



NYPD

AYEH

Introduction and Prep Work

Data Source

The screenshot displays the Data.gov website interface. At the top, the Data.gov logo is on the left, and navigation links for DATA, TOPICS, RESOURCES, STRATEGY, DEVELOPERS, and CONTACT are on the right. Below this is a blue header bar with 'DATA CATALOG' on the left and a breadcrumb trail 'Home / Datasets' followed by a search bar containing 'Organizations'. A secondary navigation bar shows the path 'Home / City of New York / data.cityofnewyork.us' and two buttons: 'Submit Data Story' and 'Report Data Issue'. The main content area features a dataset card for 'NYPD Shooting Incident Data (Historic)'. The card includes a building icon with a 'City' label, a light blue informational banner stating 'This is a Non-Federal dataset covered by different Terms of Use than Data.gov. See Terms', the dataset title, and a metadata update date of February 7, 2022.

DATA.GOV

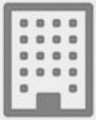
DATA TOPICS RESOURCES STRATEGY DEVELOPERS CONTACT

DATA CATALOG

Home / Datasets Organizations ?

Home / City of New York / data.cityofnewyork.us

Submit Data Story Report Data Issue

 City

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NYPD Shooting Incident Data (Historic)

Metadata Updated: February 7, 2022

Data Source

Shooting Incidents in New York City

Contains information like

- Location description
- Demographic of victim
- Demographic of perpetrator
- Longitude / Latitude

Data Setup

```
library(tidyr)
library(tidyverse)
library(lubridate)
library(ggplot2)

url <- 'https://data.cityofnewyork.us/api/views/833y-fsy8/rows.csv?accessType=DOWNLOAD'
nypd_csv <- read_csv(url)
```

Data Cleaning

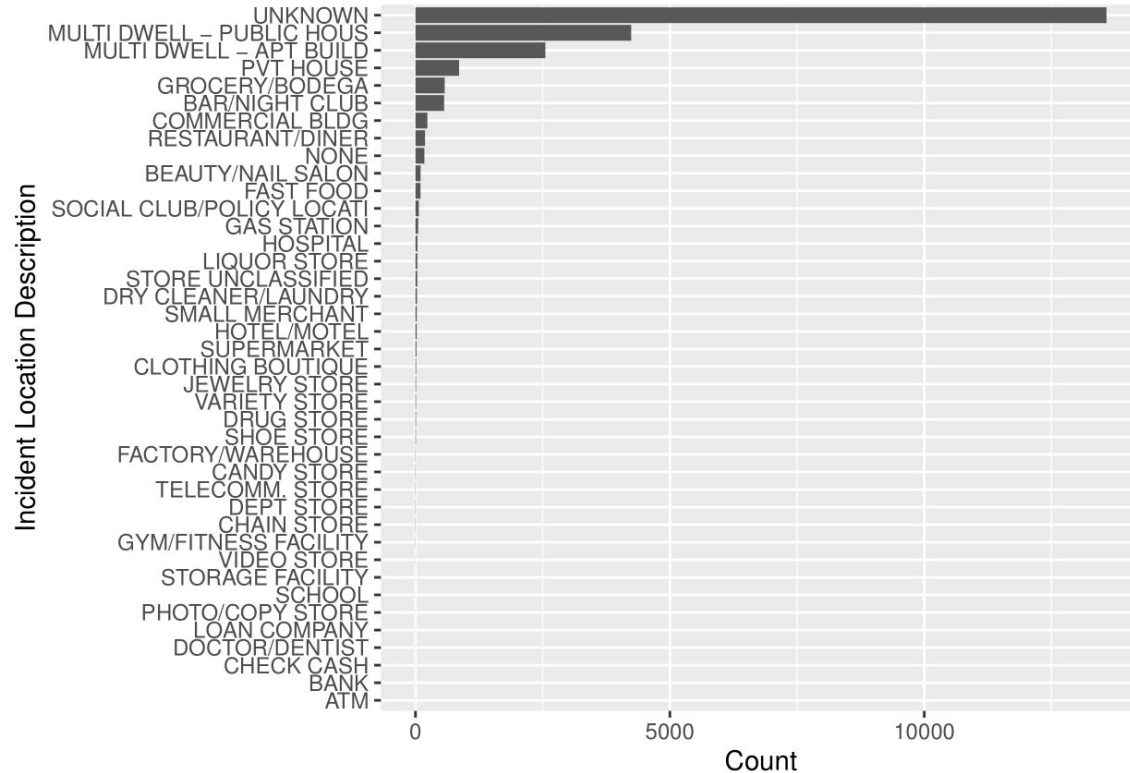
##	OCCUR_DATE	OCCUR_TIME	BORO	PRECINCT
##	Length:23585	Length:23585	Length:23585	Min. : 1.00
##	Class :character	Class1:hms	Class :character	1st Qu.: 44.00
##	Mode :character	Class2:difftime	Mode :character	Median : 69.00
##		Mode :numeric		Mean : 66.21
##				3rd Qu.: 81.00
##				Max. :123.00
##	LOCATION_DESC	PERP_AGE_GROUP	PERP_SEX	VIC_AGE_GROUP
##	Length:23585	Length:23585	Length:23585	Length:23585
##	Class :character	Class :character	Class :character	Class :character
##	Mode :character	Mode :character	Mode :character	Mode :character
##				
##				
##				
##	VIC_SEX	Latitude	Longitude	
##	Length:23585	Min. :40.51	Min. : -74.25	
##	Class :character	1st Qu.:40.67	1st Qu.: -73.94	
##	Mode :character	Median :40.70	Median : -73.92	
##		Mean :40.74	Mean : -73.91	
##		3rd Qu.:40.82	3rd Qu.: -73.88	
##		Max. :40.91	Max. : -73.70	

Dealing with NA values

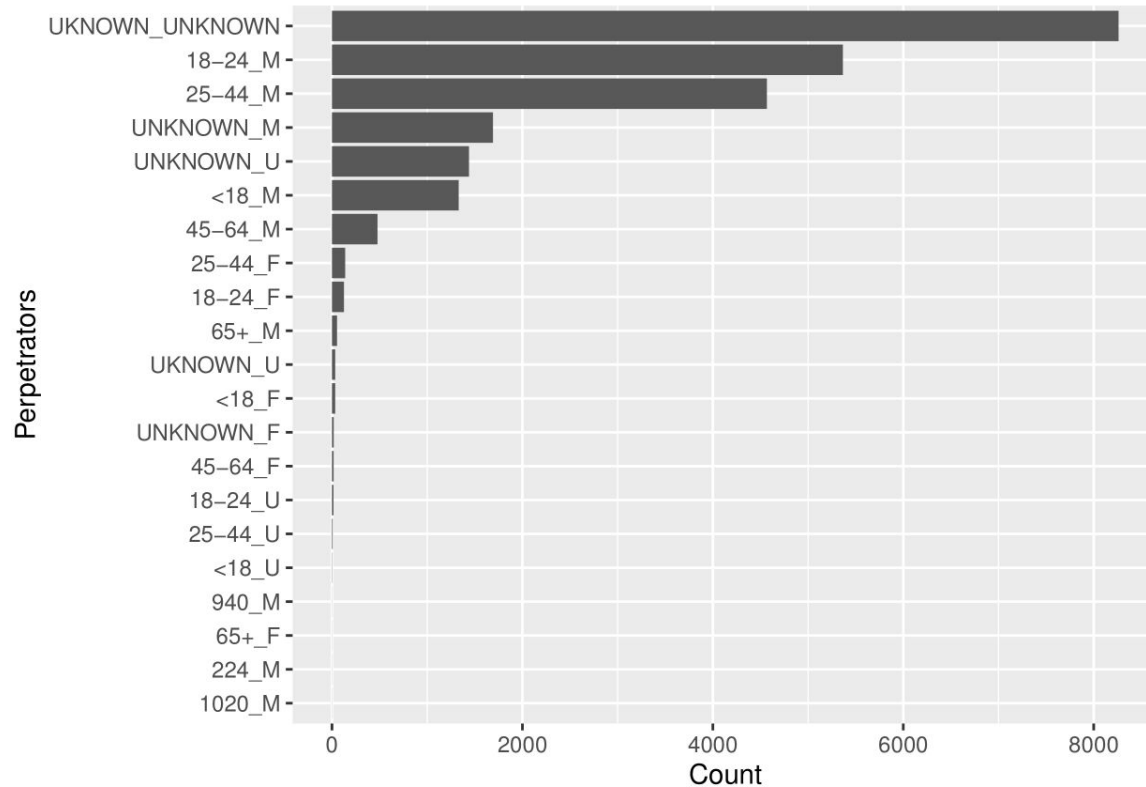
```
##      OCCUR_DATE      OCCUR_TIME      BORO      PRECINCT  LOCATION_DESC
##      0.0000000      0.0000000      0.0000000      0.0000000      0.5758321
## PERP_AGE_GROUP      PERP_SEX  VIC_AGE_GROUP      VIC_SEX      Latitude
##      0.3517066      0.3502650      0.0000000      0.0000000      0.0000000
##      Longitude
##      0.0000000
```

Plots and Models

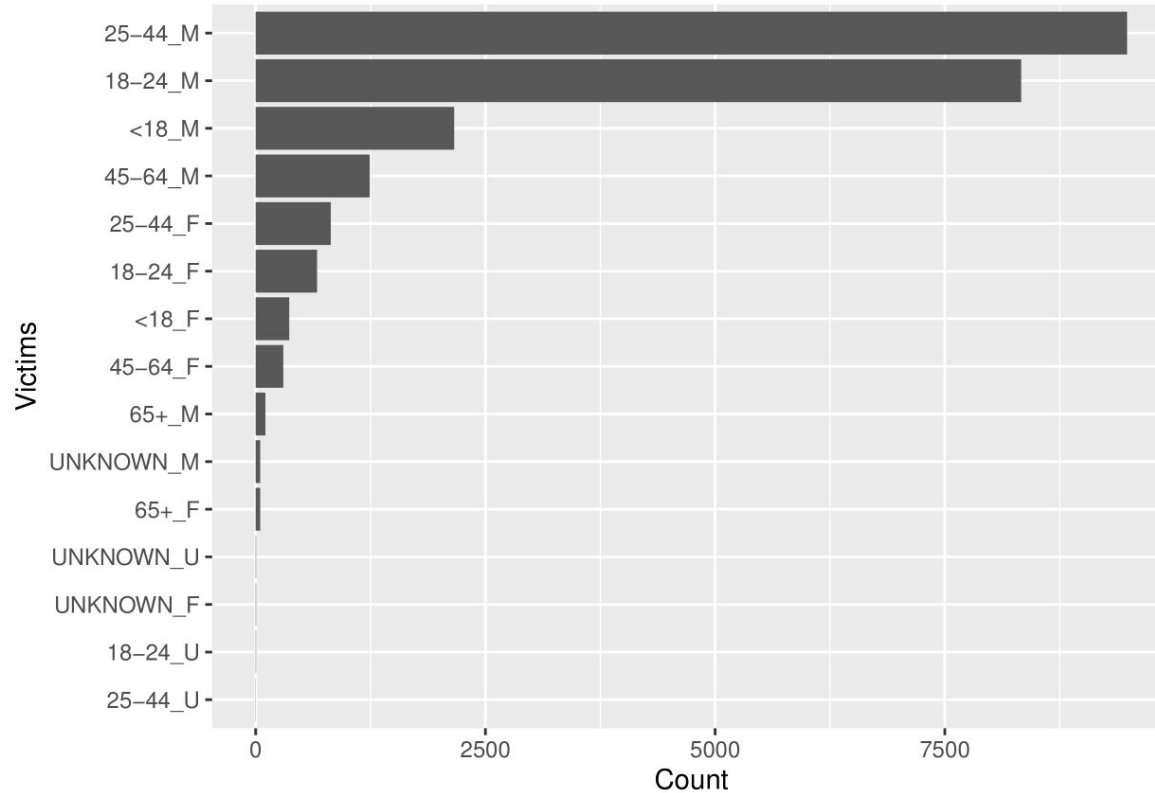
Plot 1 - Location Description Countplot



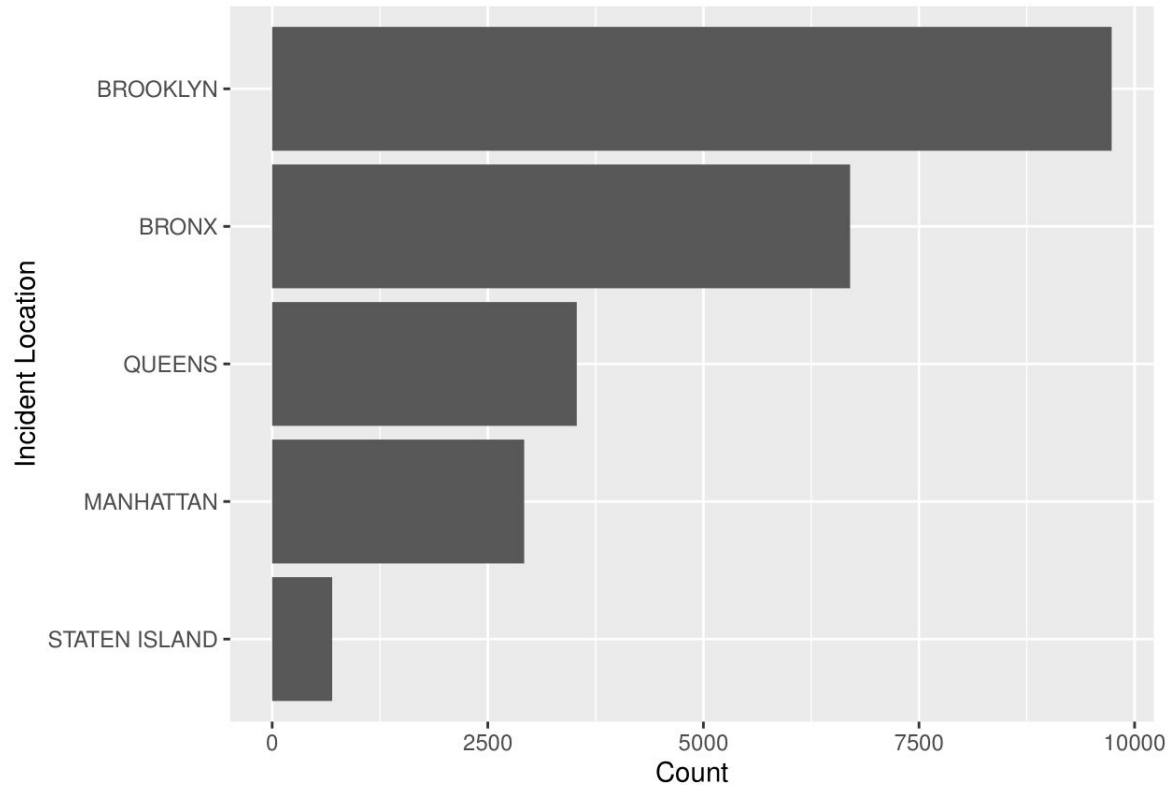
Plot 2 – Perpetrator Demographic Countplot



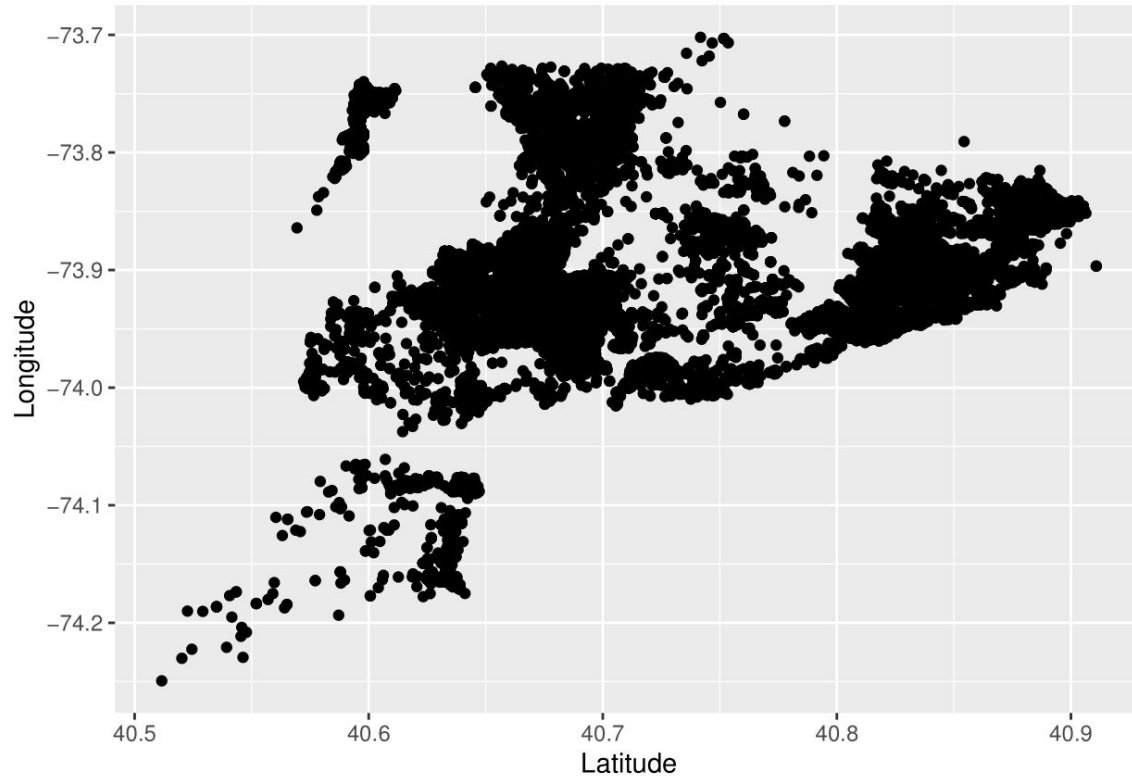
Plot 3 - Victim Demographic Countplot



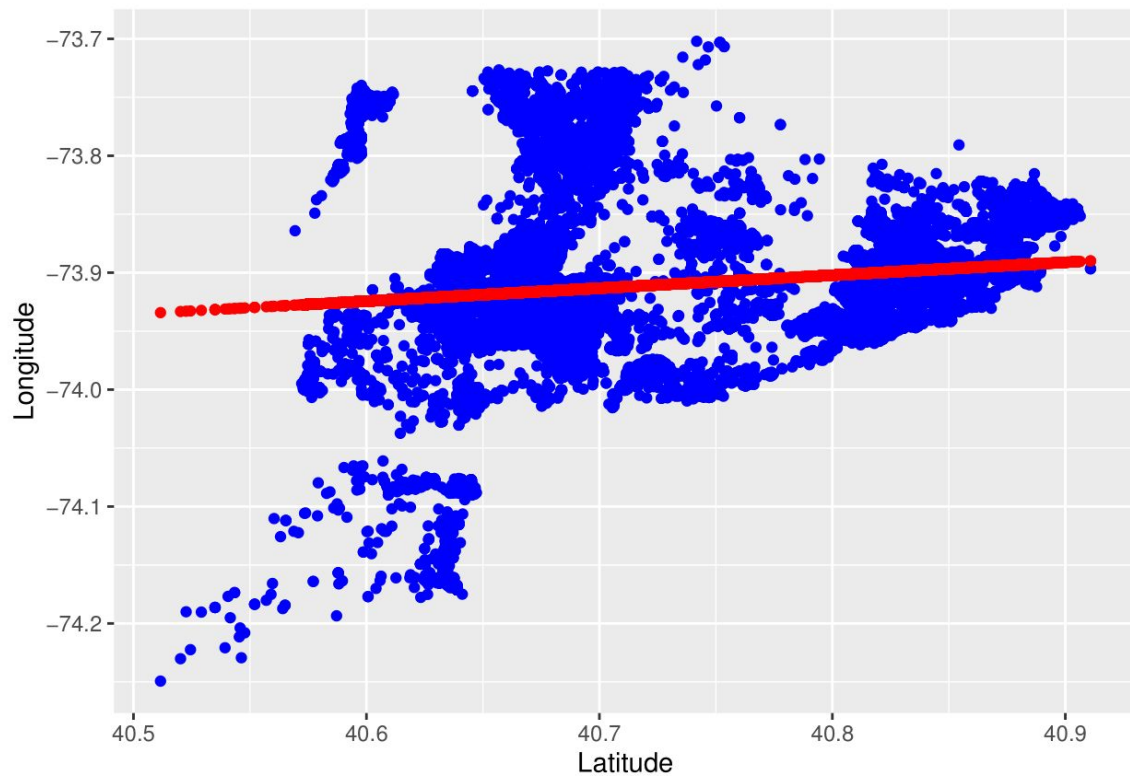
Plot 4 - Borough Countplot



Plot 5 - Incident Longitude and Latitude



Model



Conclusion

Bias and Conclusion

Bias

- Mostly Personal

Conclusion

- Incident Locations
- Common Demographics

Links

Project Github:

- <https://github.com/awyeh64/nypd>

Data Source:

- <https://catalog.data.gov/dataset/nypd-shooting-incident-data-historic>