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Toronto Crime Analysis : Pre, During & Post COVID

OVERVIEW OF ANALYTICS

Objective :

The purpose of this analysis is to assess the impact of the COVID-19 pandemic on major crime incidents across Toronto by:

Comparing crime data across three distinct time periods:

- Pre-COVID** (Before March 2020)
- During COVID** (March 2020 – May 2023)
- Post-COVID** (After May 2023)

Identifying trends in crime rates over time and evaluating any significant shifts linked to lockdowns and public health restrictions.

Classifying and analyzing the different categories of crimes (e.g., assault, theft, break and enter, etc.) to determine which types were most affected during the pandemic.





Selected columns for analysis:

- Occurrence Date** : *for time-based analysis*
- Offence** : *Specific crime committed*
- Major Crime Indicator Category** : *Crime category*
- Neighbourhood_140** : *Useful for geographic analysis*
- LAT and LONG** : *Crimes on a map*

KPIs:

1. Total Number of Crimes Crime
2. Rate Change % (Between the periods)
3. Top 5 most criminogenic neighbourhoods
4. Highest Crime Per Period
5. Pre vs During vs Post Covid Crime Counts



Toronto Crime Analysis : Pre, During & Post COVID

COVID Periods

All

Year

All

Neighbourhood

All

Crime Category

All

Total Crime

283,842

Post-Covid Crime

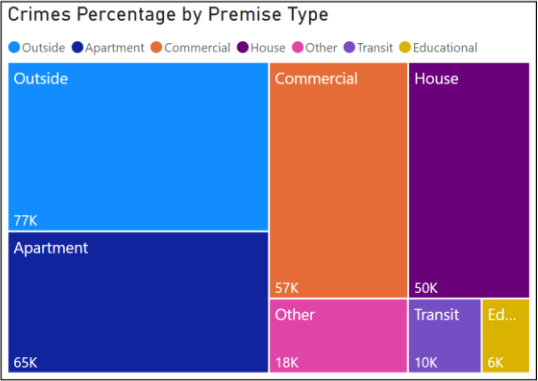
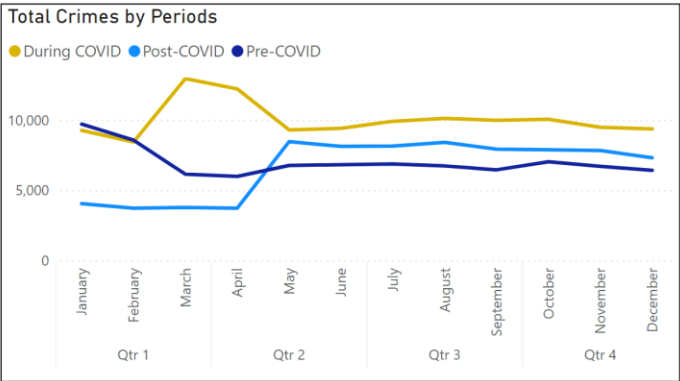
79,298

Crime During Covid

120,401

Pre-Covid Crime

84,143



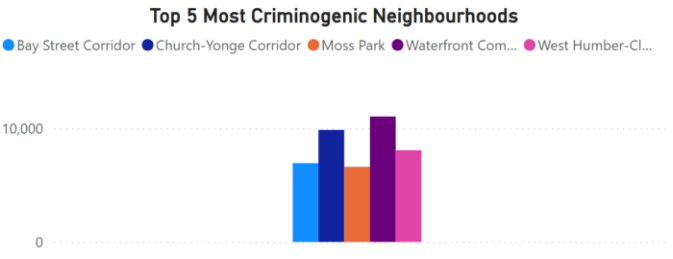
% Change Post vs During

-34%

% Change Pre vs During

-30%

Crime Category	During COVID	Post-COVID	Pre-COVID
Assault	62,899	41,117	44,447
Auto Theft	25,566	17,507	11,035
Break and Enter	19,561	12,301	17,558
Robbery	8,287	5,382	8,206
Theft Over	4,088	2,991	2,897
Total	120,401	79,298	84,143



Crime Analysis:

During Covid period had the highest total crime volume, in comparison, Pre-Covid recorded 84143 incidents, while Post-Covid saw a decline to 79298. This spike during the pandemic likely reflects the social and economic uncertainty caused by lockdowns, including reduced public interaction and increased financial pressures on households. The drop in Post-Covid numbers suggests a partial return to normal.

Assaults rose during Covid went from 44477 in Pre-Covid to 62899 incidents during Covid likely due to domestic violence and stress-related incidents. Auto Theft more than doubled during the pandemic and remained higher Post-Covid, possibly linked to the car chip shortage, the appreciation of used car market and the reduced of police patrols.

The top 5 criminogenic neighborhoods overall are : Bay Street Corridor, Church-Yonge Corridor, Moss Park, Waterfront Communities and West Humber-Clairville. But for post covid we saw Mimico and Islington-City Centre West replacing Moss park and Bay street Corridor in the ranking. Further investigation is needed to determine if this is shifting.

RECOMMENDATIONS:

Recent shifts in crime patterns highlight emerging hotspots in Mimico and Islington-City Centre West, signaling a need for increased law enforcement presence to prevent further escalation. Meanwhile, auto thefts remain high post-pandemic, requiring proactive measures such as public awareness campaigns and neighborhood patrols to discourage future offenders.

In addition, the rise in assaults during COVID was likely driven by stress and domestic tensions. This underlines the urgent need to expand mental health services and family support programs to address the root causes and prevent future incidents.

To help the police improve their efforts, we can adopt the NYC model by deploying mobile police kiosks in hotspot areas. Additionally, we should integrate CCTV with AI video analytics and acoustic sensors to pinpoint gunfire locations and dispatch police within seconds just like in Philadelphia.

The solutions are among us, but without political and financial commitment, even the best systems won't succeed.

Interactive Link ■

- 1) <https://app.powerbi.com/reportEmbed?reportId=14f7e091-15cf-41e9-be84-29365b50a264&autoAuth=true&ctid=416d9044-c24a-462e-91a6-186a2a379d18>
- 2) [Toronto-Crime-Report-with-PowerBI/ at main · DKR514/Toronto-Crime-Report-with-PowerBI](#)

Sources■

- (1) [Ontario government declares state of emergency amid coronavirus pandemic | Globalnews.ca](#)
- (2) Data source: <https://www.tps.ca/data-maps/open-data/>