Toronto Homeless Shelter by Cities*

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Homelessness and housing is a problem that every big city have to face, and Toronto is no exception. With the constant increase of rent in Toronto, there is no suprise that the need for shelter services is constantly high. We found that the amount of shelters programs drastically differs between different cities nearby Toronto. This paper aims to visualize those difference with graphs and tables.

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*Code and data are available at: https://github.com/YO7O/toronto_shelter_capacity

1 Introduction

Year 2023 is the first year I came back to Canada since COVID-19 happened. I still recall that I was hugely shocked by the inflation in rent, which felt like a 20% increase across the board since I left in 2020. This makes me wonder, if a international student with a decent wealth family background like me is shocked by the rent, how would it affect the homelessness of the city, considering the average salary have not catch up with the rent.

District of homeless shelter around Toronto is not commonly studied, and requires attention. Most homeless people would not have the luxury to drive a car, and the public transit in GTA is not the best, to say the least. This paper analyze the data of shelter programs in different cities, and discover some interesting founding around the difference in need for shelter program between cities.

2 Data

Tools by R Core Team (2022), Wickham et al. (2019) and Firke (2023) is used to clean and analyze the data collected from Gelfand (2022).

Here is some of our data of total amount of distinct shelter program in all shelter in nearby Toronto area (Figure 1), using tools from Wickham (2016)

As Figure 1 shown, there is 3 cities, Etobicoke, Scarborough and Vaughan, where the only available program area is COVID-19 Response. On the side of Toronto, there is a decrease on COVID-19 Response, while other program area remain stable across the year.

Here is our data with program with free space in all shelter around Toronto area (Figure 2).

There is no rooms available on both Etobicoke and Scarborough most of the days throughout 2023, despite the pandemic is over and quarantine is no longer needed. In Toronto and North York, most of the available rooms comes from COVID-19 Response as well, and other programs barely have any space.

3 Results

Our results are summarized in Table 1 with the help of tools made by Xie (2014) and Zhu (2021).

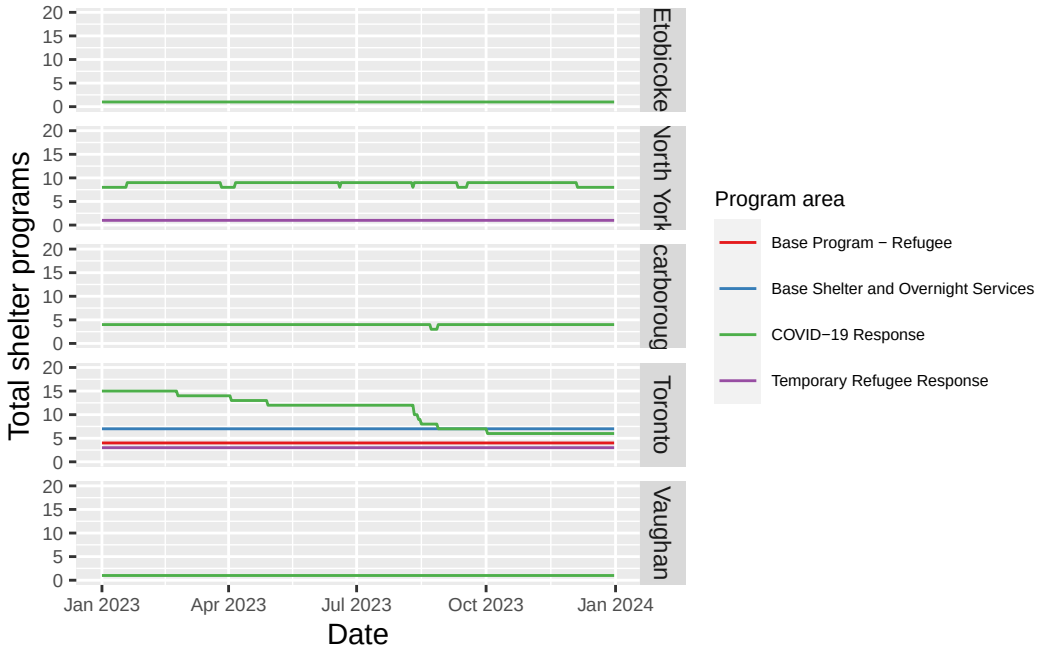

Figure 1: Total amount of distinct program in all shelter based on city in 2023

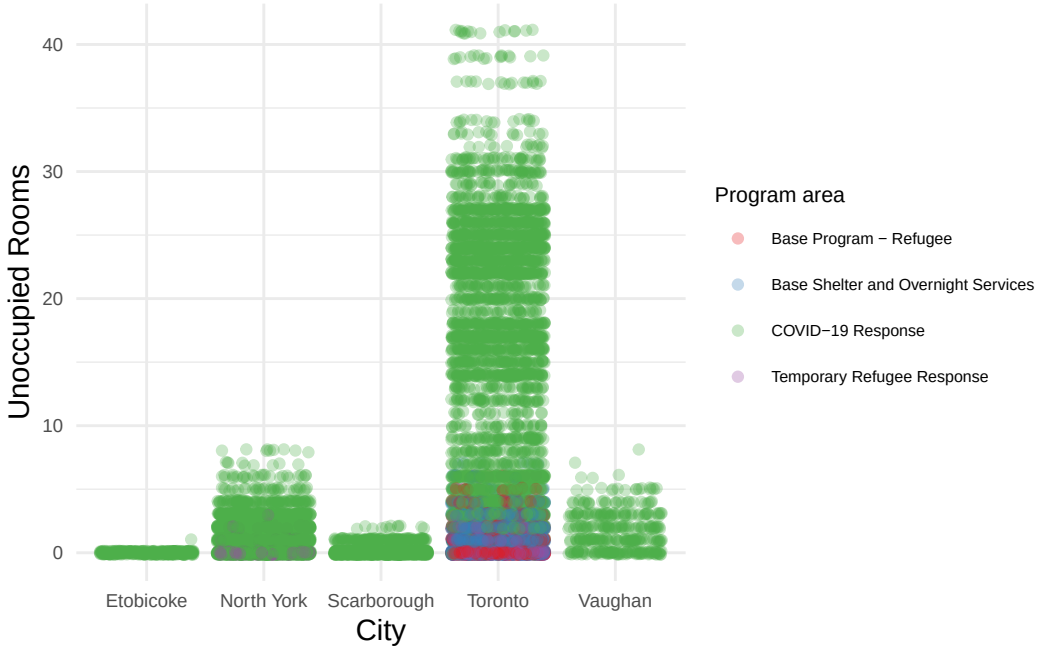

Figure 2: Amount of unoccupied rooms on each day based on city in 2023

Table 1: Average data of the year categorized by city

City	Program area	Unoccupied rooms	Total program	Occupancy rate
Etobicoke	COVID-19 Response	0.0	1.0	100.0
North York	COVID-19 Response	1.2	8.8	99.5
North York	Temporary Refugee Response	0.3	1.0	99.8
Scarborough	COVID-19 Response	0.1	4.0	100.0
Toronto	Base Program - Refugee	1.2	4.0	98.3
Toronto	Base Shelter and Overnight Services	1.4	7.0	99.5
Toronto	COVID-19 Response	15.1	11.7	98.1
Toronto	Temporary Refugee Response	0.2	3.0	100.0
Vaughan	COVID-19 Response	1.7	1.0	97.5

4 Discussion

4.1 Decrease in amount of COVID programs in Toronto

There is a huge decrease of amount of COVID-19 programs in Toronto area, from 15 to 6, as shown in Figure 1. It is normal as the pandemic is over, and Table 1 show that the average available rooms is 15.1, which firmly justify the decrease in COVID-19 programs. However, the same trend is not shown in other cities except Vaughan, where the available rooms continue to stay low throughout the year.

4.2 Need for shelter programs in nearby cites of Toronto

As shown in Figure 2, Scarborough have no shelter program space most of the year, which is supported by Table 1, having a 99.8% average of occupancy rate and 0.3 available rooms per day throughout the year. In Etobicoke, the situation is more severe, having only 1 days with 1 room (Figure 2), and the occupancy rate and available rooms is 100% and 0 respectively. Also, there is a total of one program that is not COVID-19 Response outside of Toronto, and with the high occupancy rate on across the board on other cities, there is a need for more rooms and shelter programs.

4.3 Next steps and Weaknesses

Cities besides Toronto having only COVID-19 Response programs in a era of post pandemic, programs still continue to have such high occupancy rate, despite the huge drop in need in Toronto. It could be either the demand for those programs were always high, and the only city that meet those demand is Toronto, or those program are repurpose to serve other people in need. Future research will focus on gaining a more comprehensive understanding of the reasons of difference in trend between cities. As this research only focused on room based service, and bed based service is ignored, further research could be done around bed based

service. Some research could be done on the relationship between rent increase and the shelter program usage as well.

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