

NYPD Shootings data

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NYPD shooting incident data

- ▶ What neighborhood has more incidents?
- ▶ Who is more affected?
- ▶ Are shootings slowing down?

Data source

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

- Get url for data and import:

```
url_in <- "https://data.cityofnewyork.us/api/views/833y-fsy8/rows.csv?accessType=DOWNLOAD"
file_name <- c("rows.csv?accessType=DOWNLOAD")
urls <- str_c(url_in, file_name)
urls
```

```
## [1] "https://data.cityofnewyork.us/api/views/833y-fsy8/rows.csv?accessType=DOWNLOAD"
```

Data Summary:

- ▶ collected daily 2006-2020.
- ▶ 23585 rows.
- ▶ Column names: INCIDENT_KEY, OCCUR_DATE, OCCUR_TIME, BORO, PRECINCT, JURISDICTION_CODE, LOCATION_DESC, STATISTICAL_MURDER_FLAG, PERP_AGE_GROUP, PERP_SEX, PERP_RACE, VIC_AGE_GROUP, VIC_SEX, VIC_RACE, X_COORD_CD, Y_COORD_CD, Latitude, Longitude, Lon_Lat

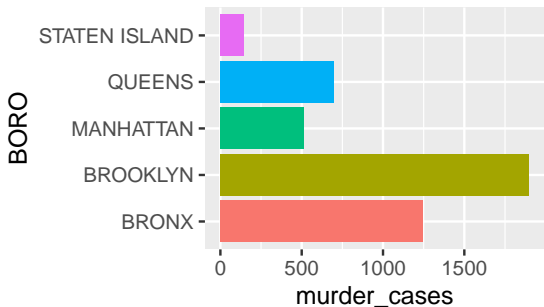
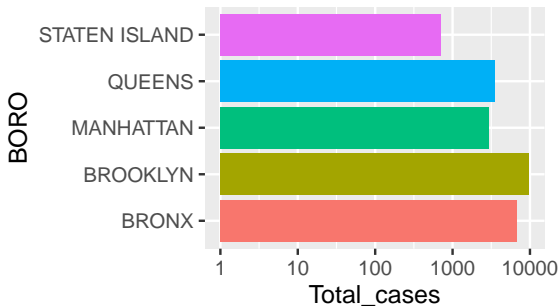
Transform Data

- ▶ Transform data to see relation between incidents and deaths
- ▶ Columns we keep in dataset: OCCUR_DATE, OCCUR_TIME, BORO_PRECINCT, BORO, PRECINCT, STATISTICAL_MURDER_FLAG, PERP_AGE_GROUP, PERP_SEX, PERP_RACE, VIC_AGE_SEX, VIC_AGE_GROUP, VIC_SEX, VIC_RACE

Analyzing data

Boros deaths,cases and murder rate:

BORO	cases	murder_cases	murder_rate
BRONX	3084	1247	0.1860916
BROOKLYN	3845	1898	0.1949866
MANHATTAN	1785	515	0.1762491
QUEENS	2075	697	0.1973386
STATEN ISLAND	521	143	0.2054598



Visualizing results

Cases Murders comparison

Warning: Transformation introduced infinite values in continuous

Transformation introduced infinite values in continuous

Murder/cases by date for specific Boro in NYC

