Trends and Challenges in Toronto's Homeless Population (2018-2024)*

A Focus on Demographics and Chronic Homelessness

Jianing Li

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This paper explores Toronto's homeless population from 2018 to 2024, focusing on age, gender, and chronic homelessness trends. The data reveal a decline during the pandemic, followed by a rebound, with males and individuals aged 35-44 making up the majority. The number of chronically homeless also increased significantly. These findings highlight the need for targeted interventions to address chronic homelessness and improve housing policies.

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

1 Introduction

Homelessness is a growing global concern, especially with rapid urbanization and the housing crisis. As Canada's largest city, Toronto faces a growing homeless population (Richard et al. 2024). In addition to being a socio-economic issue, homelessness intersects with public health and social justice (Sleet and Francescutti 2021). Understanding the trends and composition of the homeless population is critical to effective policymaking. However, existing data often lack detailed categorization, hindering a full understanding of the needs of specific groups. This study seeks to fill this gap.

Using the "Toronto Shelter System Flows" dataset form Toronto Open Data Platform (Toronto Shelter & Support Services 2024), this paper examines trends in Toronto's homeless population from 2018 to 2024, focusing on age, gender, and chronic homelessness. Our analysis reveals a decline during the pandemic, followed by a rebound, with males and the 35-44 age group comprising the majority. The number of chronically homeless people continues to grow, providing important insights for policymakers.

In this essay, Section 2.1 explains the background and necessity of using this dataset, followed by an explanation of the variables mentioned and the methods used. Section 2.2 shows the changes in the number of homeless individuals, along with the proportions and trends over time for each age group, gender, and chronic homelessness. Graphs and related explanations are provided. Section 3 further analyses the information presented in the graphs.

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 focuses on the measurement of homeless individuals' flow within Toronto's shelter system, which is funded and operated by the City of Toronto. It covers data from 2018 to September 2024, with the homeless count based on shelter admission records, including demographic information such as age and gender. The dataset also provides data on specific groups, including chronic homeless individuals, refugees, youth, single adults, and families. The measurements are collected through the Shelter Management Information System (SMIS) and are updated monthly to ensure that trends in the homeless population are accurately and timely reflected (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, 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.

All processes are performed through the R language (R Core Team 2023). Data is simulated, tested, and cleaned using the tidyverse (Wickham et al. 2019) packages, which also facilitate downloading data through opendatatoronto (Gelfand 2022). Unneeded variables are removed and renamed using dplyr (Wickham et al. 2023) and tidyr (Wickham, Vaughan, and Girlich 2024), while graphs are plotted with ggplot2 (Wickham 2016).

2.2 Results

In this section, key trends in the dataset are explored through visualizations, highlighting changes in the total homeless population over time, the distribution across age groups and genders, and the variation in both the number and percentage of the chronic homeless population.

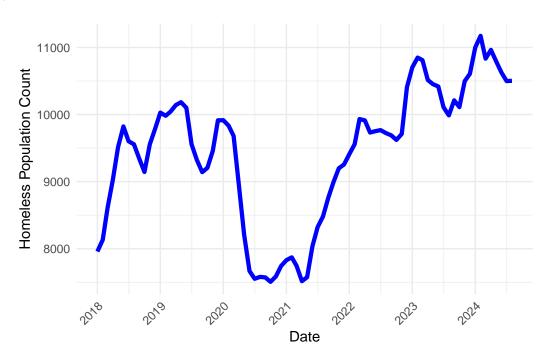
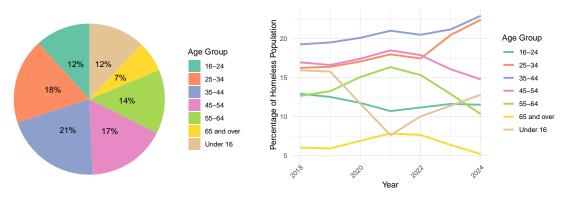


Figure 1: Trend of Homeless Population in Toronto from 2018 to 2024

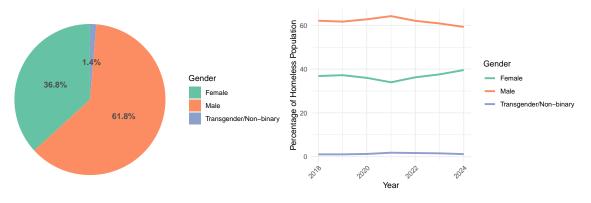
Figure 1 illustrates the fluctuation in Toronto's homeless population from 2018 to 2024. The chart shows cyclical rises and falls, with more pronounced declines around 2020 and 2021, followed by a steady increase. The population reaches its highest point in 2024. Throughout this period, the homeless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



- (a) Age Group Distribution (2018-2024)
- (b) Trends in Age Group Proportions Over Time

Figure 2: Homeless Population by Age Group in Toronto

Figure 2 shows the percentage of Toronto's homeless population by age group from 2018 to 2024, along with changes in each group's share over time. Overall, 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.



- (a) Gender Distribution (2018-2024)
- (b) Trends in Gender Proportions Over Time

Figure 3: Homeless Population by Gender in Toronto

Figure 3 shows the gender distribution of Toronto's homeless population from 2018 to 2024 and how it has changed over time. Males consistently represent the largest proportion, making up

approximately 61.8% of the total homeless population, while females account for about 36.8%, and transgender or non-binary individuals make up around 1.4%. The percentages of males and transgender or non-binary individuals initially increase but begin to decline after 2021, with the opposite trend observed for females. However, these fluctuations are minor, staying within five percentage points.

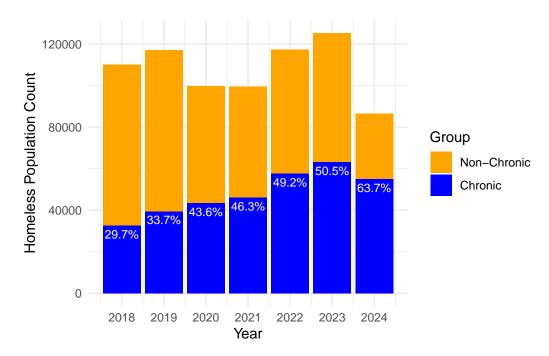


Figure 4: Changes in Chronic and Non-Chronic Homeless Population and Proportion in Toronto (2018-2024)

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)

Section 2.2 presents trends in Toronto's homeless population from 2018 to 2024, focusing on key factors such as age, gender, and chronic versus non-chronic conditions. The homeless population fluctuates greatly, with notable impacts in years like 2020 and 2021 (Figure 1), with males and the 35-44 age group making up the majority of the homeless population (Figure 2, Figure 3), and chronic homelessness showing an increasing trend (Figure 4).

3.2 Impact of COVID-19 on Homelessness

The homeless population declined 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.

3.3 Demographic and Chronic Homelessness Insights

Analysing age, gender and chronic homelessness helps to understand Toronto's homeless population. Homelessness is concentrated among working-age adults, particularly those aged 35-44 and 25-34, likely due to challenges with employment or housing stability. The sharp decline in the under-16 group during the pandemic may reflect government support for youth, but the subsequent increase underscores the need for sustained policies. In terms of gender, men remain the majority, with only 1.4% of people being transgender or non-binary. This suggests that shelters should design facilities to meet the different needs of men and women, while also accommodating transgender or non-binary people. The increase in the number of chronically homeless people highlights the inadequacy of current interventions to help people escape homelessness in the long term, and signals a worsening situation without further intervention.

3.4 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.

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