



NYPD Shooting Incident Data

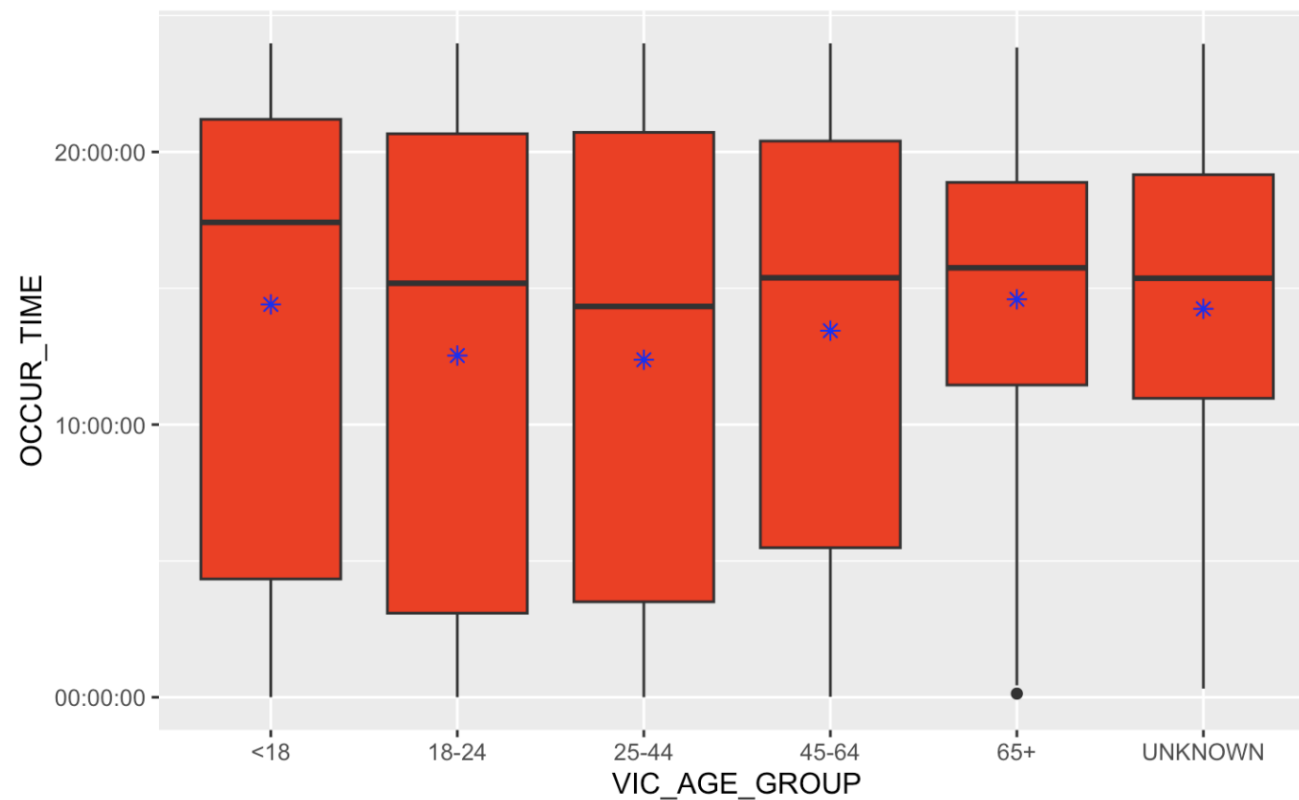
Analyzing shootings in NYC between 2006-2023



Which Borough in NYC has the most shootings?
How old are the victims?
When do shootings occur?
Do all shooting lead to murder?

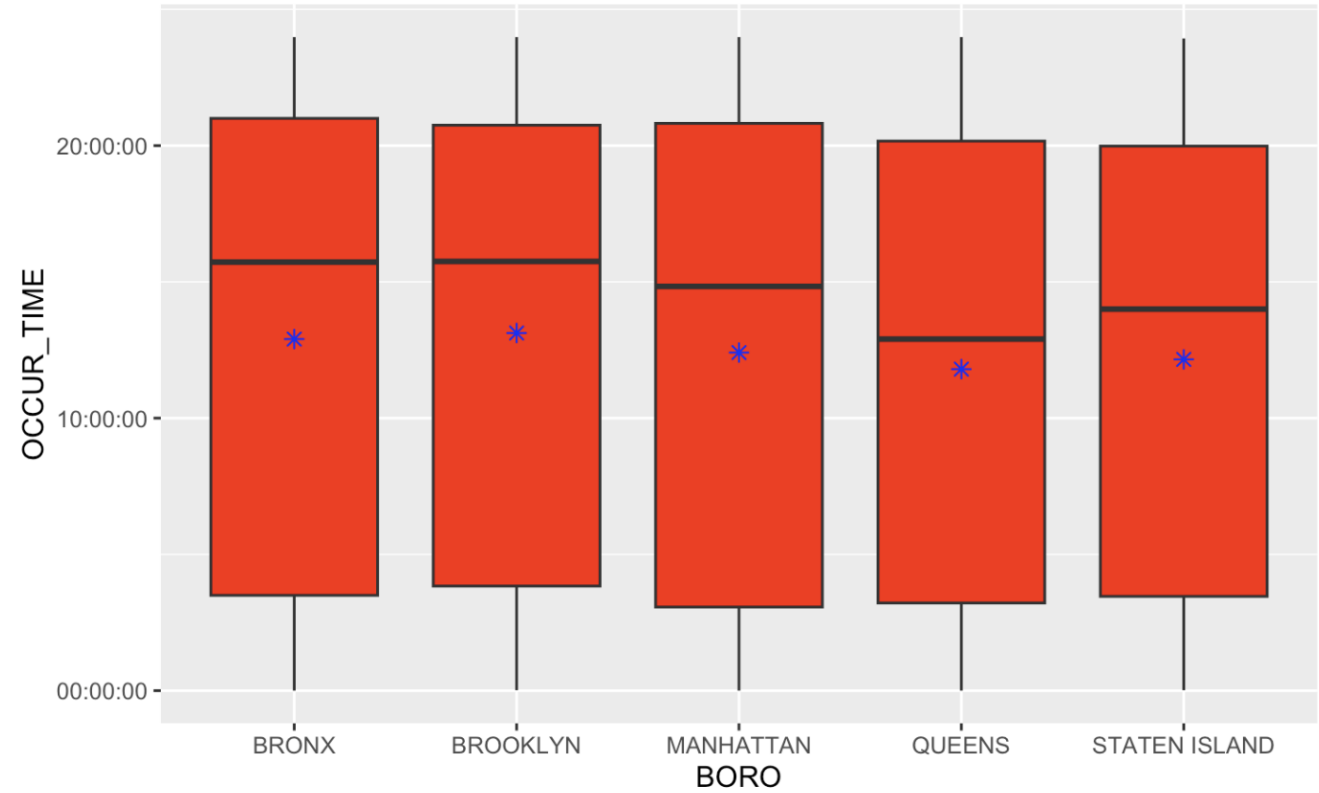
Victim Age vs Shooting Time

Shootings on average take place in the *afternoon* for all age groups



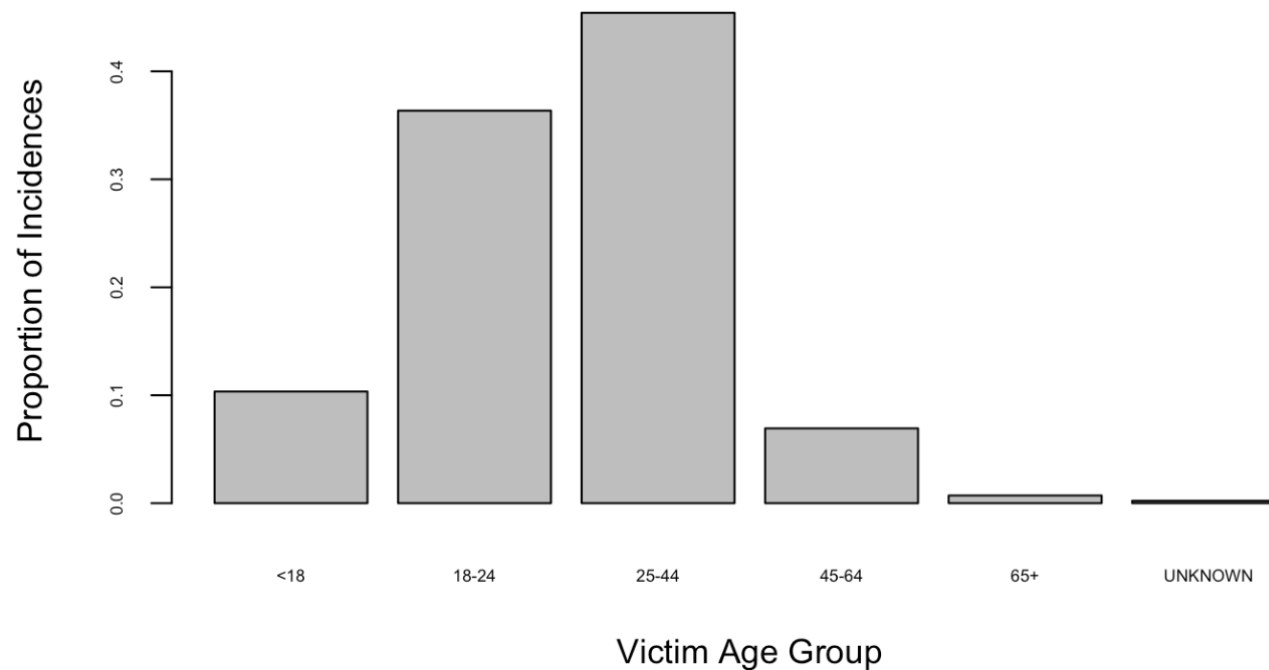
Borough vs Shooting Time

Shootings on average occurred in the *afternoon* in each Borough



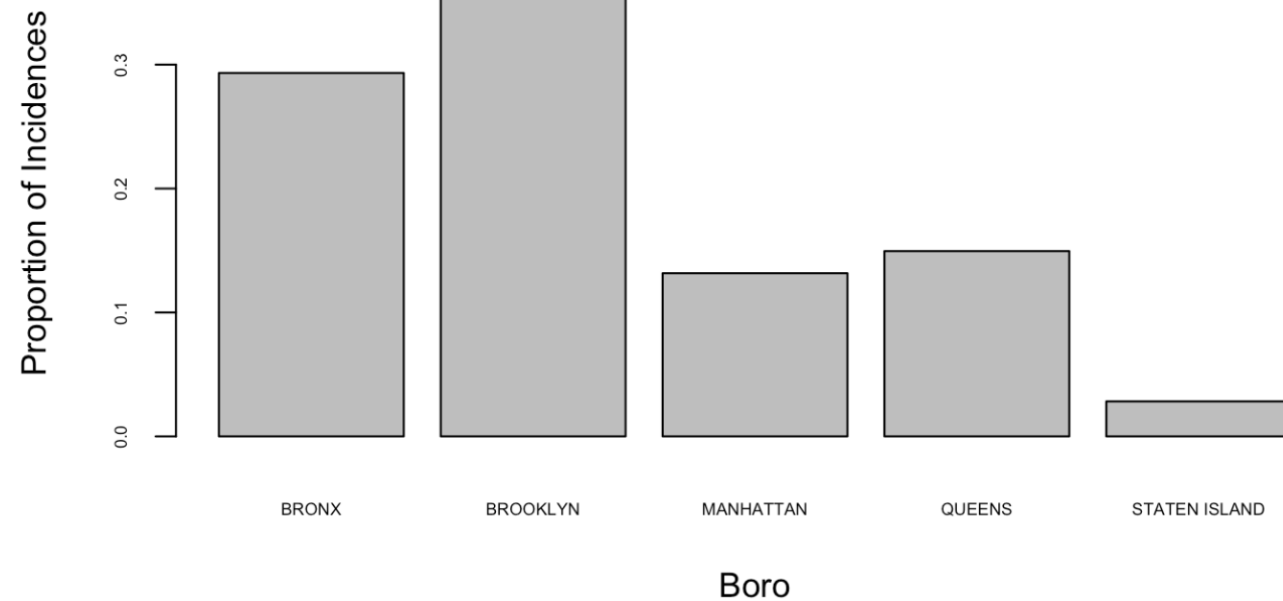
Victim Age vs Number of Shootings

*18-24 and 25-44
years olds were
victims of most
shootings*



Borough vs Number of Shootings

Most shootings occurred in *the Bronx and Brooklyn*



VIC_AGE_GROUP <chr>	Total <int>
18-24	10384
25-44	12973
45-64	1981
65+	205
<18	2954
UNKNOWN	64

BORO <chr>	Total <int>
BRONX	8376
BROOKLYN	11346
MANHATTAN	3761
QUEENS	4271
STATEN ISLAND	807

❖ *A total of roughly 28,500 shootings between 2006 and 2023. Victims aged 25-44 experienced the most shootings and Brooklyn had the highest number of shootings.*

Call:

```
lm(formula = STATISTICAL_MURDER_FLAG ~ VIC_AGE_GROUP, data = NYPD_data)
```

Residuals:

Min	1Q	Median	3Q	Max
-0.3220	-0.2188	-0.1666	-0.1303	0.8697

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	0.130332	0.007239	18.005	< 2e-16 ***
VIC_AGE_GROUP18-24	0.036271	0.008204	4.421	9.85e-06 ***
VIC_AGE_GROUP25-44	0.088430	0.008021	11.026	< 2e-16 ***
VIC_AGE_GROUP45-64	0.118028	0.011425	10.331	< 2e-16 ***
VIC_AGE_GROUP65+	0.191619	0.028415	6.744	1.58e-11 ***
VIC_AGE_GROUPUNKNOWN	0.104043	0.049708	2.093	0.0363 *

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.3934 on 28555 degrees of freedom

Multiple R-squared: 0.008309, Adjusted R-squared: 0.008135

F-statistic: 47.85 on 5 and 28555 DF, p-value: < 2.2e-16

Linear Model between Victim Age Group and Statistical Murder Flag

- Statistically significant relationship/correlation between victim age group and statistical murder flag (shooting results in a death/murder)
- Assuming an alpha of .05, given the F-stat (47.85) and p-value (2.2e-16)

Bias



Conclusion

- On average shootings occur in the afternoon across all victim age groups and boroughs
- Roughly 28,500 recorded shootings between 2006 and 2023 in New York
- Brooklyn (11346) and the Bronx (8376) had the most shootings
- 25-44 years old (12973) and 18-24 year olds (10384) most likely to be a shooting victim
- Potential bias in policing and how crime data is obtained/recorded
- Potential personal bias in assuming older people less likely to be involved in violent crime