

Social Housing in Toronto*

Investigating Status from Waiting Lists and Their Social Implications

Xiaoyu (Alice) Miao

April 22, 2024

This paper investigates household composition dynamics in social housing applications in Toronto from Q1 2019 to Q4 2023. Analyzing application data, the study examines patterns in households applying for housing assistance, focusing on those with and without dependents. Findings reveal fluctuating trends, highlighting the challenges faced by families in accessing stable and affordable housing in Toronto. By understanding these dynamics, policymakers can develop targeted interventions to promote housing equity and stability for vulnerable families in the city, contributing to ongoing efforts to address housing affordability and access issues in Toronto.

1 Introduction

Access to stable and affordable housing is a fundamental aspect of societal well-being, yet disparities persist in housing outcomes across different demographic groups. This paper investigates the dynamics of household composition in social housing applications in Toronto and its implications for housing policy and practice. Analyzing social housing application data from Q1 2019 to Q4 2023 within Toronto’s housing landscape, the study focuses on the patterns and fluctuations in households applying for housing assistance, particularly those with and without dependents. The analysis highlights the diverse challenges faced by families in accessing stable and affordable housing in Toronto, emphasizing the dynamic nature of family dynamics and economic circumstances over time.

By recognizing the unique needs of households with dependents and understanding the socio-economic drivers of housing disparities in Toronto, policymakers and housing providers can develop targeted interventions to promote housing equity and stability for vulnerable families in the city. Through evidence-based policy interventions and a deeper understanding of household composition in social housing, this paper aims to contribute to the ongoing discourse on housing

*Code and data are available at: [LINK](#).

affordability, access, and equity in Toronto, striving towards inclusive and sustainable housing solutions for all members of Toronto’s diverse community.

2 Data Sourcing

This data is sourced from Open Data Toronto, a public platform that offers a wide array of datasets relevant to various aspects of urban life, including housing, transportation, public health, and more. This initiative allows researchers, policymakers, and the general public to access and utilize city-managed data in an effort to foster transparency, drive innovation, and facilitate informed decision-making. Utilizing such open data platforms ensures that the information is not only readily available but also consistently updated and maintained according to government standards. This approach helps in compiling comprehensive and reliable datasets that are crucial for conducting thorough analyses, like the study of housing application trends, thereby contributing to more effective urban planning and policy development.

The data in this post was compiled using open source statistical programming language R R Core Team (2023). It uses functionalists such as janitor and ggplot2. Finally, the cleaned data is saved as a CSV file in the specified “analysis_data” directory. This allows access to the cleaned data set for further analysis or reporting. Using write.csv with line name = FALSE ensures the output file is neat.

#Data Cleaning

To clean the data for better analysis processing, unnecessary columns such as how many bedrooms are in the social housing units and the repetitive column ‘total application’ were removed. We use the function ‘janitor’ to achieve intended data cleaning.

Figure 1:

id	quarter__year	new_reacted	housed	inactive_cancelled	total_active_waiting	housing_list_no_dependents	dependents	dependents
1	Q1 2019	6181	522	4138	102049	38044	28223	35782
2	Q2 2019	5085	805	25297	78796	29171	21081	28544
3	Q3 2019	5434	767	6817	77024	28442	20665	27917
4	Q4 2019	5151	872	6708	75191	27521	20202	27468
5	Q1 2020	6067	471	4049	78500	29115	21059	28326
6	Q2 2020	3678	497	694	78683	29183	21141	28359

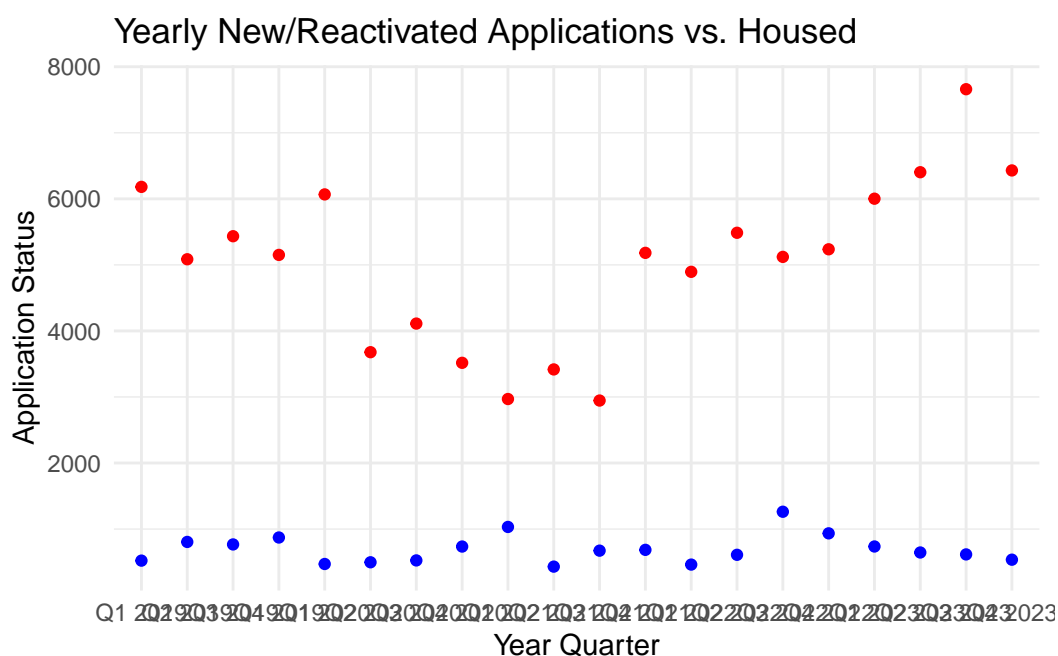
Data Overview

The above (**data-overview?**) is an overview of the data. It simulates the first 6 lines of all columns to give the readers an idea of what the data looks like. The complete data consists of 9 columns/variables and 20 lines/quarters of years from quarter 1 2019 to quarter 4 2023.

3 Results

The dataset “Centralized Waitlist for Social Housing” provides detailed information on the activities related to the social housing waitlist in Toronto for various quarters starting from Q1 2019. It includes data on new/reactivated applications, the number of households housed, inactive/cancelled applications, and the total active waiting list. Additionally, it breaks down the waiting list by household type (e.g., no dependents, with dependents, seniors).

Figure 2:



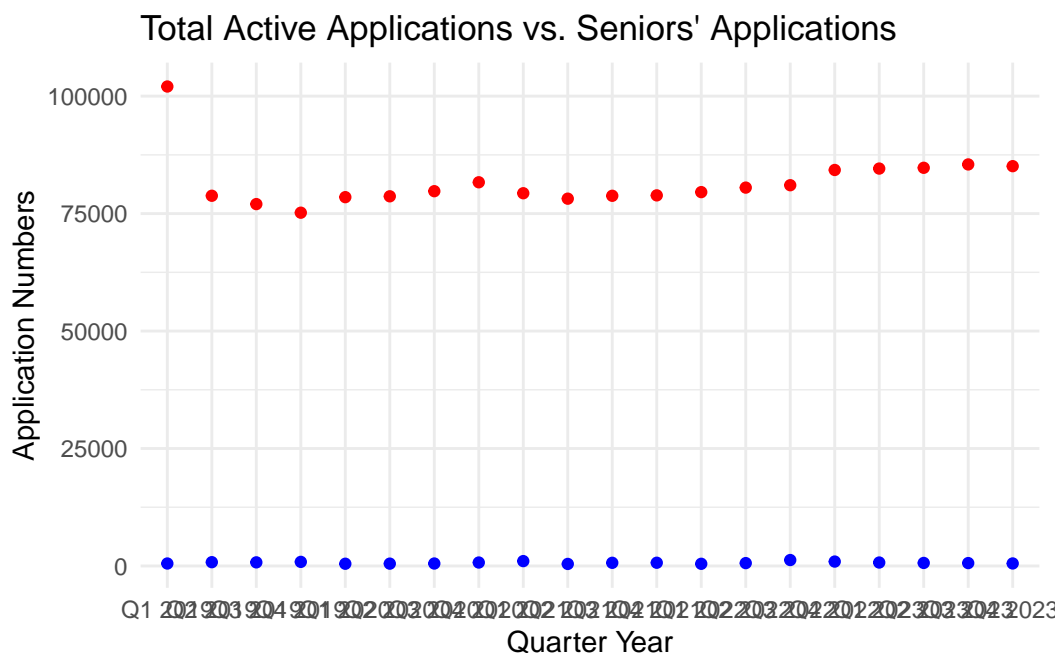
The dot plot (**new-and-housed?**) illustrates the dynamic interplay between demand and supply within Toronto’s social housing sector from Q1 2019 to Q4 2023. The data exhibits fluctuating patterns in new or reactivated social housing applications across different quarters, with a notable surge observed in Q1 2020. Despite these fluctuations, the number of households housed each quarter consistently lags behind new entries, underscoring a substantial

gap between demand and supply dynamics. This persistent shortfall indicates the ongoing challenge of meeting the housing needs of vulnerable populations within the community.

Examining waiting list trends further illuminates the complexities involved in managing social housing demand. The total active waiting list experiences fluctuations, notably declining in Q2 2019 due to a significant number of inactive or cancelled applications. This fluctuation suggests challenges in maintaining accurate waiting lists or changes in applicants' circumstances, highlighting the multifaceted nature of addressing social housing needs. Such insights underscore the importance of robust data management and adaptive policies to effectively respond to evolving housing demands.

Moreover, an analysis of the waiting list composition reveals critical insights into the demographics of those in need of social housing. A significant portion of seniors and households without dependents feature prominently in the waiting list, indicating a pressing need for housing support among these vulnerable groups. This demographic composition underscores broader social and economic challenges, including affordability issues for seniors and single individuals, necessitating targeted interventions and policy measures to address housing inequities and ensure inclusive access to adequate housing for all segments of the population.

Figure 3:

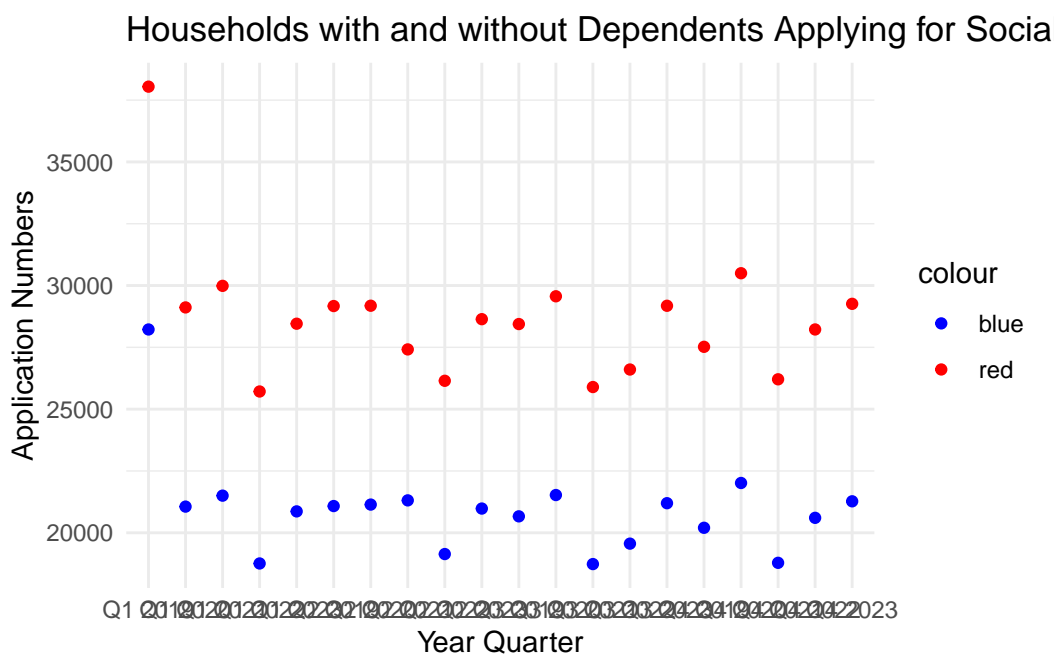


The dot plot (**total-and-seniors?**) comparing total active applications to seniors' applications from Q1 2019 to Q4 2023 provides valuable insights into the demographics of individuals seeking social housing assistance and the overall trends in application numbers over time.

From the graph, it is evident that both total active applications and seniors' applications exhibit fluctuations throughout the observed period. However, seniors' applications appear to comprise a consistently smaller proportion of the total active applications, as indicated by the consistently lower values for seniors' applications compared to total active applications. This disparity suggests that while seniors constitute a significant demographic group in need of social housing support, they may not represent the majority of applicants. Understanding this dynamic is crucial for policymakers and housing providers to tailor their strategies and resources effectively to address the diverse needs of applicants across different age groups.

Moreover, the fluctuating trends in both total active applications and seniors' applications highlight the dynamic nature of housing demand and the complex socio-economic factors influencing individuals' housing situations. Further analysis may be warranted to explore the underlying reasons behind these fluctuations, such as changes in demographic trends, economic conditions, or shifts in housing policies and programs. Overall, this graph underscores the importance of considering demographic diversity and changing trends in social housing applications when developing and implementing policies and programs aimed at addressing housing needs and promoting housing equity for all segments of the population.

Figure 4:



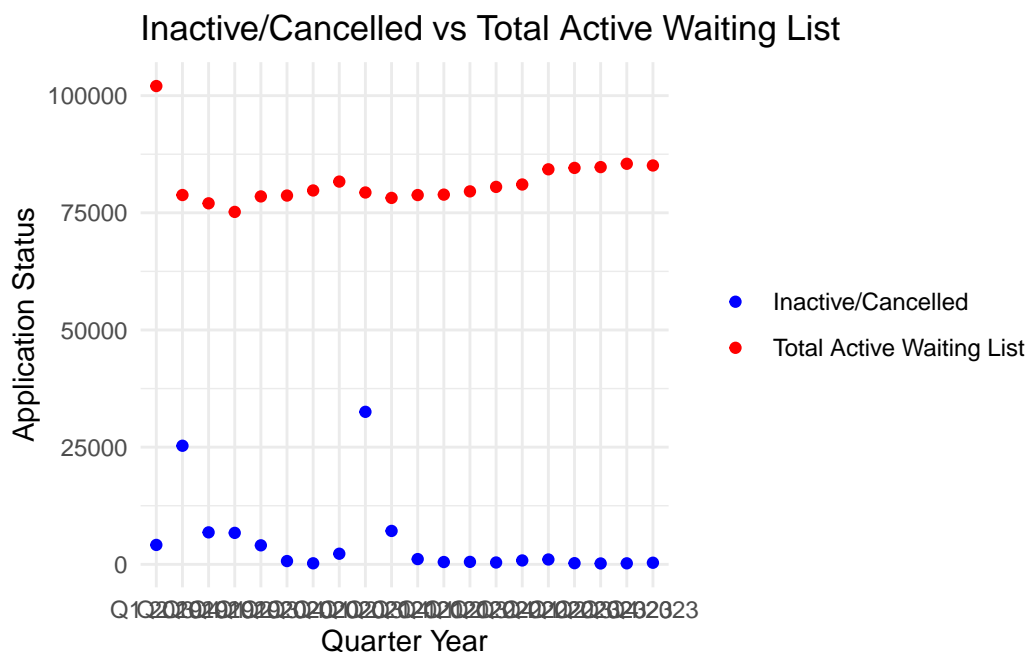
The dot plot (**dependents-or-not?**) comparing households with and without dependents applying for social housing from Q1 2019 to Q4 2023 provides valuable insights into the composition of applicants and potential variations in housing needs among different household types over time. From the graph, we observe fluctuations in both the number of households

with and without dependents applying for social housing throughout the observed period. Interestingly, the number of households with dependents appears to fluctuate more prominently compared to households without dependents, as indicated by the greater variability in the dashed line representing households with dependents.

This variation in the number of applications from households with dependents may reflect changes in family dynamics, economic conditions, or social factors affecting household composition and housing stability. For instance, economic downturns or changes in family circumstances could lead to fluctuations in the number of households with dependents seeking social housing support. Understanding these dynamics is crucial for policymakers and housing providers to tailor their programs and services effectively to meet the diverse needs of households with different compositions. It highlights the importance of considering family size, structure, and specific needs when designing housing assistance programs and allocating resources to address housing insecurity and promote housing stability for vulnerable populations.

Moreover, further analysis of the underlying factors driving fluctuations in applications from households with and without dependents may provide valuable insights into broader socioeconomic trends and challenges affecting housing affordability, access, and stability for families in need. Such insights can inform evidence-based policy interventions and targeted strategies aimed at addressing housing disparities and promoting equitable access to affordable and suitable housing for all households, regardless of their composition.

Figure 5:



The dot plot (**cancelled-vs-total?**) visualizes the relationship between inactive/cancelled applications and the total applications on the waiting list in Toronto’s social housing sector from Q1 2019 through Q4 2023. The graph demonstrates the fluctuating nature of inactive or cancelled applications across various quarters, with notable spikes and declines that provide insights into the dynamics affecting the housing waiting list. For example, a substantial rise in cancellations or inactive statuses during specific periods, which are quarter 2 2019 and quarter 1 2021, could indicate shifts in applicant circumstances or dissatisfaction with the waiting times, which in turn impacts the overall efficiency of housing allocation. These fluctuations highlight the challenges in maintaining an active and accurate waiting list, emphasizing the need for robust management systems to handle the complexities of application statuses.

Analyzing the total active waiting list alongside inactive or cancelled applications further illuminates the challenges faced by the housing sector in managing demand. The overall trend of the waiting list, when viewed in conjunction with the inactive or cancelled applications, suggests periods of increased strain on housing resources, possibly driven by economic factors or changes in policy. Such analysis is critical for housing authorities as it points out the need for adaptive strategies that can swiftly respond to changes in demand and applicant status. This insight is particularly important for planning and implementing policies aimed at reducing waiting times and improving the responsiveness of housing services to better meet the needs of those on the waiting list.

4 Discussion

4.1 First discussion point

The observed dynamics in social housing demand and supply, as evidenced by the fluctuating patterns in application rates and the persistent gap between new entries and households housed, underscore the complex interplay of socio-economic factors influencing housing access and affordability. Research by Desmond and Desmond and Kimbro (2015) highlights the intricate relationship between housing instability and poverty, wherein marginalized communities often face challenges in accessing stable and affordable housing options. Moreover, studies by Fitzpatrick et al. (2019) emphasize the role of structural inequalities and systemic barriers in perpetuating housing disparities, particularly among vulnerable populations such as seniors and single individuals. The phenomenon of fluctuating waiting list trends and demographic compositions may be attributed to various factors, including inadequate affordable housing stock, rising housing costs, and limited access to supportive services and resources. Additionally, the complexities of managing waiting lists and addressing changing applicant circumstances further contribute to the observed variations in social housing demand. Effective policy interventions aimed at addressing housing inequities and enhancing housing affordability are crucial in mitigating these challenges and ensuring equitable access to housing for all members of society Desmond and Kimbro (2015), Fitzpatrick et al. (2019).

4.2 Second discussion point

The visualization of total active applications versus seniors' applications from Q1 2019 to Q4 2023 sheds light on the significant representation of seniors within the social housing applicant pool. The observation that seniors comprise at least one-third of the total applications underscores the pronounced housing needs among older adults within the community. Research by Morrow-Howell, Galucia, and Swinford (2016) emphasizes the growing demographic shift towards an aging population and the subsequent implications for housing demand, particularly among low-income seniors. Furthermore, studies by Burholt and Windle (2006) highlight the multifaceted challenges faced by older adults in accessing suitable housing options, including financial constraints, physical health limitations, and social isolation. The substantial presence of seniors within the applicant pool suggests a pressing need for targeted interventions and policy measures to address the unique housing needs of this vulnerable demographic group Morrow-Howell, Galucia, and Swinford (2016); Burholt and Windle (2006).

Moreover, the high proportion of seniors' applications relative to the total applicant pool underscores the importance of incorporating age-specific considerations into housing policy and program development. Research by Butler and Rob (n.d.) emphasizes the significance of age-in-place initiatives and supportive housing models tailored to the needs of older adults, facilitating aging in community settings and promoting independence and well-being. Additionally, studies by Gonyea, Kemeny, and Mitchell (2017) highlight the benefits of integrated housing and service programs for seniors, addressing both housing and health-related needs and enhancing overall quality of life. The findings from the visualization underscore the imperative for comprehensive housing strategies that prioritize the housing security and dignity of seniors while addressing broader societal challenges related to aging and housing inequities Butler and Rob (n.d.); Gonyea, Kemeny, and Mitchell (2017).

4.3 Third discussion point

The analysis of the line plot comparing households with and without dependents applying for social housing sheds light on the complex interplay of socio-economic factors influencing housing needs and family structures. The observed fluctuations in applications from households with dependents suggest dynamic changes in family dynamics and economic circumstances over time. Research by Clampet-Lundquist, Massey, and South (2011) emphasizes the importance of considering household composition in housing policy and interventions, as households with dependents often face unique challenges in accessing stable and affordable housing. For instance, fluctuations in applications from households with dependents may reflect changes in employment opportunities, income levels, or housing affordability, which impact family decision-making regarding housing choices and stability.

Moreover, studies by Murdie and Teixeira (2019) highlight the role of socio-economic factors and policy interventions in shaping housing outcomes for families, particularly those with children. The greater variability observed in applications from households with dependents

compared to those without dependents underscores the diverse and evolving needs of families in the social housing system. Understanding these dynamics is essential for policymakers and housing providers to develop targeted interventions and support services that address the specific needs of families with dependents and promote housing equity for all members of society.

In summary, the analysis of household compositions in social housing applications offers valuable insights into the nuanced challenges and vulnerabilities faced by families in accessing stable and affordable housing. By recognizing the unique needs of households with dependents and implementing evidence-based policy interventions, policymakers can work towards reducing housing disparities and promoting housing stability for vulnerable families in need (Clampet-Lundquist, Massey, and South (2011); Murdie and Teixeira (2019)).

4.4 Weaknesses and next steps

One potential weakness in the data and its processing pertains to the level of details and completeness of the data collected. The dataset only provides aggregated numbers for new/reactivated applications, housed individuals, inactive/cancelled applications, and the total active waiting list, segmented by quarter and year. Such aggregation may obscure underlying patterns or anomalies that could be important for more detailed analysis. For instance, without data on the reasons for application cancellations or the demographic details of applicants, it's difficult to pinpoint specific challenges or needs within the housing system. Furthermore, if the dataset lacks consistent data collection methods across quarters or contains missing data for certain quarters, this could lead to skewed analyses and unreliable conclusions.

Regarding the processing and visualization aspect in R, while the script effectively generates a comparative line plot, it does not incorporate any statistical analysis to assess trends or significant changes over time. The choice to display only two metrics (inactive/cancelled and total active waiting list) might oversimplify the complex dynamics of housing needs and availability. Additionally, the plot assumes that the viewer will understand the implications of the data trends without providing contextual aids such as confidence intervals, which could inform the viewer about the variability or certainty of the plotted trends. The visualization might benefit from a multi-dimensional approach, perhaps including other relevant metrics or employing different types of visualizations to provide a more comprehensive view of the data. This would allow stakeholders to make more informed decisions based on a clearer understanding of all influencing factors.

To enhance our understanding and analysis of the housing data, the next steps should involve increasing the detail level and expanding the scope of data collected. This could include gathering demographic information about applicants, such as age, income, and family size, as well as reasons for application cancellations or reactivations. Implementing more advanced statistical techniques to identify trends and correlations over time would also be beneficial.

Additionally, integrating geographic data could help identify regional disparities and specific areas of need. These efforts would not only provide a more comprehensive view of the housing situation but also aid in tailoring housing policies and interventions to better meet the specific needs of different populations.

5 Conclusion

This study has provided critical insights into the complex dynamics of household composition within Toronto’s social housing applications from Q1 2019 to Q4 2023. By closely analyzing the data trends, the research highlights the significant challenges that families, particularly those with dependents, face in accessing stable and affordable housing. The findings underscore a marked inconsistency between the demand for social housing and the availability of accommodations, reflecting a substantial gap that persists despite varying applications rates. This persistent discrepancy indicates that current housing policies and resources may not adequately address the needs of the most vulnerable populations. As such, the study calls for a deeper and more nuanced understanding of these trends to facilitate the development of targeted policy interventions aimed at promoting housing equity and stability for families in Toronto. These efforts are crucial for not only improving living conditions but also for ensuring that housing policies evolve in alignment with the changing demographics and economic realities of the community.

Moving forward, the paper suggests several avenues for further research and policy development. It emphasizes the importance of enhancing data collection processes to capture more granular, demographic-specific information that can inform more effective housing strategies. Additionally, there is a strong recommendation for integrating adaptive policies that can swiftly respond to the fluctuations in housing demand and the specific circumstances of applicants. Such policies should focus on reducing waiting times, optimizing resource allocation, and improving the overall responsiveness of housing services. By addressing these critical issues, Toronto can make significant strides towards reducing housing inequities and ensuring that all residents have access to adequate and affordable housing. This comprehensive approach will not only address the immediate needs but also contribute to the long-term sustainability and resilience of the city’s housing system.

References

- Burholt, Vanessa, and Gillian Windle. 2006. "Social Support in Older Age: A Synthesis of Qualitative and Quantitative Research." *Aging & Society* 26 (5): 707–22.
- Butler, Susan S, and Rob. n.d. "Age-Friendly Communities: Are We Expecting Too Much?"
- Clampet-Lundquist, Susan, Douglas S Massey, and Scott J South. 2011. "Racial and Ethnic Differences in the Neighborhood Concentration of Disadvantage: Testing Hypotheses of Social Isolation and Spatial Assimilation." *American Journal of Sociology* 115 (1): 111–93.
- Desmond, Matthew, and Rachel Tolbert Kimbro. 2015. "Eviction and the Reproduction of Urban Poverty." *American Journal of Sociology* 118 (1): 88–133.
- Fitzpatrick, Katie M, Bronwyn Piatkowski, Gezzter Ortega Caballero, Jordan Lyerly, Kristal Jackson, Andrew M Subica, and Clare Barrington. 2019. "Housing as a Determinant of Health Equity: A Conceptual Model." *Social Science & Medicine* 243: 112571.
- Gonyea, Judith G, Margaret E Kemeny, and Leland L Mitchell. 2017. "Examining Disparities in Access to Housing for Older Adults in the United States." *Journal of Aging & Social Policy* 29 (1): 17–33.
- Morrow-Howell, Nancy, N. Galucia, and E. Swinford. 2016. "Aging with Agency: Building Communities of Care." *Generations* 40 (2): 6–12.
- Murdie, Robert A, and Carlos Teixeira. 2019. "Housing as a Site of Social Policy: A Comparative Analysis of Social Housing Outcomes in Advanced Industrialized Societies." *Journal of Comparative Policy Analysis: Research and Practice* 21 (5): 451–68.
- R Core Team. 2023. *R: A Language and Environment for Statistical Computing*. Vienna, Austria: R Foundation for Statistical Computing. <https://www.R-project.org/>.