Allocating resources for crime prevention in Chicago for 2024

FIRST OF ALL:

This is an **extremely complex** subject that requires in-depth analysis of **social, economic and demographic** data in order to propose solutions. This exercise just looks at a **small portion** of this issue and aims to point out paths based on this specific dataset.

The dataset reflects **reported incidents of crime**, except for murders, that occurred in the City of Chicago from 2001. For the purpose of this project I analysed the **historical data** up to 2023, and then focused on data referred to **last year** only.

To understand the data and better inform the decisions I divided the analysis in three questions:

WHEN?

- Locating the reports in time

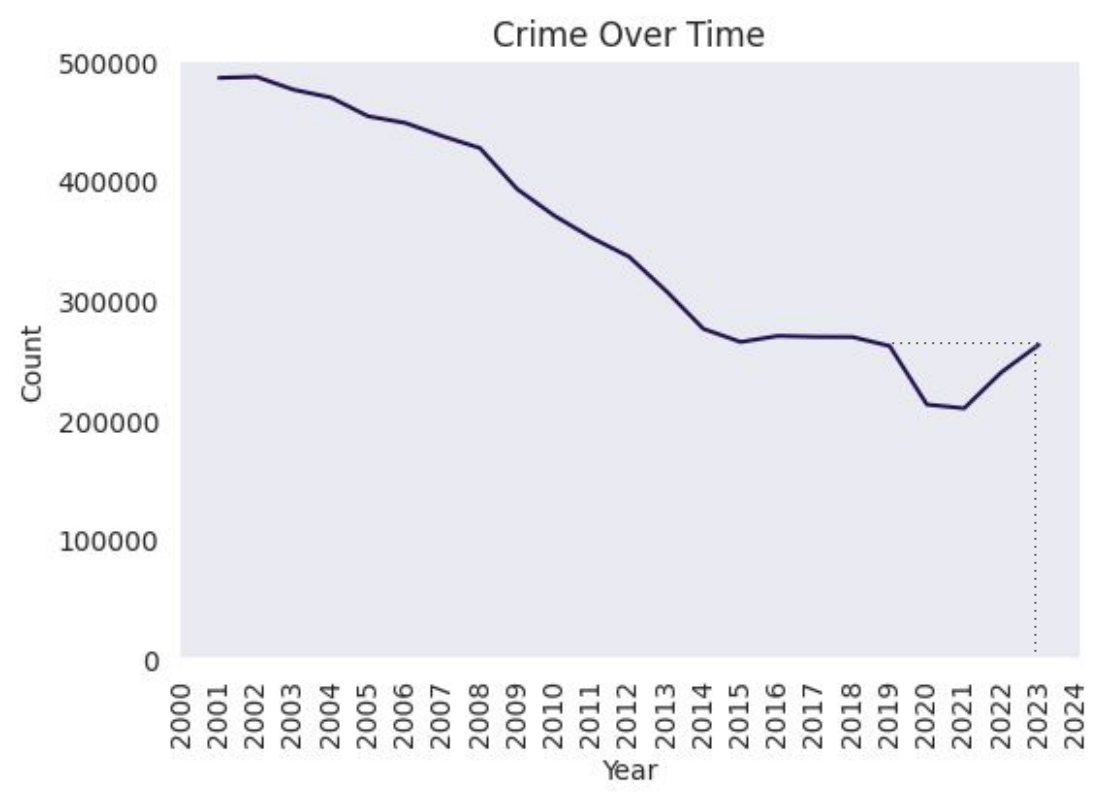
WHAT?

- Crime types reported

WHERE?

- Location

WHEN?



Reports per hour in 2001:

55.47

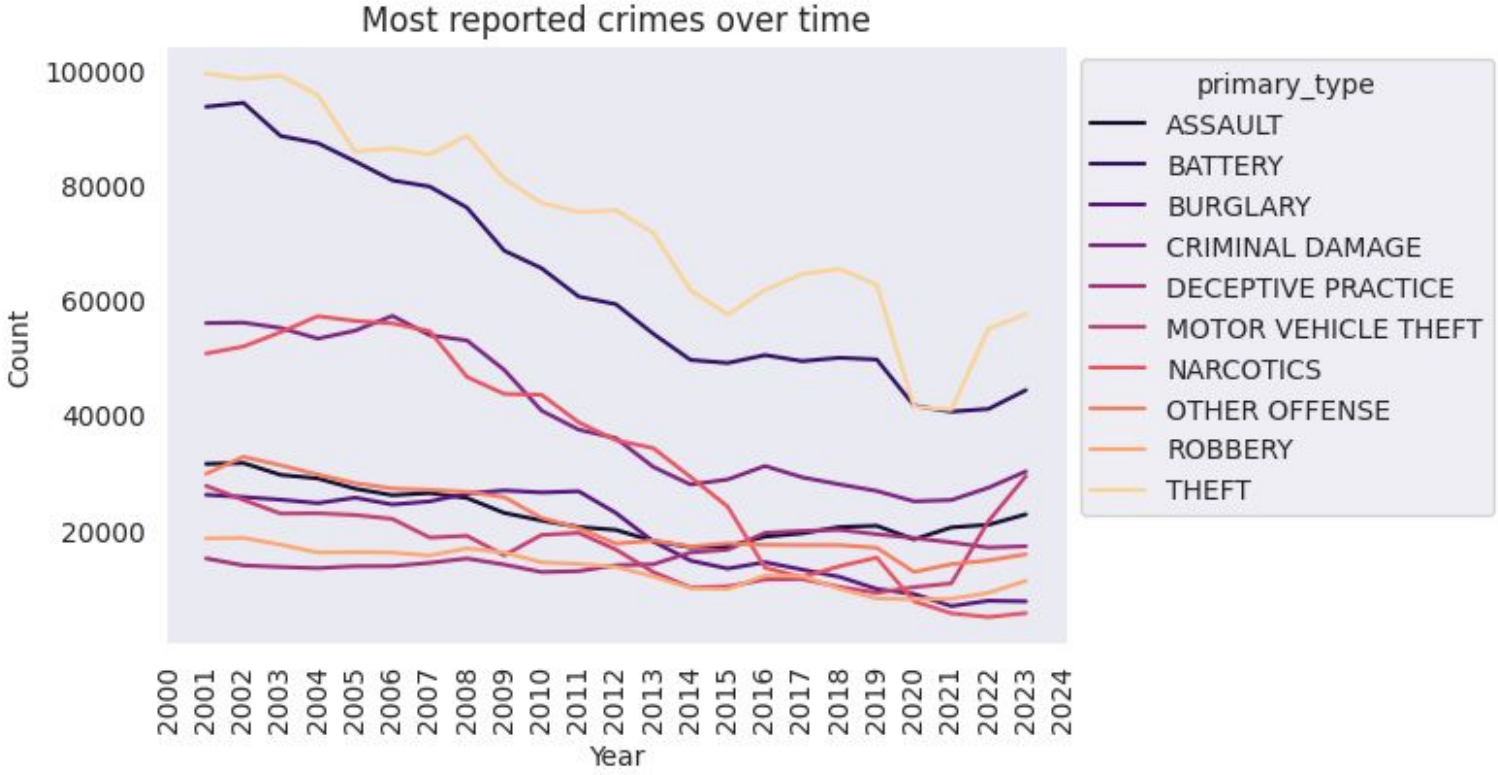
Reports per hour in 2023:

29.97

In 2020 and 2021:

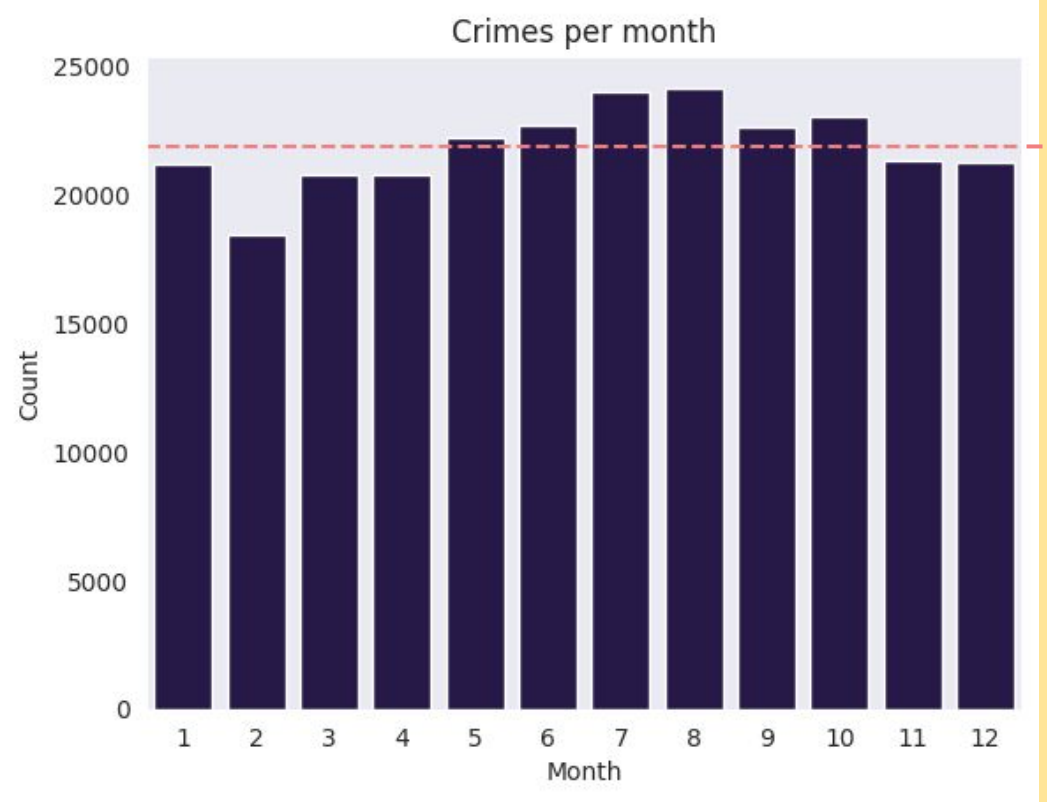
19%

WHAT?



Looking at the common types of crimes, we can see that the overall downward trend varies in various degrees. Two standouts are **theft** and **motor vehicle theft**, that have been increasing rapidly since 2021.

WHEN?



21875

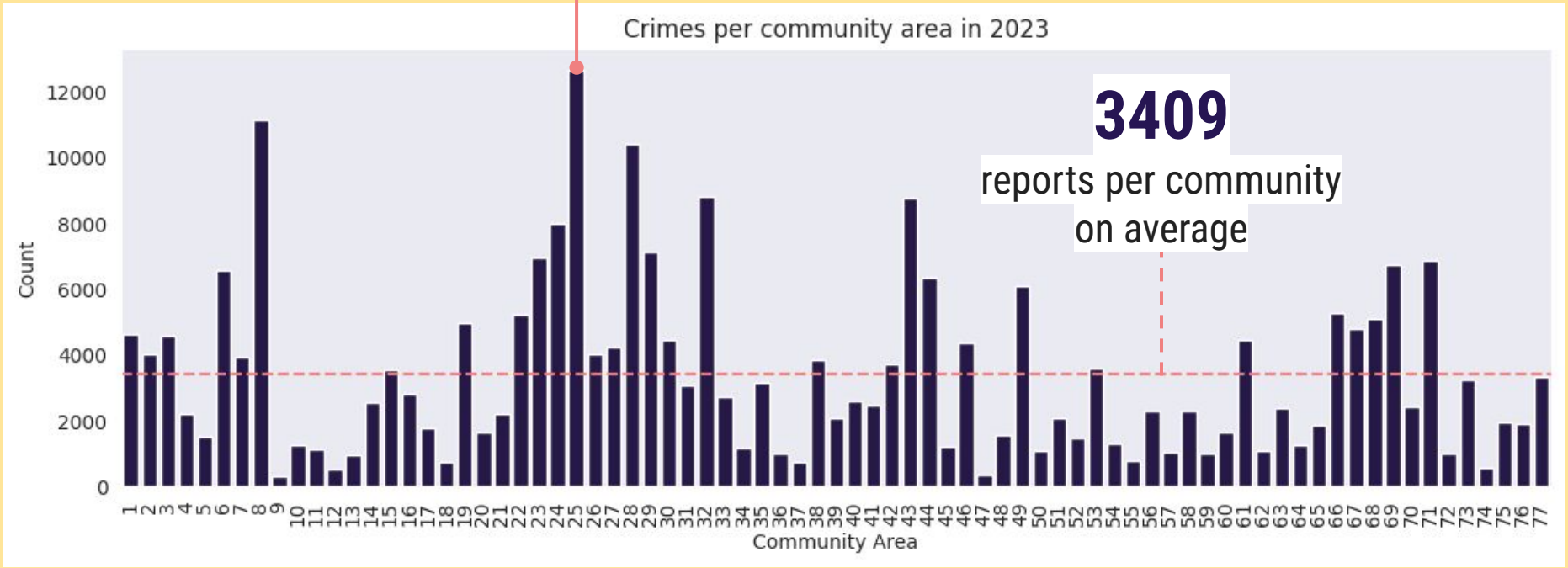
reports per month on average

30.98%

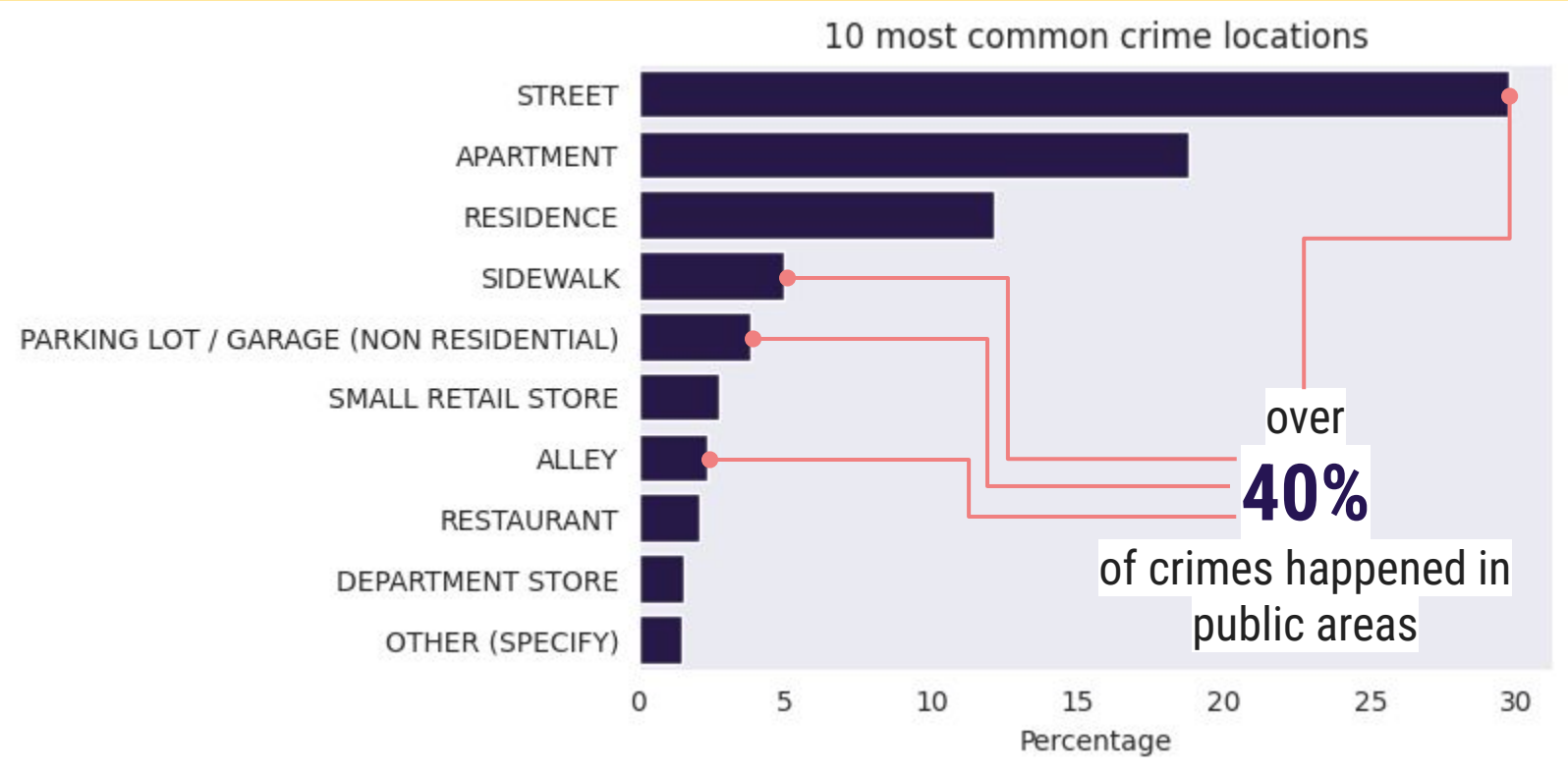
increase in crime rate from February to August

WHERE?

In 2023, **half** of the communities registered **79%** of incidentes.
Community 25, for instance, registered over **3x** the average number of incidents for the 77 areas.



WHERE?


10 most common crime locations
STREET
APARTMENT
RESIDENCE
SIDEWALK
PARKING LOT / GARAGE (NON RESIDENTIAL)
SMALL RETAIL STORE
ALLEY
RESTAURANT
DEPARTMENT STORE
OTHER (SPECIFY)
0
5
10
15
20
25
30
Percentage
over
40%
of crimes happened in public areas

CONCLUSIONS

- The data only represents **reported incidents** of crime. Because of that, **campaigns** encouraging people to **report on classically unreported or underreported crimes** can help paint a clear picture.
- That is a correlation with times when more people are circulating. Making efforts in the direction of **increasing police patrol and remote surveillance in busy areas** can reduce crimes of opportunity.
- 36% of the most common crimes happen in public areas. **Improving the physical conditions**, such as street lighting, can make safer urban spaces, **reducing opportunities** for common crimes like theft.
- Crime is unevenly distributed throughout the city, with half of the communities representing around 73% of reports. **Allocating resources in the right areas** is crucial when planning effective measures.

REFERENCES

- What is situational crime prevention?
- Measuring Performance in a Modern Police Organization

Thank you!