Refugees in Toronto's Homeless Shelters: Evaluating the Need and Impact of Recent Policies and Increased Funding*

Krishiv Jain

January 25, 2024

In July 2023, a policy was changed and funding was increased to combat the issue of refugees in Toronto facing homelessnes. An analysis of data from the past five years reveals that, despite a pre-existing upward trajectory in refugee figures prior to the July 2023, the subsequent influx of funding and policy adjustments led to increased refugee access. Further analysis can be performed once more data becomes available.

Table of contents

*Code and data are available at: https://github.com/Krishiv-J/Toronto-Refugee-Shelter.git

1 Introduction

Homelessness is a major problem in the city of Toronto, where over 9000 people are homeless. The causes of someone becoming homeless include loss of employment, domestic violence, substance abuse, mental health problems, and poor physical health. In Toronto, the drastic increases in house prices and rent costs have further worsened the situation, and around 77% of homeless people have been homeless for longer than six months ("Facts about Homelessness in Toronto," n.d.). To help combat the problem, the City of Toronto offers numerous housing and homelessness services. For instance, they provide funds for shelter providers, which make up the majority of the shelters in Toronto, and also directly operate other shelters ("TORONTO SHELTER STANDARDS" 2021).

In the first half of 2023, news outlets reported of a "shelter crisis," where there were over-capacity issues of the "overburdened" shelter system (Lilley 2023). Specifically, news outlets reported that refugees, or asylum seekers, were being blocked from entering the shelter system, and "were left sleeping on the streets" (Gibson 2023). In July 2023, Toronto May Olivia Chow passed a motion that ensured refugees would be able to access all of the city's shelters, as opposed to only those specifically designed for refugees (DeClerq 2023). Moreover, in the same month, the federal Canadian government provided an additional $97 million to the city of Toronto to "house asylum seekers" (Robert Benzie 2023). However, despite these fairly significant changes, news outlets still reported on concerns regarding the number of refugees not being able to access the shelters ("Toronto Ombudsman Investigating Shelter Denial for Asylum Seekers, Refugees" 2023 ; DeClerq 2023).

This paper aims to understanding the situation of refugees within the Toronto Shelter System, and the evaluate the effectiveness of the aforementioned policy changes and increased funding. To address this, data on "Toronto Shelter System Flow" is used, accessed from The City of Toronto's Open Data Portal. (*Toronto Shelter System Flow* 2024). Data from the past 5 years is used to be able to compare the numbers seen in 2023 to historical trends. The specific metrics considered are the total number of refugees in shelters, the number of new refugees that have entered the system, and the percentage of the total shelter population that is comprised of refugees.

The paper finds that, while the Toronto Shelter System saw a rising trend in refugee numbers even before the policy change and increased funding in July 2023, the changes appear to have contributed to sustaining and amplifying this trend.

The paper is structured as follows: Data, Results, and Discussion. The context behind the data used and the cleaning procedure is discussed in the data section. The results section introduces the graph and some summary statistics. The discussion section evaluates the trends

observed and connects it to the underlying research topic, as well as discussing limitations of the analysis.

2 Data

As mentioned above, the data in this paper is the data set "Toronto Shelter System Flow" from the City of Toronto's Open Data Portal. The data was downloaded, cleaned, and analyzed using the statistical programming language R (R Core Team 2022). The following packages were also used: janitor (Sam Firke 2023), here (J. B. Kirill Müller 2020), as well as tidyverse (Wickham et al. 2019), which includes the dplyr (Hadley Wickham 2023), tibble (R. F. Kirill Müller Hadley Wickham 2023), and ggplot2 (Wickham 2016) packages.

The data set "Toronto Shelter System Flow" comprises of data from Shelter Management Information System (SMIS), which is used by Torontonian shelters to document each specific person who is entering and exiting the shelter system. Data is reported for every month for the past 5 years (2018 to 2023) for various populations, such as single adults, indigenous, youth, and refugees, and is refreshed every month. Moreover, a number of metrics for each population are reported, such as the number that moved to permanent housing, the number that have entered the system for the first time, the number who are below the age of 16, and numerous others (*Toronto Shelter System Flow* 2024). For the purpose of this paper, the focus is placed on refugees, thus, every other population was removed. The data set does not provide a specific metric on the total number of refugees in the system per month. However, data split the total based on the age bracket they fell into ("ageunder16", "age16-24", "age25-44", ...) was included. Therefore, to calculate the total, a new column that sums all the "age" columns was added. After this calculation, every column, apart from the column on the number of people who entered the system for the first time, and the refugee population as a percentage of the total population, was removed (see Table 2). Given the use of the SMIS, no similar databases existed for the city of Toronto. Table 1 provides the summary statistics.

3 Results

Table 1 provides a summary statistics for each metric over the past 5 years.

Table 1: Summary Statistics

Metric	Mean	SD
New_Refugees	397.0	241.9
Total_Refugees	2735.4	1157.7
Percentage_of_Total	28.7	10.4

3.1 Total Refugees Over Time

The most recent data, which is for December 2023, shows that the total number of refugees in the shelter system was 5512. Over the past 5 years, the average number was 2735.4, with a standard deviation of 1157.7. The relatively high standard deviation can be explained by the decline since due to the pandemic.

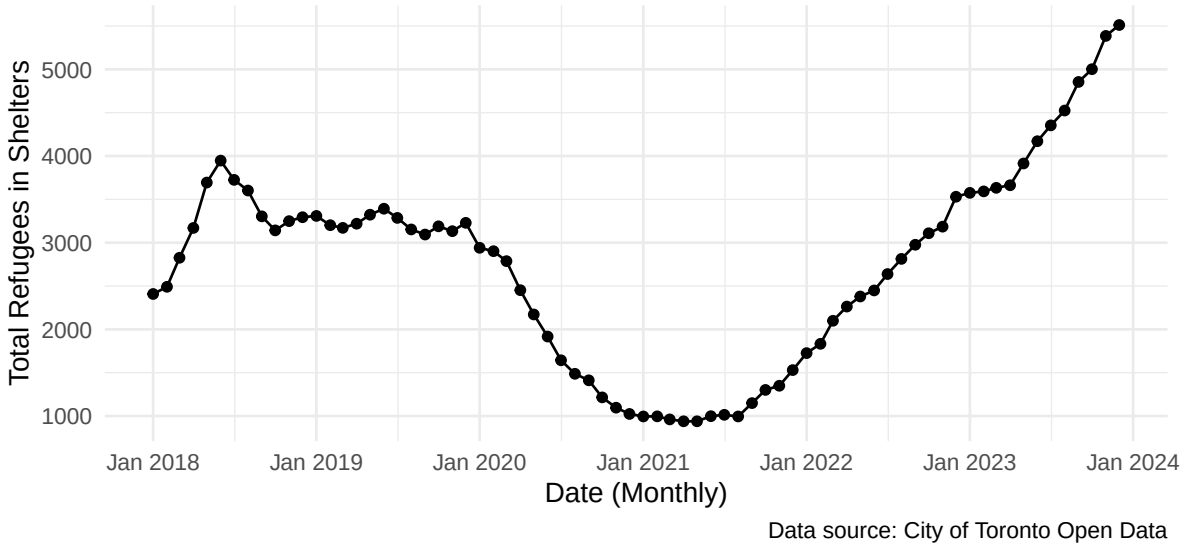

Figure 1: Graph showing Total Refugees Over Time

3.2 New Refugees Admitted Over Time

In December 2023, there were 621 refugees newly admitted into the shelter system. The mean over the past 5 years was 397.0, with a relatively high standard deviation of 241.9, which is also a result of COVID-19.

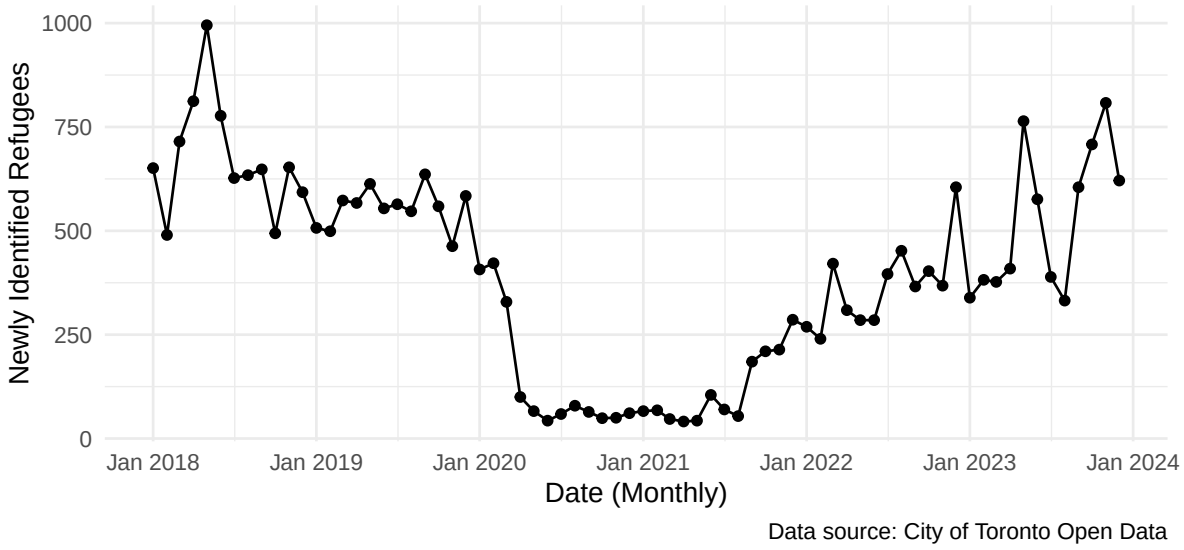

Figure 2: Graph showing Trend of New Refugees Over Time

3.3 Refugees Percentage of Population Over Time

In December 2023, the portion of refugees within the total shelter population was 52%. The mean over the past 5 years was 28.7%, with a relatively high standard deviation of 10.37%, which is also a result of COVID-19.

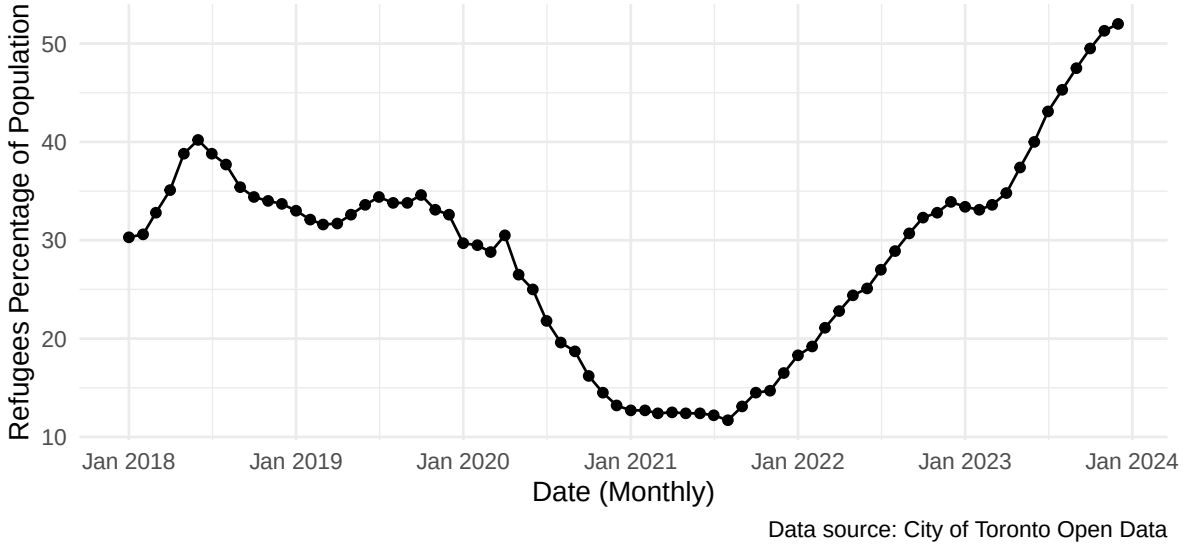

Figure 3: Graph showing Trend of Refugees Percentage of Population Over Time

3.4 Total Refugees and Refugees' Percentage of Population Combined

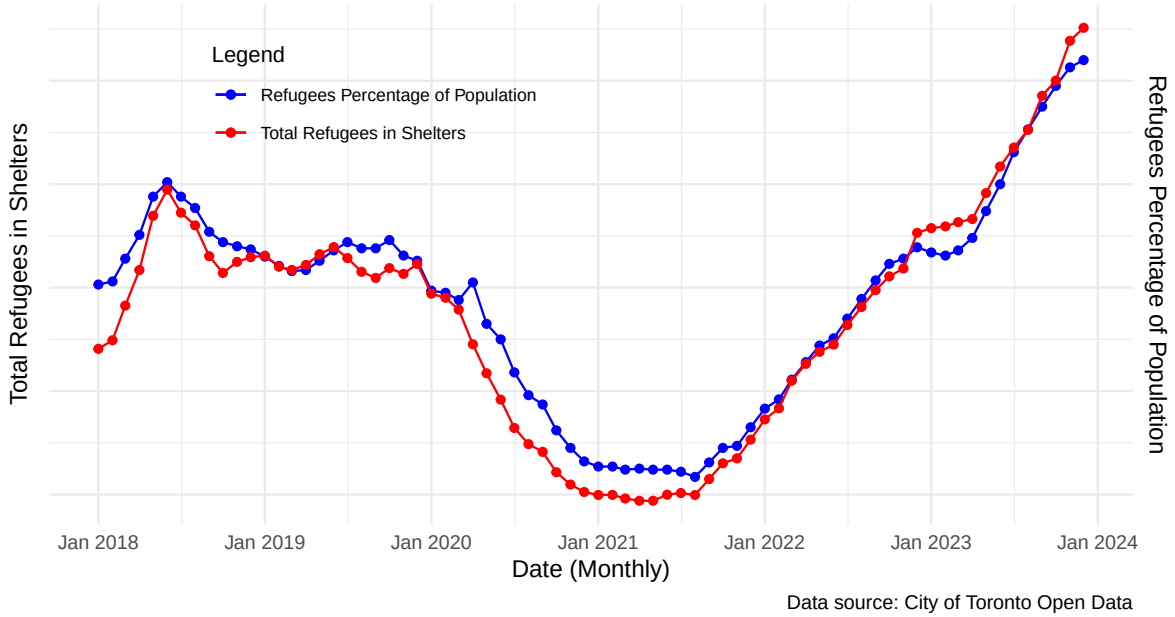

Figure 4: Graph showing both

4 Discussion

Looking at Figure 1, it can be observed that there is a sharp decline in the number from Jan 2020 onwards until January 2021, after which there the number stabilises at around 1000. From August 2021 onwards, the number starts to increase. This increase continued throughout 2022 and 2023. In the second half of 2022, the number of refugees in the system had reached similar levels to the pre-pandemic numbers. A relatively sharp increase is seen from April 2023 onwards, indicating that more refugees were a part of shelter system. Furthermore, the months including and following June 2023 see the highest numbers of the past 5 years. This finding seems odd given that the policy change and increasing funding occurred during July. There is a continued increase seen July onwards, which would somewhat indiciate that the policy was effective. Despite new highs being reached every month in the second half of 2023, one cannot say so confidently say the policy was effective given that an increasing trend was seen prior to the policy change and funding increase. To further investigate, the number of new refugees being into the system is considered to assess if the trend observed was simply due to past refugees that were staying in the system for long periods.

Looking at the Figure 2, a similar trend is observed in 2020 and 2021 due to COVID-19. The data is less steady than the previous data, whereby every month, the number of newly

admitted refugees fluctuates, especially after the pandemic. Prior to the pandemic, the number was relatively more stable, specifically from July 2018 to December 2019, where the number fluctuated between 463 and 653 per month. Post-pandemic, an increase in the fluctuations is observed. For instance, in December 2022, 605 new refugees entered the system, whereas the next month, the number dropped to 339. In 2023, the data reveals significant variations in the monthly admission of refugees, with certain months experiencing notably higher numbers compared to others. With 764, May 2023 say the second highest number of new refugees admitted in 2023. Once again, this occurred prior to the policy change and funding that occurred in July. However, in 2023, the months prior to May saw relatively low amounts of new refugees admitted, with the highest number being 409.

Moreover, since the pandemic, apart from December 2022, the number observed were consistently lower than pre-pandemic levels. In September 2023, and the months following it, there is a steep increase in the number, before a small decline in January 2024. Based on this, we can conclude that the policy change and increased funding was effective in admitted more refugees into the shelter system, and helped push the number to pre-pandemic levels. However, to further access the need and effectiveness of the policy change and funding, the refugee percent of the total population is evaluated. A increase in this metric would indicate that refugees were comprising of a larger portion of the total population, and help evaluate if the policy changes implemented specifically for refugees was effective.

The data and trends in Figure 3 look quite similar to that observed in Figure 1. There is the same relative stability seen prior to the pandemic, the same decline seen during the pandemic, and the same increasing trend after the pandemic. Figure 4 plots both data sets on the same graph. The same trends being observed in the 2 data sets implies that the sizes of other population segments have likely remained relatively constant. This would suggest that the "overburdened" shelter system was caused due to an influx of refugees, which increased demand for the shelter's services. 2023 saw "more and more" refugees entering Canada, predominantly driven by the an increase in the number of global conflicts and crises ("More and More Asylum Seekers Are Coming to Canada. Is It Enough to Stem a Global Tide of Refugees?" 2023). This influx led to refugee-focused policy changes, and prompted the increase funding. Once again though, even prior to the policy change and funding, an increasing trend is observed. However, the policy likely helped sustain the increasing trend, and pushed it to highs not seen during the last 5 years.

4.1 Limitations

Limitations of this study include the lack of data on the number of refugees leaving the shelter system, and the lack of data on the total number of refugees in Toronto. Having these metrics would have allowed for a better assessment of the policy and funding. Moreover, determining the full impact of the policy and funding may be premature, given the relatively short timeframe since its implementation. Furthermore, the data set specifically focuses on shelters utilising the Shelter Management Information System (SMIS) (*Toronto Shelter System*

Flow 2024). Shelter sites not utilizing SMIS and those funded by other levels of government are not encompassed in the data set, potentially introducing a limitation in representing the entire spectrum of shelters in Toronto. Lastly, the data set solely captures quantitative information on the number and percentage of refugees in shelters. It lacks qualitative insights into the lived experiences of refugees navigating the system.

Appendix

.1 Sample of Cleaned Data

Table 2: Sample of Cleaned Refugee Shelter Data

Date	New_Refugees	Total_Refugees	Percentage_of_Total
2018-01-01	651	2408	30.3
2018-02-01	490	2491	30.6
2018-03-01	715	2826	32.8
2018-04-01	812	3170	35.1
2018-05-01	995	3694	38.8
2018-06-01	777	3947	40.2
2018-07-01	627	3725	38.8
2018-08-01	634	3602	37.7
2018-09-01	648	3304	35.4
2018-10-01	494	3142	34.4

References

DeClerq, Katherine. 2023. "Refugees Still Being Told There Is No Space in Toronto's Shelter System." https://www.cp24.com/news/refugees-still-being-told-there-is-no-space-in-toronto-s-shelter-system-1.6553608.

"Facts about Homelessness in Toronto." n.d. https://www.fredvictor.org/facts-about-homelessness-in-toronto/.

Gibson, Victoria. 2023. "'We Are Afraid.' Asylum Seekers Sleeping on the Street Amid Tug of War Between City and Feds." https://www.thestar.com/news/gta/we-are-afraid-asylum-seekers-sleeping-on-the-street-amid-tug-of-war-between-city/article_57d34e79-d57b-5a28-9723-c4292680f796.html.

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

Kirill Müller, Jennifer Bryan. 2020. *Here: A Simpler Way to Find Your Files*. https://CRAN.R-project.org/package=here.

Kirill Müller, Romain Francois, Hadley Wickham. 2023. *Tibble: Simple Data Frames*. https://CRAN.R-project.org/package=tibble.

Lilley, Brian. 2023. "LILLEY: Toronto's Sidewalk Shelter for Refugees Is Trudeau's Shame." https://torontosun.com/opinion/columnists/torontos-sidewalk-shelter-for-refugees-is-trudeaus-shame.

"More and More Asylum Seekers Are Coming to Canada. Is It Enough to Stem a Global Tide of Refugees?" 2023. https://www.cbc.ca/news/canada/toronto/investigation-will-focus-on-city-s-shelter-denial-to-refugeeshttps://www.cbc.ca/news/canada/canada-asylum-seeker-increase-1.6916053.

R Core Team. 2022. *R: A Language and Environment for Statistical Computing*. Vienna, Austria: R Foundation for Statistical Computing. https://www.R-project.org/.

Robert Benzie, Kelly Skjerven, Nicholas Keung. 2023. "'It's about Time': Ottawa Offers Millions More in Housing Support to Shelter Refugees in Toronto." https://www.thestar.com/politics/provincial/it-s-about-time-ottawa-offers-millions-more-in-housing-support-to-shelter-refugees-in/article_69a177d3-d6ba-51c6-80b7-5c4d0909af81.html.

Sam Firke, Chris Haid, Bill Denney. 2023. *Janitor: Simple Tools for Examining and Cleaning Dirty Data*. https://CRAN.R-project.org/package=janitor.

"Toronto Ombudsman Investigating Shelter Denial for Asylum Seekers, Refugees." 2023. https://www.cbc.ca/news/canada/toronto/investigation-will-focus-on-city-s-shelter-denial-to-refugees-asylum-seekers-1.6973815.

"TORONTO SHELTER STANDARDS." 2021. *SHELTER, SUPPORT & HOUSING ADMINISTRATION*, 7–8. https://www.toronto.ca/wp-content/uploads/2018/12/9547-A1600035_TSS_FinalDraft_V3_Dec4_Blue_SimpleAccessible_updated2.pdf.

Toronto Shelter System Flow. 2024. 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.