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1 Introduction

2 Data

2.1 Overview

The dataset used for this analysis is the "Toronto Shelter System Flows" dataset from the Toronto Open Data Platform (Toronto Shelter & Support Services 2024). It shows the total number of homeless people entering and exiting shelters each month from 2018 to September 2024, as well as the number of different age groups and genders. It also shows the number and proportion of chronic homeless, refugees, youth, single adults, and families in the total homeless population. These data are updated monthly and reflect the latest trends in Toronto's homeless population and shelter system(Toronto Shelter & Support Services 2024).

The variables of interest in this analysis vary by age group (Under 16, 16-24, 25-34, 35-44, 45-54, 55-64, 65 and over) and gender (Male, Female, Transgender/Non-Binary), as well as Chronic and All populations. According to Toronto Shelter & Support Services (2024), Chronic refers to those who, according to the federal government's definition of chronic homelessness, meet one of the following two criteria: first, stayed in a shelter for at least 180 nights in the past year; and second, stayed in a shelter multiple times in the past three years, totaling at least 546 cumulative nights. All populations refers to the total number of homeless persons covered in the report without any demographic breakdown.

Similar datasets available on the City of Toronto's Open Data Catalogue include Daily Shelter & Overnight Service Occupancy & Capacity and Daily Shelter Occupancy(City of Toronto,

^{*}Code and data are available at: https://github.com/JianingLi1225/Toronto_Homeless.git.

n.d.). However, these datasets only provide an overview of shelter usage without categorizing the homeless population using the shelters. As a result, they were not used in this analysis.

2.2 Results

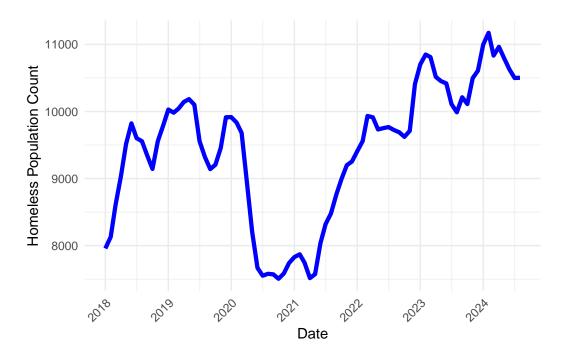


Figure 1: Trend of Homeless Population in Toronto from 2018 to 2024

Figure 1 illustrates the fluctuation in Toronto's homeless population from 2018 to 2024. The chart shows cyclical rises and falls, with more pronounced declines around 2020 and 2021, followed by a steady increase. The population reaches its highest point in 2024. Throughout this period, the homeless population varies between approximately 7,500 and 11,000 individuals.

Figure 2 shows the percentage of Toronto's homeless population in each age group as a proportion of the total homeless population from 2018 to 2024. The largest age group is 35-44 years old, accounting for about 21% of the total population, followed by the 25-34 age group (approximately 18%), the 45-54 age group (approximately 17%), and the 55-64 age group (approximately 14%). The under 16 and 16-24 age groups each account for 12%. The smallest age group is 65 years and above, making up about 7% of the total population.

Figure 3 presents the gender distribution of Toronto's homeless population from 2018 to 2024. During this period, males have consistently made up the largest proportion, accounting for approximately 61.8% of the total homeless population. Females make up about 36.8%, while non-binary individuals make up about 1.4%.

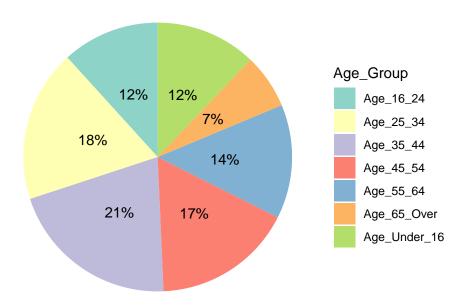


Figure 2: Age Group Distribution of Homeless Population in Toronto (2018-2024)

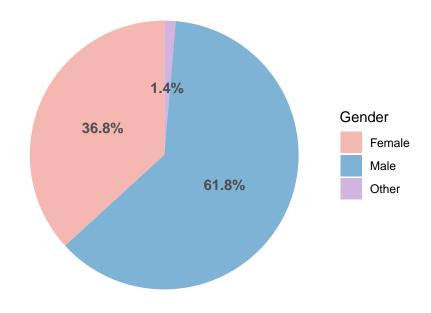


Figure 3: Homeless Population by Gender in Toronto (2018-2024)

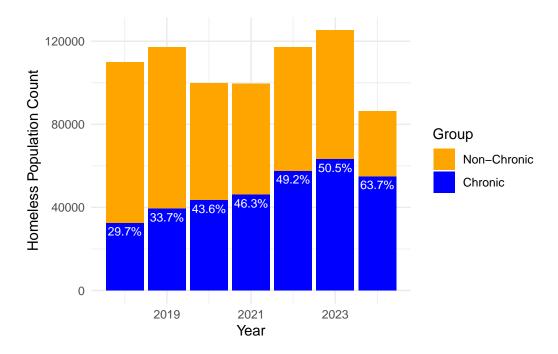


Figure 4: Changes in Chronic and Non-Chronic Homeless Population and Proportion in Toronto (2018-2024)

The Figure 4 displays the changes in the number and proportion of chronic and non-chronic homeless people in Toronto between 2018 and 2024. The number of chronically homeless has been growing over this time, with over 30,000 people in 2018, and by 2023, the number has gone to about 60,000, nearly doubling. the slight drop in numbers in 2024 is due to the fact that the statistics were last updated on September 17, 2024, and it is projected that by the end of the year, the number will have exceeded the 2023 one. Similarly, the percentage of chronically homeless is growing every year, from 29.7% in 2019 to 63.7% in 2024. Note that in 2019 to 2020 and 2023 to 2024, the rate grows faster, by about 10 percent.

3 Discussion

3.1 Overview of Homeless Trends (2018-2024)

In Section 2.2 trends in Toronto's homeless population from 2018 to 2024 are presented, focusing on key factors such as age, gender, and chronic versus non-chronic conditions. The homeless population fluctuates significantly, being significantly impacted in specific years such as 2020 and 2021Figure 1, with males and the 35-44 age group making up the majority of the homeless populationFigure 2, and chronic homelessness showing an increasing trendFigure 4. ##

Impact of COVID-19 on Homelessness The homeless population declined significantly in 2020 and 2021, likely due to COVID-19. To meet social distancing requirements, the Toronto government reduced shelter capacity and opened temporary shelters, including additional spaces in hotels and motels (May and Shelley 2023). These actions may explain the drop during these years. However, the rebound in homelessness afterward suggests that issues like housing affordability and lack of social support remain unresolved, highlighting the need for sustainable long-term solutions. ## Demographic and Chronic Homelessness Insights An analysis of age, gender, and chronic homelessness provides key insights into Toronto's homeless population. Homelessness is concentrated among working-age adults, especially those aged 35-44 and 25-34, likely due to challenges with employment or housing stability. In terms of gender, males consistently make up the majority, while non-binary individuals account for only 1.4%. This suggests shelters should consider different designs for men and women, while also addressing the needs of non-binary individuals, despite their smaller numbers. The rise in chronic homelessness suggests that existing measures are not enough to help people exit homelessness permanently.

3.2 Weaknesses and next steps

A limitation of this analysis is that the data analyzed does not reflect the entire Toronto homeless population. The database used only includes people who use City of Toronto-funded overnight shelter services and fails to reflect people who spend the night outdoors or use other homeless services. According to the most recent Street Needs Assessment, approximately 18% of the homeless population is not included in the data(Toronto Shelter & Support Services 2024).

Future directions for improvement should include expanding the data scope of the analysis to include people who spend the night outdoors and use shelters that are not funded by the Government of Toronto, in order to provide a more complete picture of homelessness in Toronto. This will help fill data gaps and support more effective policy decisions.

Appendix

A Additional data details

References

City of Toronto. n.d. "Open Data Catalogue." https://open.toronto.ca/catalogue/?search=outbreak&sort=score%20desc.

May, Kayla, and Jacob Shelley. 2023. "A Scan of Ontario Cities' COVID-19 Policies and Their Impacts on People Living in Homelessness." *International Journal on Homelessness* 3 (1): 61–82.

Toronto Shelter & Support Services. 2024. "Toronto Shelter System Flow." City of Toronto. https://open.toronto.ca/dataset/toronto-shelter-system-flow/.