

Toronto's Ongoing Problem with Homelessness*

The Toronto Shelter System Flow, January 2020 to December 2021

Min Chang

06 February 2022

Abstract

This report contains the data regarding Toronto's shelter system flow which is collected by Open Data Toronto. There is a significant difference between the number of homeless people moving into permanent housing and those who are not. Moreover, there is no information regarding how many homeless people are on the waitlist for permanent housing. Accurate data on the conditions the homeless people are experiencing should be available for the City to acknowledge the expensive rent in Toronto and either create more affordable housing.

1 Introduction

One of the ongoing social problems in Toronto is homelessness. Thus, following Ontario, the City of Toronto launched the Poverty Reduction Strategy (PRS) in 2015 in hopes of improving economic and social problems (Shaffer and Tranjan 2019). After two years into the launch of the strategy, according to the City of Toronto, they were able to provide 1,500 affordable rental homes and were in the progress of building 700 new affordable ownership homes (Toronto, n.d.). Permanent housing is one of the most important support homeless people require as Toronto experiences extreme weather from time to time. However, the society was not able to see any significant changes and felt like Toronto's PRS were more or less useful to the problem the society was experiencing (Shaffer and Tranjan 2019).

Since it has been 5 years since the improvement of affordable homes, there would be some higher expectations on the City of Toronto's next plan. For reference, there were approximately nine thousand homeless people in 2018 which is one year after the 2017 PRS update (Canada 2021). However, according to the Toronto's shelter system flow data from the Open Data Toronto, it is still showing high numbers of homeless people. This means that the City of Toronto did not improve as much from the last 5 years with the PRS. Thus, this report will go over the data in section2 which shows the number of newly identified homeless people, homeless people moved into permanent housing, and homeless people returned from permanent housing. Additionally, the report will view the approximate whole population of homeless people in Toronto from January 2020 to December 2021—which will also be discussed in section 2.

2 Data

2.1 Data Source

The overnight services such as the emergency shelters, respites, hotel/motel programs, warming centers for homeless people in Toronto are all funded and operated by the City of Toronto (Shelter 2022). The data

*Code and data are available at: <https://github.com/min-315/Toronto-Shelter-System-Flow>

includes information on homeless people visiting and leaving the service each month, specific demographics who used the service at least once in the past three months, and people who are actively experiencing homelessness (Shelter 2022). For the purpose of this report, the data was analyzed using the R statistical programming language (R Core Team 2020), and the data was retrieved through the City of Toronto Open Data Portal using the R package `opendatatoronto` (Gelfand 2020).

2.2 Recorded Data

The data was recorded by using the Shelter Management Information System (SMIS) to record people who are using the overnight services which are funded and operated by the City of Toronto as mentioned in 2.1 (Shelter 2022). People using overnight services that do not use the SMIS and are funded by other government are not included in the data (Shelter 2022). Additionally, the data does not include people who sleep outdoors (Shelter 2022). Thus, the total population experiencing homelessness will be an approximate. The data is refreshed monthly on the 15th day of month which will keep an updated data of the previous month (Shelter 2022).

2.3 Organized Data

The data was organized using `dplyr` (Wickham et al. 2021) that is from the `tidyverse` package (Wickham et al. 2019) for data manipulation and `knitr` (Xie 2021) was used to create Table 1. And `kableExtra` (Zhu 2021) was used to keep the table in place in the report. Table 1 was filtered to show information of all the population instead of each distinct demographic for an overall data result on the number of people newly identified, moved into permanent housing, and returned from housing. To explain each column further, the column for “Newly Identified” identifies people who visited the overnight services for the first time, the column for “Moved to Housing” identifies people who moved to permanent housing, lastly, the column for “Returned from Housing” identifies the people who returned to the overnight services from permanent housing (Shelter 2022).

Table 1 is able to display the flow of Toronto’s shelter system for each month from January 2020 to December 2021. Moreover, it is able to display how many people are actually able to move into permanent housing for each month. The balance between the number of people newly identified and people who were able to move into permanent housing seems balanced. However, since there is no data on how many people are actually waiting to move into permanent housing it is harder to grasp the idea of how long people have to wait to be able to move into permanent housing. Moreover, there are people who return to overnight services from permanent housing. It would be helpful for the City of Toronto to record the reasons to why people return to overnight services to identify problems that caused people to experience homelessness again. In Table 1, the number of people who are actively experiencing homelessness is not included to see how the data could be more specific to help display the reality in moving into permanent housing.

Table 1: The Toronto shelter system flow from January 2020 to December 2021

Date(m-y)	Population	Newly Identified	Moved to Housing	Returned from Housing
Jan-20	All Population	901	567	64
Feb-20	All Population	959	601	76
Mar-20	All Population	900	660	89
Apr-20	All Population	469	600	67
May-20	All Population	390	497	57
Jun-20	All Population	368	434	48
Jul-20	All Population	552	512	87
Aug-20	All Population	628	477	89
Sep-20	All Population	595	522	82
Oct-20	All Population	636	444	88
Nov-20	All Population	598	405	53
Dec-20	All Population	621	375	91
Jan-21	All Population	647	346	84
Feb-21	All Population	590	297	88
Mar-21	All Population	539	341	71
Apr-21	All Population	480	268	69
May-21	All Population	626	278	78
Jun-21	All Population	719	253	98
Jul-21	All Population	740	284	87
Aug-21	All Population	685	306	104
Sep-21	All Population	832	255	101
Oct-21	All Population	850	270	80
Nov-21	All Population	783	250	77
Dec-21	All Population	806	261	52

Thus, instead, the number of people who are actively experiencing homelessness was created into a bar graph (Figure 1) to easily see the changes in the number throughout the two years data. According to the data, people who are actively experiencing homelessness are people who used the overnight services at least once for the past three months and did not move into permanent housing(Shelter 2022). For Figure 1, `ggplot2` (Wickham 2016) was used to create and organize the graph. And, `forcats`(Wickham 2021) was used to organize the dates on the x-axis to be in chronological order. On the y-axis, it displays the number of people who are actively experiencing homelessness each month.

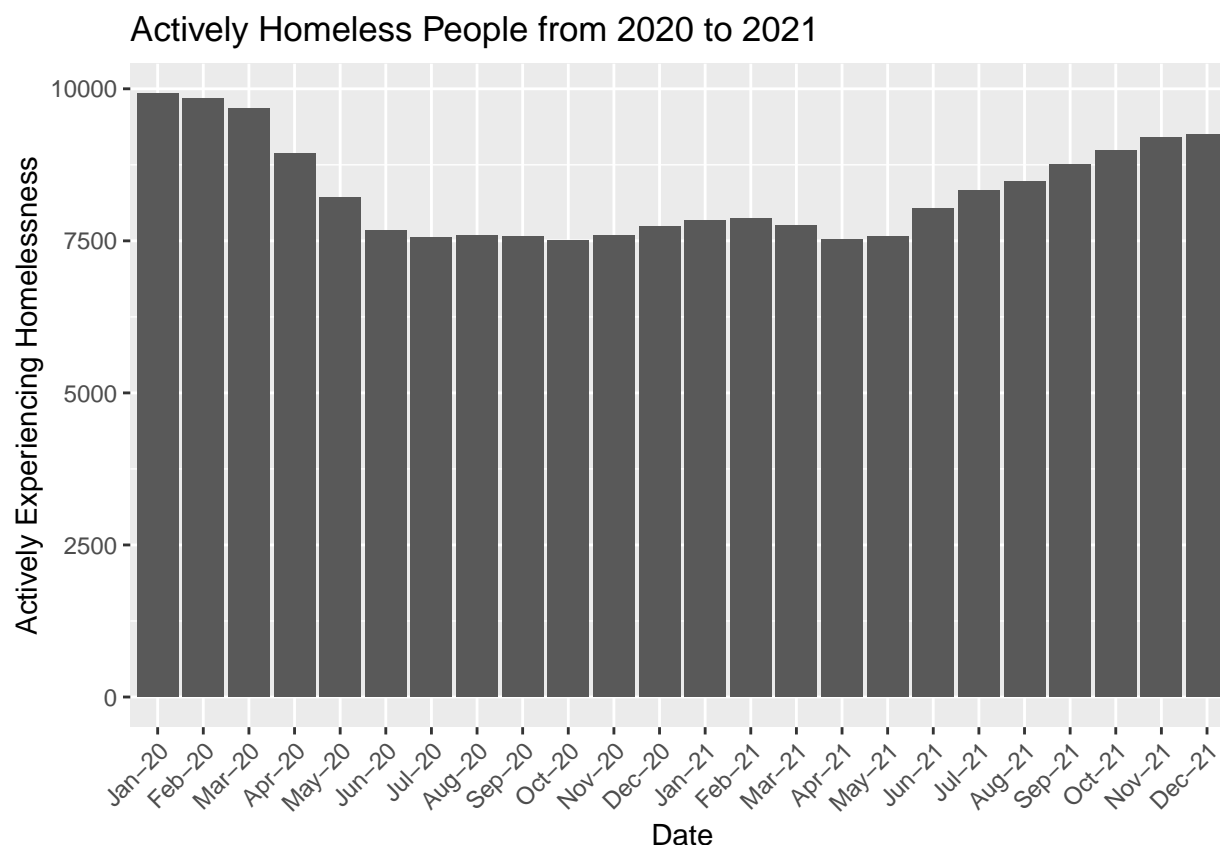


Figure 1: Homeless Population in Toronto from January 2020 to December 2021

Figure 1 is showing a great decrease in the number of people actively experiencing homelessness starting in May 2020, which was around the time when the COVID-19 pandemic began and lock down restrictions were strict. Therefore, the data on the number of actively homeless people would be inaccurate. If the pandemic and lock down did not occur, the number of people who actively experience homelessness would be more or less the same as January 2020. Moreover, as the pandemic is slowly being under controlled, the number of people actively experiencing homelessness is slowly rising again starting May 2021.

The purpose of Figure 1 was to see Toronto's PRS has been helping with the homelessness problem. Moreover, to see if the balance between the number of people actively experiencing homelessness and people who were able to move into permanent housing is well balanced. As mentioned in 1, the number of people experiencing homelessness in 2017 was approximately nine thousand people (Canada 2021). Due to the COVID-19 pandemic, there is a decrease in the number of homeless people using the overnight services. Thus, that does not correlate to the number of people who moved into permanent housing in the data. For example, in July 2020 five hundred and fifty two people moved into permanent housing. Yet, the number of people actively homeless reduced approximately two thousand people compared to January 2020. Therefore, overall the number of people experiencing homelessness in 2020 to 2021 did not change as much since 2017. Which potentially means Toronto's PRS has not been doing much significant changes to reduce homelessness in Toronto.

3 Results

The purpose of this report was to see if Toronto's PRS was doing significant work by looking at the data from Open Data Toronto to see the number of homeless people being able to move into permanent housing. If the PRS was making changes, there would be more affordable houses for people to move in, open more job positions, or increase minimum wage. However, the number of homeless people compared to 2017, the numbers barely changed in 2020 as mentioned in 2.3. Due to COVID-19, the number of homeless people did greatly reduce, yet since there were lock down restrictions and the concern of being exposed to the virus, people would have obviously not visit the overnight services. Thus, there is a significant decrease in the number of homeless people in 2020. Moreover, the number of homeless people visiting overnight services are slowly increasing as the pandemic is steadily being under control. Thus, compared to the number of homeless people in 2017 is not much different than the number of homeless people in 2020 and 2021. Overall, it seems like the City of Toronto is going to take a while to make major changes that would help people who are experiencing homelessness further.

4 Discussion

The data on Toronto's Shelter System Flow included detailed information on different demographics which shows that the data is trying not to be biased. However, they were missing information regarding how many people are waiting to move into permanent housing, how much permanent housing is, reasons to why people return from permanent housing to overnight services, and data on people who sleep outdoors which is one of their limitations they mentioned in the Toronto Open Data website (Shelter 2022). Since the data is only focusing on the flow of the shelter systems, those information could be missing. However, Toronto Open Data should consider making a new data that includes information on permanent housing mentioned above.

Additionally, after few researches, funding and operating services such as emergency shelters are expensive and supporting one individual's homelessness can cost about \$72,000 (Gaetz 2012). The prices would differ depending on different provinces and cities, yet, it shows that the government is able to fund the overnight services for the people experiencing homeless. Thus, this shows the government is more than financially stable to fund each person experiencing homelessness. If the government is rich enough to fund each person, they could also probably either increase affordable permanent housings, increase minimum wage, open more job positions or do all of them to reduce or even remove homelessness.

This report includes general information regarding Toronto's shelter system flow and how many people are able to move in to permanent housing. Therefore, there are several missing information that could enhance the knowledge of how Toronto is dealing with homelessness. For that reason, the next step would be researching more on what the government does to support people who are experiencing homelessness and how increasing minimum wage and job positions could reduce homelessness.

References

- Canada, Statistics. 2021. *Characterizing People Experiencing Homelessness and Trends in Homelessness Using Population-Level Emergency Department Visit Data in Ontario, Canada*. <https://www150.statcan.gc.ca/n1/pub/82-003-x/2021001/article/00002-eng.htm>.
- Gaetz, Stephen. 2012. "The Real Cost of Homelessness." *The Homeless Hub*. <http://hdl.handle.net/10315/29369>.
- Gelfand, Sharla. 2020. *Opendatatoronto: Access the City of Toronto Open Data Portal*. <https://CRAN.R-project.org/package=opendatatoronto>.
- R Core Team. 2020. *R: A Language and Environment for Statistical Computing*. Vienna, Austria: R Foundation for Statistical Computing. <https://www.R-project.org/>.
- Shaffer, Paul, and Ricardo Tranjan. 2019. "What to Expect from Toronto's Poverty Reduction Strategy: Lessons from the Global South." *Journal Storage*. <https://doi.org/https://utpjournals.press/doi/10.3138/cpp.2018-056>.

- Shelter, Support & Housing Administration. 2022. *Toronto Shelter System Flow*. <https://open.toronto.ca/dataset/toronto-shelter-system-flow/>.
- Toronto, City of. n.d. *Achievements & Updates – Poverty Reduction Strategy*. <https://www.toronto.ca/city-government/accountability-operations-customer-service/long-term-vision-plans-and-strategies/poverty-reduction-strategy/poverty-reduction-strategy-achievements-updates/>.
- Wickham, Hadley. 2016. *Ggplot2: Elegant Graphics for Data Analysis*. Springer-Verlag New York. <https://ggplot2.tidyverse.org>.
- . 2021. *Forcats: Tools for Working with Categorical Variables (Factors)*. <https://CRAN.R-project.org/package=forcats>.
- Wickham, Hadley, Mara Averick, Jennifer Bryan, Winston Chang, Lucy D’Agostino McGowan, Romain François, Garrett Golemund, 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, and Kirill Müller. 2021. *Dplyr: A Grammar of Data Manipulation*. <https://CRAN.R-project.org/package=dplyr>.
- Xie, Yihui. 2021. *Knitr: A General-Purpose Package for Dynamic Report Generation in r*.
- Zhu, Hao. 2021. *kableExtra: Construct Complex Table with ‘Kable’ and Pipe Syntax*. <https://CRAN.R-project.org/package=kableExtra>.