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Analysis of 2024 NYPD Arrests



Agenda

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 - Perpetrator Sex
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Executive Summary, Context & Objective, Methodology

Introduction

Executive Summary

Identified demographic and geographic patterns in NYPD arrest data from 2024 in order to inform preventative strategies that reduce bias and improve community safety.

Age	Sex	Race	Location
In 2024 one age group was arrested the most for most offensive crimes.	Men are more likely to be arrested than women	Every ethnic group, besides American Indian, had a higher % felony charge than White individuals.	Neighborhood wealth, density, and resources could be influencing both the types of crimes committed and the degree of enforcement.

Preventative Measures: Understand and invest in tackling the root causes of crimes with a focus in reducing bias among the law enforcement with special programs (rehabilitation, counseling, and workshops) that help build community and trust

Context and Objective

- Stakeholders: NYPD
- Dataset: [NYPD Arrest Dataset \(2006-2024\)](#)
 - Data from 2024 is used for relevancy

- NYPD has reached out to a group of analysts to provide them with findings and insights from the arrests dataset in 2024.
- The objective is to identify demographic and geographic patterns in the 2024 dataset in order to inform preventative strategies that reduce bias and improve community safety.

Methodology

Data

- Identify and remove nulls, incomplete sections, and any other unnecessary information.
- Ensure data is complete, accurate, up-to-date, and from a trusted source.

Analysis

- Analyze arrest data to identify trends and disparities across different demographic and geographic groups.
- Recognize that bias can exist within data and appear in multiple forms, such as collection methods, categorization, or interpretation.

Insights

- Analyze trends and patterns in data to create interpretations.



Age, Perpetrator sex, Race, Location

Observations + Insights



Age

Based on "2024 NYPD Arrests" dataset which age group was arrested the most to least?

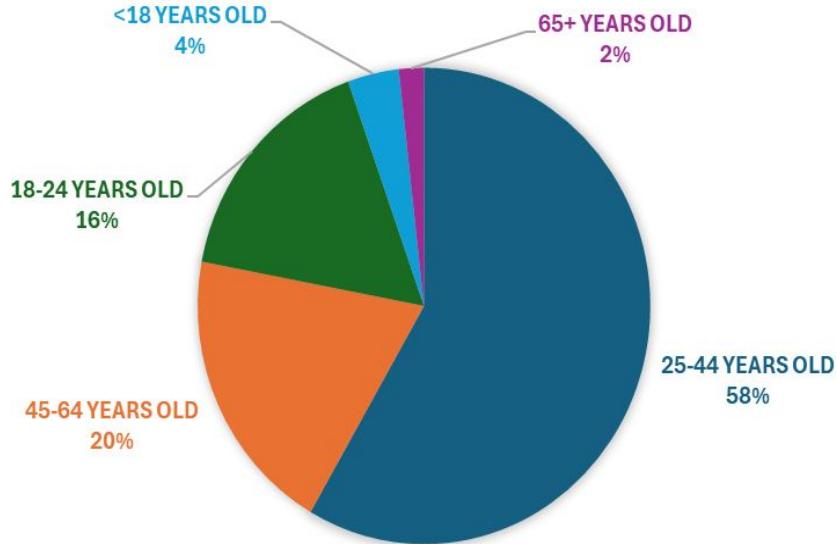
Poll

- Which age group was arrested the most in 2024?
 - A. Less than 18 Years Old
 - B. 18-24 Years Old
 - C. 25-44 Years Old
 - D. 45-64 Years Old
 - E. Over 65 Years Old

Data Overview

- In 2024, individuals between the ages of 25 to 44 represented the largest share of NYPD arrests, accounting for more than 50% of the total.

Age groups	TOTAL Arrests
25-44 YEARS OLD	152,034
45-64 YEARS OLD	51,121
18-24 YEARS OLD	43,174
<18 YEARS OLD	9,525
65+ YEARS OLD	4,649
Grand Total	260,503



Insights

- **Why is this age group involved in the highest number of arrests?**
 - Socioeconomic factors such as limited job opportunities, financial hardship, and social pressures contribute to their higher arrest rates.
- **Bias:** The dataset may be biased due to inconsistent time ranges across age groups, which can affect comparisons of arrest counts. Additionally, multiple offenses committed by the same individual may be counted separately, further inflating the totals for certain age groups.



Perpetrator Sex

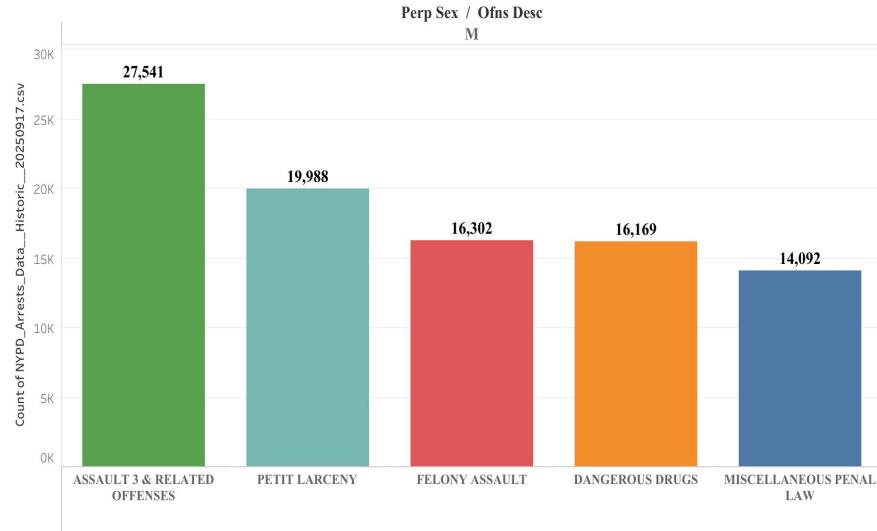
Why were males arrested more frequently than females?



Perp Sex vs Offensive Description

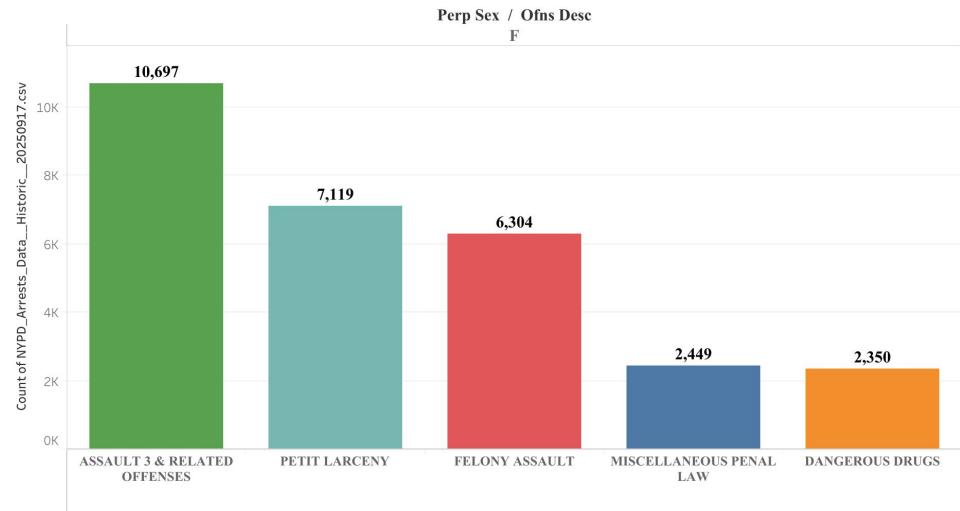
Top 5 Arrests

Offensive Description vs Perp Sex



Top 5 Arrests

Offensive Description vs Perp Sex



In these charts show the top five (5) offensive descriptions for arrests among men and women.

Arrests based on Crimes Committed by Men

MISCELLANEOUS PENAL LAW

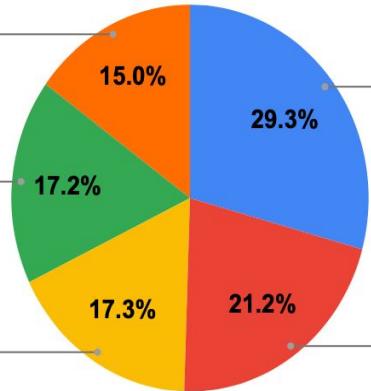
15.0%

DANGEROUS DRUGS

17.2%

FELONY ASSAULT

17.3%



ASSAULT 3 & RELATED OFFENSES

29.3%

PETIT LARCENY

21.2%

Arrests based on Crimes Committed by Women

DANGEROUS DRUGS

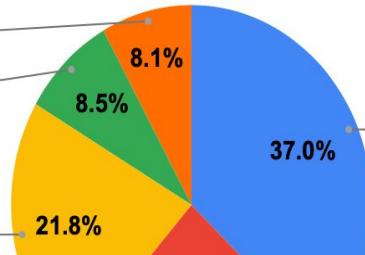
8.1%

MISCELLANEOUS PENAL LAW

8.5%

FELONY ASSAULT

21.8%



ASSAULT 3 & RELATED OFFENSES

37.0%

The overall data shows that men are the majority of the arrests, which is about 82%, while women represent only 18%.

Insights

Why were males arrested more frequently than females?

- Based on the data, men are more frequently arrested for aggressive or drug-related crimes
- The disparity may suggest differences in societal roles or exposure that lead to men being arrested more frequently
- Some crimes involving women might be underreported



Race

Were certain ethnic groups charged with felonies more often than others in 2024?

Context

- **FELONY**
 - **Criminal Record:** Permanent record that appears on all background checks.
 - **Employment:** Many employers may refuse to hire someone with a felony conviction, especially for jobs requiring trust, licensing, or security clearance.
 - **Housing:** Can make it difficult to rent apartments or qualify for public housing.
 - **Social Consequences:** Significant stigma; can affect relationships, immigration status, and access to education or loans.
- **MISDEMEANOR**
 - **Criminal Record:** Still creates a criminal record, though less damaging than a felony.
 - **Employment:** May limit certain jobs (especially government or licensed professions) but many private employers are more lenient.
 - **Housing and Education:** Can affect some background screenings but less severely than a felony.
 - **Civil Rights:** Typically retain rights to vote, serve on juries, and own firearms (unless related to domestic violence).
 - **Social Consequences:** Can still carry stigma, though often viewed as a "mistake" rather than a serious crime.

Data Background

COUNT of ARREST_KEY	LAW_CAT_CD				% of Low-Level Charges	% of Felony Charges
PERP_RACE	FELONY	MISDEMEANOR	VIOLATION	Grand Total		
AMERICAN INDIAN/ALASKAN NATIVE	267	537	8	812	67.12%	32.88%
ASIAN / PACIFIC ISLANDER	6029	8531	88	14648	58.84%	41.16%
WHITE	9256	16219	400	25875	64.23%	35.77%
BLACK HISPANIC	11379	14735	172	26286	56.71%	43.29%
WHITE HISPANIC	27574	40405	517	68496	59.74%	40.26%
BLACK	54313	65747	1027	121087	55.15%	44.85%
Grand Total	108818	146174	2212	257204		

- % of Arrest Charged as Felonies = The amount of arrests charged as felonies for a particular racial group out of the total arrests for that racial group. **Lower % means less felonies for that group**
 - % of Arrests Charged as "Low-Level" = $(\text{Amount of Misdemeanors} + \text{Amount of Violations}) / (\text{Grand Total})$

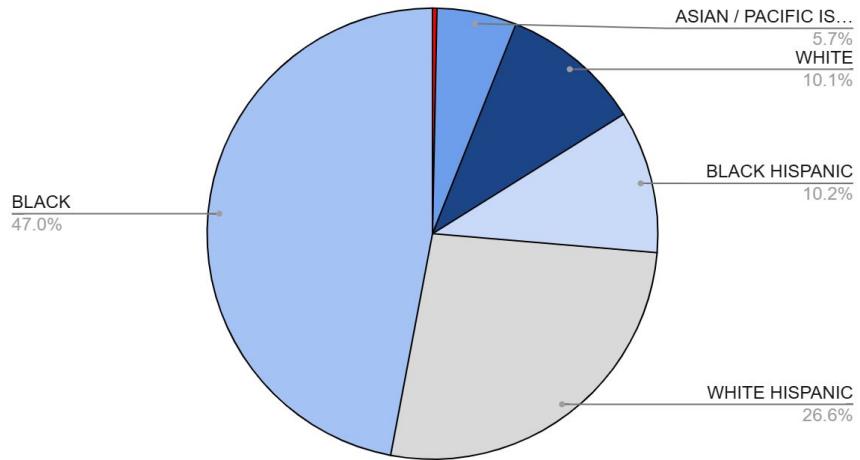
Data Overview

% of Arrests Charged as Low-Level vs. Felony



- White Individuals had a lower % of arrests charged as felonies in comparison to nearly every other ethnic group.
- This discrepancy between white individuals and almost every other ethnic group **may suggest potential bias in the charging process.**

Percent of Arrest Total by Race



- American Indian individuals, represented by the red slice, have a much smaller sample size relative to every other ethnic group. (About 800 out of the nearly 260,000 arrests).
- Underrepresentation/overrepresentation may explain the large differences** in the % of arrests charged as felonies.

Insights

- The **disproportionate charge percentage** between white individuals and most ethnic groups could **suggest potential bias** in the charging process for offenses.(Ex. Difference between Felony and Misdemeanor Drug possession is quantity or intent to sell)
- The difference in felony charge percentage can have lasting impacts on individuals. **Felonies impose severe barriers** on an individual's social and economic opportunities.
- The disparity may suggest a difference in interaction between police and certain communities. Certain ethnic communities may have better relations with police or law enforcement may patrol areas different depending on the community
- There may be **overrepresentation** and **underrepresentation** for certain ethnic groups that **may skew the data**.
- Insights are based on the data which covers only arrests and not crimes. **Arrests ≠ Crimes**.

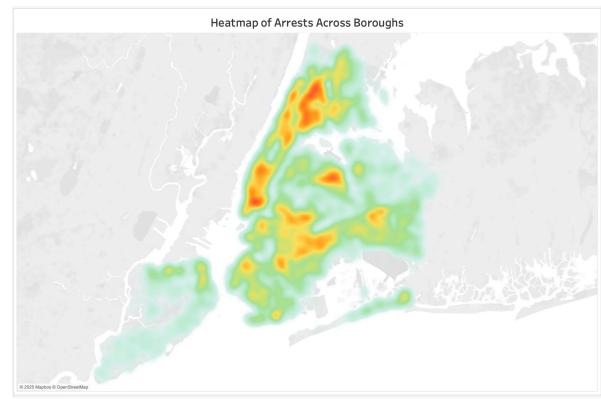
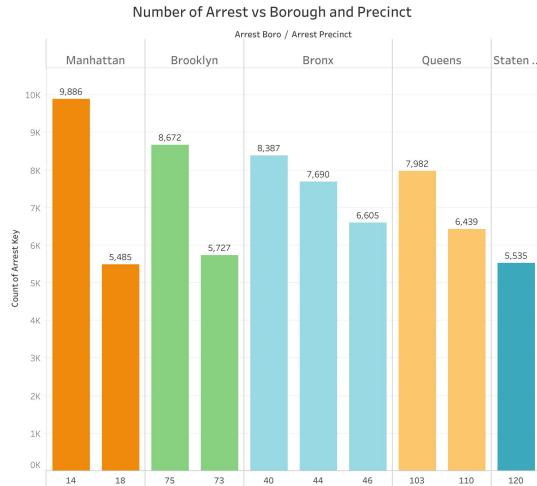
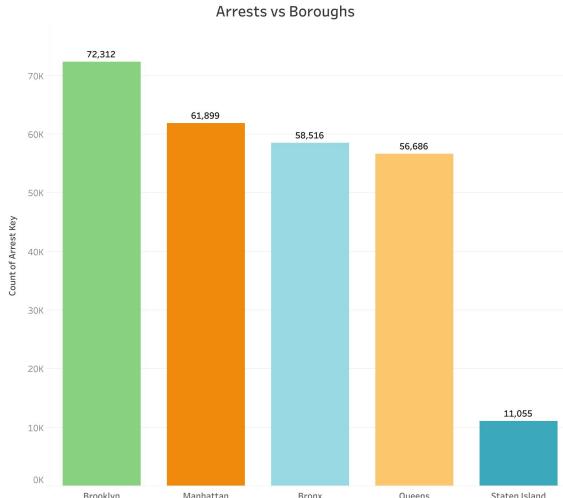


Location

How do patterns of arrests vary across boroughs and precincts, and what factors might explain them?

Boroughs & Precincts

- Highest amount of arrests: Brooklyn
- Precinct 14 in Midtown, Manhattan resulted in the highest number of arrests
- Manhattan and the Bronx has more concentrated areas of arrests

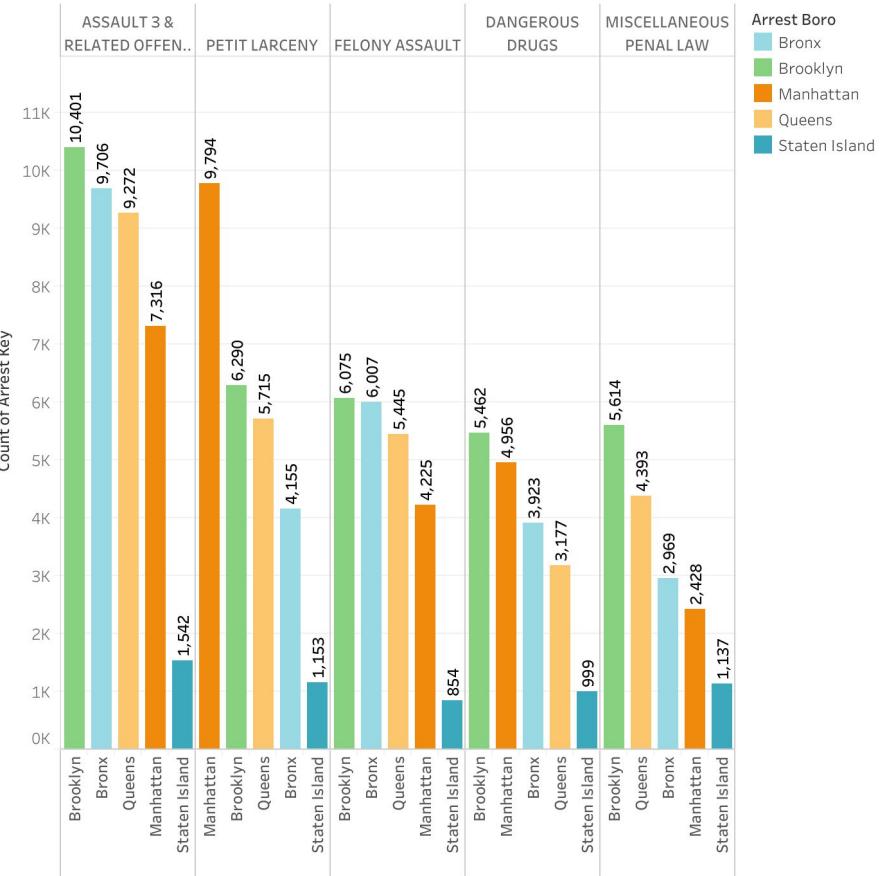


- High concentrated areas in Manhattan are in commercial areas
- High concentrated areas in the Bronx are in residential areas

Arrests vs Top 5 Offenses

- Top 5 offences ranked by boroughs
- Brooklyn leads in assault 3
- Manhattan leads in petit larceny

Arrests per Offense & Boroughs



Insights

- Arrests are **more concentrated** in certain areas, particularly **commercial districts** and some **high-crime residential neighborhoods**. This suggests that **police presence** is likely **higher** in these zones, which contributes to **higher arrest counts**.
- Brooklyn shows the highest overall number of arrests among the boroughs, while Manhattan precincts, particularly in central commercial hubs, rank at the top. This raises questions about whether **police presence and enforcement are intentionally stronger in certain areas compared to others**.
- Commercial areas, with heavy foot traffic and shopping centers, are associated with higher arrests for petit larceny. In contrast, residential areas show higher arrests for assault and related offenses, reflecting different types of neighborhood-level challenges.
- These patterns may not only reflect crime distribution, but also the underlying socio-economic and demographic dynamics of each area. **Neighborhood wealth, density, and resources could be influencing both the types of crimes committed and the degree of enforcement.**



Preventative measures (recommendations), Next steps

Conclusion

Preventative Measures

- Implement mandatory bias-awareness/scenario-based workshops and training for police officers that target overcoming biases.
- Rehabilitation and continuous counseling programs based on a newly defined age group.
- Expanding access to education, job trainings, and stable employment can help reduce economic pressures that might lead to crimes committed
- Investing in community based prevention programs to tackle root causes of why certain crimes are committed in high arrest boroughs and precincts can help with lowering arrest rates all together while rebuilding trust in community and the police



Next Steps

- Combining observations and insights
- Gain more information on the police themselves (demographics, location, police presences)
- Looking at the intersection between categories
 - Ex: compare data between location, races, and age
- Combine our dataset with other related datasets such as crime maps
- Account for biases in data and adjust accordingly
- Look at the historical data and observe trends

Thank you

