
(NYPD Arrest Data Historic)

<https://data.cityofnewyork.us/Public-Safety/NYPD-Criminal-Court-Summons-Historic-/sv2w-rv3k>  
(NYPD Criminal Court Summons)

<https://data.cityofnewyork.us/Public-Safety/NYPD-Criminal-Court-Summons-Incident-Level-Data-Ye/mv4k-y93f>  
(NYPD Criminal Court Summons Incident Level Data (Year To Date))  
<https://data.cityofnewyork.us/Public-Safety/NYPD-Complaint-Data-Historic/qgea-i56i>  
(NYPD Complaint Data Historic)

<https://data.cityofnewyork.us/Public-Safety/NYPD-Complaint-Data-Current-Year-To-Date-/5uac-w243>  
(NYPD Complaint Data Current - YTD)

<https://dev.socrata.com/foundry/data.cityofnewyork.us/wewp-mm3p>  
<https://data.cityofnewyork.us/City-Government/311-Call-Center-Inquiry/tdd6-3ysr>  
(311 Call Center Inquiry)

<http://johnkeefe.net/nyc-police-precinct-and-census-data>  
(Spatial datasets - 2010 Census Block data and precinct data- it maps each census block to precinct, 2010 Census data is attached to census blocks, which are attached to precincts).

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## **Potential Timeline**

### Week 4

Compile data sets and figure out which combination of data we would like to use for our analysis

### Week 5

Conclude on if we are looking at all of NYC or have enough data to focus on a single area, such as Staten Island because it has clearly demarcated neighborhoods racially, though this is changing.

### Week 6

Look for patterns in the data in the form of simple graphs, visualizations, as well as possible k-means cluster analysis (data reduction data tendencies)

Compile Relevant Descriptive Statistics

Construct Our midterm Project Update for Presentation

### Week 7-8

Try Multiple Models- some with Categorical race outcomes

### Week 9-10

Model Selection

### Week 11-12

Supplementary Visualization construction from final model

### Week 13-14

Final Paper write up