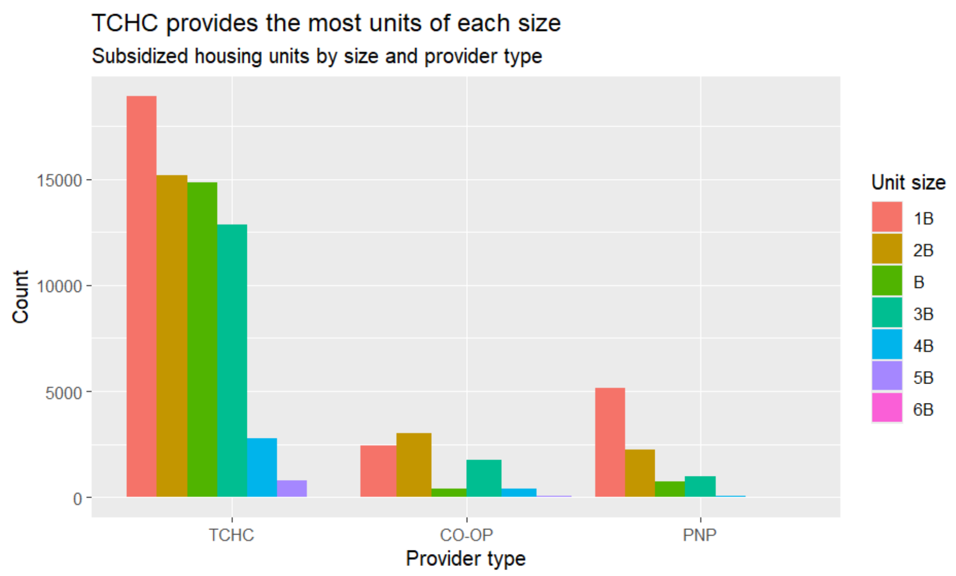
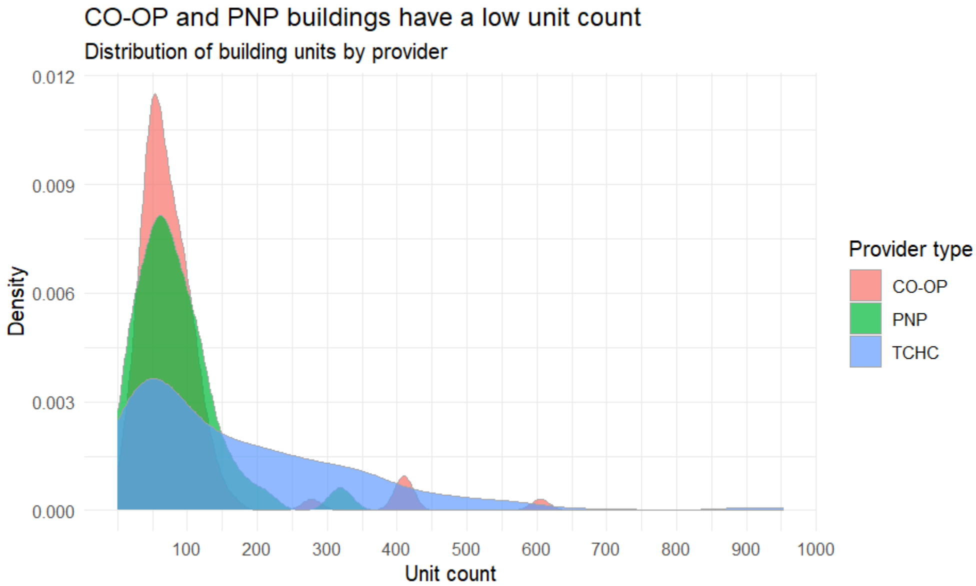
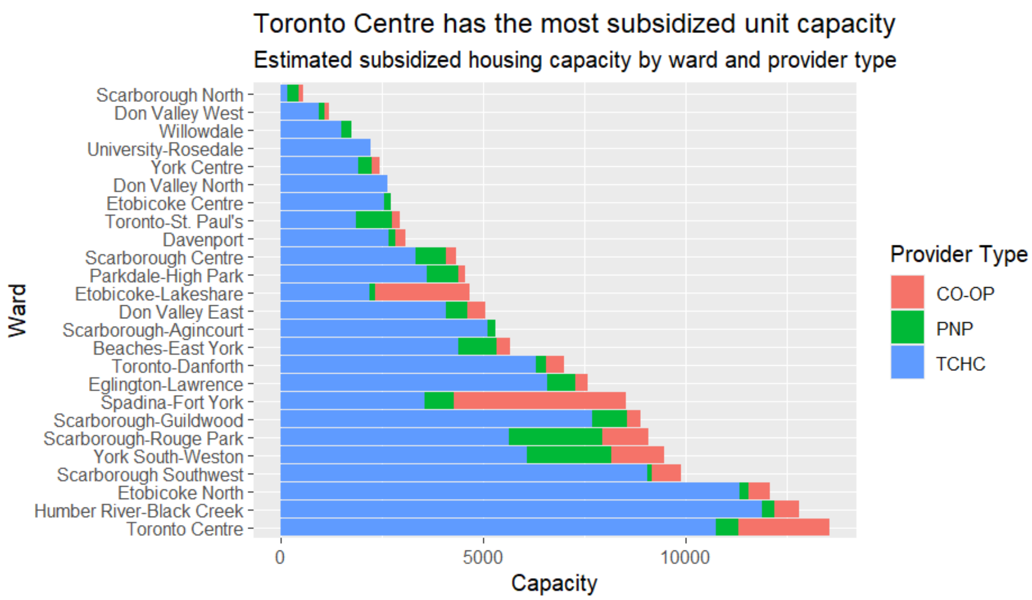
The dataset I chose is the Subsidized Housing Listings published by the City of Toronto. For my final assessment, I aim to learn about the supply of subsidized housing in the city and how well it matches the needs of Toronto. This dataset can be used to overview the current subsidized housing portfolio, providing insights into the buildings, provider types, size of units, amount of units, etc. My focus with this analysis was to better understand the current supply, focusing on unit sizes and differences across provider types and wards. I created three charts towards this, using base ggplot labels and themes for colour and fonts; alt text was added through Canvas.



The first chart is a grouped bar chart using colour to differentiate each unit size. The TCHC is the largest housing provider overall, owning units of all unit sizes and the highest amount of each size. CO-OP and PNP providers have similar overall unit counts in their supply, CO-OP providers seem to focus on 2B, 1B, and 3B units, while PNP have mostly 1B units. How provider types decide which unit sizes are built/purchased, and how it compares to the needs of the city, could be an area of further research.



The second chart explores the distribution of buildings by the total units they have, separated by provider type. For all providers, most of their buildings have a lower count of subsidized units, of around 50. CO-OP and PNP providers show the highest concentration of buildings at this low end, each with small spikes where they have buildings with more units further on. Both of these providers have a less diverse portfolio of buildings when compared to TCHC, which shows a gradual slope downwards, though consistent, showing that they have many buildings with higher unit counts. This distribution enriches the previous chart, showing the patterns in building distribution, after analyzing the overall supply of units.



Estimated capacity is 1 for B, 1 for 1B, 2 for 2B, 3 for 3B, 4 for 4B, 5 for 5B, and 6 for 6B.

The final chart attempts to provide an estimate on the subsidized housing capacity of each ward, indicating how the provider types are contributing to each estimation. The dominance of TCHC is seen in almost all wards, while CO-OPs are most prominent in a few wards and PNP is more spread out across the wards. While Toronto Centre has the highest estimated capacity, the next few wards in highest capacity are further from the downtown. A visualization like a choropleth map could help highlight any geographical patterns with the wards and their estimated capacities. The estimated capacity assumption could be improved by finding other data sources or studies to inform these numbers.

REFERENCES

City of Toronto. "Subsidized Housing Listings."

https://open.toronto.ca/dataset/subsidized-housing-listings/