

The Role of Shelters in Providing Emergency Housing especially for the Homeless*

Syed Hassan

19 April 2023

The city and the people of Toronto provide shelter to thousands of people every year. The majority that takes benefit from the city's overnight shelter are the homeless. The occupancy of these shelters is 100% on most nights and rarely does space go unoccupied. We need to make these shelters more accessible for the homeless and provide more funding to expand the program.

Table of contents

1	Introduction	2
2	Data	2
3	Results	5
4	Discussion	5
5	Limitations	5
6	Conclusion	6
7	Appendix	7
7.1	Code	7
	References	8

*Code and data are available at: https://github.com/saiyedgh/Shelters_Toronto.git

1 Introduction

Homelessness is a genuine concern of the city and the people of Toronto. The city has acquired plenty of permanent and temporary shelters to provide better housing and overnight shelters for the homeless as well as others seeking emergency housing. The city of Toronto, like many other metropolitan cities, has suffered from the problem of homelessness for years. However, the role of the shelters in helping the homeless might go unnoticed because of the increasing numbers on the streets. My analysis aims to discover the issue in detail using data provided by the city of Toronto. Through my analysis, I aim to take you deep into statistics as well as focus on the patterns in order to develop empathy for the homeless. Lastly, the analysis will conclude the role of the shelters of Toronto in helping people overall and how they can improve to include more people in need.

2 Data

Table 1: Total number of shelters in the city of Toronto with average daily users - 2021.

District	Numbers	Users
Etobicoke	2	176.11233
North York	5	1094.29863
Scarborough	10	668.22466
Toronto	94	4262.63288
Vaughan	1	69.63562
NA	3	111.35616
Total	115	6382.26027

Table 2: Total number of shelters in the city of Toronto with average daily users - 2022.

District	Numbers	Users
Etobicoke	2	188.00274
North York	6	1543.89589
Scarborough	8	789.04110
Toronto	90	5287.21918
Vaughan	1	69.95616
NA	4	133.43562
Total	111	8011.55068

dasdasdasdasdasdajfb dasdhajshdkahdahjs sdajkhjdkahsdjka.

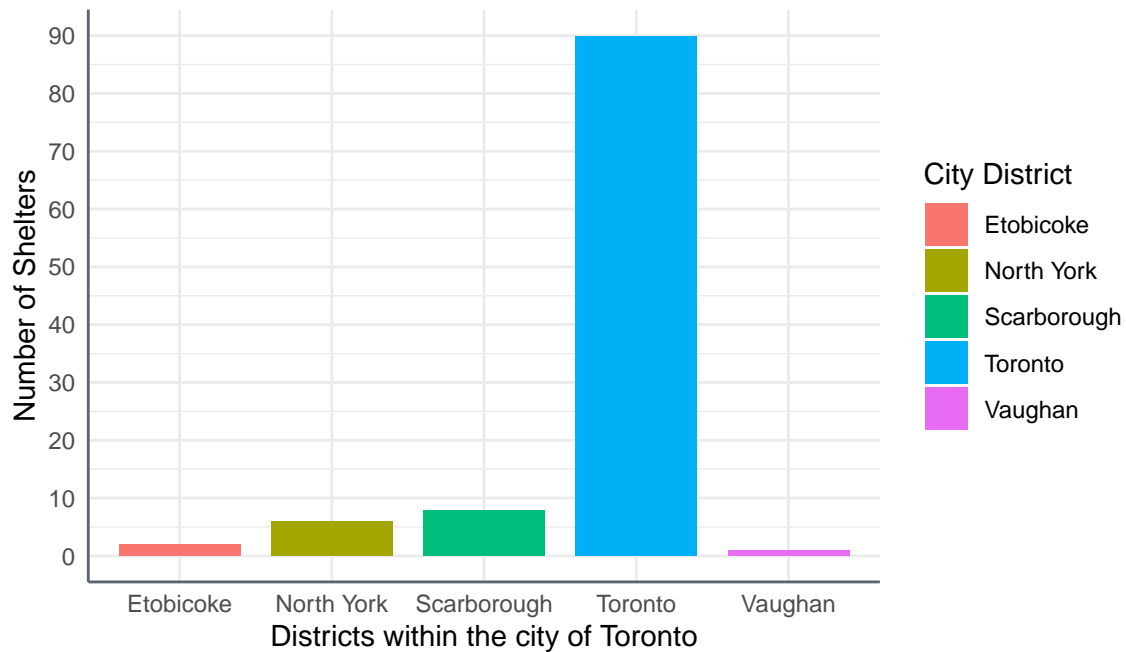


Figure 1: Number of shelters in Toronto by district.

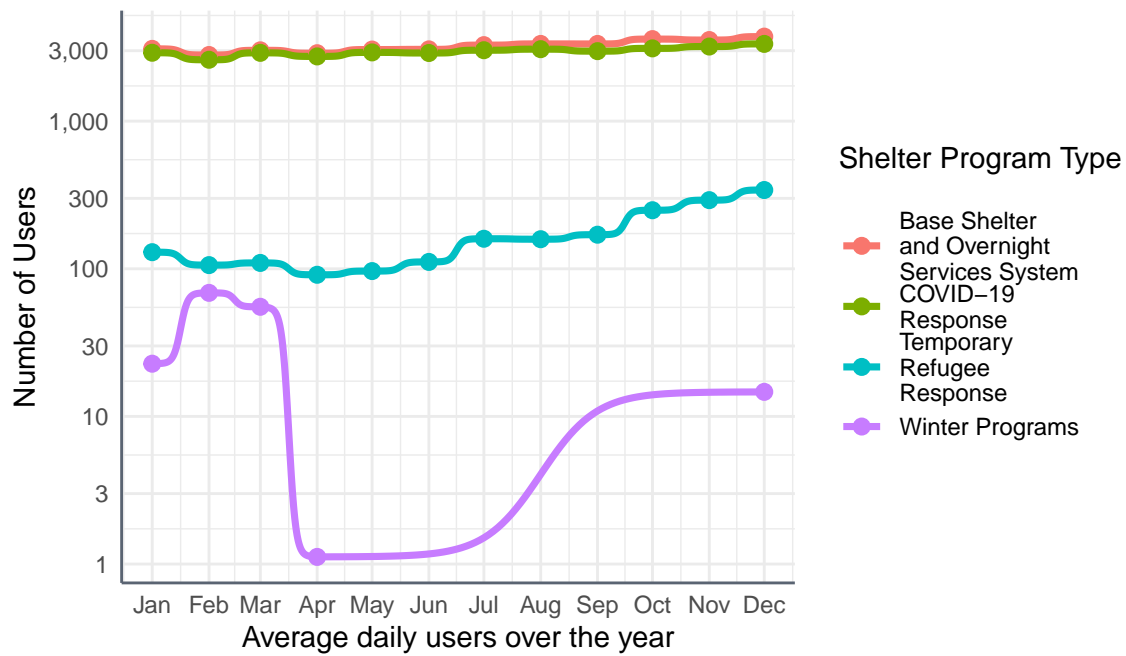


Figure 2: Number of people using shelters by Program - 2021.

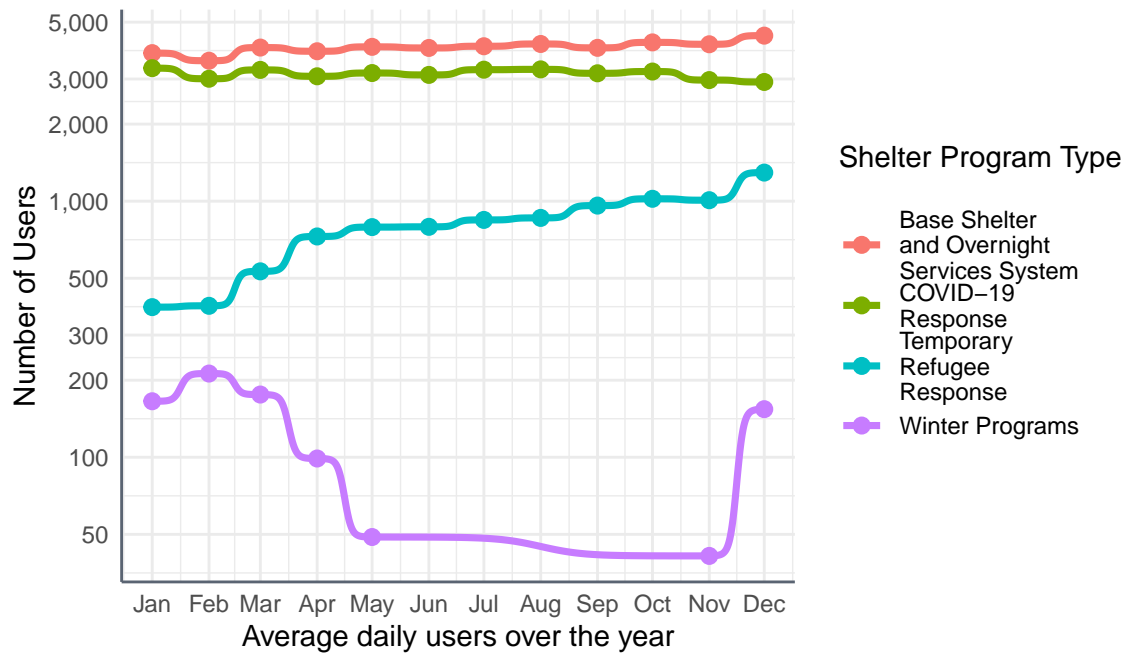


Figure 3: Number of people using shelters over time by Program - 2022.

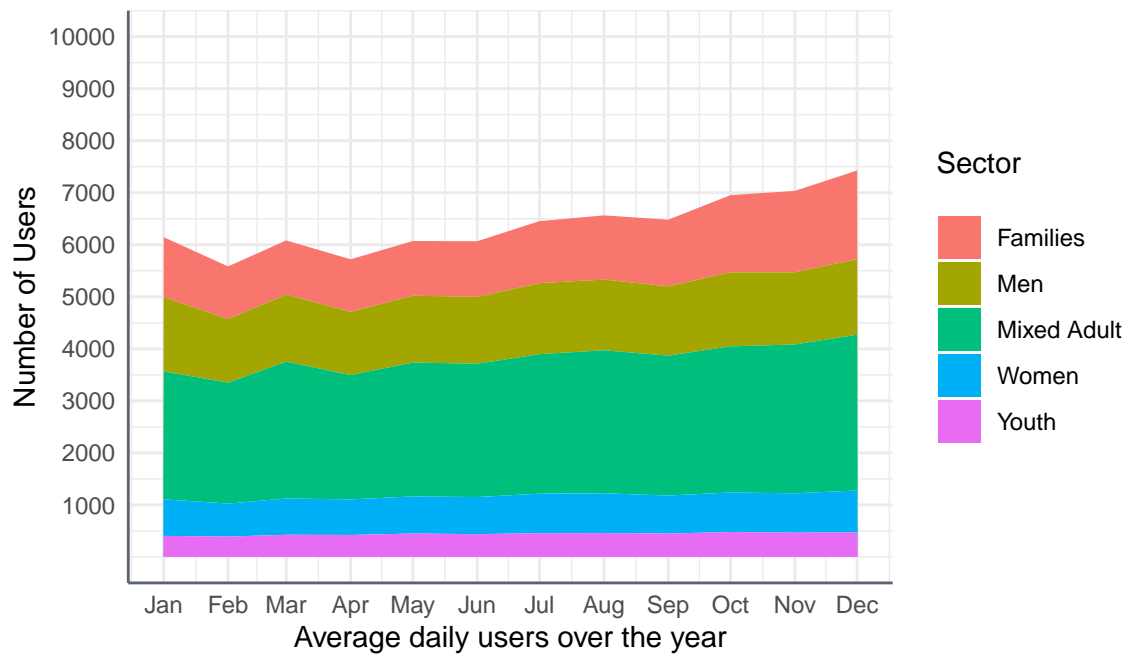


Figure 4: Number of people using shelters over time by Sector - 2021.

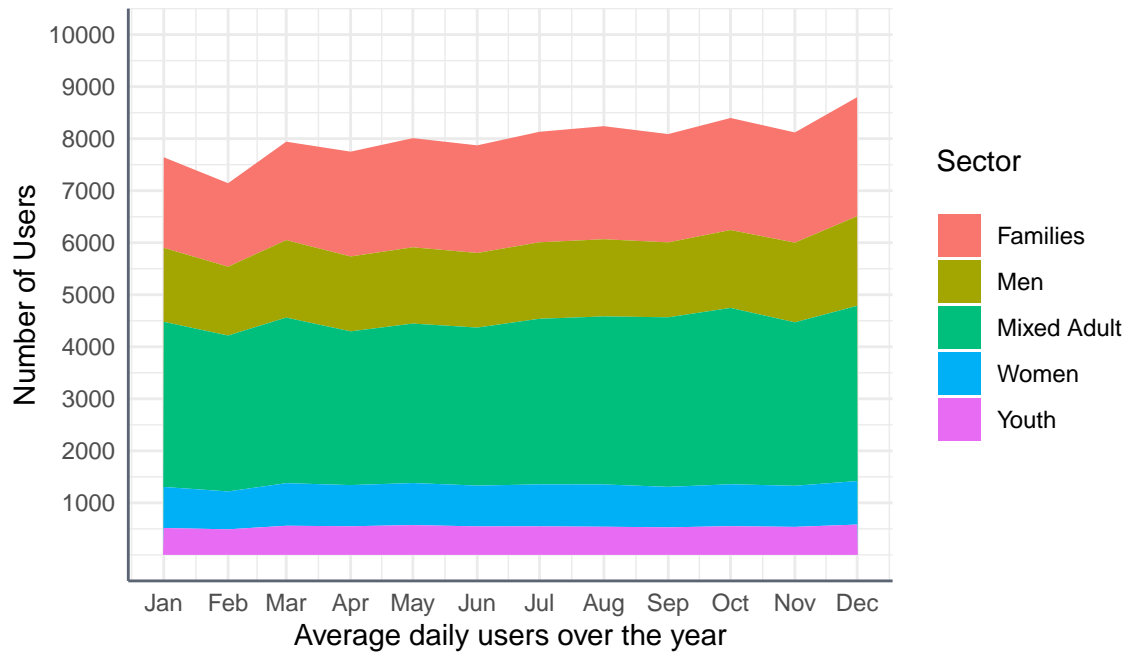


Figure 5: Number of people using shelters over time by Sector - 2022.

3 Results

Coming soon...

4 Discussion

Coming soon...

5 Limitations

Coming soon...

6 Conclusion

Coming soon...

7 Appendix

7.1 Code

The report was created using *R* (R Core Team 2020) and *R Studio* (RStudio Team 2020) with *Quarto* (Quarto, n.d.) – a new version of *R Markdown* (RStudio, n.d.). The main library utilized for this purpose is *Tidyverse* (Wickham et al. 2019). Its used sub-packages include *dplyr* (Wickham et al. 2022) to enable query-like syntax, and *ggplot* (Wickham 2016) to create graphs and charts. Other packages and tools include *here* (Müller 2020), *janitor* (Firke 2021), *knitr* (Xie 2022), *kableExtra* (Zhu 2021), and *scales* (Wickham and Seidel 2022). Their respective function is to find *csv* files, clean data, generate reports, create tables, and enable customized legends and break points. Lastly, as *csv* files convert the date column to character, the *lubridate* (Grolemund and Wickham 2011) package was used to convert character dates to proper dates, something essential to plot date or time variables.

References

- Firke, Sam. 2021. *Janitor: Simple Tools for Examining and Cleaning Dirty Data*. <https://CRAN.R-project.org/package=janitor>.
- Grolemund, Garrett, and Hadley Wickham. 2011. “Dates and Times Made Easy with lubridate.” *Journal of Statistical Software* 40 (3): 1–25. <https://www.jstatsoft.org/v40/i03/>.
- Müller, Kirill. 2020. *Here: A Simpler Way to Find Your Files*. <https://CRAN.R-project.org/package=here>.
- Quarto. n.d. *Quarto, an Open-Source Scientific and Technical Publishing System Built on Pandoc*. <https://quarto.org>.
- R Core Team. 2020. *R: A Language and Environment for Statistical Computing*. Vienna, Austria: R Foundation for Statistical Computing. <https://www.R-project.org/>.
- RStudio. n.d. *Your Data Tells a Story. Tell It with r Markdown*. <https://rmarkdown.rstudio.com>.
- RStudio Team. 2020. *RStudio: Integrated Development Environment for r*. Boston, MA: RStudio, PBC. <http://www.rstudio.com/>.
- 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, and Kirill Müller. 2022. *Dplyr: A Grammar of Data Manipulation*. <https://CRAN.R-project.org/package=dplyr>.
- Wickham, Hadley, and Dana Seidel. 2022. *Scales: Scale Functions for Visualization*. <https://CRAN.R-project.org/package=scales>.
- Xie, Yihui. 2022. *Knitr: A General-Purpose Package for Dynamic Report Generation in r*. <https://yihui.org/knitr/>.
- Zhu, Hao. 2021. *kableExtra: Construct Complex Table with ‘Kable’ and Pipe Syntax*. <https://CRAN.R-project.org/package=kableExtra>.