

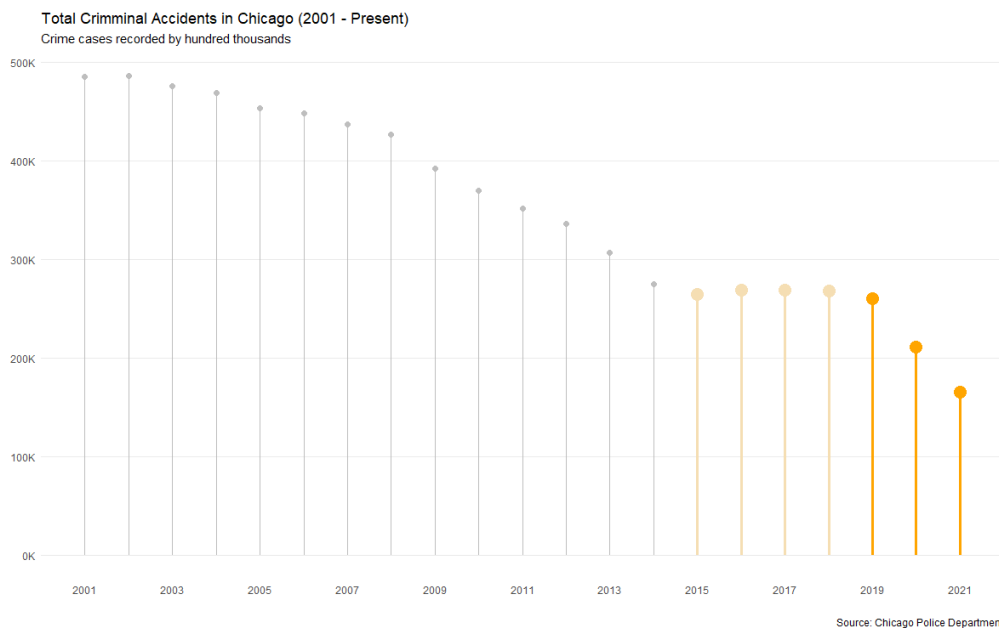
Chicago or “The Crime City”:

An analysis on Crime data in Chicago from past to present

Introduction

For decades, Chicago has been notoriously known as “The Crime City” with gangsters, violence and corruption. Since the 2000s, increasing law enforcement and public governance have been made to bring more control to the city. Within this blog post, I investigate the crime dataset from the Chicago Police Department (CDP) between 2001 and 2021 to see the general trends and take a closer look at specific crimes in recent years.

General Trend between 2001 - 2021

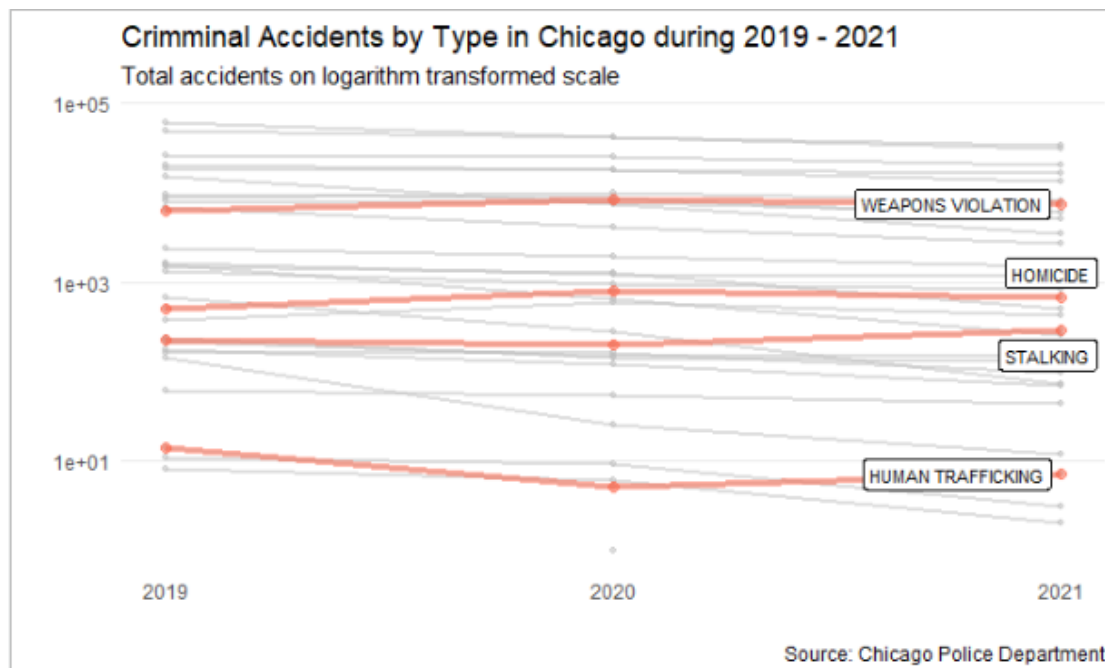


The total crime accidents in Chicago was under half a million in 2001 but decreased consistently to well under 300,000 cases in 2014. On average, total crime cases decreased by more than 15,300 cases per year for 13 years. Since 2003, CDP had used statistics and predictive modelling to identify areas where police needed most. CDP also organized the Targeted Response Unit (TRU) in 2003 to address sudden hot spots in the city. TRU split into two teams to address the gang-related crimes in designated neighborhoods. In 2006, CDP focused on communities with at-risk youth to improve social conditions.

Between 2015 and 2019, the total criminal accidents levelled off under 300,000 cases. In 2017, The US Department of Justice concluded the investigation on CDP after a police shooting citizen case and said that the poor police training and excessive force had led to civil unrest. In 2019, CPD went through major reforms required by the US Department of Justice.

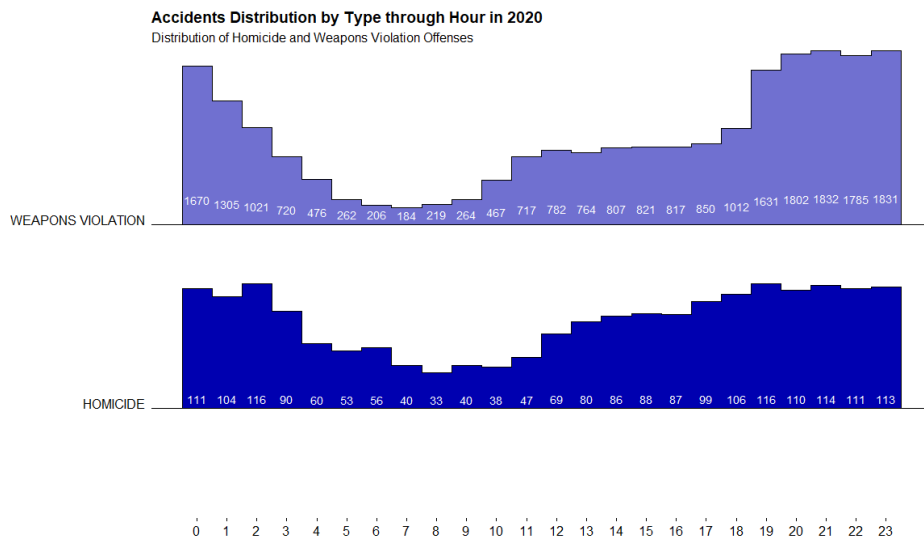
During the COVID pandemic in 2020 and 2021, there was a sharp decline in criminal accidents. This could be due to the fact that the city was under lockdown and public interaction was prevented.

A Closer Look in 2020 - 2021



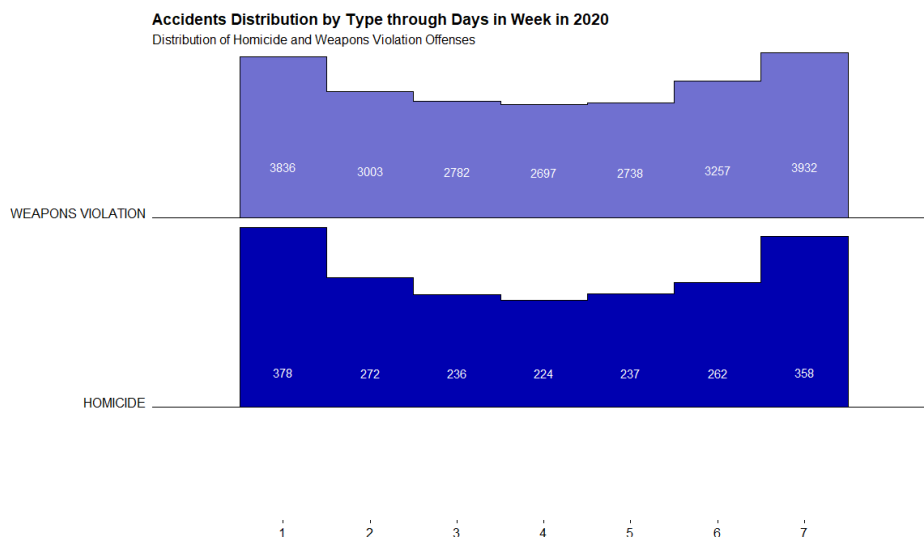
In contrast to the overall decline in criminal accidents during COVID, the change in total criminal cases by type in the past 2 years said otherwise. While most violation types either remained the same or reduced, homicides, weapons violation, stalking and human trafficking had increased. Of these 4 types, I focus on homicide and weapons violation as these were major crimes and had more records. Since lots of homicides were shootings, I have an assumption that homicide and weapons violations are highly correlated. I use the in-depth analysis by time and location of time and location to examine this assumption.

Time Distribution



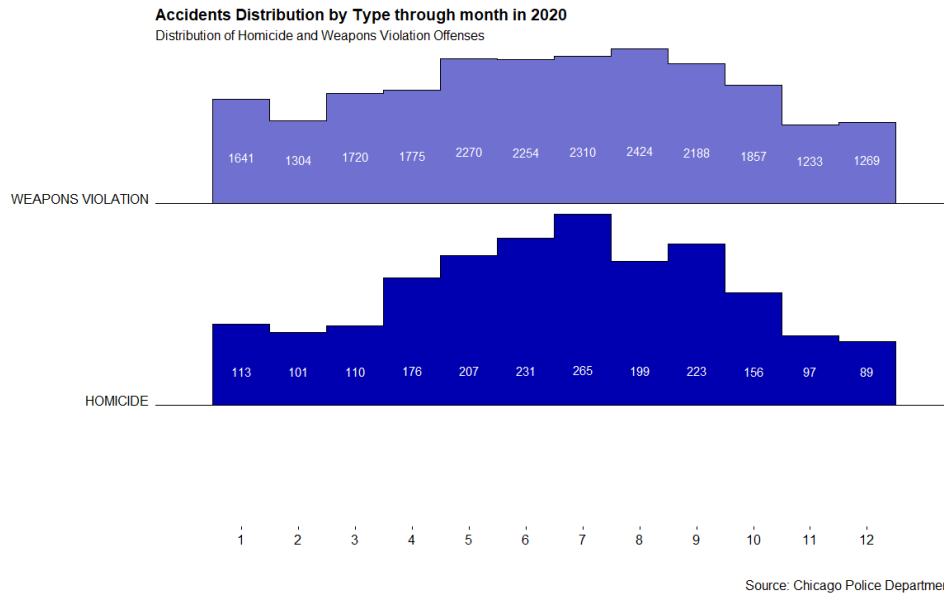
Source: Chicago Police Department

The distribution of homicide and weapons violation through hour in the day shows that both types were more likely to occur from 6PM to 2AM and less during the day. Data showed that there were around 600 more weapons violation accidents during every hour after 6PM. Between 5AM to 9AM, there were only around 200 cases every hour, which was 5 times lower than at 6PM.



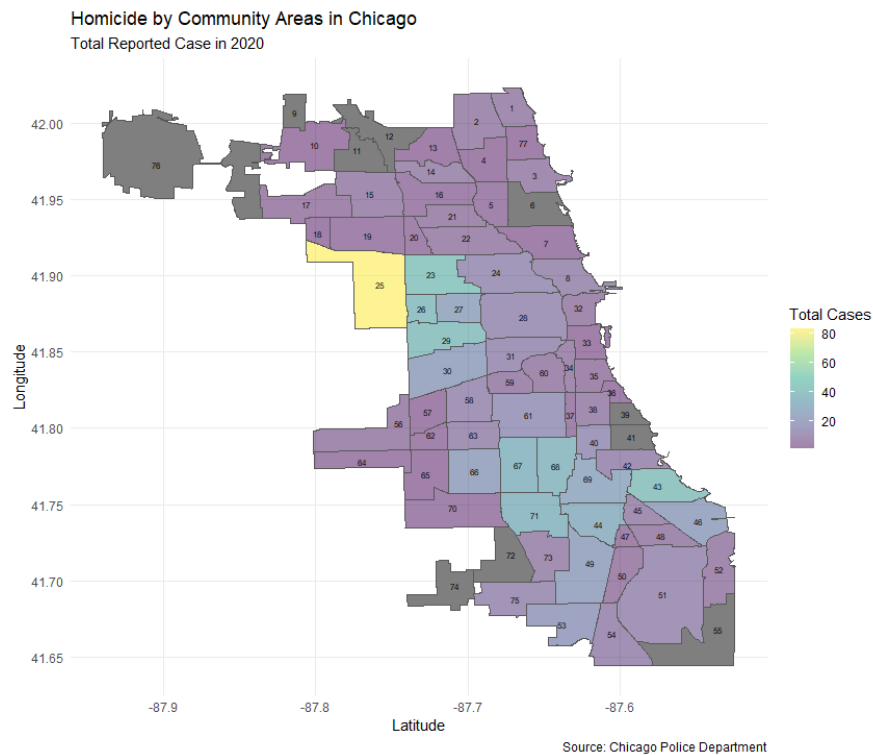
Source: Chicago Police Department

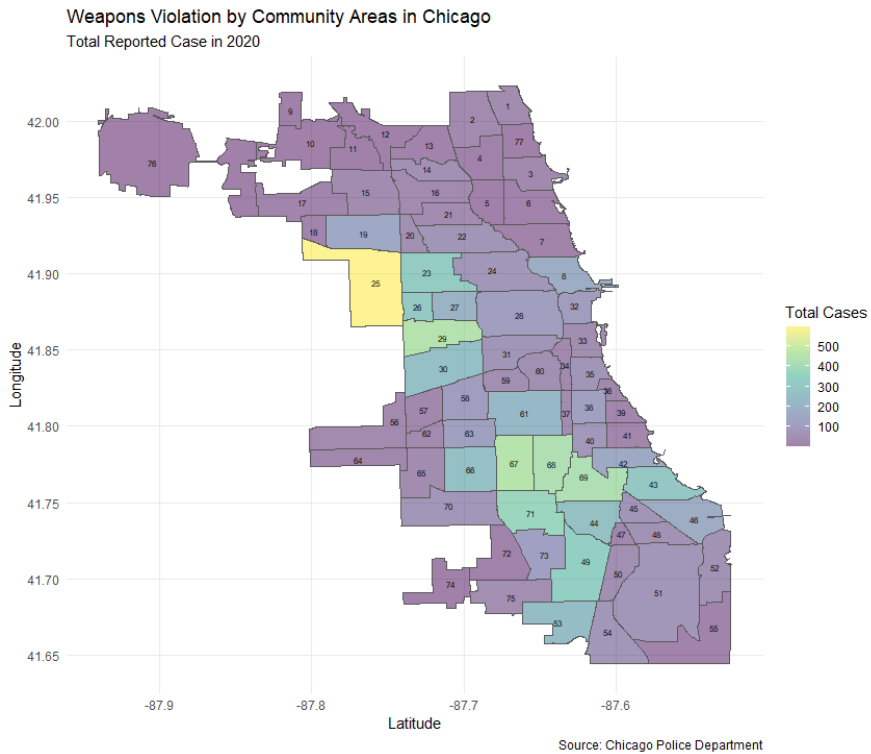
In a week, Wednesday had the lowest cases reported for both types and the cases increased towards the weekend. This could be due to the fact that most people went outside more during the weekend so there were more chances for these accidents to occur.



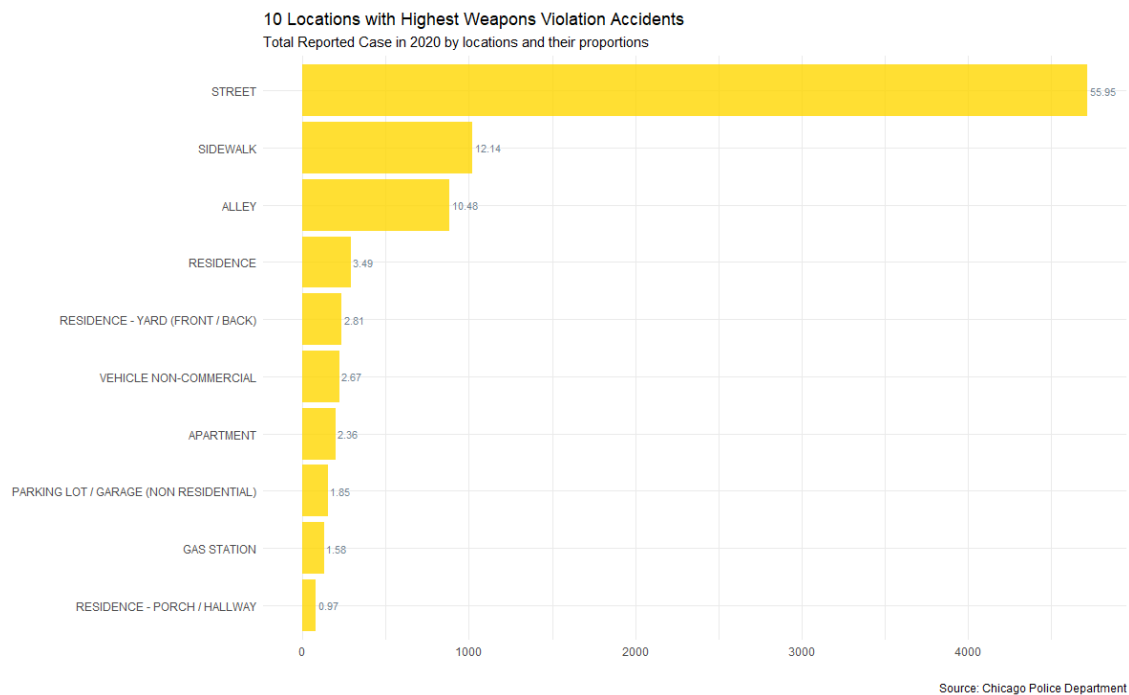
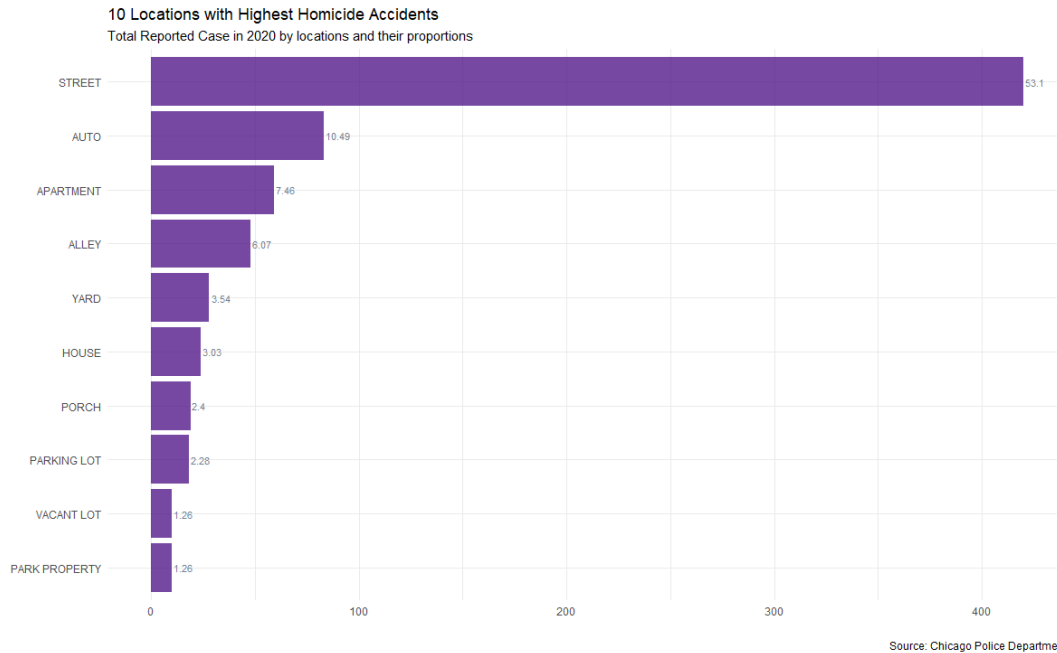
Both homicide and weapons violation had similar seasonal trends as they increased from January and peaked in summer months, July or August, then decreased towards December. This was unexpected as the city underwent a lockdown last March.

Location



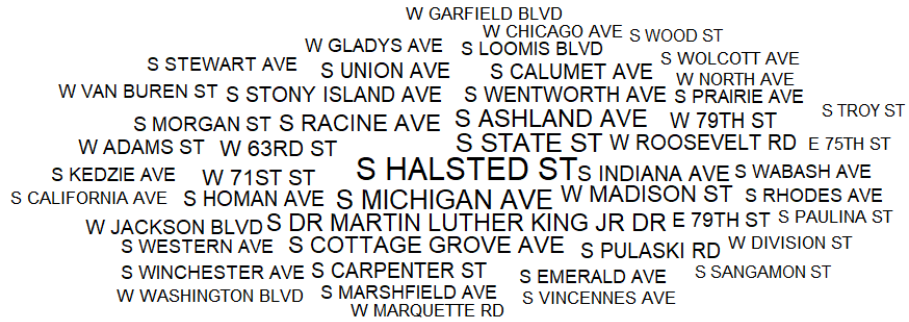


Based on the plot of total criminal cases by community areas, homicide and weapons violation cases concentrated mainly in the West Side including Austin, Humboldt Park, West Side Park and the South Side including West Englewood, Englewood, Auburn Gresham, Greatergrand Crossing and Chatham. These Westside neighborhoods have diverse demographics and minority communities while some Southside neighborhoods remain under heavy influence of mobs and gangsters.



In general, homicides and weapons violations were likely to be observed in public places such as streets (> 50%), alleys and sidewalks. Homicides were also seen in automobiles (10.49%) and private places such as apartments (7%) and houses (3%). Weapons violations were seen in more outdoor places.

Total Reported Case in 2020 by Street



Source: Chicago Police Department

Lastly, both homicides and weapons violations were likely to occur S Dr Martin Luther King St and S Halsted St, both in the Southside. Forming the O Block with 63rd St, the S Dr Martin Luther King St is a very dangerous place and also a “racialized” landscape as lots of African Americans reside in this area. Due to the negligence of the government, people in this area are subjected to property devaluation and poverty. The equity gap widened during the pandemic could have led to increasing gun violence, weapons violation and eventually homicides.

Summary

From 2001 to 2021, the total crime rates have gradually decreased until 2014 and decreased again under the influence of the pandemic. Despite COVID-19, weapons violation and homicide still increased. These 2 types of crimes are highly correlated to each other as they have similar distributions by time and location. These crimes occurred mainly in heavily marginalized neighborhoods. This brought further questions about how effective the government support plan towards these communities during COVID-19.

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