# Demographic Patterns in NYPD Shooting Incidents

### Virgil Tornoreanu

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#### 1 Introduction

This report analyzes demographic and temporal patterns in NYPD Shooting Incidents from 2008 to the present.

It visualizes trends by year, gender, race, age, and borough.

Each chart is also saved as a 300-DPI PNG inside the figures/ folder for slides.

#### 2 Yearly Trend

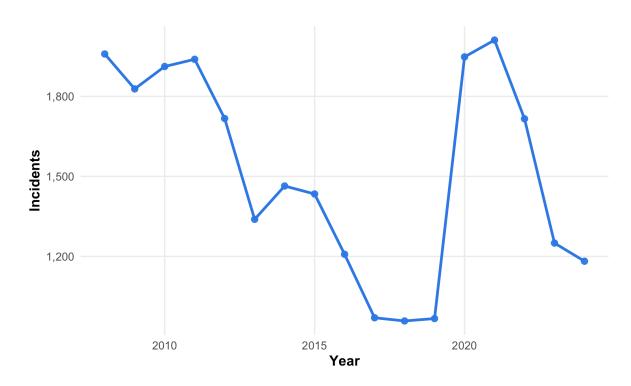


Figure 1: Incidents by Year (2008–Present). Long decline until 2019, then a pandemic-era spike.

# 3 Seasonality

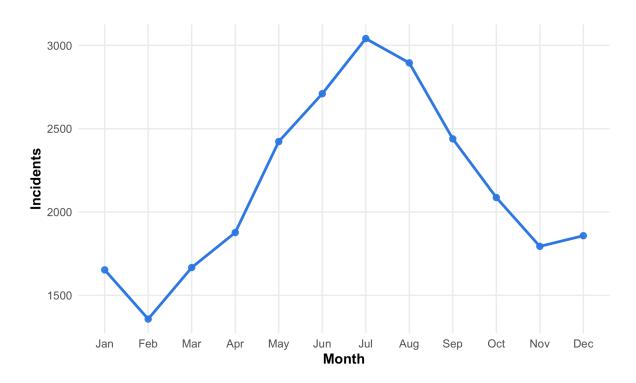


Figure 2: Incidents by Month (All Years Combined). Slight summer lift.

## 4 Timing Heatmap

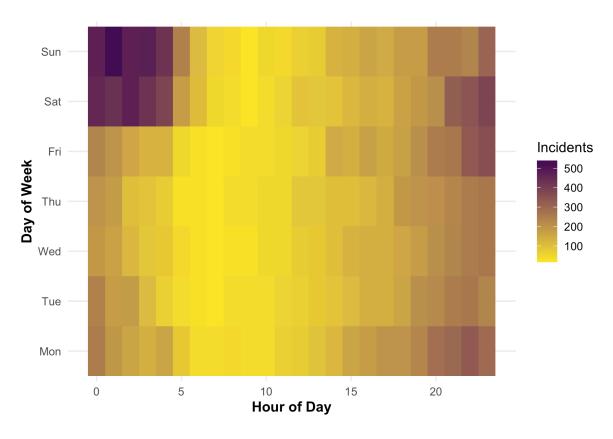


Figure 3: When Do Incidents Happen? Heatmap by Hour  $\times$  Day of Week.

### 5 Victim Gender

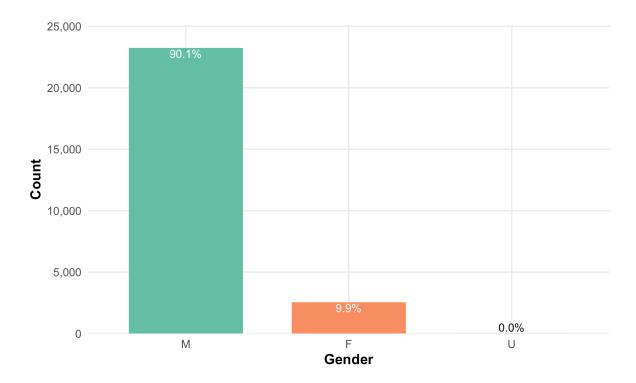


Figure 4: Victim Gender Distribution. Men account for over 90% of all victims.

### 6 Victim Race

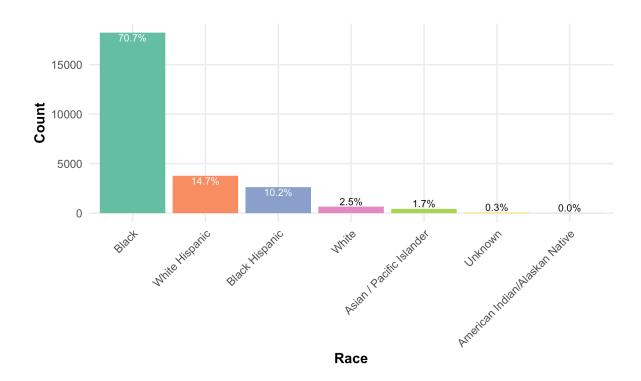


Figure 5: Victim Race Distribution. Higher shares among Black and Hispanic communities.

### 7 Suspect Race

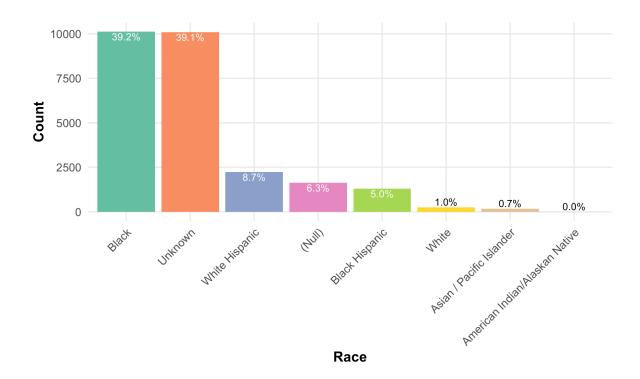


Figure 6: Suspect Race Distribution. Similar pattern to victim distribution.

# 8 Victim Age Group

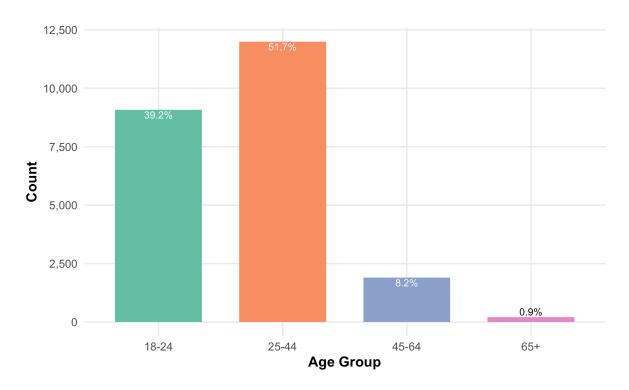


Figure 7: Victim Age Group. Most victims are 18-44.

### 9 Borough Comparison

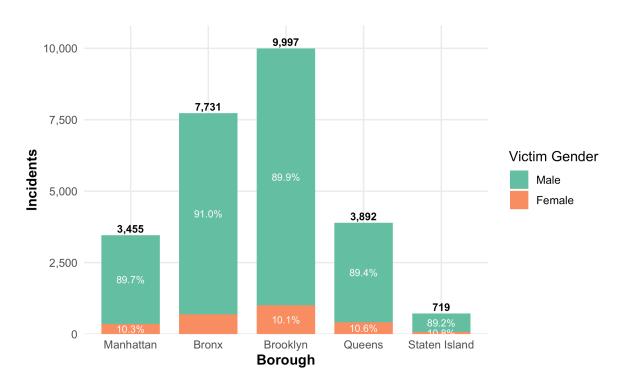


Figure 8: Incidents by Borough (Stacked by Victim Gender). Bronx and Brooklyn dominate; male majority everywhere.

#### 10 Borough Totals

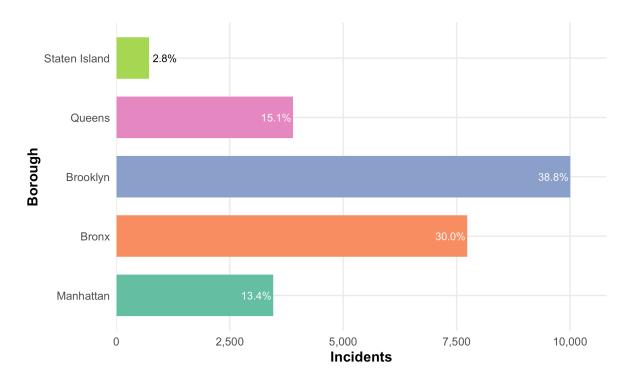


Figure 9: Incidents by Borough (Totals). Bronx and Brooklyn highest; Staten Island lowest.

#### 11 Appendix: Figure Notes (for Slides)

- Trend: From 2008 to 2019, shootings declined, then spiked during COVID-19 years.
- Seasonality: Slight summer lift; July–August peaks.
- Timing: Late-night peaks, especially Fri–Sun (heatmap).
- Gender: Over 90% male victims.
- Victim Race: Higher shares among Black and Hispanic communities.
- Suspect Race: Mirrors victim distribution.
- **Age:** Mostly 18–44.
- Borough  $\times$  Gender: Bronx and Brooklyn dominate; male majority everywhere.
- Borough Totals: Bronx and Brooklyn highest; Staten Island lowest.