



# **Chain of explanation: Prevalent types of crime in Chicago from 2001 to 2023**

# Our Team



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# About DATA



1. Most common crime: Larceny/Theft, with over **7 million** reported thefts annually.
2. The data is between **2001 to 2023** and it comes from **Official Chicago Data Portal**
3. Other prevalent crimes: Burglary, car theft, aggravated assault, robbery, and property crime.
4. 2021 theft rate: **1,394.1 cases per 100,000** residents, a decrease from the previous year.
5. Easy legal access to guns contributes to crime in America.
6. Limited knowledge: Crime in America is largely uncharted beyond general information.
7. Importance of understanding and addressing crime trends in America.

Data: [Link](#)

# Unveiling Crime-Related Insights



- Chicago has long grappled with complex crime issues, despite its remarkable attributes and cultural significance.
- The theft curve in Chicago experienced an **increase between 2015 and 2019**, reaching a significant peak in 2022.
- The implementation of new policies, strategies, or initiatives by Mayor Brandon Johnson in 2023 led to a subsequent **decrease in theft**.
- West Garfield Park, North Lawndale, East Garfield Park, Washington Park, and West Englewood are the **most dangerous neighborhoods** in Chicago based on FBI statistics.

# The Methodology



## Data Processing & Analysis:

- Python
- Pandas
- data cleaning
- preprocessing tasks
  - handling missing values and removing unnecessary columns

## Data Visualization:

- matplotlib
- Plotly
- Bar charts and line charts
- Heat map

## The Tools:

- ArcGIS

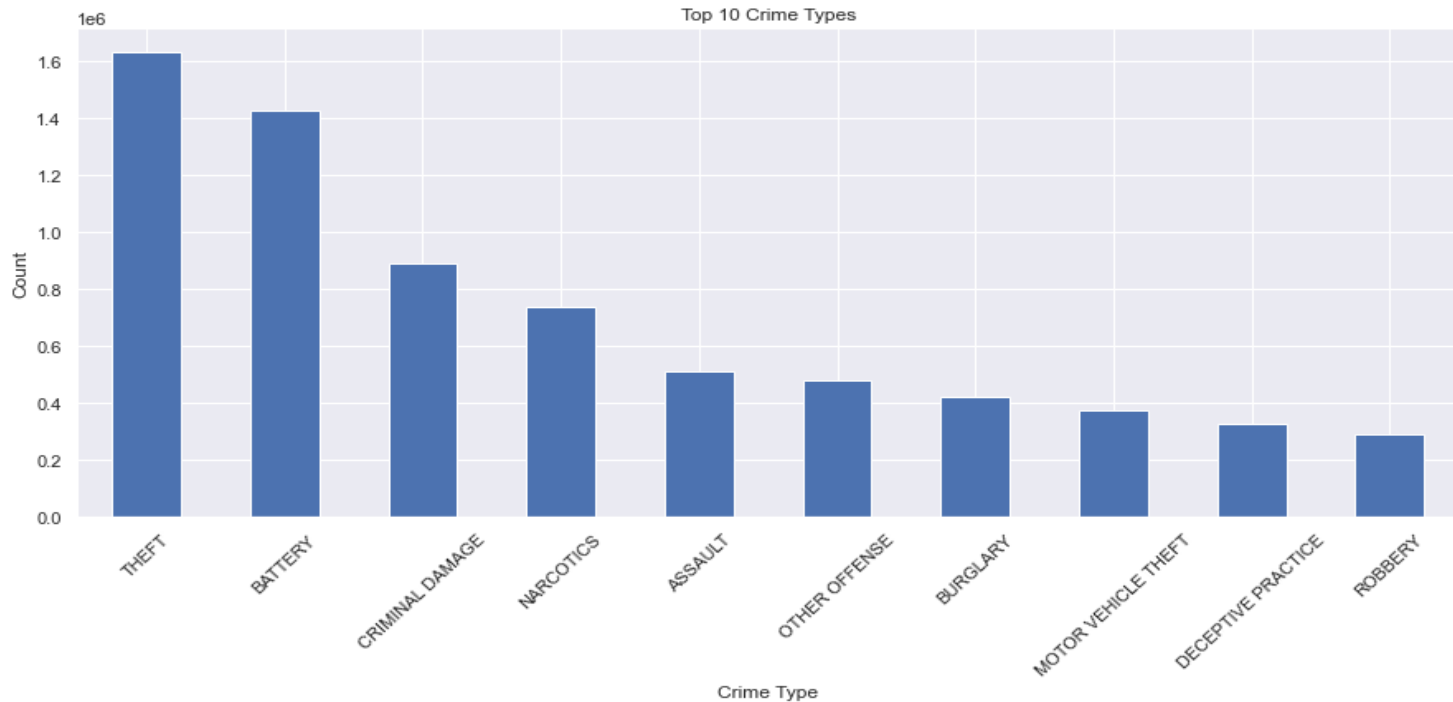
Using the geographic information, we plotted an interactive map of assault incidents in Chicago over the past 22 years.



[illegible]



# Top 10 Crimes



# Navigating the Shadows: Safety in Chicago

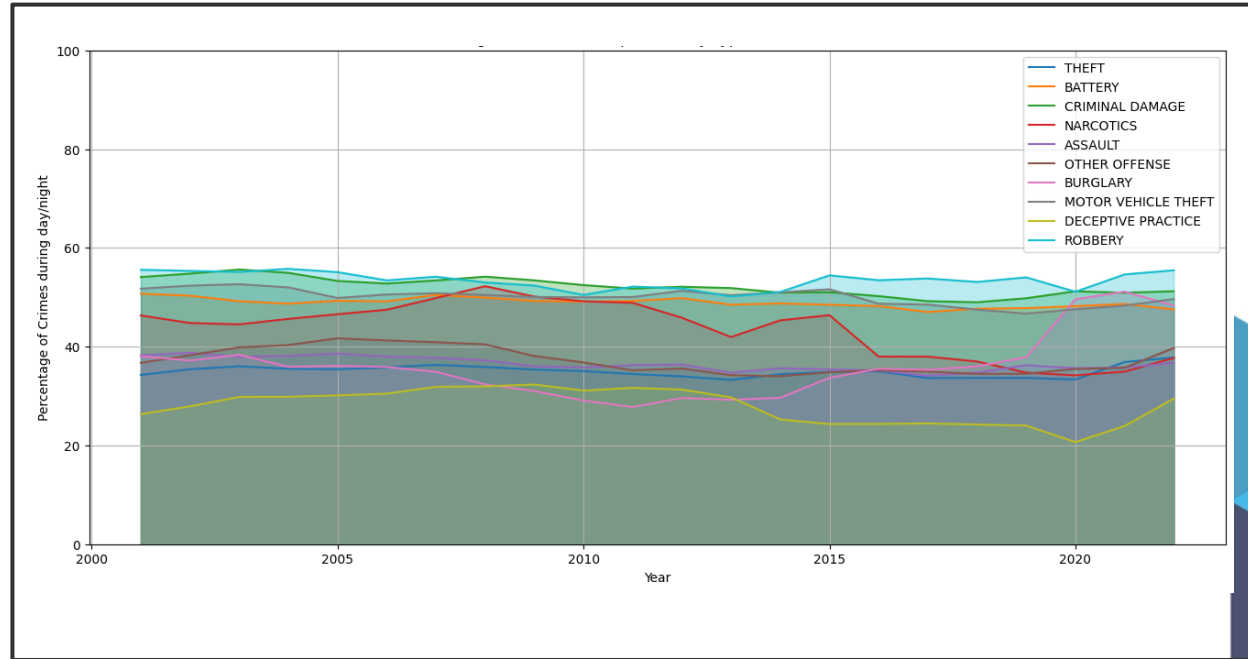


Safety walking alone  
during daylight

**56.01%**     **Moderate**

Safety walking alone  
during night

**26.13%**     **Low**



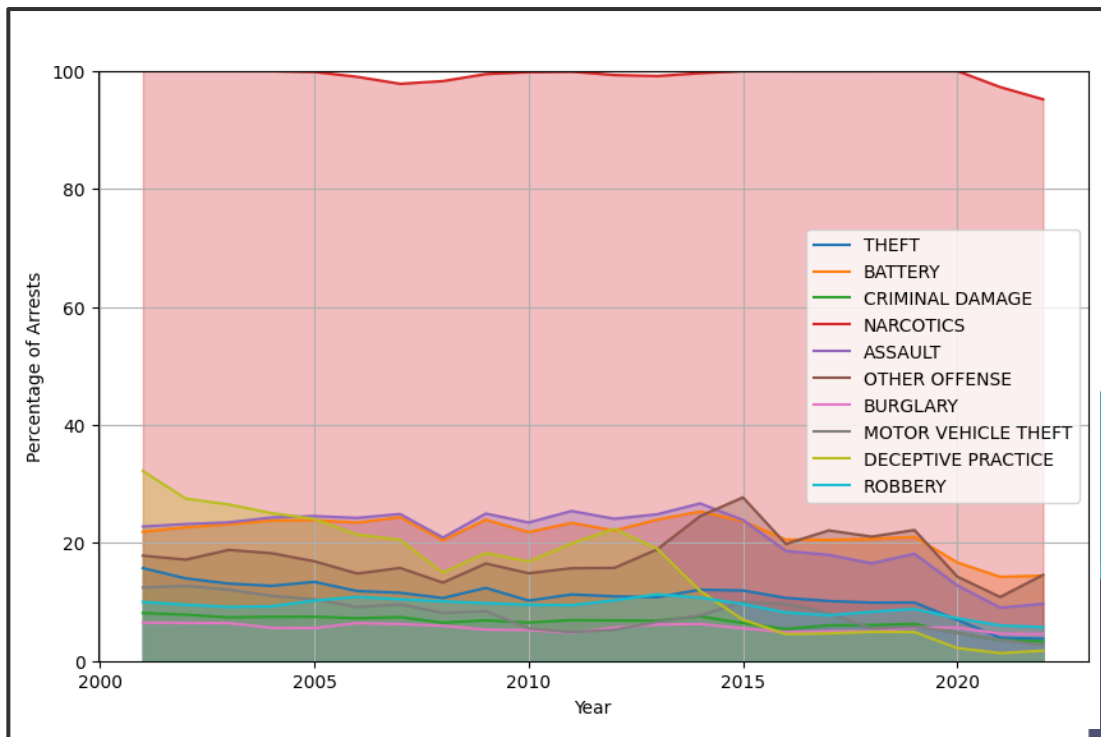




# % of Arrests for Top 10 Crimes

Immediate arrests were prevalent in drug-related cases from 2001 to 2021, indicating enforcement efforts.

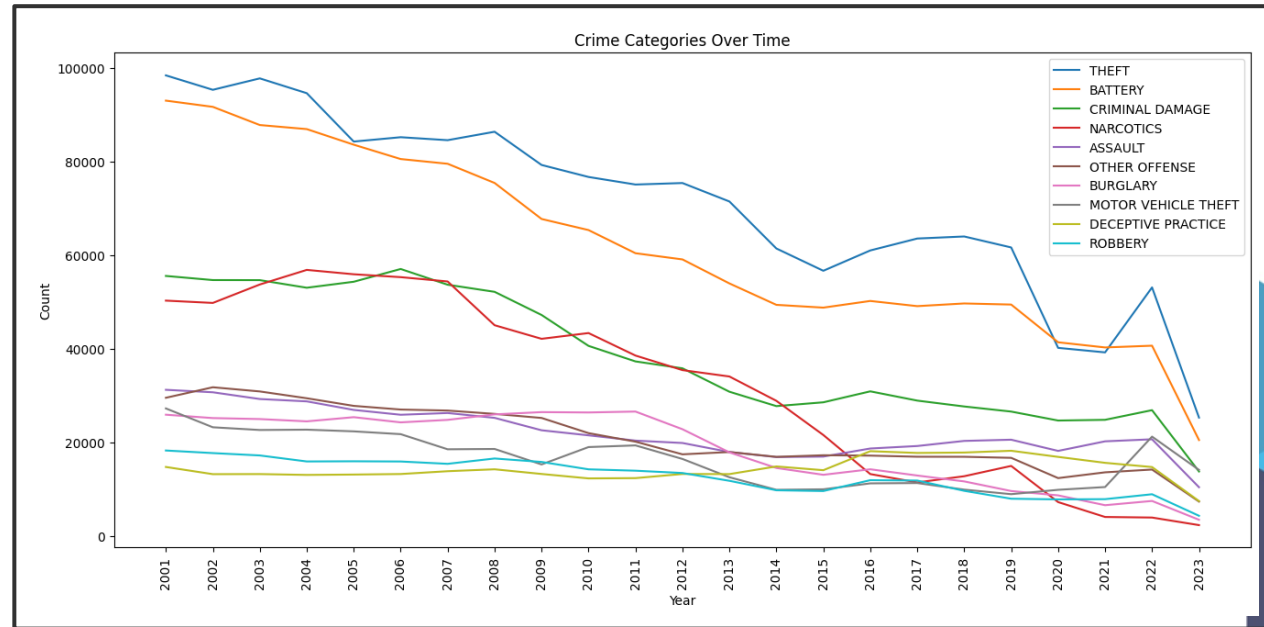
Opioid epidemic in Chicago:  
Increased unemployment,  
homelessness, and crime  
reflect the widespread  
impact of drug abuse.



# Top 10 Crimes Trend by Category Over 22 Years

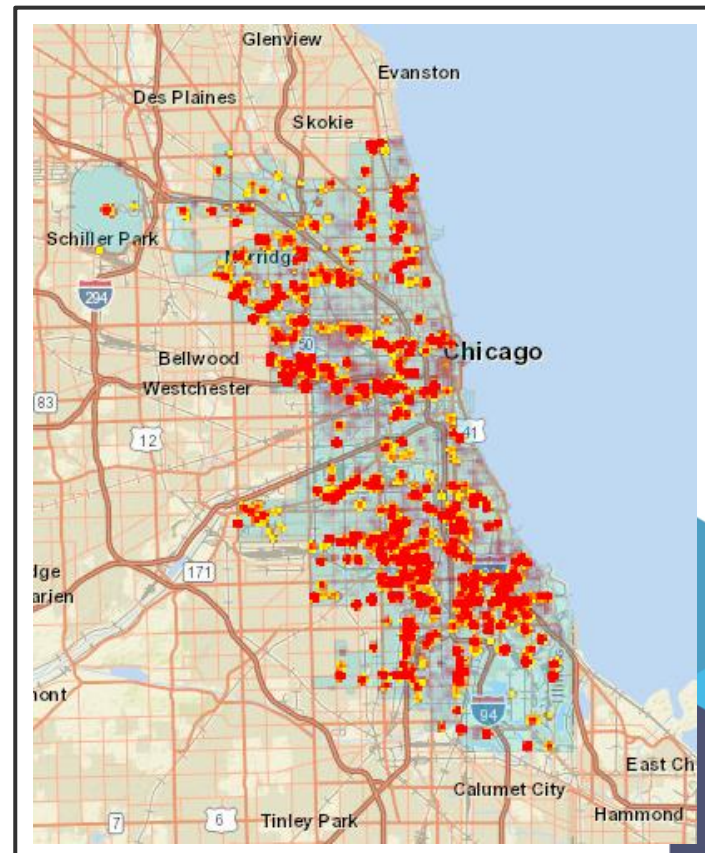


The crimes during the Covid time (2019–2021) dropped significantly. And in general, the crimes decreased during these years.



# The Distribution of Assaults in Chicago over 22 years

- One of the areas that most assaults happened is Austin, Humboldt Park, Garfield Park in the center of Chicago.
- Southwest Side and South Side are also having a very high rate of assault



# Conclusions



Decreasing crime rates in Chicago over the past few years can be attributed to several factors:

1. Law enforcement
2. Community policing strategies
3. Collaborative efforts between local agencies and community organizations.
5. Targeted interventions in high-crime areas, improved socioeconomic conditions, and stronger gun control measures have also played a role.
6. Ongoing efforts aim to improve living conditions and opportunities in underserved communities, addressing the root causes of crime.
7. Mayor Johnson's implementation of new policies, strategies, and initiatives is believed to be a significant factor in this decline.





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# Thanks!

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