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

Middle-Aged Males Leading the Homeless Population with Continued Growth in Chronic Homelessness

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September 26, 2024

Toronto's homeless population experienced changes between 2018 and 2024, with key trends in age, gender, and chronic homelessness. Using data from the Toronto Shelter System, this paper examines these trends and the effects of the COVID-19 pandemic. The results show that males aged 35-44 are the largest demographic, and the number of chronically homeless individuals has increased. Understanding these dynamics is essential for developing more effective policies to address homelessness and improve long-term housing stability.

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

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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). However, the existing data often lacks detailed classification, preventing a comprehensive understanding of the needs of specific groups. The present study seeks to fill this gap by analyzing the share and trends of different groups in the homeless population.

Using the "Toronto Shelter System Flows" dataset from the 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 analyses show that homelessness declined during the pandemic and then rebounded. Among all homeless people, males and the 35-44 age group make up the majority, and the number of chronically homeless people continues to grow. These results provide important insights for policymakers.

In this essay, Section 2.1 explains the background and necessity for using the dataset, followed by an explanation of the dataset's measurements. 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 provided in the figures and describes the weaknesses of the study.

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 chronically 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). The `knitr` (Xie 2014) package is used to generate the final PDF report.

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 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 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.

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 makeup around 1.4%. The percentages of males and transgender or non-binary individuals initially increase but begin to decline after 2021,
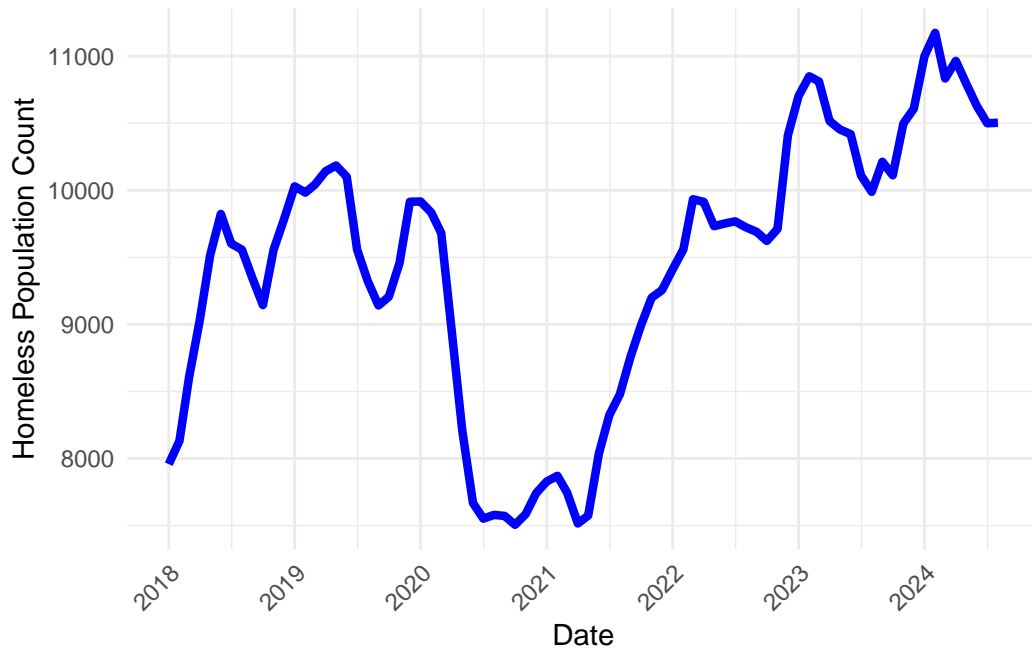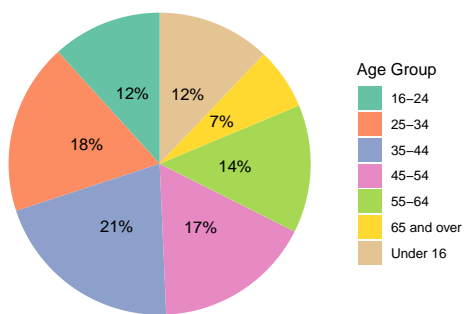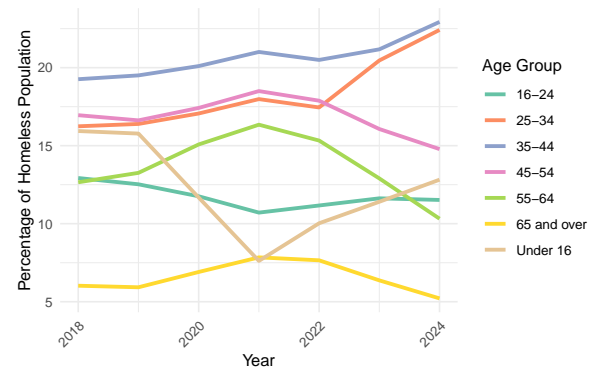
Figure 1: Trend of Homeless Population in Toronto from 2018 to 2024

(a) Age Group Distribution (2018-2024)

(b) Trends in Age Group Proportions Over Time

Figure 2: Homeless Population by Age Group in Toronto

(a) Gender Distribution (2018-2024)   (b) Trends in Gender Proportions Over Time
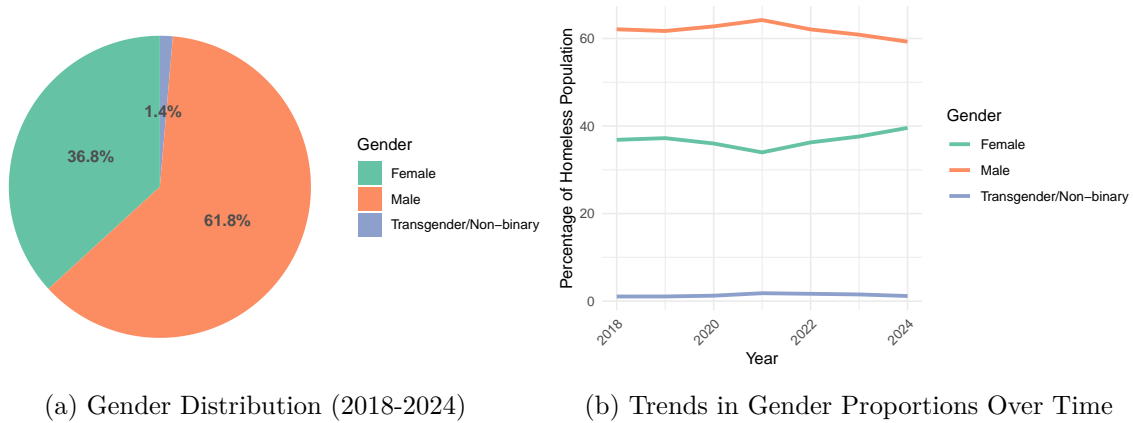
Figure 3: Homeless Population by Gender in Toronto

with the opposite trend observed for females. However, these fluctuations are minor, staying within five percentage points.

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. It should be noted that this percentage grows faster at about 10 percent between 2019 to 2020 and 2023 to 2024.

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
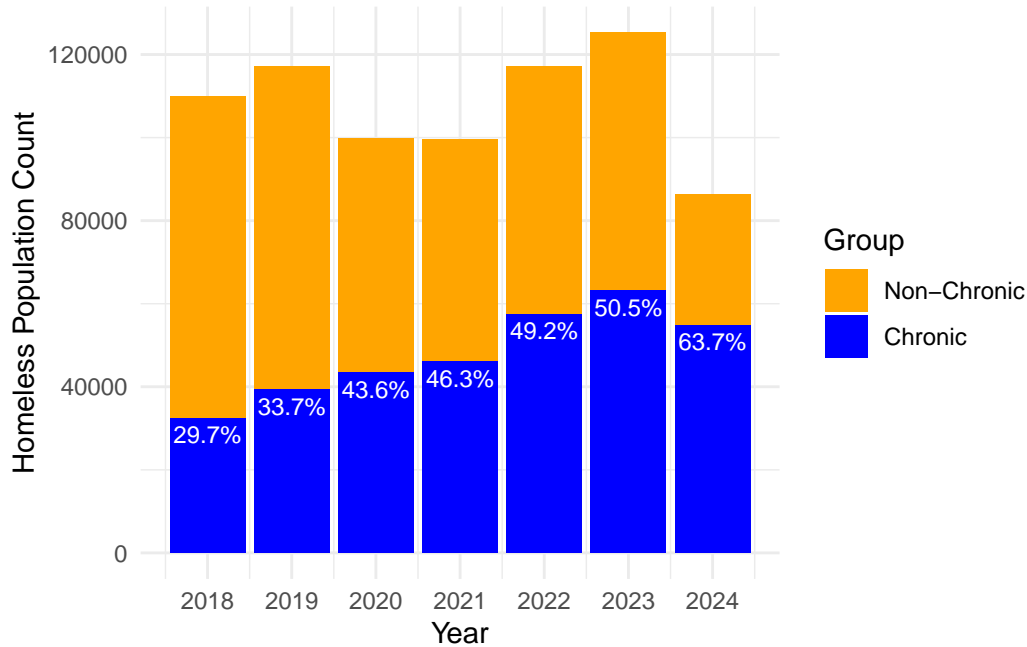
Figure 4

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

Analyzing 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.

References

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

Gelfand, Sharla. 2022. *Opendatatoronto: Access the City of Toronto Open Data Portal.* https://CRAN.R-project.org/package=opendatatoronto.

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.

R Core Team. 2023. *R: A Language and Environment for Statistical Computing.* Vienna, Austria: R Foundation for Statistical Computing. https://www.R-project.org/.

Richard, Lucie, Brooke Carter, Linda Wu, and Stephen W Hwang. 2024. "Disparities in All-Cause Mortality Among People Experiencing Homelessness in Toronto, Canada During the COVID-19 Pandemic: A Cohort Study." *Frontiers in Public Health* 12: 1401662.

Sleet, David A, and Louis Hugo Francescutti. 2021. "Homelessness and Public Health: A Focus on Strategies and Solutions." *International Journal of Environmental Research and Public Health.* MDPI.

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

Wickham, Hadley. 2016. *Ggplot2: Elegant Graphics for Data Analysis.* Springer-Verlag New York. https://ggplot2.tidyverse.org.

Wickham, Hadley, Mara Averick, Jennifer Bryan, Winston Chang, Lucy D'Agostino McGowan, Romain François, Garrett Grolemund, et al. 2019. "Welcome to the tidyverse." *Journal of Open Source Software* 4 (43): 1686. https://doi.org/10.21105/joss.01686.

Wickham, Hadley, Romain François, Lionel Henry, Kirill Müller, and Davis Vaughan. 2023. *Dplyr: A Grammar of Data Manipulation.* https://CRAN.R-project.org/package=dplyr.

Wickham, Hadley, Davis Vaughan, and Maximilian Girlich. 2024. *Tidyr: Tidy Messy Data.* https://CRAN.R-project.org/package=tidyr.

Xie, Yihui. 2014. "Knitr: A Comprehensive Tool for Reproducible Research in R." In *Implementing Reproducible Computational Research*, edited by Victoria Stodden, Friedrich Leisch, and Roger D. Peng. Chapman; Hall/CRC.