Vizualizing Toronto Homess Shelter data Across a Global Pandemic*

The City of Toronto's failure to aid a certain demographic has led to a disproportioanlity in the of Toronto Homeless Shelters //

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Abstract

In addition to a global pandemic, homlessness and housing is a self apparent issue in the city of Toronto. Taking a stroll through certain areas in the downtown core, it's almost impossible to miss homeless tent cities and homeless people lined outside of shelters awaiting food or entry in the afternoon. Upon further examination of data collected from the Open Data Portal of the City of Toronto, it was easy to find interesting trends in homeless shelter data in the years 2020 and 2021. We found trends in the diminishing use of sheleters by various demographic of homeless people and age groups. This paper attempts to visualize these trends as well as touch on some problems that one might experience in trying to extract real meaning from the data.

Contents

1 Introduction

You can and should cross-reference sections and sub-sections. For instance, Section 2. R Markdown automatically makes the sections lower case and adds a dash to spaces to generate labels, for instance, Section 5.1.

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*Code and data are available at: https://github.com/adam-labas/adam_labas_paper_1_opendatatoronto

Table 1: First ten rows of a dataset of shelture usage

Population Group	Aged less than 16	Aged 16-24	Aged 25-44	Aged 45-64	Aged 65
All Population	1440	1227	3893	2852	504
Chronic	429	432	1096	1205	307
Refugees	969	341	1177	427	27
Families	1438	238	790	231	9
Youth	0	987	0	0	0
Single Adult	0	0	3103	2621	495
Non-refugees	471	886	2716	2425	477
All Population	1434	1185	3909	2795	511
Chronic	405	435	1029	1251	309
Refugees	961	334	1174	407	26

2 Data

All the data that is used in this paper was retrieved from the City of Toronto Open Data Portal and is titled "Toronto Shelter System Flow" on their end. Using the R package opendatatoronto Gelfand (2020)
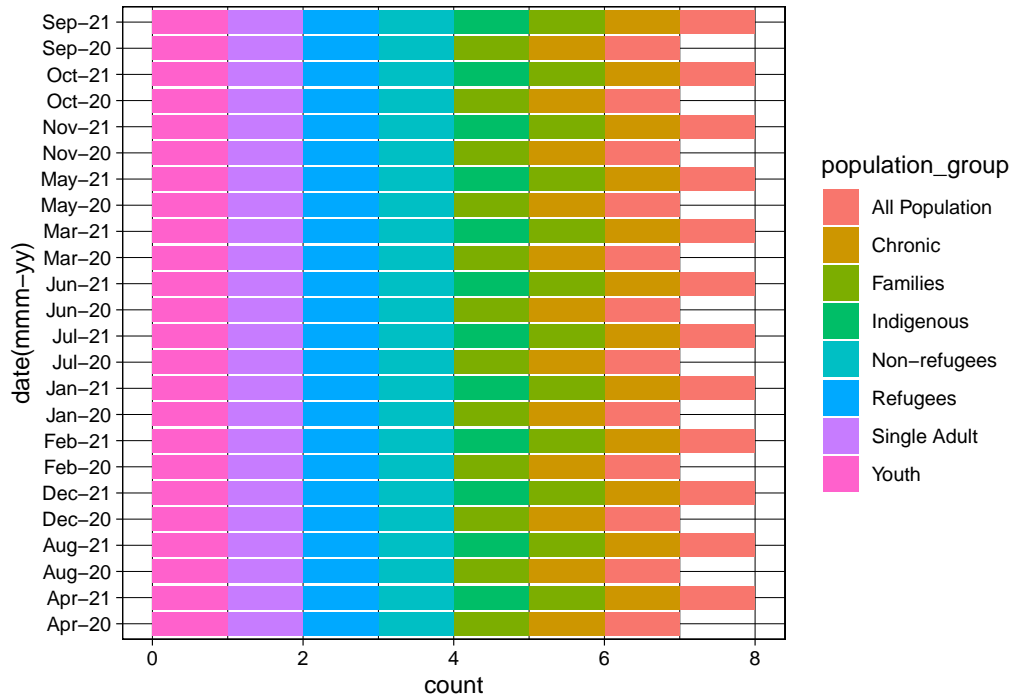

Figure 1: There are no Indeginous data for 2020

Talk more about it.

Also bills and their average (Figure 2). (Notice how you can change the height and width so they don't take the whole page?)
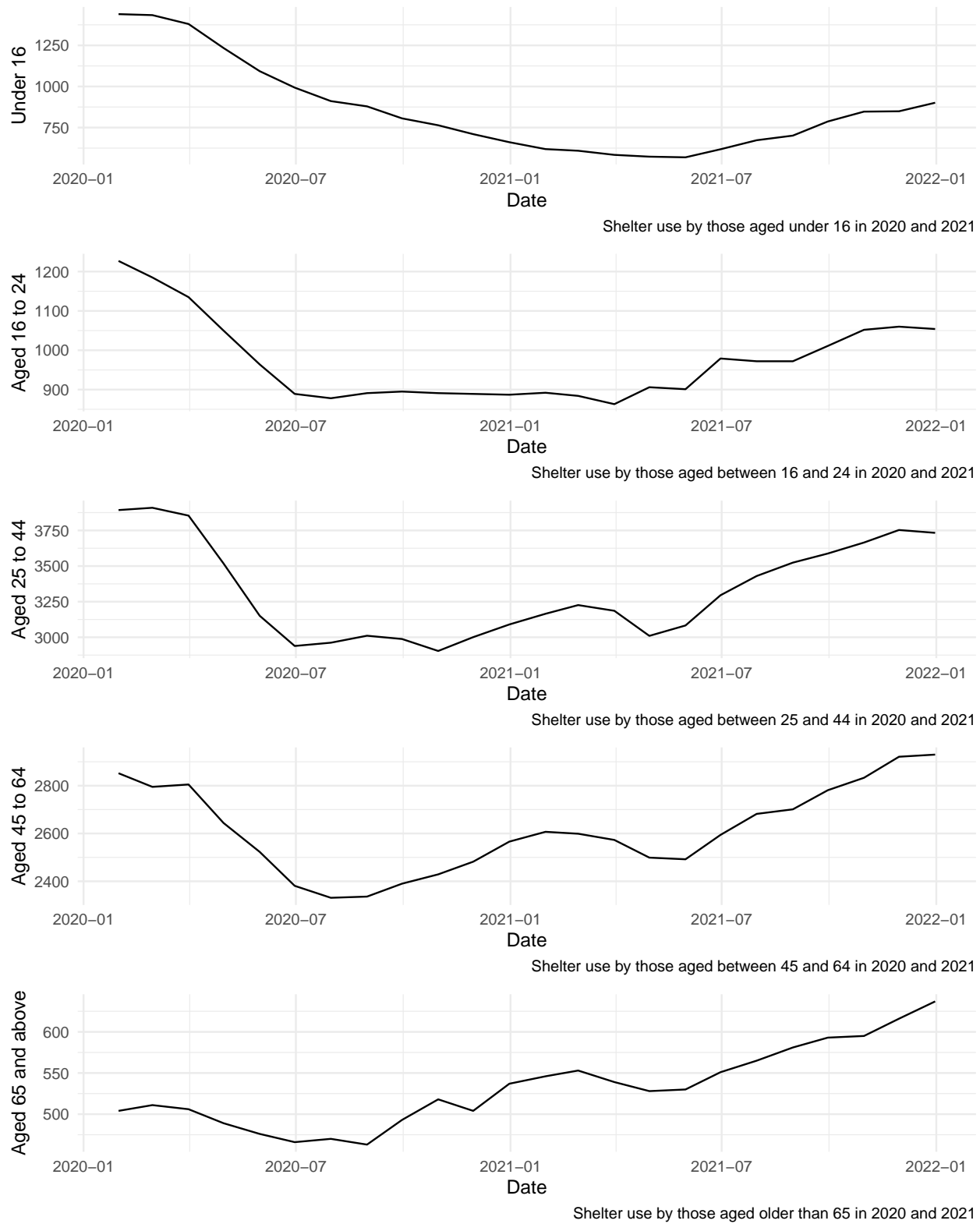
Talk way more about it.

Shelter use by those aged under 16 in 2020 and 2021

Shelter use by those aged between 16 and 24 in 2020 and 2021

Shelter use by those aged between 25 and 44 in 2020 and 2021

Shelter use by those aged between 45 and 64 in 2020 and 2021

Shelter use by those aged older than 65 in 2020 and 2021

Figure 2: More bills of penguins

3 Model

$$Pr(\theta|y) = \frac{Pr(y|\theta)Pr(\theta)}{Pr(y)} \tag{1}$$

Equation (1) seems useful, eh?

Here's a dumb example of how to use some references: In paper we run our analysis in `R` (R Core Team 2020). We also use the `tidyverse` which was written by Wickham et al. (2019) If we were interested in baseball data then Friendly et al. (2020) could be useful.

We can use maths by including latex between dollar signs, for instance θ.

4 Results

5 Discussion

5.1 First discussion point

If my paper were 10 pages, then should be be at least 2.5 pages. The discussion is a chance to show off what you know and what you learnt from all this.

5.2 Second discussion point

5.3 Third discussion point

5.4 Weaknesses and next steps

Weaknesses and next steps should also be included.

Appendix

A   Additional details

References

Friendly, Michael, Chris Dalzell, Martin Monkman, and Dennis Murphy. 2020. *Lahman: Sean 'Lahman' Baseball Database.* https://CRAN.R-project.org/package=Lahman.

Gelfand, Sharla. 2020. *Opendatatoronto: Access the City of Toronto Open Data Portal.*

R Core Team. 2020. *R: A Language and Environment for Statistical Computing.* Vienna, Austria: R Foundation for Statistical Computing. https://www.R-project.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.