

Studentification Unveiled: Navigating Socioeconomic Shifts, Housing Pressures, and  
Community Cohesion in Aging Communities

By

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# Abstract

This thesis explores the interconnection between studentification, demographic change, and the financialization of housing in Kingston, Ontario. As university enrollment grows and housing becomes increasingly commodified, tensions can arise between students, older adult residents, and municipal policymakers. The study investigates how these dynamics impact housing affordability, social cohesion, and the urban landscape.

Using a mixed-methods approach, the research combines spatial analysis of housing trends with qualitative insights from nine semi-structured interviews with students, older adults, and professionals. The findings reveal that homes marketed to student investors are spatially concentrated near the university and sell at a premium compared to homes for owner-occupiers. Statistical analysis shows that unoccupied dwellings, indicative of student rental investments, are strongly linked to specific neighbourhood characteristics. Housing in student-dominant areas fails to meet Canadian affordability standards, with students and older adults facing significant challenges in securing affordable housing. These results highlight the need for policy interventions to address affordability disparities and ensure housing stability for vulnerable populations.

Downtown Kingston also plays a significant role in shaping student-resident relations. While students frequent the downtown core for nightlife and services, older adults engage more deeply with local businesses, highlighting differences in place attachment. Interviews with the Kingston Business Improvement Area (BIA) and a longitudinal analysis of storefront operations reveal concerns over the growing presence of chain stores catering to students, potentially displacing local businesses and altering the downtown character.

To address these issues, the thesis offers four recommendations: (1) strengthen communication channels between students, the city, and local organizations through outreach

positions and orientation programs; (2) enhance housing regulations to ensure landlord accountability and improve housing conditions; (3) promote intergenerational living to foster social connections and provide financial benefits to homeowners; and (4) activate public spaces that encourage interaction between students and long-term residents.

Ultimately, this study highlights the need for inclusive urban planning that recognizes students as temporary but vital members of the community. By fostering connections between students and older adults, Kingston can work towards a more cohesive and resilient urban fabric, mitigating the negative effects of studentification while embracing its potential for positive change.

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## Table of Contents

Abstract .....	ii
Acknowledgements .....	iv
List of Tables .....	viii
List of Figures .....	ix
Chapter 1: Introduction .....	1
1.0 Background .....	1
1.1 Research Objectives .....	2
1.2 Outline .....	3
Chapter 2: Literature Review .....	4
2.1 Studentification .....	4
2.2 The Shift in Retail Services and Amenities .....	11
2.3 Town and Gown Relations .....	13
2.4 Older Adults: A Growing Demographic .....	16
2.5 Third Places for Older Adults .....	21
2.6 Kingston, Ontario .....	24
2.7 Higher Education Institutions: Queen’s University .....	26
2.8 Town and Gown Relations in Kingston, Ontario .....	28
2.9 The City and the School .....	28
Chapter 3: Methodology .....	30
Phase 1 .....	30
Phase 2 .....	32
Phase 3 .....	33
Phase 4 .....	35
Phase 5 .....	37
3.1 Limitations .....	39
Chapter 4: Findings & Discussion .....	41
4.1: Phase 1 .....	41
Hypothesis 1: Neighbourhoods abutting Queen’s University will have a higher percentage of unoccupied dwellings. ....	42
Hypothesis 2: Dwellings in studentified neighbourhoods will have a higher average value in comparison to average dwelling values across Kingston. ....	44
Hypothesis 3: A higher percentage of students in a neighbourhood will have an inverse relationship to total income per household. ....	47

Hypothesis 4: A higher percentage of students in a neighbourhood will have an inverse relationship to the proportion of older adults residing in the same area. ....	49
Hypothesis 5: A higher percentage of students in a neighbourhood will have an inverse relationship on housing condition and repair status.....	52
4.2: Phase 2 .....	53
Hypothesis 1: Investors actively entering the housing market as student enrollment grows. ....	53
Hypothesis 2: Homes marketed for sale to student-investors, not owner-occupiers, will be spatially concentrated around Queen’s University.....	55
Hypothesis 3: Homes marketed for sale to student-investors will sell for a higher value than homes marketed for sale to owner-occupiers.....	62
4.3: Phase 3 .....	65
Hypothesis 1: Housing in studentified neighbourhoods will not meet Canadian affordability standards for ownership (for-sale) properties. ....	65
Hypothesis 2: Both older adults and students will face challenges affording average rental prices in studentified neighborhoods. ....	69
Hypothesis 3: Increasing student enrollment will correlate with decreasing vacancy rates in studentified neighborhoods in Kingston. ....	72
4.4: Phase 4 .....	76
Hypothesis 1: Studentification is associated with the conversion of retail establishments, leading to a shift from resident-oriented businesses to student-focused amenities such as bars and fast-food outlets. ....	76
4.5: Phase 5 .....	84
Housing and Affordability .....	84
The Shift to PBSA .....	85
Retail & Downtown Services.....	86
Sense of Community.....	87
Third spaces .....	89
Town and Gown Relations.....	90
Chapter 6: Recommendations & Conclusion.....	91
Determine the relationship between studentification and the socioeconomic and demographic structure of neighbourhoods.....	91
Estimate the impacts of studentification on residential stability and affordability for older adults. ....	93
Determine the linkages between studentification and the conversion of retail establishments in densely populated student areas.....	96
Moving Forward .....	98
Strengthen Communication Channels.....	98

Regulated Housing.....	99
Intergenerational Living.....	99
Place Activation .....	100
Concluding Remarks.....	100
Bibliography .....	101
Appendices.....	124
Ethics Approval.....	125
Letter of Information.....	127
Interview Questions .....	130

## List of Tables

Table 1: Fox Brock Town and Gown Associations (2019); Cortes (2004); Smith & Holt (2007) .	9
Table 2: City of Kingston Permitted Uses in Urban Multi- Residential Zones (City of Kingston, 2022) .....	27
Table 3: Retail Establishment Descriptions, Author Generated 2024.....	36
Table 4: Summary Statistics on Change in Average Dwelling .....	46
Table 5: Median and Average Income of Permanent Population in Kingston hotspot neighbourhoods.....	47
Table 6: Summary of OLS Results, dependent variable of older adults in hotspot neighbourhoods .....	50
Table 7: Ordinary Least Square Results, ArcGIS output 2024 .....	52
Table 8: Summary of Ordinary Least Squares Results with Unoccupied Dwellings and Dissemination Areas .....	57
Table 9: Summary of Ordinary Least Squares Results with Unoccupied Dwellings and Dissemination Areas .....	59
Table 10: Historical Student Population of Queen’s University versus Kingston Average Household Pricing.....	73

## List of Figures

Figure 1: Creative Community Retention Theoretical Framework, Massey et al., 2014 .....	14
Figure 2: The “Spiral of Anxiety”, Kenyon (1997) .....	18
Figure 3: Map of Kingston with Municipal Boundaries .....	24
Figure 4: Demographic Composition of Kingston, Ontario .....	25
Figure 5: Census Tract and Dissemination Areas for exploration .....	29
Figure 6: Analysis of 2011- 2021 Unoccupied dwellings in census tracts in Kingston Ontario, Author generated 2024.....	43
Figure 7: Map of Hotspot Neighbourhoods surrounding Queen’s University.....	45
Figure 8: After-Tax Income of Households, Statistics Canada 2024.....	48
Figure 9: Change in Percent of Older Adults in Kingston, 2001 to 2021, Statistics Canada Census .....	51
Figure 10: Historical Sale pricing of listings in Student-based census tracts versus the percentage of units Marketed to Students .....	54
Figure 11: 2021 Unoccupied Dwellings in comparison to Listings marketed as student rentals and/or to student landlords.....	56
Figure 12: Hot Spot Analysis of Neighbourhoods with Listings Marketed to Students.....	58
Figure 13: Ordinary Least Squares Analysis: Number of Bedrooms as an indicator of Listings Marketed to Students .....	60
Figure 14: Ordinary Least Squares Analysis: Unoccupied Dwellings as an indicator of Listings Marketed to Students .....	61
Figure 15: Sale Pricing of Homes sold to end-users versus investors, House Sigma 2024.....	62
Figure 16: Owner Occupied versus Student Investment Sales by Home Product, House Sigma 2024.....	64
Figure 17: Minimum Incomes in Kingston, Ontario versus Incomes required for affordable housing.....	66
Figure 18: Median Incomes in Kingston, Ontario versus Incomes required for affordable housing .....	67
Figure 19: Income Thresholds for Home Ownership in hotspot areas .....	68
Figure 20: Minimum Rental Incomes for Students and Older Adults in hotspot neighbourhoods	71
Figure 21: Population Growth versus Vacancy Rates.....	74
Figure 22: BIA Boundary Map, Downtown Kingston (n.d.) .....	77
Figure 23: Change in Retail Operations between 2009 and 2018, Author Generated 2024.....	78
Figure 24: Comparison Bar Chart of Shifting Operations of Storefronts in Downtown Kingston between 2009 and 2018, Author Generated 2024.....	79
Figure 25: Composition of storefronts, 2018 Google Earth .....	82
Figure 26: Composition of Storefronts, 2018 Google Earth.....	83

# Chapter 1: Introduction

## 1.0 Background

The rapid growth of student housing near universities has created seismic shifts on the urban landscape and residential neighbourhoods (Lazzeroni, 2015). The congregation of students in near-campus neighbourhoods creates socio-spatial divides, fosters age-homogeneous environments, and erodes community cohesion (Sage et al., 2013). High demand for housing may increase rental rates, pushing some students into poverty or substandard housing (Laidley, 2014). This dynamic has also strained community relations, particularly between students and older adults (O'Brien, 2017).

Students, often perceived as transient residents, may feel targeted by older, long-term residents who view them as disruptors of neighbourhood stability. At the same time, older adults express frustration with the redevelopment of their communities, as properties are increasingly tailored to meet student needs (Sage et al., 2011). The emergence of privately developed purpose-built student accommodation (PBSAs) exacerbates these challenges, disrupting social support networks for older adults and impeding their ability to age in place (Smith & Hubbard 2014; Revington, 2021). These dynamics are collectively described as "studentification."

Beyond housing, the growing student population can also transform local businesses, prompting a shift in services to cater primarily to students. This transition often displaces establishments essential for older adults to maintain social connections and develop place attachment (Lager, 2019). Consequently, generational differences have surfaced, wherein the housing rights and social needs of students clash with those of older adults, intensifying tensions on both sides.

This thesis explores these trends through a case study of Kingston, Ontario, a city selected for its established aging population and its significant higher education institutions. Unlike larger metropolitan areas where students are more integrated into the urban fabric, Kingston's spatial configuration allows for a focused analysis of socio-economic changes over time, particularly from the perspective of older adults. The primary aim of this research is to examine how studentification influences residential stability, housing affordability, and intergenerational relations, with a particular focus on the experiences of older adults.

## 1.1 Research Objectives

The overarching goal of this thesis is to identify the externalities of studentification, particularly its impact on older adults, and to evaluate the role of commercial businesses in supporting aging in place. The specific research objectives are:

1. Determine the relationship between studentification and the socioeconomic and demographic structure of neighbourhoods.
2. Estimate the impacts of studentification on residential stability and affordability for older adults.
3. Determine the linkages between studentification and the conversion of retail establishments in densely populated student areas.

This research employs a mixed-methods approach, incorporating literature reviews, open-source geospatial data, publicly available housing statistics, demographic information and interviews. While the study uses Kingston, Ontario as a case study, the findings have broader implications for medium-sized municipalities across Ontario grappling with similar challenges. The findings may also inform municipalities as to the effects of a growing student population on

local housing markets and retail establishments. When combined, the findings highlight the cascading effects of studentification on the functionality and inclusiveness of cities.

## 1.2 Outline

This thesis is organized into six chapters. Chapter 2 reviews the literature on studentification, financialization, third places and town and gown relations. Chapter 3 outlines the methodology. Chapter 4 presents the results, including spatial analysis, housing market trends, and interviews with key stakeholders and concludes with a discussion of recommendations for strengthening town and gown relations. Chapter 5 summarizes the research contributions and suggests directions for future studies.

## Chapter 2: Literature Review

This chapter explores four key themes that frame this research. First, it will examine studentification, focusing on its social, economic, and spatial impacts on university towns, particularly the tensions it creates between transient student populations and long-term residents. Second, it will explore retail services and amenities in university towns and the emergence of the student service sector. Third, it will explore town and gown relations and coping strategies for long-term residents. Finally, it will examine the consequences of an aging population and the importance of third places for aging in place. The chapter concludes with an overview of housing and demographic trends in Kingston, Ontario, establishing the foundation for understanding the dynamics at play in Kingston and guide the development of the study's research questions and analysis.

### 2.1 Studentification

Academic literature has highlighted the growing influence of universities and students and their impact on the urban environment. The term “studentification” was first introduced in the UK to describe the process by which a neighbourhood becomes dominated by student occupation (Smith, 2002). While often associated with gentrification, studentification differs in that it marginalizes former dominant social groups, without necessarily displacing them, and can contribute to neighbourhood decline (He, 2014). Despite housing condition, studentification often increases property prices (Smith, 2005; Kinton et al., 2018) and excludes owner-occupiers from the housing market (He, 2015; Smith, 2005; Rugg et al., 2000a; Hubbard, 2009). The phenomenon is also spatially constrained (Hubbard, 2008), commonly occurring within walking distance of a

campus (Gui & Smith, 2020; Holton & Mouat, 2021; Lynch et al., 2023; Prada, 2019; Kinton et al., 2018).

The phenomenon generates both positive and negative externalities for cities, including changes in property values, the sense of place, community cohesion, tax revenues, and demands on local governments (Kinton, 2016). As seen in Waterloo, Ontario, the growing influx of students culminates in displacement pressures for local families, older adults, and low-income individuals leading to monoculture student neighbourhoods segregated from the wider population (Smith, 2004; Smith, 2014; Revington, 2019). While moving is framed as a choice, many residents may feel compelled to leave due to dissatisfaction with the changing neighbourhood (Allinson, 2006). This process fuels the student monoculture, reinforcing age segregation and fundamentally reshaping residential neighbourhoods (Revington, 2021).

The concentration of students in an established neighbourhood generates social, economic, and cultural and spatial effects (Smith, 2005), leading to a homogenous society (Zasina, 2021). Students reshape the socioeconomic structure and social composition of neighbourhoods, often increasing property prices as landlords and investors seek to capitalize on the demand (Smith, 2014). Economically and socially, studentification inflates property prices thus displacing residents (Smith, 2005). Spatially, it extends the monoculture into new neighbourhoods, driven by transportation, commercial services and multi-person occupancy (Allinson, 2006). Culturally, it leads to the restructuring of retail and recreational amenities to better cater to student lifestyles (Rugg et. al, 2004). This can be a vital asset for small and medium-sized cities, creating urban regeneration and economic investment (Hubbard, 2009). However, when city centres become dedicated to servicing students, concerns arise that this polarizes non-student residents, exacerbating tensions between groups (Chatterton, 2010).

## **The Rent Gap**

To understand studentification in the context of housing, it is necessary to briefly explain financialization. August (2021) describes the financialization of housing as the treatment of housing as a financial asset, managed and traded as an investment product rather than being managed to prioritize the security and quality of life for the residents. In Canada, this trend emerged as early as the 1990's, with both the multifamily and senior's housing experiencing a transformation in ownership to private sector entities (August 2021).

As universities expand and student enrollment rises, demand for housing by students increases. If all students cannot be housed on-campus, the process of studentification begins, with students entering the private housing market. First, there is a noticeable decline in owner-occupied housing, replaced by rental housing (Smith, 2014). Traditional single-family homes are converted into high multiple occupancy homes (HMO's) by investors or landlords to take advantage of the rent-gap. Coined by Smith (1979) the rent-gap discusses the difference between current rents and the potential rent that could be obtained under a "better land use". Smith (1979) argues that the process will not begin until the rent-gap is wide enough that the profit associated with the home outstrips any short-term investment required to convert a property. As the availability of homes for conversion diminishes, property prices rise, further incentivizing landlords to rent rooms to students (Smith, 2005).

In the case of studentification, renting to families or members of the community falls out of favour as landlords convert housing to capitalize on the growing student population (Smith, 2005; Pickren, 2012). This transition begins the process of urban segregation, increasing rents and marginalizing long-term residents to close the rent gap (Miessner, 2021; Smith, 2005). Thus, landlords play an important role in the studentification process, particularly in medium-sized cities

(Miessner, 2021; Pickrenn, 2012). The rent gap also highlights how housing can be easily financialized, where short-term profit goals outstrip broader social and affordable housing initiatives (Slater, 2017).

### **Purpose-Built Student Accommodations**

A more recent development in studentification is the rise of Purpose-Built Student Accommodation (PBSA). Since 2011, investors have increasingly entered the Canadian student housing market, focusing on the development of PBSA (Revington, 2020). This shift has moved development away from small-scale landlords to global financial players seeking high-yield investments (Sage et al., 2013).

PBSA developments often cater to students desiring higher quality amenities and luxury accommodation, funded predominantly through parental contributions (Wilkinson & Greenhalgh, 2024; Kinton et al., 2018). Moreover, unlike traditional condominium units which are bought to live in, PBSA units are typically purchased as rental investments (Hulse and Reynolds, 2018). This further financializes the housing stock (Revington, 2020).

While the growth of PBSA's has replaced some run-down homes, it has also created homogenized communities that enhance social exclusion in the name of profit (Revington, 2021; Revington, 2022). The growth of commercial real estate interest in the student housing sector thus raises concerns about the commodification of student living and more broadly, the education system itself (Gu & Smith, 2019).

Another externality of PBSA's is its polarization of the student population. Kinton et al., (2018) studied the growth of PBSA's in Loughborough, UK., identifying that PBSA's resulted in financial and spatial divides among students. One class of students could afford the higher quality

accommodations offered by the PBSA and moved out of the studentified area. The other class of students, wanting to drive down their rental costs, moved in to the studentified areas vacated by the former group. Seeing a new rent gap, landlords charged more for individual rooms for rent. Though beyond the scope of the Kinton et al. (2018) study, the rise in rents can create conditions contributing to students graduating with increased debt (Norma & Barlett, 2024; Franz & Gruber, 2022).

### **Students as neighbours**

Studentification produces positive, negative and further indirect effects on communities (**Table 1**). These externalities are more noticeable in smaller and medium-sized towns, where the presence of students is more visible (Black, 2002; Cortes, 2004). On the positive side, student spending can revitalize downtowns, support the local economy and enhance cultural infrastructure (Mulhearn & Franco, 2018; Hubbard, 2008; Allinson, 2006). Universities also bring employment opportunities, helping them integrate into the fabric of cities (Black, 2002).

Conversely students may also create noise disturbances, increase crime, create parking congestion and displace residents (Mulhearn & Franco, 2018; Revington, 2020). These tensions often lead to segregated communities and demographic imbalances in studentified neighbourhoods (Smith, 2008; Gumprecht, 2006; Xiao, 2013; Kenyon, 1997). For cities, a larger transient population can reduce community cohesion and affect the quality of social interactions (University UK, 2006; Sage et al., 2012b). This can disrupt the nature and strength of local communities.

Positive Effects	Negative Effects	Additional Effects
<ul style="list-style-type: none"> <li>● Student demand for housing</li> <li>● Regeneration of older housing stock</li> <li>● Increasing viability of local businesses</li> <li>● Increase in commercial outlets near campus</li> <li>● Student volunteerism in community</li> <li>● Population stabilization and potential retention</li> <li>● International influence and vibrancy</li> <li>● Diverse cultural activities</li> <li>● Investment in rental properties</li> <li>● Inner-city density</li> <li>● Increase in athletic facilities</li> </ul>	<ul style="list-style-type: none"> <li>● Anti-social behaviour, noise and late-night activities</li> <li>● Residents demoralized</li> <li>● Seasonality of student housing</li> <li>● Limited community integration</li> <li>● Conflicts and disputes</li> <li>● Lower quality of housing</li> <li>● Property neglect</li> <li>● Increased municipal service pressures</li> <li>● Reduced parking availability and increased congestion</li> </ul>	<ul style="list-style-type: none"> <li>● Rise in home prices</li> <li>● Concentration of students in select neighbourhoods</li> <li>● Change in retail amenities</li> <li>● Fluctuating demand for housing</li> <li>● Seasonal employment</li> <li>● Change in average incomes</li> <li>● Privatization of housing market supply</li> <li>● Change in percentages of owner-occupied and rental households</li> <li>● Change in demand for services such as schools, dentists and doctors</li> <li>● Changing sense of place</li> </ul>

*Table 1: Fox Brock Town and Gown Associations (2019); Cortes (2004); Smith & Holt (2007)*

**Studentification and Higher Education**

Higher education has become a widely accessible phenomenon, driving economic competitiveness, fostering innovation, and can be a prerequisite to many employment opportunities (Smith & Holt, 2007; Wilkinson & Greenhalgh, 2024; Kenyon, 1997; Zasina, 2021). Accordingly, this transformation and commodification of higher education has increased student enrollments (Revington et al., 2018; He, 2015; Chatterton, 2010; Thiem, 2009; Pillai et al., 2021). However, institutions have struggled to keep pace with enrollment, often limiting on-campus housing to first year undergraduate students (Wilkinson & Greenhalgh, 2004). As of 2023, approximately 81% of domestic students and 74% of international students live off campus (Danis et al., 2023). As public funding for post-secondary education remains scarce, universities may be

unable to construct new housing (Bekurs, 2007), leaving upper-year undergraduates, graduate students, and post-doctoral scholars to secure housing in the local market (Revington & Benhocine, 2023).

A key aspect of students as renters is their ability to adapt to any type of property (Rugg et al., 2002, Thiem, 2009). Unlike families who may desire a backyard or specific amenity, students are willing to live in almost any accommodation near their school (Rugg et al., 2002). Seeing this economic advantage, landlords are more inclined to rent towards a group of students who will cumulatively pay a higher combined rent than a single household (Miessner, 2021). Moreover, with average tenancies lasting only one or two years, students' transient nature means landlords face fewer challenges related to repossessions and can raise rents more frequently (Rugg et al., 2000; Desjardins, 2024).

Thus, despite the drawbacks of studentification, landlords are willing to tolerate these costs for higher rent (Miessner, 2021), converting single-family homes to student dwellings (Kinton, 2016). This creates winners—landlords who secure higher rents and students who find housing—and losers—low-income households, families and other groups crowded out of the rental market. Ultimately, studentification results from the expansion of higher education and the financialization of housing (Universities UK, 2006).

### **Blight or Regeneration?**

An ongoing debate in academia is whether studentification brings regeneration to cities (Kington et al., 2018; Allison, 2006; Xiao, 2013) or sets in motion blight and housing degeneration (Cortes, 2004). Some scholars argue that landlords may lack incentive to maintain homes, compared to owner-occupiers, since they can continue to collect rent without investing in repairs

(Smith, 1979; Miessner, 2021). Moreover, a study conducted by Johnson et al. (2009) suggest that paying higher rents does not necessarily correlate with fewer housing problems, indicating that landlords may neglect maintenance in favour of profit.

Wanting to create harmonious living environments, or minimize neighbouring tenant complaints, surrounding landlords may also target students or young adults, leading to gentrification, youthification and studentification (Jolivet et al., 2022; Revington et al., 2021). Combined with the cash flow potential, landlords develop a preference for student renters (Pickren, 2012), reconfiguring the socioeconomic and cultural geographies of university towns (Kinton et al., 2018). Thus, the student neighbourhoods often displace residents near a higher education campus, intensifying the concentration of HMOs (Smith & Holt, 2007). As student enrollment grows, HMO's spread into areas further away from campus', beginning again the cycle of inflated home prices, rents and resident displacement (Wilkinson & Greenhalgh, 2024).

## 2.2 The Shift in Retail Services and Amenities

Academic literature has consistently identified key factors contributing to successful central business districts (CBDs), including the presence of street-facing retail establishments and high pedestrian activity (Burayidi, 2001). As of 2004, Filion (2004;2024) highlighted the role of universities in supporting downtown revitalization, particularly in small to mid-sized cities. This is particularly true for mid-sized cities where universities can address downtown revitalization using student populations (Charbonneau et al., 2006) and where student consumption can be viewed as positive gentrification in declining areas (Sage et al., 2012a).

Housing is not the only area affected by the influx of students. Services and large portions of city centres adapt to cater to students, particularly in terms of entertainment and retail amenities

(Chatterton, 2010; Rugg et al, 2004). This shift is most apparent in the growth of student-focused services, including pubs, bars, nightclubs, and fast-food outlets (Chatterton, 2010). Research by Prada (2019) revealed that one in four shop owners adjusted their operations to account for student populations. Moreover, adaptation can also manifest as a shift in existing services or stimulation of new services that meet the limited disposable incomes of students (Cortes, 2004; Revington & August, 2020). As students are viewed as a dependable consumer base, their purchasing power can boost a local economy (Zasina, 2020; Zasina, 2021) and drive changes in retail offerings.

Smith (2005) identified the emergence of a "student urban service sector" concentrated along urban corridors, supporting the notion that students prioritize proximity to campus and social amenities. Surveys have shown that 90% of students value living close to campus, while 50% find proximity to coffee shops and restaurants equally important (Moos, n.d.).

However, the specific commercial changes induced by the process of studentification remain unclear. While Chatterton and Hollands (2005) found that students prefer mainstream brands, Paolo and Sans (2009) suggested that students can sustain small local businesses and contribute to revitalization efforts.

### **Consequences of Retail Shifts**

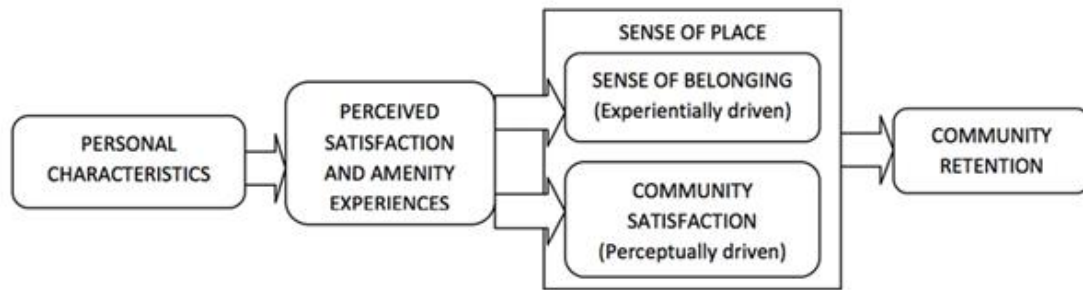
In Kingston, Ontario, studies have shown that student satisfaction with shopping and entertainment amenities directly influences their sense of place (Massey et al., 2014). This can then lead to greater satisfaction in the community and the domination of services catered to student consumption patterns (Rugg et al., 2004). However, the domination of select services can also create community imbalance and social change, resulting in the loss of spaces serving other community groups (Sage et al., 2012a). This suggests that the presence of students disrupts local

retail and community facilities, modifying the urban landscape to suit student preferences (Hubbard, 2008). As retail services evolve and community facilities close, permanent residents may migrate, or feel pushed out, of student neighbourhoods (Kinton, 2018). Thus, the process of studentification not only extends to changes in the social and economic fabric of an area but has far reaching cultural implications for cities.

## 2.3 Town and Gown Relations

Growing literature has cited the critical role universities play in their communities, acting as powerful catalysts for economic, social, and spatial changes, with unprecedented leverage in both land and labour markets (O'Mara, 2010; Massey et. al, 2014). The presence of a university enhances the cultural capital of a region, leaving long lasting symbols and designs on the urban landscape (Lazzeroni, 2015).

Despite historical tensions, universities have largely developed positive relationships with their surrounding communities (Harasta, 2022). Moreover, positive town and gown relations can create “pull factors” that entice students to stay after graduation, contributing a city’s stable population base (Massey et al., 2014). Visible **in Figure 1**, factors such as satisfaction with city amenities can create a sense of belonging, leading to higher levels of community retention post-graduation. This can be especially important for small to medium sized cities looking to stabilize their population base, as universities can create local job growth and increase innovation and increase the percentage of younger adults (O'Mara, 2010).



*Figure 1: Creative Community Retention Theoretical Framework, Massey et al., 2014*

### **Strained Town-Gown Relations**

The concentration of students often leads to the displacement of non-student residents (Zasina, 2021). This displacement may be the result of property price increases, in turn contributing to fewer families in the area, lowering children for local schools and thus results in the closure of community facilities (Allinson, 2006). The adversarial nature of town-gown relationships is well-documented, with community members often perceiving students as disruptive, while students feel marginalized, under appreciated and disconnected (Harasta, 2022; Sharma & Young, 2008). University leaders have noted this complexity, citing the age and lifestyle differential between students and residents as the greatest issue affecting improved town and gown relationships (Harasta, 2022). This strained relationship has caused many institutions to isolate themselves from the surrounding community, becoming self-sufficient cities, eliminating the need for town-gown relations (Bruning et. al, 2006). The rise in isolation, with students seldom leaving the borders of campus, can further exacerbate conflict. This isolation, compounded by expanding student neighbourhoods, poses significant challenges for urban cohesion (Hoeger, 2007).

## Strategies and Coping Mechanisms

The International Town and Gown Association highlights that even in the absence of overt conflict, underlying tensions may persist (Smith & Fox, n.d.). Residents may be uncomfortable with the negative externalities associated with studentification but may lack the financial means or mobility to move. Generally, Woldoff and Weis (2012) find that residents may blame studentification for neighbourhood decline but do not blame students for this event. The university, landlords and municipal offices are blamed. In response to studentification, Woldoff and Weis (2018) identify three responses that residents may employ:

1. **Exit the community:** Residents may choose to leave their neighbourhood.
2. **Active coping:** Residents may confront students directly or seek to intervene.
3. **Passive coping:** Residents may normalize studentification and accept its effects.

In many cases, residents may be reluctant to involve authorities, whether due to employment tied to a university or in fear of retaliation. Notably, a sentimentality to the neighbourhood may cause residents to report neighbourhood satisfaction whilst simultaneously reporting a decline in neighbourhood quality. For older adults, the feeling of being abandoned by local authorities or universities may exacerbate feelings of isolation and frustration, compounding the negative effects of studentification (Woldoff & Weis, 2012). These dynamics stress the role of institutions in the construction and fabric of a city's urban identity and the need for strong communication and collaboration between parties. Without adequate consultation and engagement, institutions may be enacting policies that offer no benefits to the community, or worse, create more problems (Harasta, 2022).

## **Municipal Challenges and Collaboration**

Universities create unique challenges for local governments, as there is increased pressure on municipal services and budgets (Smith & Fox, n.d.). In turn, residents may look to the municipal offices to protect neighbourhoods from studentification (Fox, 2012). Bickford and Blake-Dixon (2008) highlight that municipalities face significant challenges in addressing the negative effects of studentification through zoning by-laws without risking discrimination.

To improve town-gown relations, Sungu-Eryilmaz (2009) emphasize the importance of balancing university and community interests. Likewise, McGirr et. al (2003) identifies three effective strategies that allow institutions to be better neighbours:

1. **Master Planning:** Institutions with comprehensive master plans can better understand a universities impact on surrounding neighbourhoods, promoting thoughtful off-campus development.
2. **Partnerships:** Collaborative efforts between universities and communities enhance accountability and foster shared development goals.
3. **Inclusive Planning:** Engaging local stakeholders and leveraging innovative financial strategies ensure mutual benefits and reduce risks.

By prioritizing coordination and communication, municipalities and universities can create harmonious relationships, preserving the social fabric of their communities and fostering a stronger urban identity (Slate, 2020).

## **2.4 Older Adults: A Growing Demographic**

### **The Aging Population**

Lower fertility rates and longer life expectancy has shifted global population pyramids, creating increasingly older populations in many countries (United Nations, Department of Economic and Social Affairs, Population Division 2015). In Canada, older adults, defined as those aged 65 and above, are projected to represent 30% of the population by 2068 (Statistics Canada, 2019). This demographic shift has profound implications for housing and support services needed to help older adults age in place (Salisbury, 2023).

As older adults often have different mobility and activity patterns compared to younger populations (Golob & Hensher, 2007; Boman & Dolley, 2019), these changes affect urban planning and transportation systems. Additionally, housing needs for those later in life are diverse, meaning that a one-size-fits-all approach is insufficient, contributing to competition for limited housing options (Birdi, 2018).

Many older adults commonly express a desire to age in place, even when it comes with financial and accessibility challenges (Altus, 2000). The fear of institutionalization and the potential for social isolation drives this preference (Blanchard, 2014). Social relationships are also crucial for maintaining cognitive function, with research showing that strong social networks improve cognitive functioning in older adults (Seeman et al., 2001), highlighting the value of remaining in a place of familiarity.

Thus, aging in place is viewed to support the development of social capital and fosters a sense of community (Thomas & Blanchard, 2009), contributing to a strong sense of place attachment, which has positive implications for community well-being (Kretzmann & McKnight, 1993; Blanchard, 2014).

### **Density and Changing Social Services**

One outcome of studentification can be the increasing population density of students in residential neighbourhoods (Allinson, 2006). The speed and volume of displacement is partially connected to the closure of local services such as schools, primary centres and community halls (Rugg et al., 2000a). The dislocation of services then affects groups such as immigrants, low-income groups, families and older adults, creating “neighbourhood resource displacement” or “ghost towns” (Revington et al., 2022; Kinton et al., 2016; Bromley, 2006; Pickren, 2012; Gu, 2019).

In many cases, local retail and recreational facilities must adapt their offerings to cater to students or risk closure (Hubbard, 2008). As more students move in, the desire by local residents to move out rises, intensifying the transformation of the urban landscape (Smith, 2005). Visible in **Figure 2**, this shift in amenities compounded by low housing maintenance can fuel the monoculture of student neighbourhoods, further perpetuating the cycle of change known as the “cycle of anxiety” (Kenyon, 1997; Allinson, 2006).

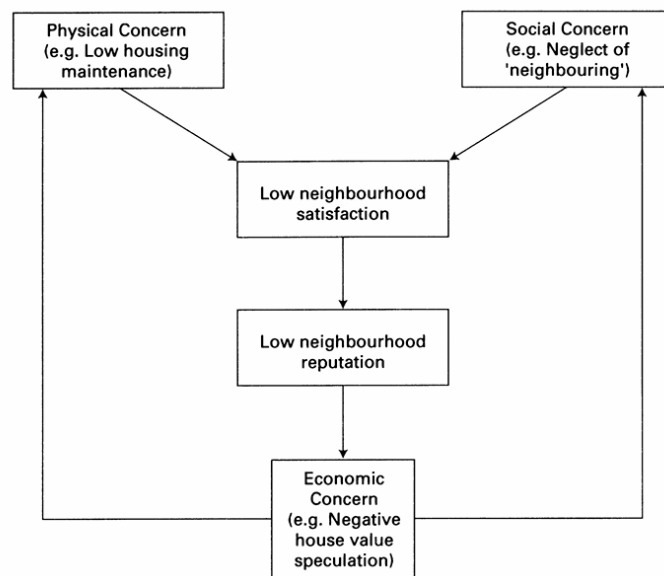


Figure 2: The “Spiral of Anxiety”, Kenyon (1997)

The alterations in services also impact commercial rents, which can further alter community dynamics, decreasing neighbourhood satisfaction and increasing the reasons for residents to migrate elsewhere (Jolivet et al., 2022).

### **Older Adults Left Behind**

A study conducted by Allinson (2006) looked at the concentration of students in wards (neighbourhoods) within Birmingham, UK. The Selly Oak neighbourhood had the highest percentage of students and experienced a reorientation of services to cater to student lifestyles. Notably, Allinson (2006) remarked that the remaining residents in student neighbourhoods were predominantly over the age of 65. With fewer permanent residents, access to care services declined, disrupting vital social support networks thus reducing a residents ability to age in place (Lager and van Hoven, 2019). For students, their growing sense of place often comes at the expense of long-established residents' sense of community, with older residents reporting a loss of attachment to their neighbourhoods (Bromley, 2006; Gu, 2019).

Intergenerational housing could potentially dismantle the monoculture environments of these studentified neighbourhoods and reduce age segregation, though this housing model has not been widely implemented in Canada (Revington, 2021). Some programs have also aimed to influence students' attitudes toward older adults, encouraging a deeper connection to the neighborhood, with studies showing improved attitudes following such initiatives (Snyder, 2005). Notably, prior literature from (Fraser, 2019) has indicated students in Kingston, Ontario may not be interested in living with seniors. However, (Fraser, 2019) also noted that increased quality of housing and affordable rent could increase student demand for this living arrangement.

Neighbourhoods play crucial roles in cities, providing recreational facilities, amenities and services. Neighbourhoods also perform key social functions by providing “public social space within which residents can interact” (Hickman, 2012, p.222). The quality of this infrastructure has a direct impact on a residents quality of life (Carley et al., 2001). This is most pronounced for older adults (Chaudhury & Rowles, 2005).

### **Impacts of Studentification on Older Adults**

Place attachment refers to the “emotional connection formed by an individual to a physical location due to the meaning given to the site as a function of its role as a setting for experience.” (Ponzetti, 2003, p.1). As neighbourhoods undergo transformation, social structures and place attachment may be disrupted. As Shaw (2004, p.414) states “people do not just live in houses, they live in and experience neighbourhoods”. Loneliness is a well documented issue for older adults and can lead to premature mortality (Gerst-Emerson & Jayawardhana 2015; Smith, 2009). The risk of isolation is particularly high for older adults who may spend a significant amount of time at home (Baltes et al., 1999; Smith, 2009). The social services and activities that older adults rely on often diminish with age (Richard et al., 2009), and the arrival of students or other gentrifying groups may exacerbate these challenges.

Disinvestment in age-friendly infrastructure can result in limited built-environment features that are conducive to social supports, further isolating some older adults (Dobson & Gilroy, 2009, Chaudhury et al., 2011). Moreover, salient neighbourhoods, and neighbours, may limit older adults activities area and contribute to further exclusion (Mahmood & Keating, 2012; Chaudhury & Rowles, 2005). As aptly noted by Madanipour et al (1998, p.81) “Space has ... a major role in the integration or segregation of urban society.” The loss of neighbours and unfamiliarity with the neighbourhood can erode the social supports viewed as protective to the

health of older adults (Mahmood & Keating, 2012; Gilleard & Higgs, 2005). The erosion of place attachment can lead to cognitive decline, as the connection between memory and home weakens (Chaudhury & Rowles, 2005).

An unfamiliarity with neighbours can also influence older adult's perceived safety and fear of crime (Mulhearn et al., 2018). A fear of crime can lead to older adults choosing to remain housebound, further reducing their social interactions (Scharf, 2001). Studies have shown that neighbourhoods predominantly occupied by younger residents often contribute to an increased fear of crime among older adults (Scharf, 2001). This heightened sense of insecurity can make it more difficult for older adults to age in place (Phillips et al., 2005).

Finally, affordability is a key issue for older adults, who often rely on fixed incomes (Mahmood & Keating, 2012). With increasing demand for housing from other demographic groups, older adults may find themselves excluded from the housing market, or with limited relocation options (Howden-Chapman, 1999). This is particularly true for those with physical or cognitive impairments, for whom the right housing is crucial for maintaining independence and dignity (Maisel, 2007).

## 2.5 Third Places for Older Adults

### **Neighbourhoods as Community Builders**

Neighbourhoods have been the focus of academics and planners for their importance in building communities. As Oldenburg (1999, p.4) remarked, "houses alone do not make a community". Third places act as another important feature of community health. The term "third place" was coined by Ray Oldenburg in his 1999 book *The Great Good Place*. In it, Oldenburg (1999) explains that a person's home (first place) or work (second place) are complemented by a

third place, public spaces where regular, voluntary, informal and happily anticipating gatherings occur. Examples include libraries, coffee shops, parks, senior centers, and other community spaces that encourage social participation. These third places are particularly significant for older adults, often becoming their “second place” upon retirement (Oldenburg, 1999).

### **Third Places, Barriers and Social Connectivity**

Third places foster “weak ties”, providing friendships and supports that extend beyond the “strong ties” of family members and friends (Sugiyama et. al, 2022). Local shops, in particular, play a vital role in promoting social interaction and connection, alongside community centers that cater to both families and older adults (Hickman, 2012). These spaces facilitate the exchange of social supports amongst residents (Rosenbaum, 2006), increasing place attachment (Rosenbaum, 2009).

Research demonstrates that strong social engagement is positively associated with older adults health, with regular interaction in third places has been shown to prevent cognitive decline and enhance functional status (Bassuk et al., 1999; Sugiyama et. al, 2022). This comes at a time when many older adults in Western societies elect to remain living independently, aging in place, rather than move to care facilities (Boldy et al., 2011). However, to age successfully goes beyond physical independence, it incorporates feeling connected with the local community (Fong et. al, 2020). Concerningly, as mobility declines, along with other aspects such as hearing and vision, these changes make it harder for older adults to travel beyond their homes (Campbell, 2017). Additionally, the displacement of permanent residents, who often act as informal caregivers, can isolate older adults, reducing their access to third places (Allinson, 2006). In this regard, the accessibility of third places and neighbourhood design become critical elements for fostering weak social ties and interactions (Bosman & Dolley, 2019; Geladi, 2018).

As neighbourhoods evolve, and places for social interaction decline, third places may play a stronger role in the lives of residents, particularly older adults (Hickman, 2012). Empirical evidence indicates that the loss of social support from retiring can be offset with third places and third place relationships (Rosenbaum, 2009; Fong et. al, 2020). The loss of third places tailored to diverse community needs can severely impact those who rely on them for connection and support (Rosenbaum, 2007). For older adults, local businesses and shops are critical resources for maintaining social engagement, health and well-being (Sugiyama et. al, 2022; Campbell 2017).

### **The Impact of Studentification on Third Places**

Studentification can disrupt the traditional function of third places. Studies indicate that shop owners modify their schedules in response to the arrival of students (Prada, 2019) and cater to student lifestyles (Smith et. al, 2014). Conversely, the literature on third places outlines the importance of having businesses within walking distance to support older adults, as proximity is associated with larger and more developed social networks (Lane et al., 2020).

There is a noticeable gap in academia regarding how businesses navigate the competing needs of students and older adults in studentified neighbourhoods. It is unclear whether businesses shift from resident-oriented to student-oriented services and how these changes affect older adults' ability to access third places. Similarly, limited attention has been given to the intersection of studentification, the availability of third places, and the capacity for older adults to age in place in studentified neighbourhoods. Addressing these gaps is essential to understanding the broader implications of studentification on community dynamics and the well-being of older adults.

## 2.6 Kingston, Ontario

Kingston is centrally located between the nation’s capital, Ottawa, and central business hubs of Toronto and Montreal (**Figure 3**). Located at the head of the St. Lawrence river, Kingston represented a key military base, with the establishment of Fort Frontenac and Fort Henry, a UNESCO world heritage site. The city is home to a world class university, Queen’s University, along with the Royal Military College of Canada and St. Lawrence College.

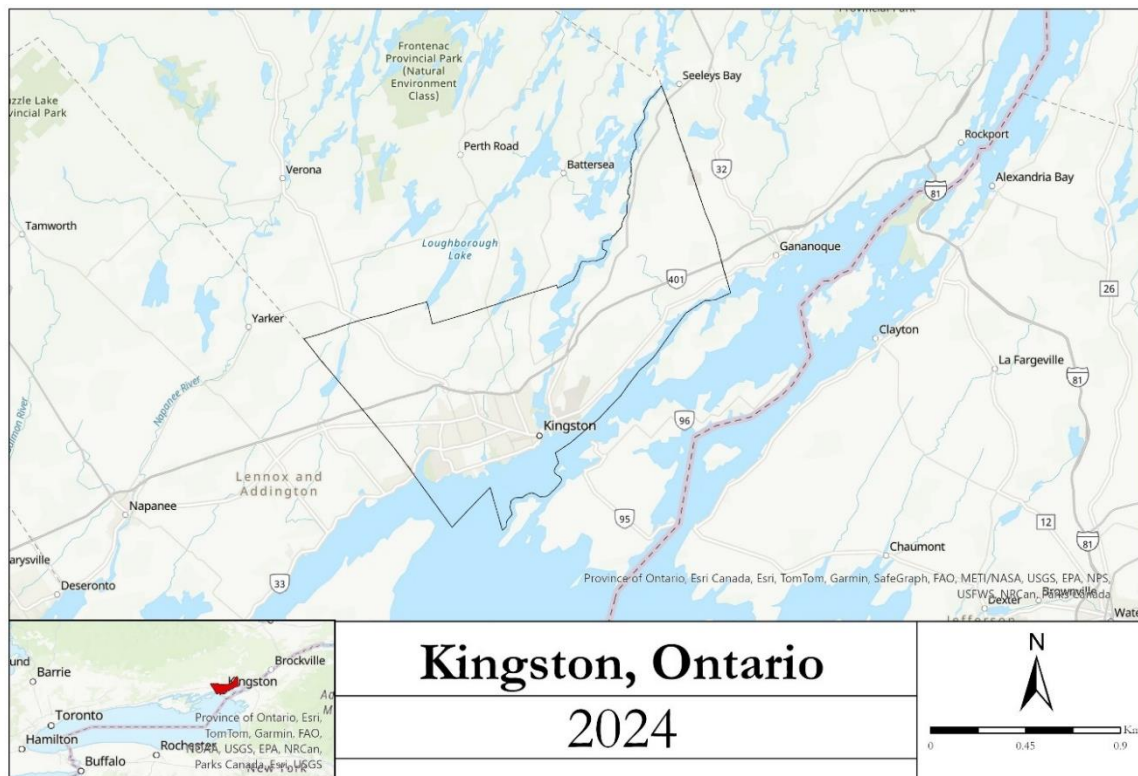


Figure 3: Map of Kingston with Municipal Boundaries

Kingston’s urban form is anchored by its downtown, centered along Princess Street, a pedestrian-friendly retail corridor extending 1.25 km (Fillion, 2023). Downtown Kingston supports over 10,000 employees and 700 businesses, facilitated by its walkable streetscape (Downtown Kingston, n.d.).

Demographically, Kingston features a notable proportion of older adults (Figure 4), with residents aged 60 and over forming over 26% of the population. (Statistics Canada, 2024). Conversely, younger working aged residents represent 19% of the population (Statistics Canada, 2024). The imbalance between older occupants and younger working age residents indicates an aging population, largely baby boomers, nearing retirement age and putting pressure on the local labour market. This presents a major point of observation; the dichotomy of the permanent population being comprised of an older and aging population versus the transient population comprised of students. These two age groups have increased the demand for rental housing in high-density dwellings and have added pressure to rental rates in a supply constrained market (Ogur 1973).

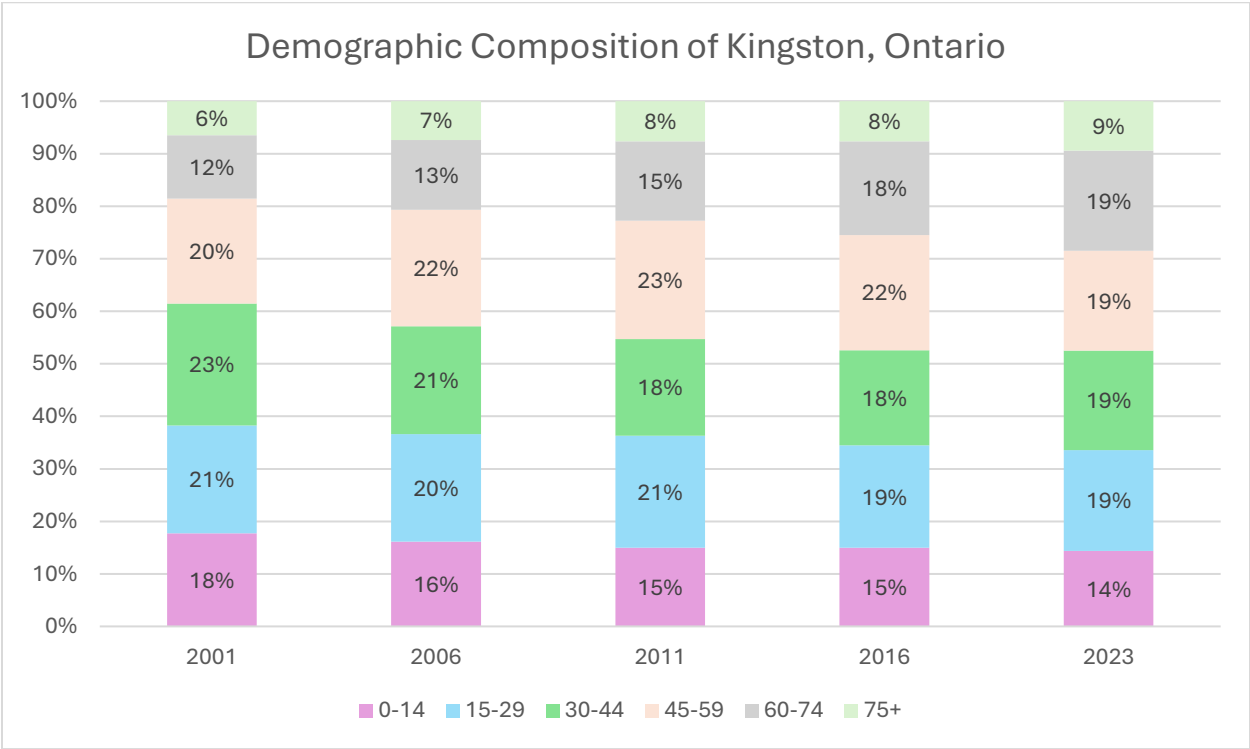


Figure 4: Demographic Composition of Kingston, Ontario

## 2.7 Higher Education Institutions: Queen’s University

Established in 1841, Queen’s University provides undergraduate, graduate and professional programs and is internationally recognized (Queen’s University, 2024). In addition to controlling a large portion of the land in central Kingston, the school contributes over \$1 billion annually to the Kingston economy (Gavazzi et al., 2014). The city’s student population, drawn from Queen’s University, St. Lawrence College, and the Royal Military College, exceeds 35,000 individuals, with many living in rental housing near campus (The Whig, 2023).

For town and gown relations, the colloquial term for the relationship between the institution and city, Queen’s University has a long history of conflict with the local community (Stechyson, 2010). Over the past two decades, the student population has grown significantly from 18,223 students in 2001 to 34,604 students in 2023 (Queen’s University, 2024) and the university has faced ongoing pressures to expand. Like trends observed in other post-secondary institutions, this growth has resulted in students spilling over into adjacent residential neighbourhoods, often occupying single-family homes converted into student housing (Pillai et al., 2021). This phenomenon has proven challenging to manage without inadvertently discriminating against multiple demographic groups.

For instance, zoning by-laws in Kingston establish maximum dwelling densities within designated Urban Multi-Residential (URM) Zones (**Table 2**). In neighbourhoods surrounding Queen’s University—classified as URM3, URM4, and URM8—permitted housing types range from single-detached homes to larger apartment buildings (City of Kingston, 2022). In the context of Canada’s nationwide housing crisis, city planners may face mounting pressure to allow higher-density developments on traditional single-family lots to increase housing availability for families and vulnerable groups.

Residential Land Use	URM 1	URM 2	URM 3	URM 4	URM 5	URM 6	URM 7	URM 8	URM 9	URM 10
Apartment Building	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Duplex	◆		◆	◆	◆					
Semi-Detached House	◆									
Single-Detached House	◆		◆							
Stacked Townhouse	◆	◆						◆	◆	◆
Townhouse	◆	◆		◆	◆					
Triplex	◆		◆	◆	◆	◆	◆			

Table 2: City of Kingston Permitted Uses in Urban Multi- Residential Zones (City of Kingston, 2022)

However, these same by-laws designed to encourage density and affordability can be exploited by investors and developers. For example, an investor could purchase a single-family home, extend its footprint to increase the number of bedrooms, or convert its use to cater exclusively to students. While this approach might alleviate some of the housing demand among students, it simultaneously reduces the supply of affordable housing for the broader community. This creates a dilemma for planners: they must balance the need for increased housing supply with the unintended consequences of policies that risk fueling speculative investments or demographic imbalances. As a result, planners often find themselves caught between the priorities of equitable housing provision and the unintended socio-economic outcomes of zoning decisions.

## 2.8 Town and Gown Relations in Kingston, Ontario

Research from Gavazzi et. al (2014) indicates that relations between the City of Kingston and Queen’s University began declining in the 1950’s, when the provincial government authorized the school the right to expropriate private homes to expand institutional buildings and off-campus housing. More recently, the school gained national, if not global, media attention when its 2008 homecoming event resulted in fires and the deployment of riot police (Fox, 2012). While the university has taken steps to address these challenges, such as implementing the 2011–2014 Town and Gown Strategic Plan, lingering issues remain. The plan marked a turning point in fostering collaboration between university officials, city leaders, and residents, but the continued growth of the student population necessitates ongoing efforts to address these dynamics.

## 2.9 The City and the School

Accordingly, Queen’s University has been selected as the higher education institution for analysis given its geographic location within the city, history of tumultuous town and gown relations and its growing student population. Initial Census Tract analysis revealed limitations; therefore, this study focuses on the dissemination areas that border the city's major post-secondary institutions (**Figure 5**). Dissemination areas are defined as small, stable geographic areas comprised of one or more neighbouring blocks (Statistics Canada, 2024). It is the smallest standard of measure for which all census data is collected. By narrowing the scope to dissemination areas, this research provides a more granular understanding of demographic and housing dynamics.

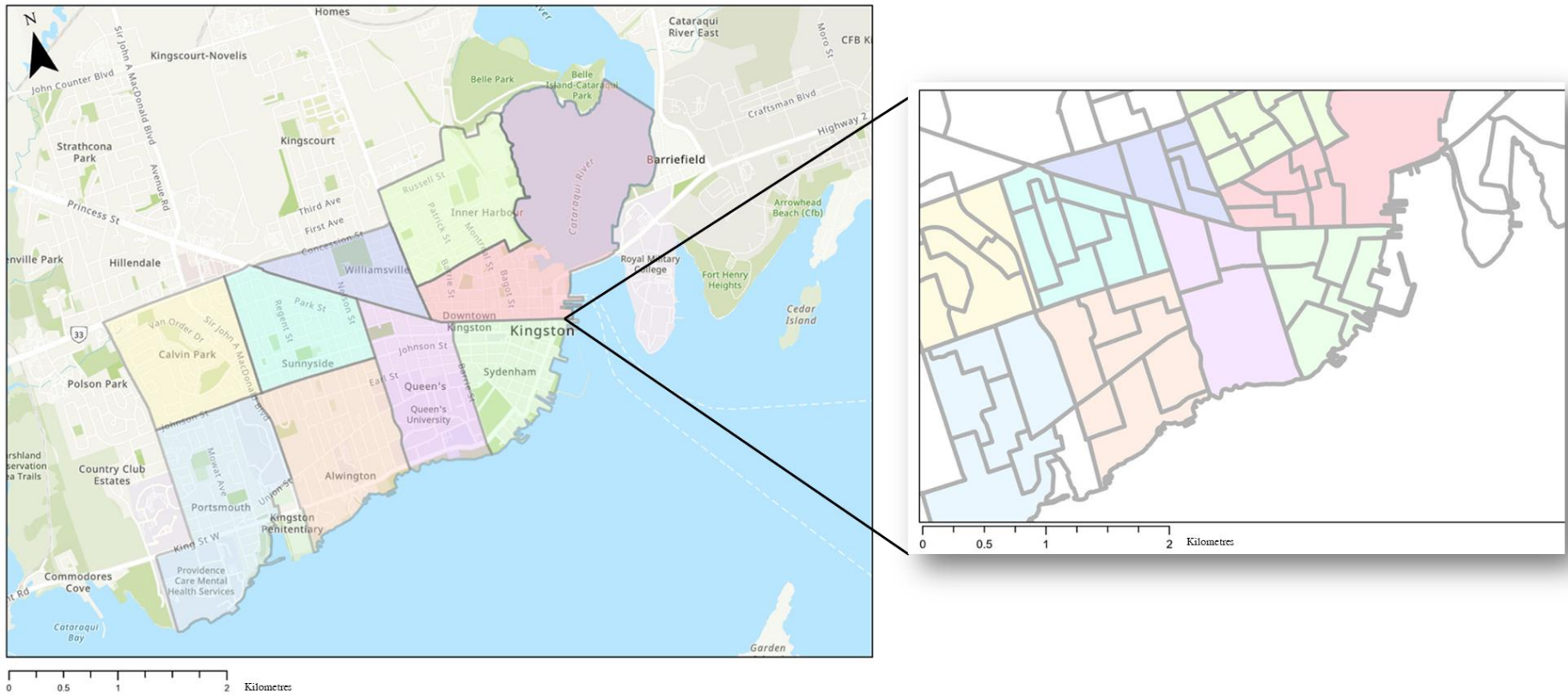


Figure 5: Census Tract and Dissemination Areas for exploration

## Chapter 3: Methodology

The study will take a five-phase mixed-methods approach to determine the socio-spatial relationship between students and older adults. The scope of this thesis is limited to Kingston, Ontario. Case studies are a research method tool employed to understand complex social phenomena (Yin, 2009, p4). It can allow researchers to obtain meaningful characteristics of group behaviour, neighbourhood change and the maturation of industries (Yin, 2009, p4). This thesis looks at the contemporary event of studentification in Kingston, given its large student population, aging population and distinct residential land uses surrounding higher education institutions.

The case study approach is especially relevant to this thesis as it enables researchers and practitioners to understand the unique characteristics of the challenges faced by communities of interest (Silverman & Patterson, 2022). Finally, the case study approach allows for a pragmatic focus on the local conditions within a specific area (Silverman & Patterson, 2022) providing tangible solutions to an area experiencing town and gown tensions (Forestell, 2023).

### Phase 1

Spatial analysis is used to determine the spatial delineation of student neighbourhoods in Kingston, Ontario. The time period this research focuses on is 2001 to 2021, aligning with five census reviews. Canadian Census data is sourced from the CHASS Canadian Census Analyzer web portal. Previous spatial research focused on studentification produced by students in the School of Urban and Regional Planning at Queen's University has been utilized to inform best practices (Whitfield 2022; Lauzon 2021). Geographic Information Systems software (ArcGIS) is then utilized to map the percentage of occupied versus unoccupied dwellings in dissemination

areas in Kingston, Ontario. Dissemination areas are utilized as changes to their boundaries are often discouraged to allow for maximum comparability between census years (Statistics Canada, 2018).

According to Statistics Canada, a person's usual place of residence is defined as the home where they typically live. For students, this is considered to be their parents' home (Statistics Canada, 2017a). Additionally, Statistics Canada classifies a dwelling as unoccupied if it meets the necessary requirements for year-round use—such as having a power source and protection from the elements—but no one was living there as of the census survey (Statistics Canada, 2017b). Based on these definitions, many student-occupied residences would be categorized as unoccupied. This approach follows Lauzon (2021), who employed the same indicator to study the geographical impact of studentification in the UK and Kingston respectively. To arrive at the level of unoccupied dwellings, occupied dwellings by permanent residents are removed from total dwellings in each census year.

The initial hypothesis is that as students congregate in fewer neighbourhoods, these areas would become more attractive to investors seeking to purchase rental properties. Using variables such as average home pricing, student population, percentage of unoccupied dwellings and age, statistical methods such as ordinary least square regression, analyses are employed to discern correlations and casual relationships between these variables. Multiple regression analysis, Moran's I, and t-tests are then utilized to determine trends between average income per neighbourhood, average age and the percentage of occupants over 65 years of age. All variables are tested to determine their relationship, if any, to student housing. The data is analyzed in both ArcGIS and SPSS to determine statistical relationships and visual aids.

## Phase 2

The second phase of research considers changes in the housing market in response to student populations. This phase of research investigates if investors are entering the market in response to a growing student population and if the general affordability of homes in census districts surrounding higher education institutions is declining. Census data provides average and median reported house values within census districts. While this data can show general trends over time, a different data source is required to examine if investors are entering the market to capitalize on student enrollment.

HouseSigma is a web-based technology platform that allows users to view past and present values of home listings across Canada (HouseSigma, 2024). This is especially helpful in markets outside of major cities where reporting data is limited. Accordingly, HouseSigma is utilized to record home listings from 2009 to 2023, using the spatial boundaries of the nine census districts outlined in **Figure 6** from Phase 1. Variables recorded included bedrooms, bathrooms, list price, sale price, days on market, taxes and if the listing was marketed as a student investment.

Descriptive statistics for housing transactions (retrieved from HouseSigma) coupled with demographic data (data retrieved from Statistics Canada via CHASS and the Canadian Mortgage Housing Corporation) underscores the relationship between student populations and the local housing stock, ending with an analysis on the correlation to residential stability. For this section, stability is used synonymously with affordability. When discussing stability, it is essential to define the key variables that signal whether a housing market is affordable or unaffordable. According to the 2020 Provincial Policy Statement, affordable housing is defined as "housing for which the purchase price results in annual accommodation costs that do not exceed 30 percent of gross annual household income for low and moderate-income households" (Ministry of Municipal Affairs and

Housing, 2020, p.39). This threshold is also endorsed by the Canada Mortgage and Housing Corporation (CMHC). The 30% affordability benchmark ensures that households retain sufficient income for other essential expenses, such as food, transportation, and healthcare.

Regression analysis is conducted to quantify the impact of studentification on the local housing market. In particular, data from Phase 1 is overlaid with the HouseSigma data to determine if particular details of the listings, or their location, are predictive of the listings being marketed to students or as student investment opportunities. Data is analyzed in SPSS and Microsoft Excel to determine the relationship between variables. Data is also spatially presented using Geographic Information Systems software (ArcGIS) to measure the relationship between neighbourhoods in close proximity to Queen's University and the percentage of listings catering to students or student landlords.

This research phase incorporates a series of regression analyses to determine the strength of the relationship between housing prices, student enrollment and proximity to Queen's University Campus. This technique allowed for multiple independent variables (enrollment and proximity) to predict the dependent variable being housing prices. The multiple regression coefficients indicated the strength and direction of the relationship between each variable and its significance on housing prices in select dissemination areas.

### Phase 3

The third phase of research investigates residential stability and affordability in student neighbourhoods identified in Phase 1 and Phase 2, and more broadly in Kingston. Descriptive statistics, average incomes and employment information from Statistics Canada and the City of Kingston are combined with Government of Canada salary ranges to analyze the affordability gap

of housing in Kingston. The top nine employment sectors are identified from the City of Kingston's employment statistics. This determines whether housing across the city is affordable for residents based on the top industries of employment. The analysis is then spatially refined to the student neighbourhoods.

Housing affordability in this analysis separated by housing tenure: renters and owners. Rental affordability was defined using the Canada Mortgage Housing Corporation definition: wherein residents are not spending more than 30% of their income on housing.

The steps to determine homeownership affordability are more complex. First, the starting assumption is that a homeowner would require a conventional mortgage to purchase a home. In Canada, the minimum down payment is 5% of the home's purchase price (Government of Canada, 2023). A conventional mortgage requires a downpayment of at least 20%. Below this threshold, additional fees are added to mortgages to account for the increased risk of default. Second, average home values are identified using census data. I apply a 20% downpayment metric to these values to determine the outstanding mortgage that would be required to buy the home (80%). Next, the Royal Bank of Canada Mortgage Payment Calculator is used to determine the monthly mortgage payments that would be required to purchase a home. As of the writing early 2025 the 5-year fixed interest rate is 4.89%, amortized over 25 years. Lastly, the CMHC ratio of 30% of income is applied to the mortgage payment, producing the minimum incomes required to sustain homeownership in these neighbourhoods.

In general, increasing the supply of rental housing would alleviate pressure on vacancy rates and restore balance to the market. An imbalanced market can force tenants to remain in substandard housing for extended periods, as they may be unable to afford improved accommodations due to rising rental costs. In this study, older adult renters in census districts with

a high proportion of students may experience frustration over their inability to relocate to more suitable neighbourhoods or may find diminished enjoyment in their living environments. This issue will be further examined in phase four.

The final affordability exercise surrounds vacancy rates. Student enrollment, taken from publicly available data from Queen's University, and City of Kingston population information, from Statistics Canada, are combined with rental vacancy rates from CMHC. Historical comparisons are drawn between changes in populations and vacancy rates across Kingston and in the select student neighbourhoods to determine the relationship between affordability and student enrollment.

## Phase 4

The fourth phase of research investigates the relationship between student populations and the commercial offerings available downtown. A longitudinal analysis is used to establish the relationship between student housing density and the transformation of businesses over a ten-year period. Satellite imagery spanning from 2009 to 2019 (data retrieved by Google Earth and Google Maps) is utilized to establish business offerings in Kingston's Central Business District. The findings measure how business activities respond to changing demographics from resident-oriented activities to student-oriented activities. The findings build upon the 2014 report produced by graduate students in the School of Urban and Regional Planning and the Business School at Queen's University, indicating that a student's sense of place was correlated with their satisfaction in shopping and entertainment facilities (Massey et. al, 2014).

Downtown Kingston is one of the primary hubs of attractions for residents, students and tourists, home to city hall, food and walking tours (Kingston, n.d.). Activities and focal points

range from Kingston City Hall, Springer Market Square, retail shopping amenities, cinemas and nightlife attractions. Princess Street is the main arterial road. Third places in downtown cores can take the form of cafes, bookstores, libraries and community centres that allow different groups to congregate and form connections. Monitoring the change in storefronts over the ten-year period provides a baseline to investigate if these proxy third places are being maintained or declining.

Initially, the City of Kingston was contacted to see if a list of commercial storefronts and business activities would be available under a freedom of information request. This data was not available unlike the dataset utilized by Hidalgo et al (2023) in their Madrid case study. To proceed with the analysis, Google Earth was utilized to classify and count the number of storefronts on over 1,000 metres of Princess Street, from Waterfront Trail to Division Street, are based on their retail establishment. In total, 195 businesses were observed, forming the baseline for the analysis.

<b>Establishment</b>	<b>Establishment Description</b>
Beauty Salon	Beauty Salons, Nail Salons, Esthetician Services
Café	Cafes, Tea Shops, Pastry Shops
Computers & Electronics	Electronic Stores, Computer Stores, CD & DVD Stores
Cultural	Art galleries, community centres, religious institutions
Dental/ Optometry	Dental Operations, Optometry Operations
Fast Food	Ready-made stores, fast food chains, take-out operations
Furnishing	Furniture Stores
Health/ Workout	Yoga studios, gyms
Jeweller	Jewellers
Local Retail	Drugstores, banks, plant stores, general stores, clothing stores, bookstores, telecommunication, mail carriers
Nightlife	Bars, Nightlife Establishments, Clubs
Offices & Commercial	Office Operations, Legal services, general commercial
Retail Food	Sit down restaurants, convenience stores, butchers, health stores
Student Stores	Clothing stores specialized to younger demographics, stores linked to higher education institutions
Vacant	Vacant storefronts

*Table 3: Retail Establishment Descriptions, Author Generated 2024*

Once the initial storefront count was determined, the same exercise was conducted using both Google Earth and Google Maps to verify addresses and ensure consistency between the two time periods. Using a similar methodology to Hidalgo et al. (2023), storefronts were recorded based on their name, storefront offering and consolidated into larger retail establishment categories. These categories can be found in **Table 3** above. Student stores are classified as bars, clubs, cannabis outlets, fast food establishments and ready made “to go” stores, in line with observations from Chatterton (2010) and Zasina (2021). Additionally, big box retailers such as, but not limited to Urban Outfitters, Lululemon, Phase 2 and Agent 99 are classified as student establishments based on interview findings from Phase 5. Local retail stores make up the balance of retail clothing stores that could serve a wider range of residents such as children, older adults or working professionals. Local retail also encompasses operations that would exist in a medium-sized city without the presence of students, such as drugstores, grocery stores, general stores, bookstores and telecommunication businesses (Hidalgo et al. 2023). Once categorized, the storefronts that were classified with a change in operations will be visually represented using comparison bar charts.

## Phase 5

The final phase of research uses semi-structured interviews to explore the relationship between older adults and students in Kingston, Ontario. Interviews are also used to understand how city planning staff respond to the needs of multiple demographic groups and how the local Business Improvement Association manages downtown businesses. The overarching goal of the interview analysis is to (1) understand the pressures key city personnel face in balancing the needs of different demographic groups, (2) discuss the role of third places and the built environment in reducing social isolation for older adults, and (3) better understand the relationship between

students and older adults. The study uses a case study approach, involving nine semi-structured interviews with city informants and Business Improvement Area (BIA) executives, older adult representatives, and student representatives.

In total, 50 participants were contacted, 14 responded and nine interviews occurred from November 2024 to January 2025. Tailored recruitment strategies encompassed a variety of methods, including targeted emails, social media outreach, university channels, and community centre sign-ups. City informants and the Downtown Kingston BIA were contacted via email, accompanied by a succinct one-page study overview. Participants were also be contacted over the telephone based on publicly available phone numbers. Students were primarily engaged through digital platforms such as Facebook and Instagram. Student presidents, elected by their student bodies, were contacted over email through their departments official websites. Older adults were predominantly targeted through community centers and the Seniors Association Kingston Region. These organizations are the gatekeepers of older adults and thus the primary contact point for interviews.

The interviews lasted approximately one hour in duration and occurred in-person in Kingston and virtually using a video conferencing platform. Semi-structured interviews are a common research method cited among the theses and research reports focused on older adults and third places produced by graduate students in the School of Urban and Regional Planning at Queen's University (Fraser, 2019; Birdi, 2018; Schneider 2020).

Interviews were recorded, and each participant was given notice of the recording and asked for their consent. Participants were given the option to withdraw from the study before, during and after interviews. Of note, the study was approved by the General Research Ethics Board at Queen's University (TRAQ #6041996). Key informants do not have their names included in the study for

confidentiality. Upon completion of the interviews, each one was transcribed verbatim to ensure accuracy. Once transcribed, a thematic analysis was used to identify, organize, and describe the overarching themes related to the research questions (Braun & Clarke, 2006). The content of the transcript was converted into written segments, creating a thematic analysis to complement the previous three phases of this thesis.

### 3.1 Limitations

This thesis focuses on a single case study, Kingston, Ontario. The singular case study approach has been criticized for its lack of repeatability and inability to be empirically generalized to the broader community (Yin, 2009, p15). A multiple-case study approach would enable researchers to replicate findings across multiple geographic locations and provide similarities and differences that could enhance the validity and reliability of recommendations (Gustafsson, 2017). However, a comparative or multiple-case study approach can be time-consuming and resource-intensive which can inhibit the depth of information obtained for each case study or how many case studies can be studied over a set period (Good, 2014).

Another limitation of this study is the availability and access to data over specific time intervals (Yin, 2003). This issue was particularly evident in phase 2 and phase 3 research, as House Sigma did not contain fulsome house listing and sale data until 2016. Moreover, CMHC and Statistics Canada data was limited to census years or did not contain all the variables required to conduct multiple statistical analysis tests.

The key informant interviews were also limited in number, producing unique perspectives that may not be generalized to areas outside of Kingston (Yin, 2009, p15). Studentification affects additional demographic groups outside of older adults and similarly, may have city-wide impacts

on infrastructure and services such as public transit that were not studied. By focusing on older adults and students, valuable insights were not uncovered from other demographic groups that are also indirectly and directly impacted by this phenomenon. Moreover, many older adults interviewed had a connection to Queen's University, which could have led to bias or acceptance of student behaviours.

## Chapter 4: Findings & Discussion

### 4.1: Phase 1

The first phase of this research aimed to define student neighbourhoods in Kingston and determine whether student populations have been concentrating within specific “hotspot” neighbourhoods. As stated in Chapter 3, unoccupied dwellings are used as a proxy for student population. Subsequent research objectives focused on measuring changes in housing values abutting Queen’s University as well as analyzing the demographic composition of these census tracts over time. Collectively, this phase seeks to assess whether student populations are centralized around post-secondary institutions and whether neighbourhood data reflects shifts in the socio-economic or demographic makeup of these neighbourhoods. To answer this broad research question, phase 1 tests five hypotheses.

Hypothesis 1: Neighbourhoods abutting Queen’s University will have a higher percentage of unoccupied dwellings.

Hypothesis 2: Dwellings in studentified neighbourhoods will have a higher average monetary value in comparison to average dwelling values across Kingston.

Hypothesis 3: A higher percentage of students in a neighbourhood will have an inverse relationship to total income per household.

Hypothesis 4: A higher percentage of students in a neighbourhood will have an inverse relationship to the proportion of older adults residing in the same area.

Hypothesis 5: A higher percentage of students in a neighbourhood will have an inverse relationship on housing condition and repair status.

## Hypothesis 1: Neighbourhoods abutting Queen's University will have a higher percentage of unoccupied dwellings.

The initial hypothesis posited that neighbourhoods surrounding post-secondary institutions would exhibit a higher rate of unoccupied dwellings compared to other districts in Kingston. Drawing from prior research by Professor David Gordon, graduated scale maps were created using ArcGIS to analyze the ratio of occupied to unoccupied dwellings between 2011 and 2021. As shown in **Figure 6**, census data reveals that the highest proportion of unoccupied dwellings in Kingston is concentrated in six neighbourhoods adjacent to Queen's University. These are now referred to as the "hotspot" areas.

The data also highlights a pattern of consolidation surrounding Queen's University between 2011 and 2021. This increased spatial density aligns with trends observed in other cases of studentification, where students tend to favor housing in close proximity to campus (Revington, 2020).

Next a Global Moran's I test was conducted to determine if the percentage of students per dissemination area clustered geographically around Queen's campus. This test is useful to indicate whether studentification may manifest strongly in different areas around Kingston. The Moran's I value is +0.32, indicating a positive spatial autocorrelation. This suggest that areas with a high percentage of students are geographically clustered together. The p-value of this test is  $>0.0001$ , indicating that the observed spatial autocorrelation is statistically significant. The z-score is greater than +1.96, indicating that there is a less than 1% likelihood that the spatial pattern is due to random chance. In this regard, the hypothesis is confirmed: student populations are indeed clustering near campus.

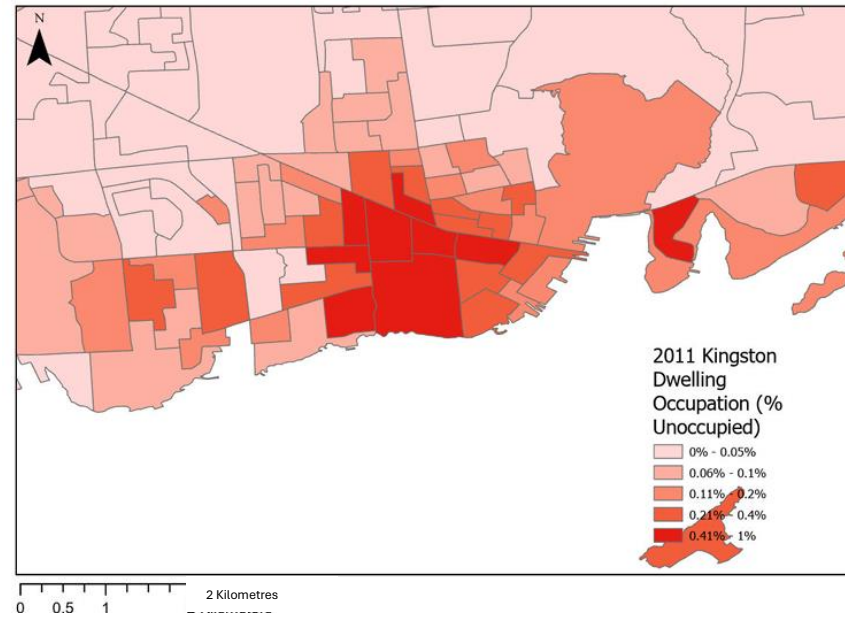
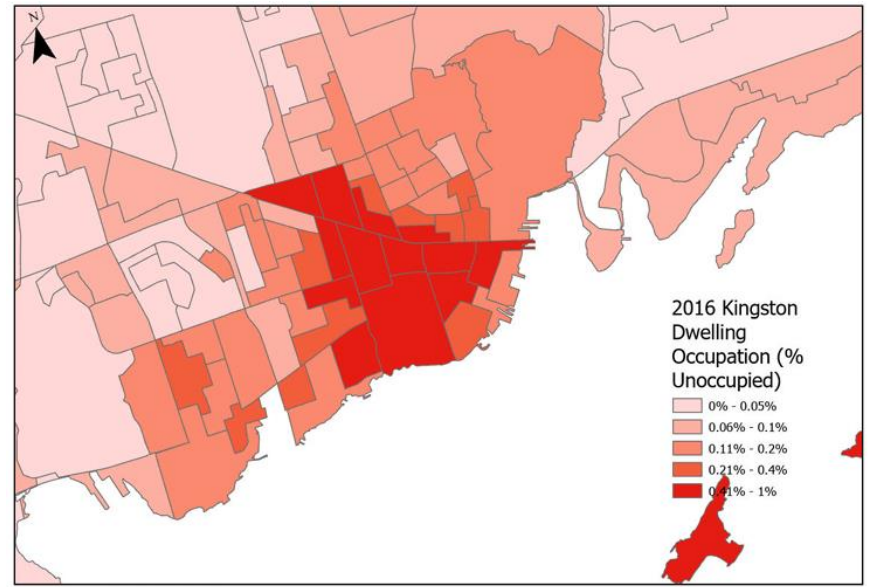
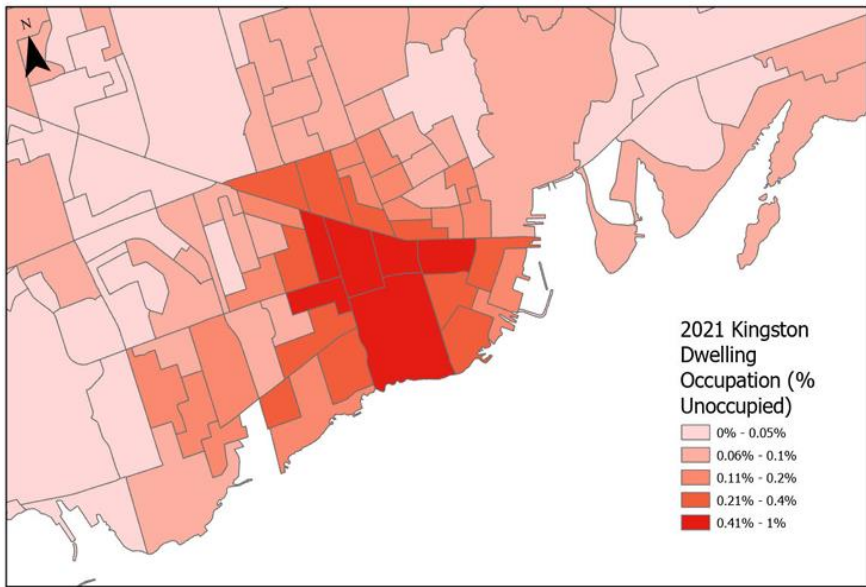


Figure 6: Analysis of 2011- 2021 Unoccupied dwellings in census tracts in Kingston Ontario, Author generated 2024.

Hypothesis 2: Dwellings in studentified neighbourhoods will have a higher average value in comparison to average dwelling values across Kingston.

Census data was then used to examine the change in average dwelling values between 2011 and 2021. The hypothesis was that as students increasingly congregated in fewer areas, these neighbourhoods would become more attractive to investors seeking to purchase rental properties.

The six neighbourhoods with the highest student populations were designated as the "hotspots" in **Figure 7**, with the average value for the Kingston Census Metropolitan Area (CMA) included for comparison. **Table 4** illustrates that year-over-year, the average value of dwellings in these hotspots neighbourhoods increased by 65%. Comparatively, home prices across Kingston increased by 50%. Using both median and average value of dwellings and the average monthly shelter cost in 2021, homes in the hotspot areas command a 58%, 84% and 42% premium respectively to homes across Kingston. The same trend is visible for 2016. Plainly, this indicates that on average, homes in hotspot areas are worth 58% **more** than homes in non-hotspot areas.

These findings indicate that homes in the hotspot areas have become more valuable than those in surrounding areas, a trend that has implications not only for investors but also for permanent residents. Families looking to settle in these desirable neighbourhoods may find it increasingly difficult to compete with investors who are willing to pay the elevated premiums for properties in these areas. Moreover, those already living within these neighbourhoods may have to contend with housing in disrepair or in worsening condition, unable to move due to high rental pricing.

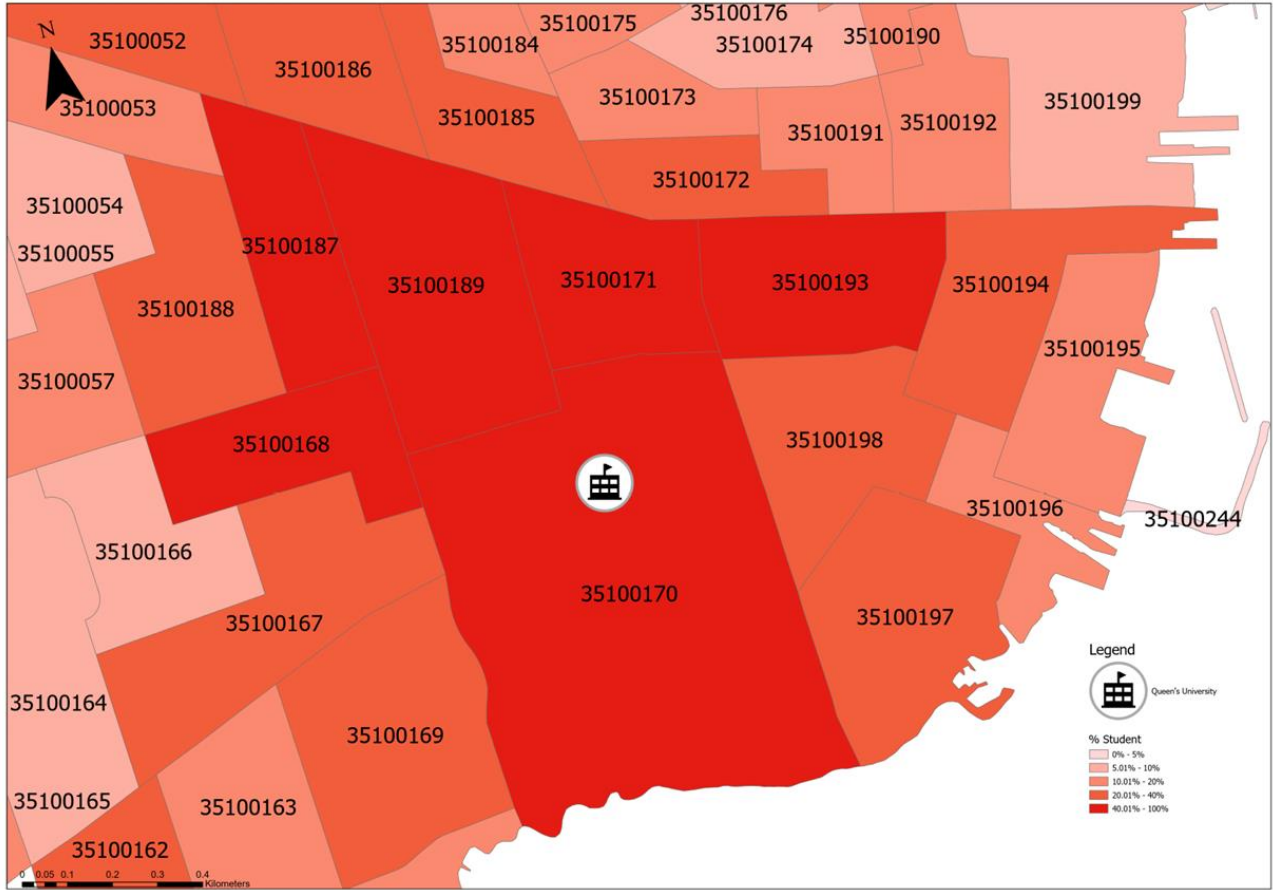


Figure 7: Map of Hotspot Neighbourhoods surrounding Queen's University

Median and Average Dwelling Comparison in Hotspot Kingston Neighbourhoods 2016 and 2021 Comparison												
Neighbourhood ID	2021			2016			Change 2016 to 2021					
	Median value of dwellings (\$)	Average value of dwellings (\$)	Average monthly shelter costs (\$) <sup>1</sup>	Median value of dwellings (\$)	Average value of dwellings (\$)	Average monthly shelter costs (\$) <sup>1</sup>	Change in Median value of dwellings (\$)		Change in Average value of dwellings (\$)		Change in Average Monthly Shelter Cost (\$)	
35100168	\$750,000	\$920,000	\$1,040	\$482,285	\$488,634	\$1,213	\$267,715	56%	\$431,366	88%	-\$173	-14%
35100170	N/A	\$1,500,000	\$1,440	N/A	N/A	\$1,165	N/A	N/A	N/A	N/A	\$275	24%
35100187	\$600,000	\$600,000	\$1,220	\$401,340	\$429,666	\$1,211	\$198,660	49%	\$170,334	40%	\$9	1%
35100189	N/A	\$900,000	\$1,290	\$600,738	\$651,698	\$1,403	N/A	N/A	\$248,302	38%	-\$113	-8%
35100171	N/A	N/A	\$1,450	N/A	N/A	\$1,063	N/A	N/A	N/A	N/A	\$387	36%
35100193	\$1,000,000	\$1,000,000	\$1,560	\$801,131	\$813,515	\$1,064	\$198,869	25%	\$186,485	23%	\$496	47%
<b>Kingston CMA</b>	<b>\$496,000</b>	<b>\$533,500</b>	<b>\$1,302</b>	<b>\$300,476</b>	<b>\$356,013</b>	<b>\$1,059</b>	<b>\$195,524</b>	<b>65%</b>	<b>\$177,487</b>	<b>50%</b>	<b>\$243</b>	<b>23%</b>
<b>Average (Hotspots)</b>	<b>\$783,333</b>	<b>\$984,000</b>	<b>\$1,333</b>	<b>\$571,374</b>	<b>\$595,878</b>	<b>\$1,187</b>	<b>\$211,960</b>	<b>37%</b>	<b>\$388,122</b>	<b>65%</b>	<b>\$147</b>	<b>12%</b>
<b>Premium to CMA</b>	<b>58%</b>	<b>84%</b>	<b>2%</b>	<b>90%</b>	<b>67%</b>	<b>12%</b>						

N/A refers to information not available at the time of study  
<sup>1</sup> = Average monthly shelter cost for renter households  
Source: Statistics Canada

Table 4: Summary Statistics on Change in Average Dwelling

Hypothesis 3: A higher percentage of students in a neighbourhood will have an inverse relationship to total income per household.

The next hypothesis tested was that a higher proportion of students would have an inverse relationship to total income per household. This hypothesis is based on the theory of homogenous tenants in studentified neighbourhoods and the out-migration of families and higher-income earners. **Table 5** and **Figure 8** indicate that total household income in student hotspot neighbourhoods is significantly below the average across Kingston.

<b>Median and Average Income of Permanent Population in Select Kingston Neighbourhoods 2001 to 2021</b>						
<b>GEO UID</b>	<b>2021 Average After-Tax Household Income</b>	<b>2021 Percent of Population 65+</b>	<b>2016 Percent of Population 65+</b>	<b>2011 Percent of Population 65+</b>	<b>2006 Percent of Population 65+</b>	<b>2001 Percent of Population 65+</b>
35100168	\$66,000	13%	14%	18%	10%	11%
35100170	\$33,600	9%	19%	5%	11%	10%
35100187	\$40,400	14%	11%	10%	12%	7%
35100189	\$34,800	7%	8%	7%	6%	6%
35100171	\$39,600	5%	6%	5%	6%	20%
35100193	\$45,600	9%	13%	15%	25%	18%
<b>Kingston CMA</b>	<b>\$72,000</b>	<b>22%</b>	<b>20%</b>	<b>17%</b>	<b>16%</b>	<b>15%</b>
<b>Average (Select)</b>	<b>\$43,333</b>	<b>9%</b>	<b>12%</b>	<b>10%</b>	<b>12%</b>	<b>12%</b>

*Table 5: Median and Average Income of Permanent Population in Kingston hotspot neighbourhoods*



Hypothesis 4: A higher percentage of students in a neighbourhood will have an inverse relationship to the proportion of older adults residing in the same area.

The next hypothesis tested was that the higher percentage of unoccupied dwellings in the six hotspot neighbourhoods would correlate with a decline in the population of older adults over time. Kingston has an aging population and thus it was predicted that many of the neighbourhoods would be comprised of a larger proportion of older adults (Statistics Canada, 2024).

As shown in Table 4 above, the percentage of older adults is significantly lower in student hotspot neighbourhoods and has been declining since 2001. Using multiple regression analysis, the average age of the permanent population, value of dwellings, rental pricing, percentage of students and proximity to Queen's campus were tested to determine if any variable was predictive of the percentage of older adults per neighbourhood. Only two variables, visible in **Table 6**, students as a percentage of unoccupied dwellings and average home value reported significance. What this tells us is that neighbourhoods with more expensive homes are likely to be comprised of an older population. Conversely, neighbourhoods with a larger student population are likely to have fewer older adults. However, given that the percentage of older adults has long oscillated between 0-20% since 2001 (**Figure 9**) the results of the multiple regression analysis are likely more causal than predictive. The changes to the neighbourhood occurred more than 20 years prior, limiting the significance of the results.

## Summary of OLS Results

Variable	Coefficient [a]	StdError	t-Statistic	Probability [b]	Robust_SE	Robust_t	Robust_Pr [b]	VIF [c]
Average Income	0.000000	0.000001	0.141988	0.887649	0.000001	0.213830	0.831534	1.929757
Average Home Rent	-0.000038	0.000069	-0.546987	0.586774	0.000046	-0.817755	0.417299	4.341798
Student Population	-0.416768	0.144084	-2.892544	0.005606*	0.087829	-4.745249	0.000018*	2.207872
Home Sale Pricing	-0.000000	0.000000	-0.217033	0.829050	0.000000	-0.324935	0.746562	1.563404
# of Bedrooms	0.000330	0.012973	0.025453	0.979792	0.008767	0.037667	0.970099	2.159444
# of Bathrooms	-0.011059	0.016910	-0.653981	0.516061	0.012984	-0.851691	0.398365	1.949948
Marketed as Student Investment	0.001702	0.032705	0.052041	0.958698	0.028582	0.059548	0.952747	1.415812

### Summary of OLS Results - Model Variables

Variable	Coefficient [a]	StdError	t-Statistic	Probability [b]	Robust_SE	Robust_t	Robust_Pr [b]	VIF [c]
Older Adult (65+)	2.360748	0.971700	2.429501	0.018351*	0.824462	2.863380	0.005888*	-----
Home Sale Price (\$)	-0.065025	0.029864	-2.177377	0.033681*	0.025284	-2.571812	0.012797*	11.652732

Table 6: Summary of OLS Results, dependent variable of older adults in hotspot neighbourhoods

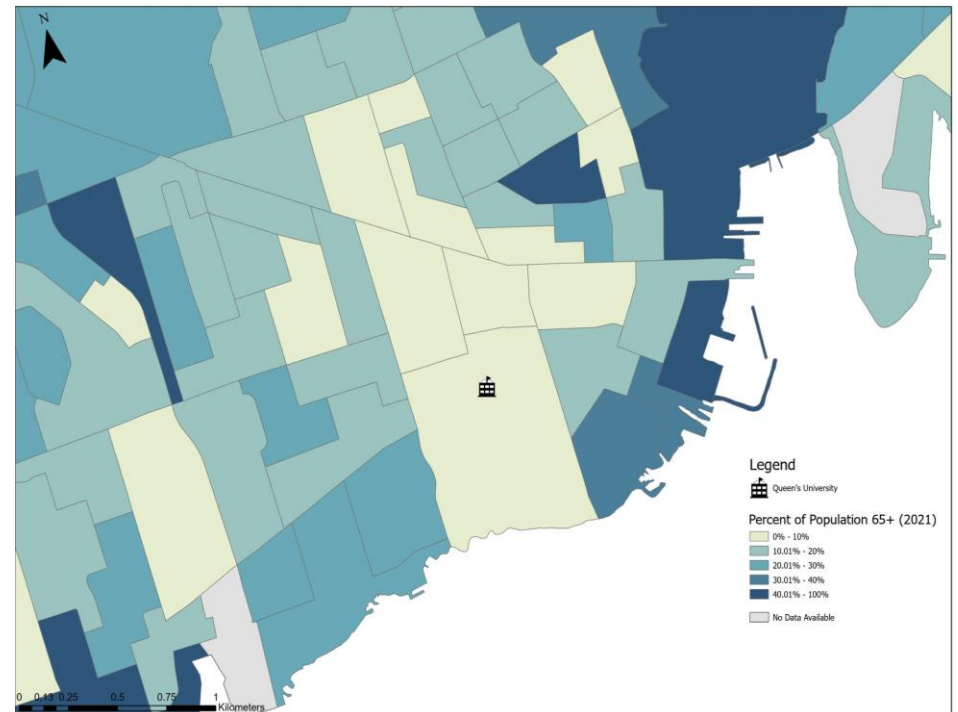
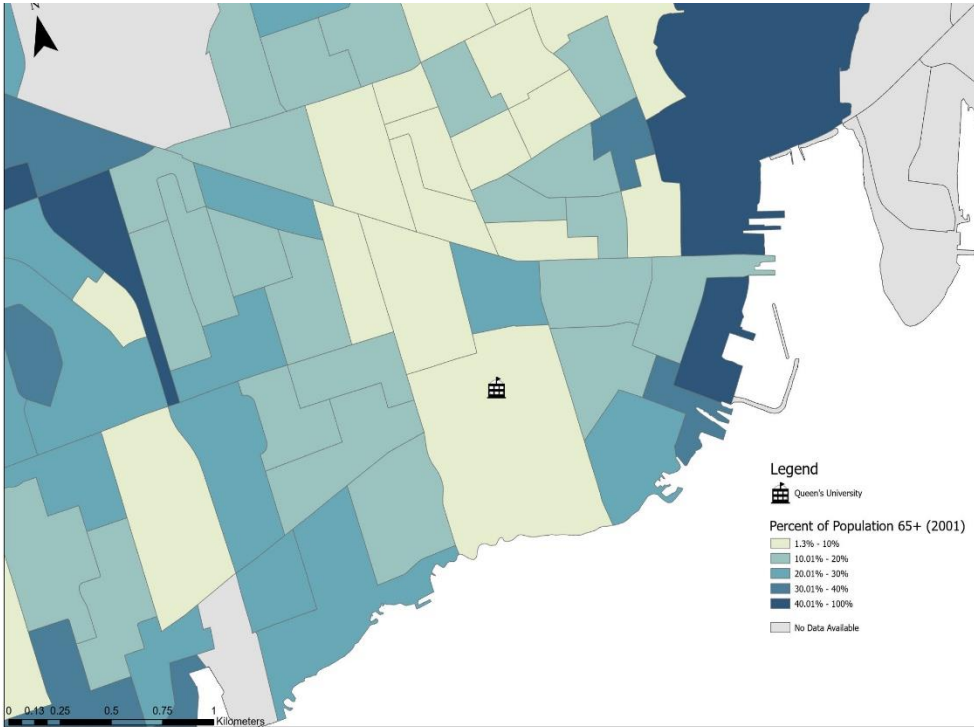


Figure 9: Change in Percent of Older Adults in Kingston, 2001 to 2021, Statistics Canada Census

Hypothesis 5: A higher percentage of students in a neighbourhood will have an inverse relationship on housing condition and repair status.

The final hypothesis tested measured the condition of housing. Prior academic literature has been unclear on the relationship between housing state and studentification. Using data collected from CMHC and the 2021 Census, a Ordinary Least Squares test was run to determine the relationship between the percentage of housing reported as “in need of repair or large scale repair” and the percentage of students. Other variables tested included value of homes, rental rates and the average age of permanent residents (**Table 7**). Two variables have significant probabilities. First, household income has a positive effect, meaning that higher incomes reduce the likelihood that homes will be reported to be in a state of disrepair. Second, a higher proportion of students, as measured by unoccupied dwellings, has a negative effect on housing condition, meaning that a neighbourhood with more students is likely to have more homes in some form of disrepair. Again, while these values are significant, the process of studentification has been ongoing in the hotspot neighbourhoods for some time.

Variable	Coefficient [a]	StdError	t-Statistic	Probability [b]	Robust_SE	Robust_t	Robust_Pr [b]	VIF [c]
Intercept	0.507394	0.035683	14.219500	0.000000*	0.057024	8.897878	0.000000*	-----
Older Adults (65 +)	0.111969	0.075092	1.491080	0.137655	0.067821	1.650951	0.100455	1.219915
Household Income	-0.000004	0.000000	-10.799531	0.000000*	0.000001	-5.880264	0.000000*	1.778190
Average Home Value	-0.000000	0.000000	-0.094682	0.924659	0.000000	-0.088296	0.929726	4.088035
Average Rent	0.000019	0.000031	0.617520	0.537652	0.000035	0.554126	0.580168	2.829322
Student (%)	0.541145	0.096073	5.632658	0.000000*	0.138168	3.916570	0.000133*	1.955750

Table 7: Ordinary Least Square Results, ArcGIS output 2024

## 4.2: Phase 2

The second phase of this research examined changes in the housing market in response to growing student enrollment. The phase sets out to examine three hypotheses:

Hypothesis 1: Investors actively entering the housing market as student enrollment grows.

Hypothesis 2: Homes marketed for sale to student-investors, not owner-occupiers, will be spatially concentrated around Queen’s University.

Hypothesis 3: Homes marketed for sale to student-investors will sell for a higher value than homes marketed for sale to owner-occupiers.

**Hypothesis 1: Investors actively entering the housing market as student enrollment grows.**

Using the same census tracts identified in phase one, house sale prices were recorded from 2009 to 2023. HouseSigma was utilized to pull home listings, as the platform provided the most fulsome historical information on listing price, sold pricing and marketing. While platforms such as Statistics Canada can provide census tract level averages, HouseSigma provides information for each listing, allowing for the evaluation of trends such as investor involvement. Listings were scanned for references to students or if homes were marketed as student investment opportunities. Examples of student-based listings are visible below:

*“Amazing Opportunity In A Brand New Development. This Turn-Key Investment Offers Luxurious Living Steps From Queen's University. Spacious 1 Bedroom Layout With 9 Ft Ceiling, Granite Countertops, Laminate Flooring. Sun-Filled South Facing With Beautiful Lake View, Really Found Huge Balcony. Move In Ready.”- 2022 Listing*

*“Low maintenance residence fully turn-key leased to great tenants. Strategic location near Queen's University. In-law suite adds extra rental space or personal space for owner.” – 2023 Listing*

As shown in **Figure 10**, the historical price analysis reveals a consistent escalation in housing prices for properties located near post-secondary institutions. As noted previously, both students and older adults renters can be adversely affected by this intensification, as they compete for housing in a market where rental rates exceed affordability thresholds. The percentage of listings marketed to students varied annually, ranging from 29% in 2012 to as high as 100% in 2009 and 2010. Additionally, the average number of days a home remained on the market steadily declined each year from 55 days between 2009-2013 to 36 days from 2019-2023, indicating increased competition within the housing market.

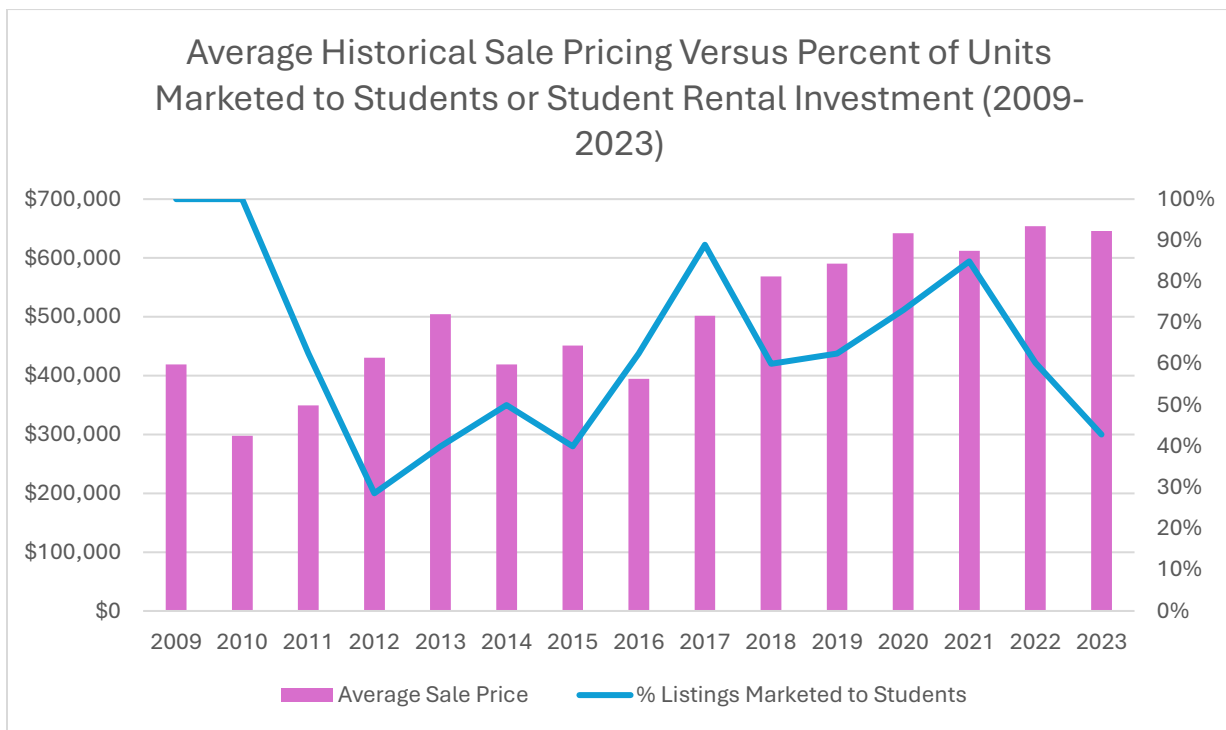


Figure 10: Historical Sale pricing of listings in Student-based census tracts versus the percentage of units Marketed to Students

Hypothesis 2: Homes marketed for sale to student-investors, not owner-occupiers, will be spatially concentrated around Queen's University.

Beyond identifying the percentage of listings targeted to student investors, this thesis incorporates data from phase 1, overlaying the location of 15 years worth of home sales. Geographic Information Services (ArcGIS) is utilized to spatially represent this relationship. Visible in **Figure 11**, there is a distinct congregation of listings marketed as student rental opportunities within the neighbourhoods identified with the highest level of unoccupied dwellings. However, one can also see that the listings marketed to students extend beyond the previously noted "hotspot" neighbourhoods, confirming academic theories that studentification slowly spreads to peripheral neighbourhoods within a medium-sized university city.

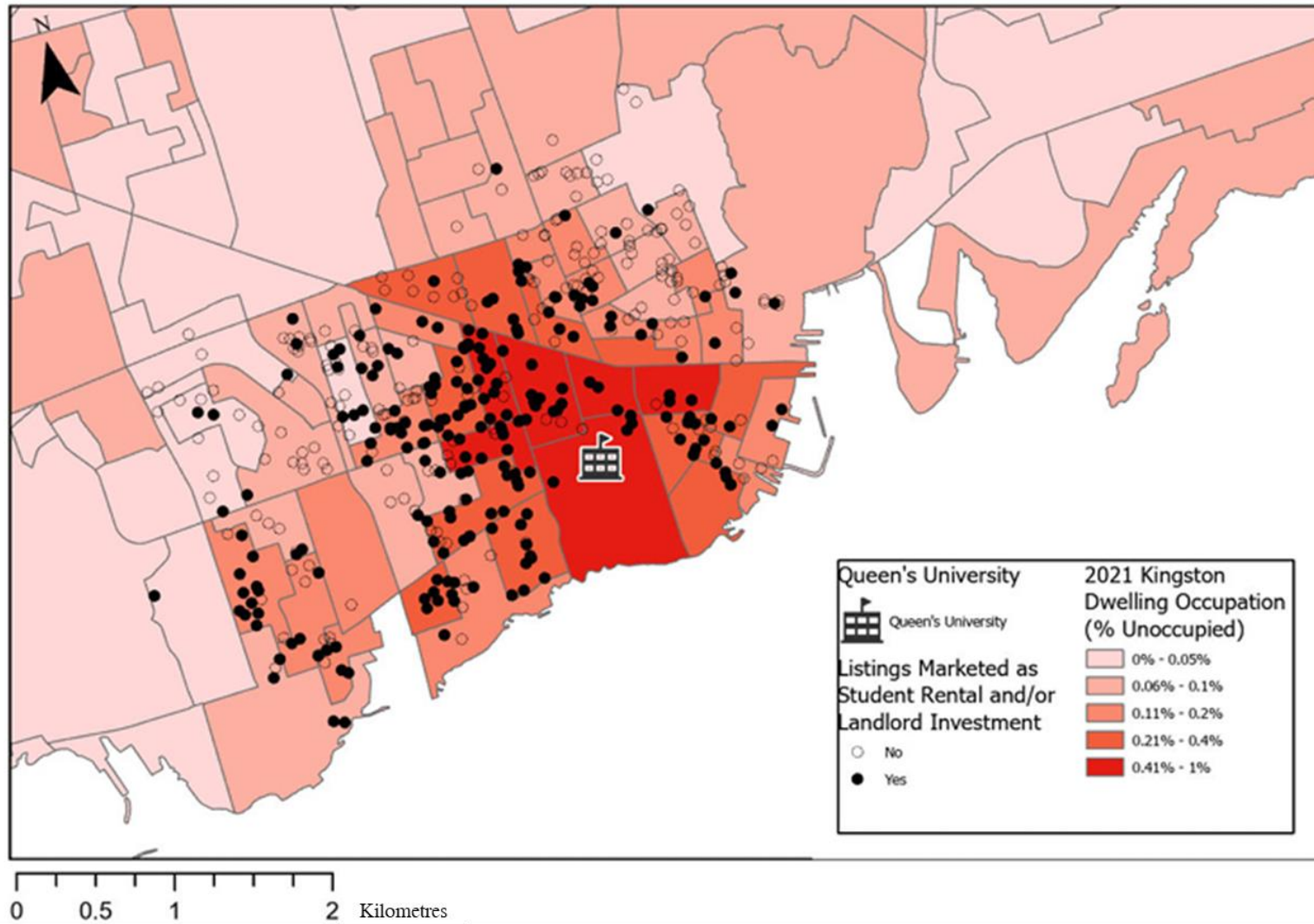


Figure 11: 2021 Unoccupied Dwellings in comparison to Listings marketed as student rentals and/or to student landlords

Similar to phase 1, a hot spot analysis was conducted to determine if listings marketed to students were spatially clustered around Queen’s campus. Visible in **Figure 12**, the previously identified hotspot neighbourhoods have the highest significance of listings marketed to students. In this regard, the hypothesis that listings marketed to student investors would be clustered around Queen’s campus holds true.

Complementing the hypothesis above, an Ordinary Least Squares Regression was conducted in ArcGIS to determine the relationship between unoccupied dwellings and dissemination areas. Using the dissemination areas as the independent variable and unoccupied dwellings as the dependent variable, the regression analysis produced a statistically significant result at the 1% level (**Table 8**). Plainly, this means that the proximity to post-secondary institutions (as captured by the census dissemination area variable) significantly affects the percentage of unoccupied dwellings. A significant result suggests that the spatial distribution of census dissemination areas may capture factors such as proximity to post-secondary institutions, influencing housing dynamics.

Variable	Coefficient	Std Error	t-Statistic	Probability	Robust Probability	Chi-Squared (1 degree of Freedom)
% Unoccupied Dwellings	-4331.027658	3177.773844	-1.362912	0.174523	0.020368*	N/A
Dissemination Area	0.000123	0.000091	1.362936	0.174516	0.020364*	0.019341*

*Table 8: Summary of Ordinary Least Squares Results with Unoccupied Dwellings and Dissemination Areas*

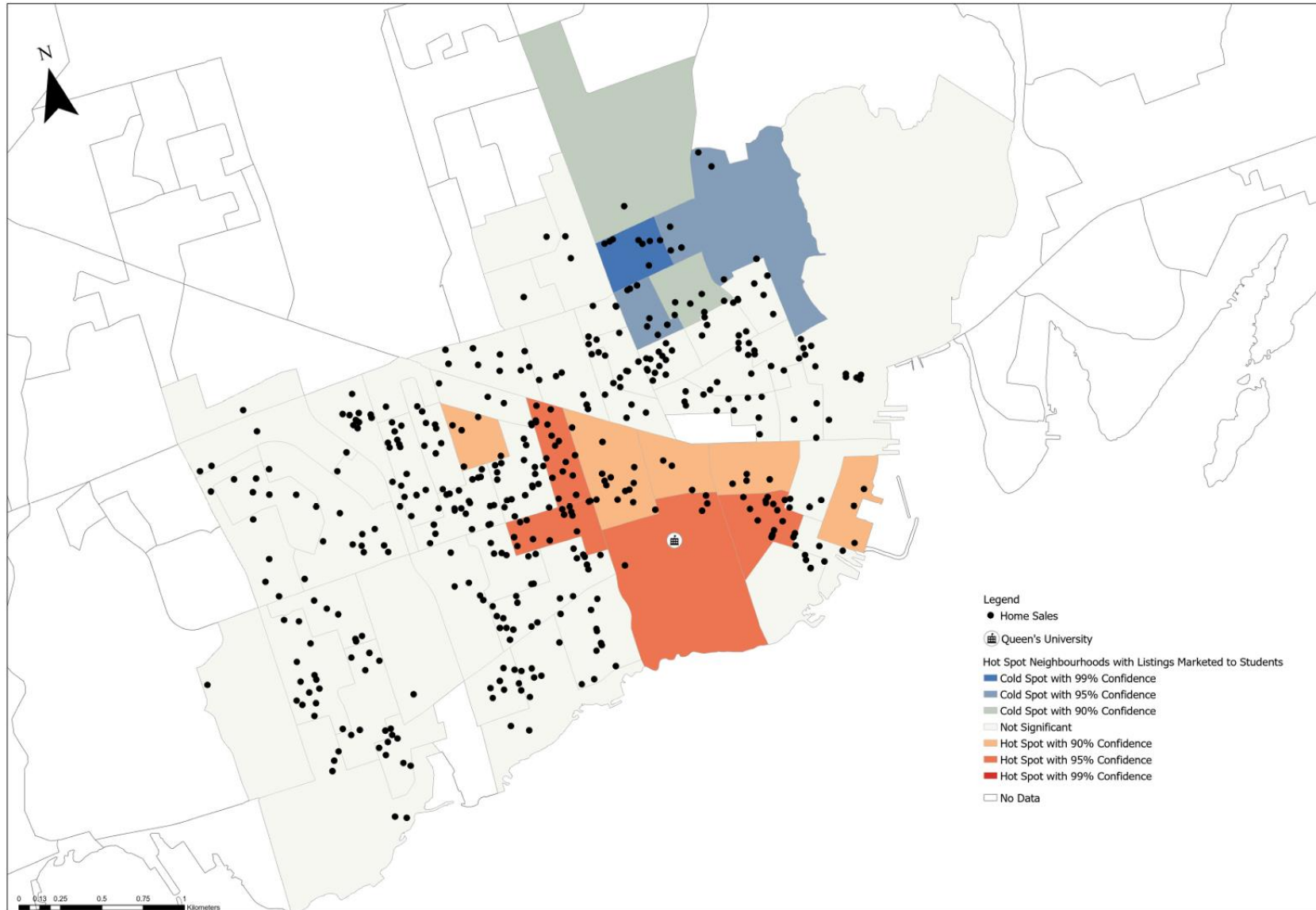


Figure 12: Hot Spot Analysis of Neighbourhoods with Listings Marketed to Students

Finally, an Ordinary Least Squares Regression analysis was conducted to determine the relationship between the housing listings marketed to investors and other variables of interest. Variables modeled include year of sale, listing price, sale pricing, number of bedrooms, number of bathrooms, days on market, geographic location and unoccupied dwellings as a percent of total dwellings. **Table 9** below indicates that two variables in particular, number of bedrooms and unoccupied units as a percent of total dwellings affect the likelihood of listings being marketed as student rental investments. These variables are modelled in **Figure 13** and **Figure 14** to show their spatial relevancy.

Variable	Coefficient	Std Error	t-Statistic	Probability	Robust_Probability	Chi-Squared (1 degree of Freedom)	Probability: F-Statistic
Listings Marketed to Students	0.216769	0.031066	6.977743	<b>0.000000*</b>	<b>0.000000*</b>	<b>0.000000*</b>	
Unoccupied Units (%)	1.466210	0.118090	12.416026	<b>0.000000*</b>	<b>0.000000*</b>	<b>0.001809*</b>	<b>0.000000*</b>
Listings Marketed to Students	0.397680	0.046256	8.597317	<b>0.000000*</b>	<b>0.000000*</b>	<b>0.001165*</b>	
Number of Bedrooms	0.043347	0.013656	3.174089	<b>0.001593*</b>	<b>0.001244*</b>	<b>0.000000*</b>	<b>0.006767*</b>

*Table 9: Summary of Ordinary Least Squares Results with Unoccupied Dwellings and Dissemination Areas*

With both variables of significance, the Chi-squared test, ( $X^2(1, N = 54) = 6.7, p < .01$ ), indicates a highly significant relationship with p-values less than 0.0005. Thus, the number of bedrooms and geographic location of listings are very predictive of whether a listing will contain language marketing it as an investment. Together, the results indicate the listings with a higher proportion of bedrooms and listings within dissemination areas adjacent to the post-secondary institution are statistically more likely to be marketed as investment opportunities.

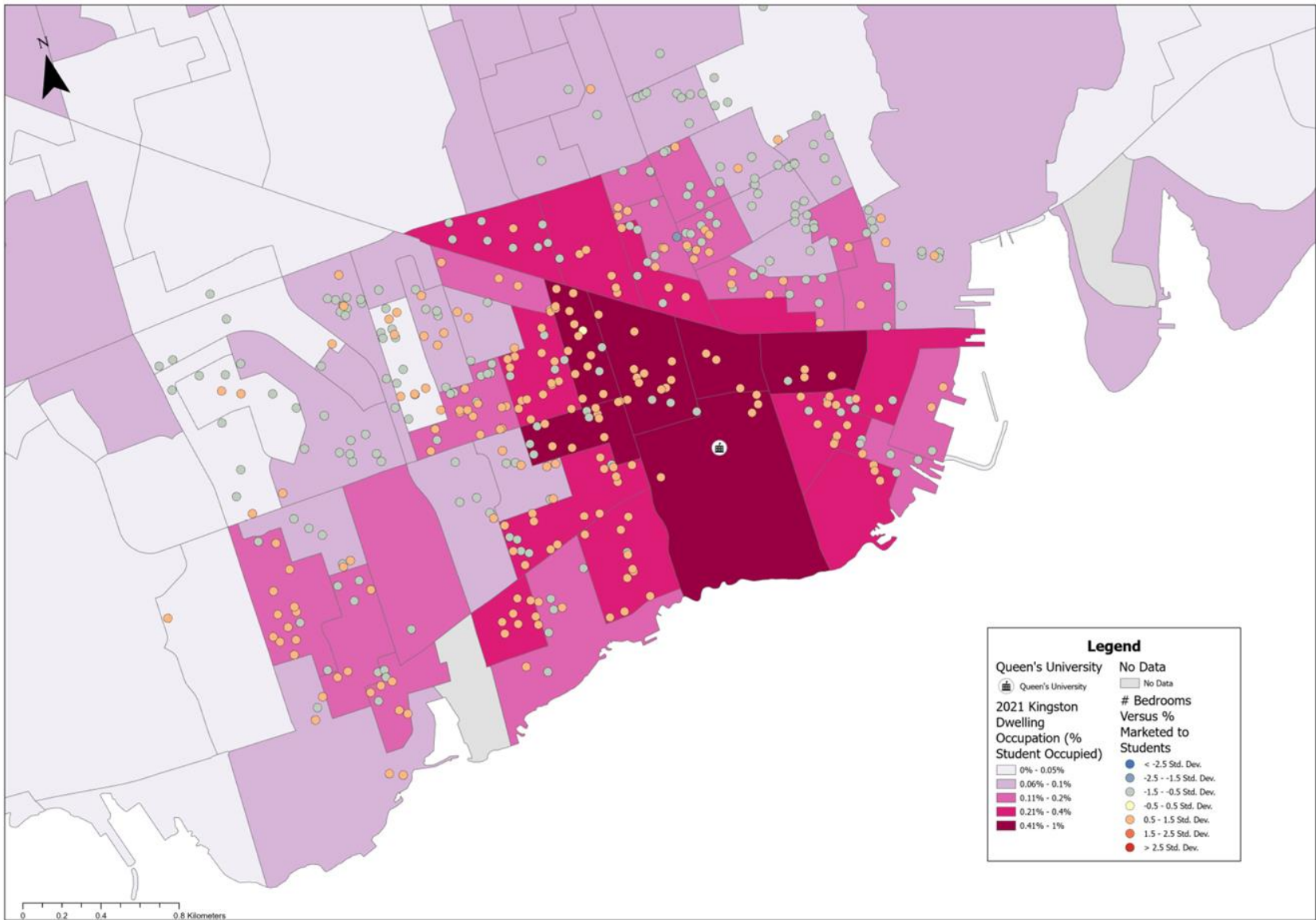


Figure 13: Ordinary Least Squares Analysis: Number of Bedrooms as an indicator of Listings Marketed to Students

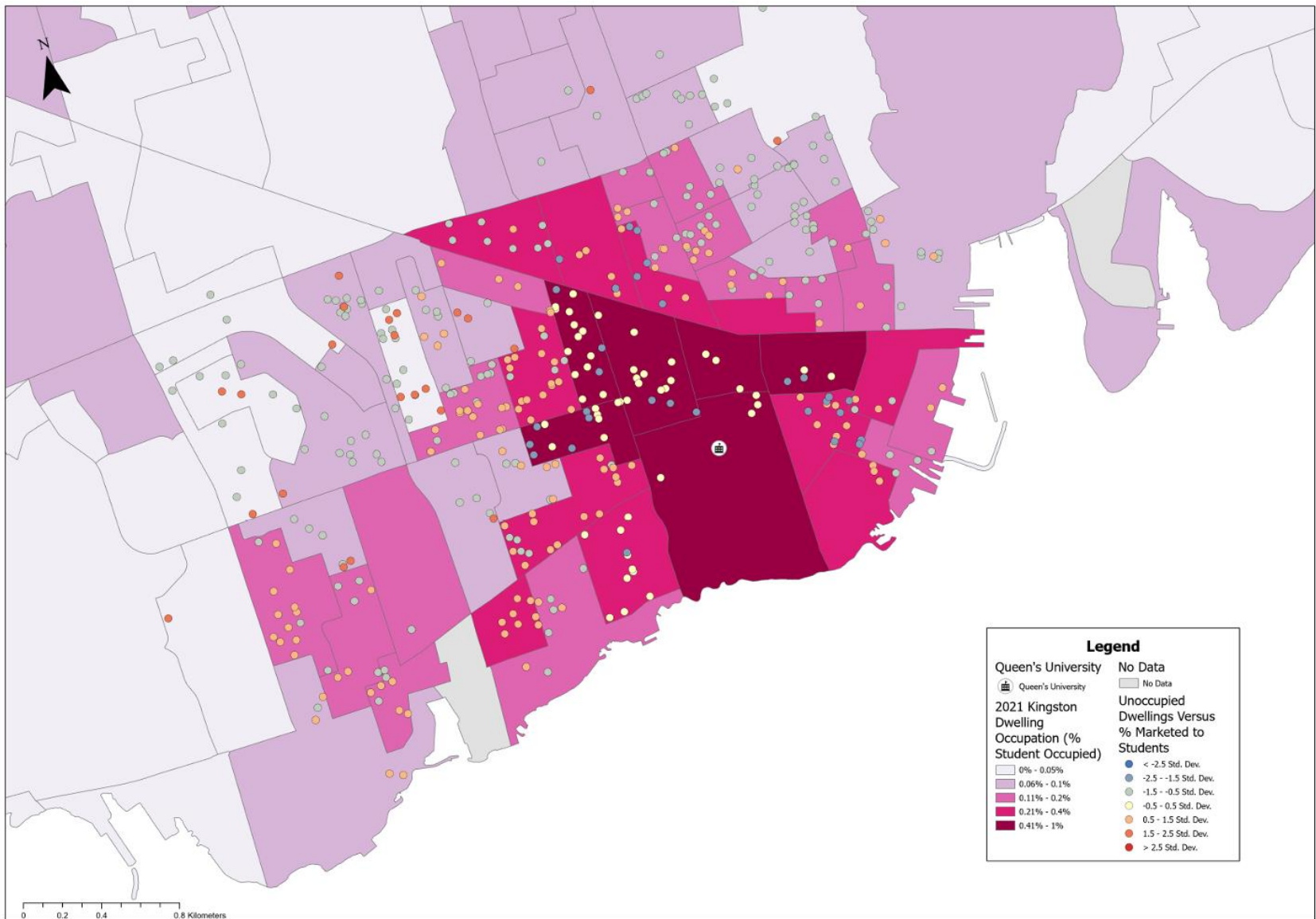


Figure 14: Ordinary Least Squares Analysis: Unoccupied Dwellings as an indicator of Listings Marketed to Students

### Hypothesis 3: Homes marketed for sale to student-investors will sell for a higher value than homes marketed for sale to owner-occupiers.

The final hypothesis tested investigates the monetary value of homes marketed to student investors versus owner-occupied users. Academic literature indicates that property prices increase in studentified neighbourhoods as investors look to capitalize on students as cash flow generators (Smith et al., 2014; Allinson, 2006; Smith, 2005; Wilkinson & Greenhalgh, 2002; Smith & Holt, 2007). Thus, they are willing to pay more to purchase a home as an investment.

This trend is depicted in **Figure 15**, where the average value of homes for student investors and owner-occupiers generally moves in unison. On average across the neighbourhoods identified in Phase 1, the value of owner-occupier homes is \$607,000 versus the student investment home of \$629,000. In some years, student investment homes have sold for premiums 113% above other housing stock, but on average, they are within 4% of owner-occupied homes in hotspot areas.

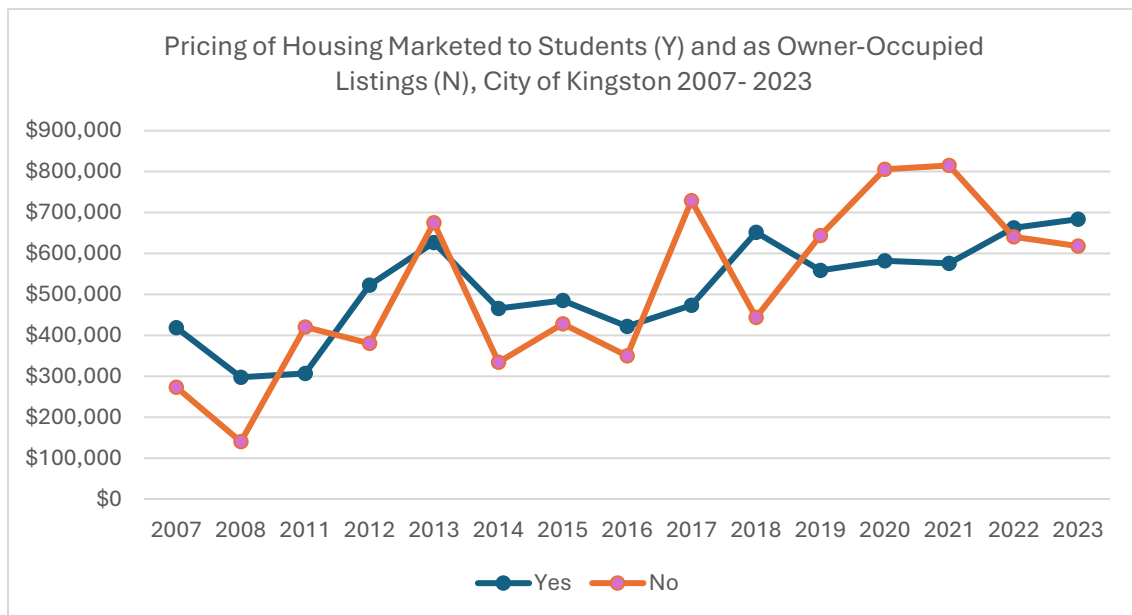


Figure 15: Sale Pricing of Homes sold to end-users versus investors, House Sigma 2024

Within testing for the final hypothesis, I examined whether a specific housing type was responsible for the variations in sale price to list price or total average pricing. Put simply, I questioned whether townhouses, condominiums/apartments or single-detached homes were responsible for the fluctuations between owner-occupied and student investment sale pricing. Though data was collected from 2007 to 2023, only values from 2018 to 2023 were consistent enough across housing types to produce any form of graphs or analysis. In **Figure 16**, two housing types dominate the student investment marketed, single family homes and condominiums/apartments. Though this thesis does not focus on PBSA's, as they are built as an exclusive product to students, student investor condominiums are selling for 115% of their list price. This is in comparison to owner-occupied condominiums that sell at 95% of listing price. More specific to single-family homes, student investments sell for 110% of their list price versus other homes selling for 99%. This does match previous academic studies indicating that property pricing inflates for student investment opportunities. Moreover, though beyond the scope of this thesis, measuring the age of sellers in the market would be valuable in determining the levels of out-migration of older adults in hotspot neighbourhoods.

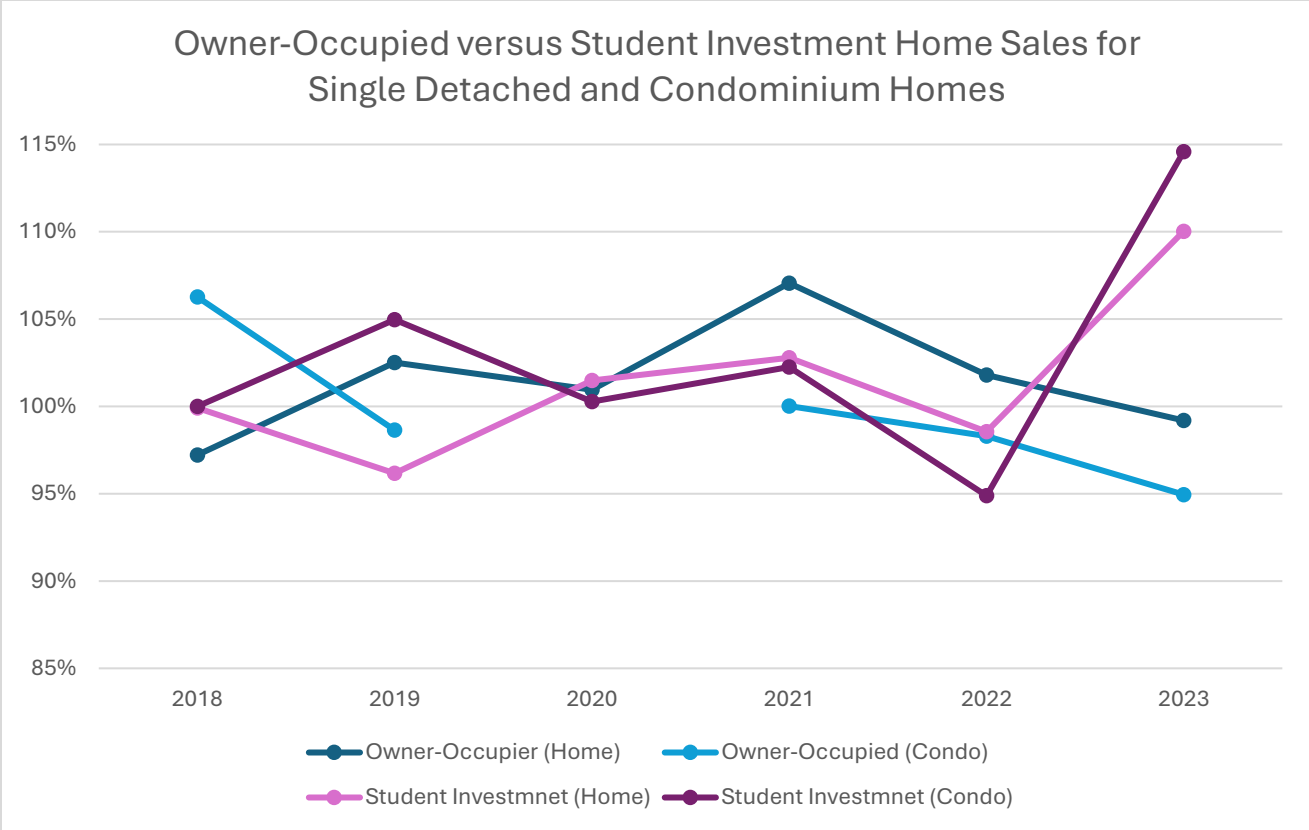


Figure 16: Owner Occupied versus Student Investment Sales by Home Product, House Sigma 2024

### 4.3: Phase 3

The hypotheses tested in phase three focuses on housing affordability for students, older adults and local residents in Kingston, Ontario.

Hypothesis 1: Housing in studentified neighbourhoods will not meet Canadian affordability standards for ownership (for-sale) properties.

Hypothesis 2: Both older adults and students will face challenges affording average rental prices in studentified neighbourhoods.

Hypothesis 3: Increasing student enrollment will correlate with decreasing vacancy rates in studentified neighbourhoods in Kingston.

**Hypothesis 1: Housing in studentified neighbourhoods will not meet Canadian affordability standards for ownership (for-sale) properties.**

To evaluate affordability in Kingston, data from the Canada Mortgage and Housing Corporation (CMHC), the Government of Canada Job Bank, and HouseSigma are combined to test if there is a gap between the average incomes attained by residents and the income required to purchase a home. This is called an affordability gap analysis.

The gap analysis is conducted with both minimum and average salaries, given the percentage of low-income households identified in Phase 1. Testing the minimum income attained in employment can be useful in measuring housing affordability for younger adults but can also act as a proxy for older adults on pension or limited incomes.

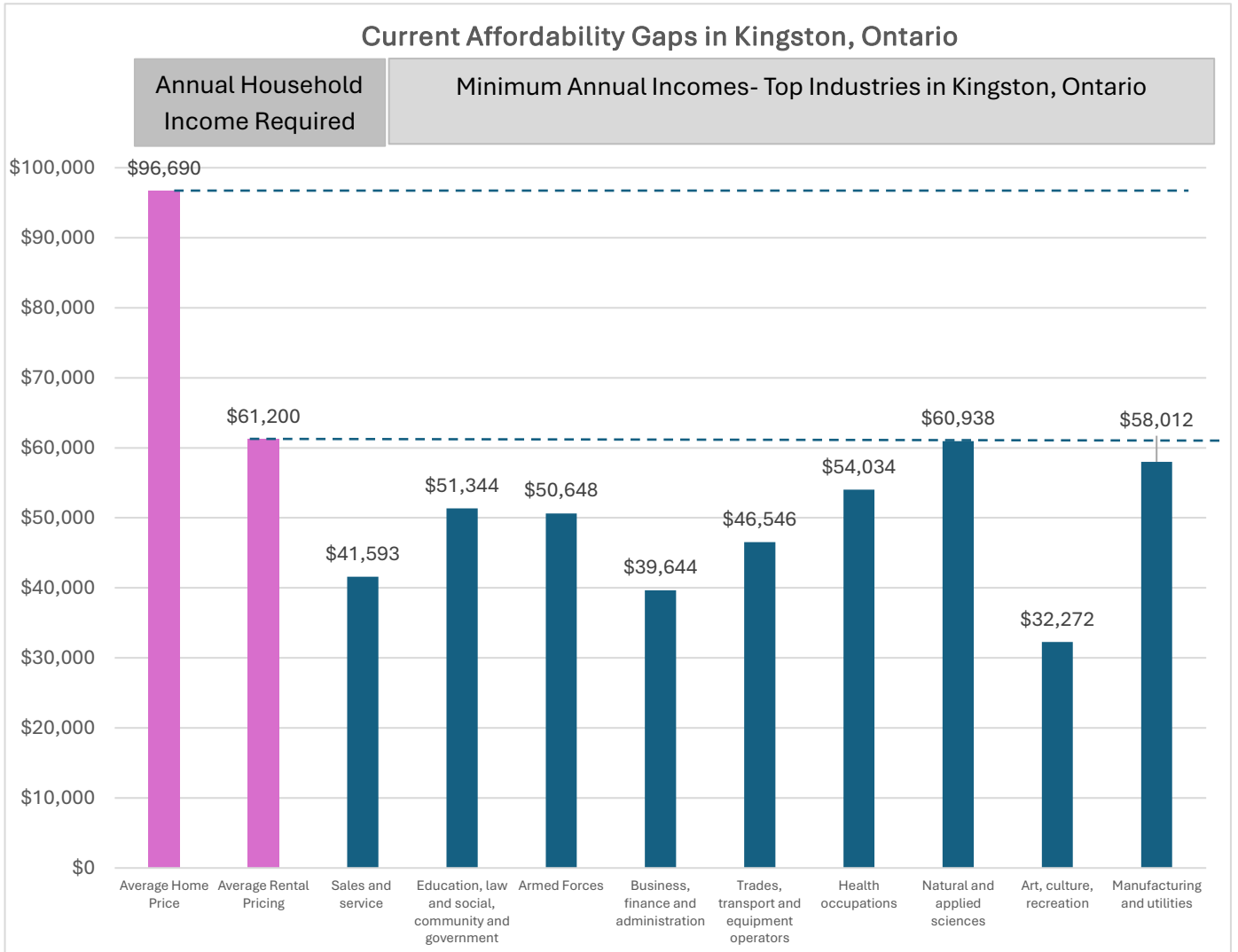


Figure 17: Minimum Incomes in Kingston, Ontario versus Incomes required for affordable housing

In the minimum scenario, **Figure 17** illustrates that among the top nine industries employing workers in Kingston, none offer starting salaries, ranging from ~\$32,000 to \$60,938 per year as of 2024, sufficient to afford either rental or home ownership based on the established affordability criteria in the methodology chapter. The home value used to calculate ownership affordability was \$533,000, the median value from the 2021 census for the Kingston CMA. Notably, this figure is conservative, as the 2023 average sold price from the House Sigma analysis

was \$646,000, further widening the affordability gap. This ongoing disparity increases financial pressure on students and older adults, exacerbating challenges in securing housing and contributing to broader socio-economic inequalities.

In the median scenario, **Figure 18** illustrates a more positive story indicating that six of the nine industries employing workers offer salaries sufficient to afford rental housing in Kingston. These sectors are Education, the Armed Forces, Business & Finance, Trade & Transportation, Health Occupations and Natural & Applied Sciences. Notably, homeownership is still out of reach on one income.

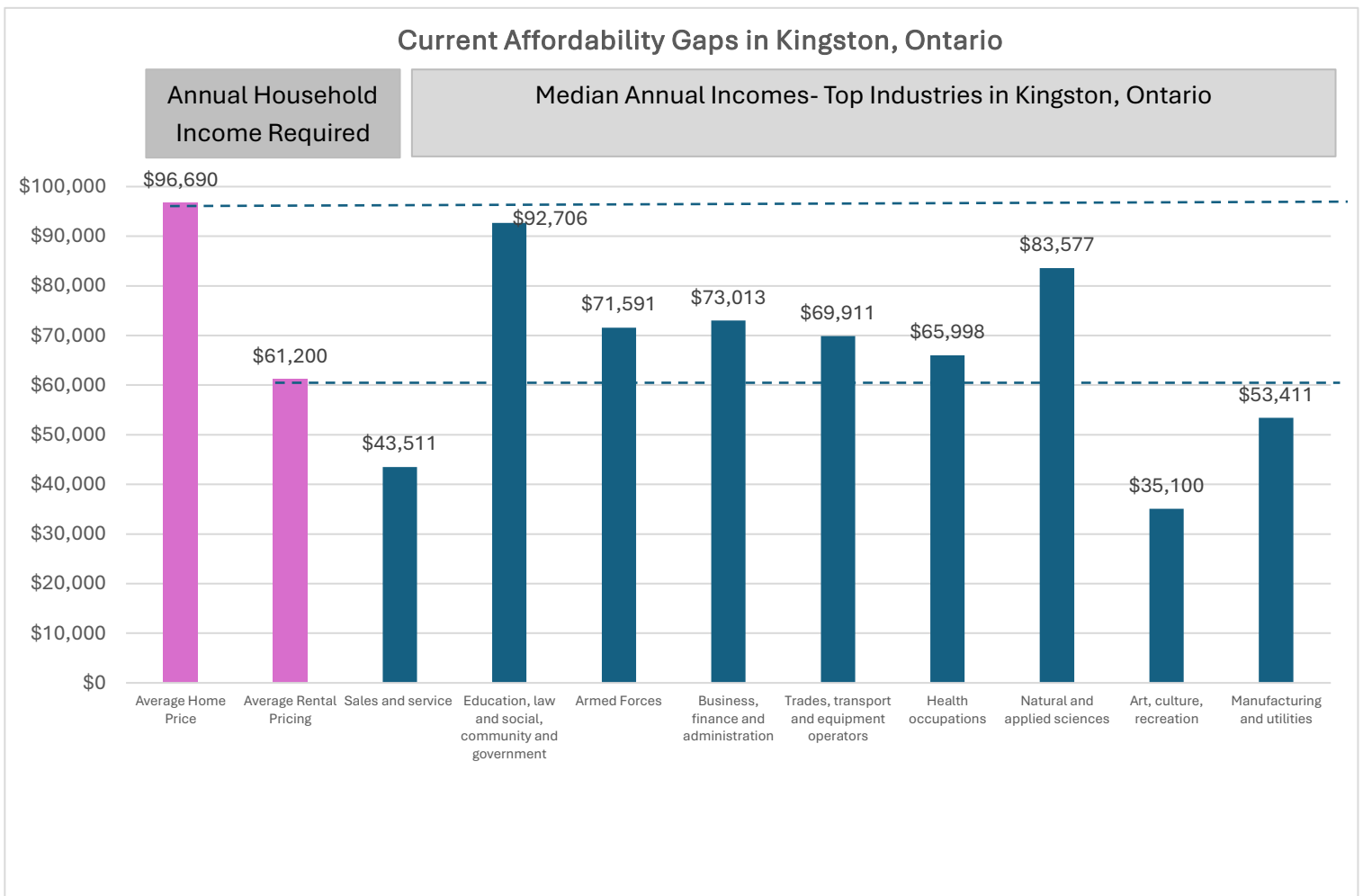
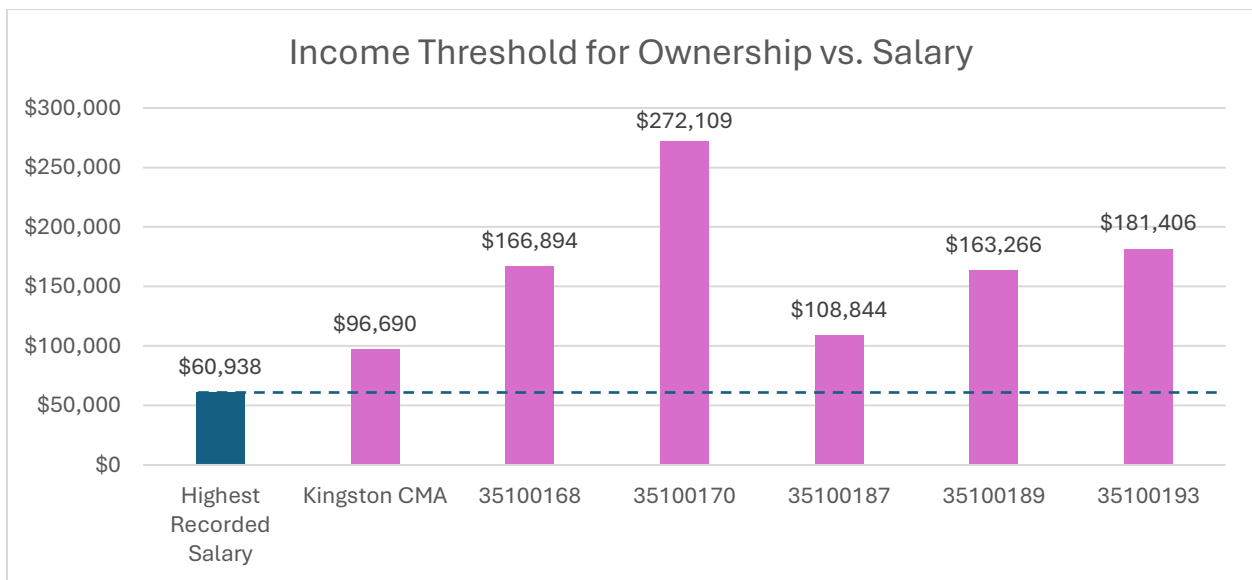


Figure 18: Median Incomes in Kingston, Ontario versus Incomes required for affordable housing

Focusing on the student hotspots neighbourhoods identified in Phase 1, **Figure 19** below examines income thresholds required to purchase a home based on the same affordability criteria outlined in the methodology chapter. This analysis aimed to determine whether any of the hotspots adhered to affordability guidelines. Using the highest average salary in Kingston and the average housing values, the data shows that none of these neighbourhoods meet the prescribed affordability standards. This poses significant challenges for both students, who are forced to allocate a substantial portion of their limited funds toward housing near campus, and older adults, many of whom rely on fixed monthly incomes.



*Figure 19: Income Thresholds for Home Ownership in hotspot areas*

Affordability levels are only met when housing prices drop to \$318,000—a value lower than any of the recorded averages from the 2021 census. In the subject districts, this level of affordability has not been seen since 2011. For older adults looking to move to the area, the rising costs of homeownership, compounded by increasing interest rates and escalating home prices, complicate efforts to age in place or secure housing that does not impose financial strain. For

students, the higher thresholds for homeownership lead to increased rental prices, as investors seek to recoup higher costs by transferring them to tenants. Given that students often lack access to reliable transportation or vehicles (Allinson, 2006), they face the difficult choice of either paying a premium for housing close to campus or commuting to reduce costs. In both cases, rising home prices disproportionately affect students and older adults, undermining their housing security.

## Hypothesis 2: Both older adults and students will face challenges affording average rental prices in studentified neighborhoods.

Like ownership units, this analysis aims to determine whether any of the hotspots adhered to affordability guidelines. Examining the same trends for rental housing is an important factor to determine affordability, as students are often limited to stipends and scholarships and older adults may be on fixed-incomes via pensions.

Student incomes are determined as a minimum threshold and average threshold. This is to account for undergraduate and graduate students who may have varying levels of wealth. In a worst case scenario, a student can only work for four months of the year, over summer break, earning minimum wage. This equates to approximate earnings of \$10,000 annually. In the average scenario, a student may work for the same duration and receive scholarships. This value may be closer to \$25,000. For older adults, a new retiree can expect to receive \$808 per month in Canada Pension Plan (CPP) benefits and \$727 per month in Old Age Security (OAS). This equates to \$18,430 per year. This data is then overlaid with the average rents recorded in each neighbourhood, as provided by Statistics Canada and census data.

**Figure 20** compares the annual incomes of students and older adults alongside the incomes required to rent in the student hotspot neighbourhoods. Like previous analysis, the annual incomes

for each neighbourhood are found using the minimum affordability standards. The results suggest that both groups are unable to afford rental housing in these neighbourhoods. This poses significant challenges for both students, who are forced to allocate a substantial portion of their limited funds toward housing near campus, and older adults, many of whom rely on fixed monthly incomes. For students, they may have to live in shared accommodation, accommodation of varying quality or take on debt to meet monthly housing expenses. For older adults, the same can be true.

### Income Threshold for Rental vs. Salary

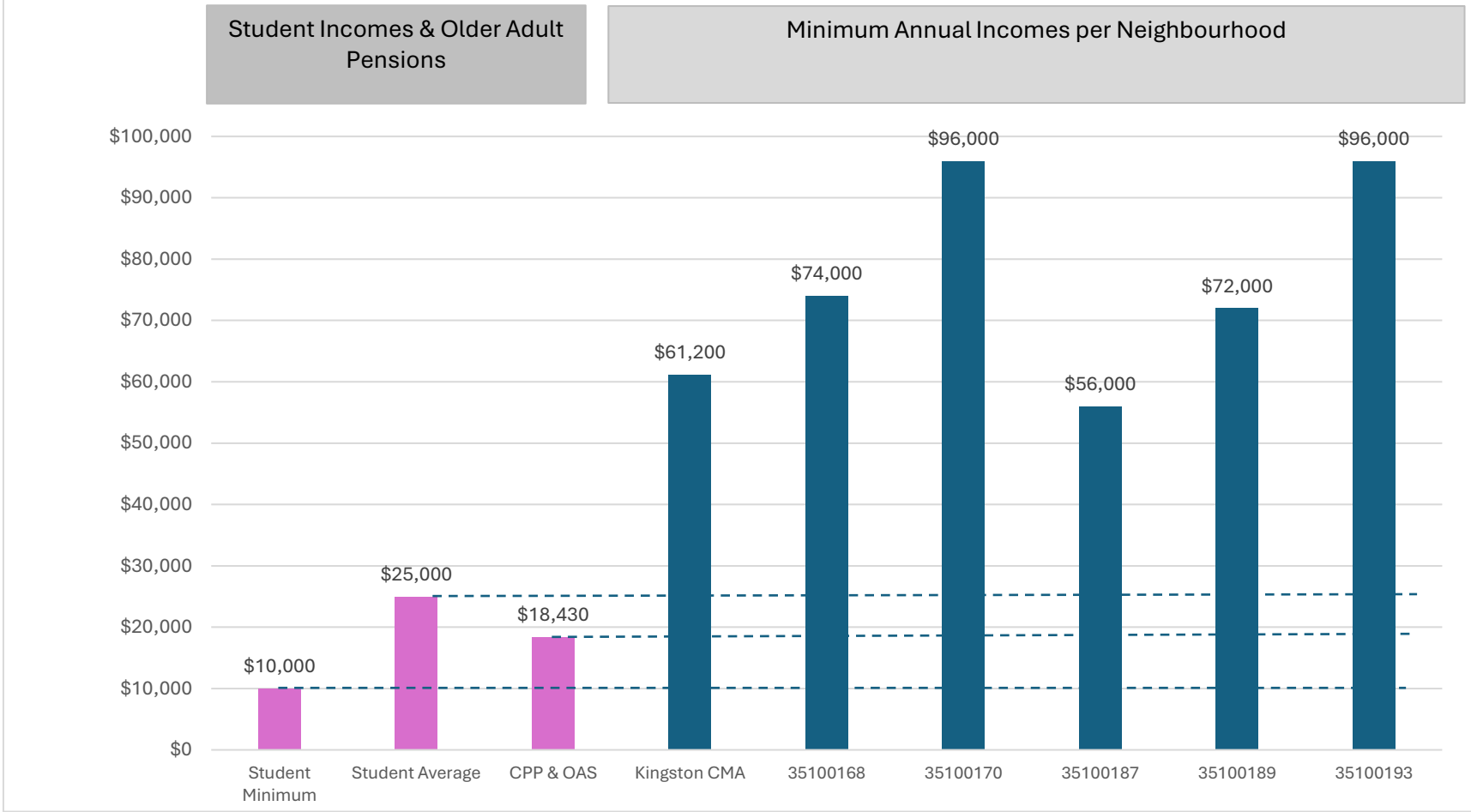


Figure 20: Minimum Rental Incomes for Students and Older Adults in hotspot neighbourhoods

### Hypothesis 3: Increasing student enrollment will correlate with decreasing vacancy rates in studentified neighborhoods in Kingston.

It is important to understand why studentification, and its impacts, are hard to measure. The neighbourhoods abutting Queen's campus represent a combined permanent population of 28,415 (Statistics Canada, 2021). However, as previously discussed, students are frequently omitted from census data due to their frequent migration and transient nature (Whitfield, 2022).

In **Table 10**, between 2001 and 2023, Queen's University's student population grew by 90%, compared to a 23% increase in the city's overall population. Concurrently, the housing market experienced significant strain, with vacancy rates declining from 1.4% to 0.8% and average home prices rising by 313%.

Without including student enrollment, a researcher may assume that the local population is responsible for declining vacancy rates and suggest adding new homes/ units to bring the market to a healthy level. However, in doing so, it would fail to capture the additional students and their housing requirements, thus failing to provide relief in the housing market. Including students in population forecasts is essential, as they have substantial impacts on infrastructure and housing demand (Watson & Associates Economists Ltd, 2019). Furthermore, Kingston's collective student population, including the Royal Military College and St. Lawrence College, is projected to grow by an additional 10,400 students by 2046 (Watson & Associates Economists Ltd, 2019).

Year	Student Enrollment (A)	Kingston Population (B)	Total Population (A) + (B)	Kingston Vacancy Rate (%)	Kingston Average Household Pricing
2001	18,223	152,774	170,997	1.40%	\$156,445
2002	18,923	154,925	173,848	0.90%	N/A
2003	20,034	156,551	176,585	2.00%	N/A
2004	20,391	157,513	177,904	2.40%	N/A
2005	20,783	157,866	178,649	2.40%	N/A
2006	20,565	158,117	178,682	2.30%	\$242,600
2007	20,708	158,664	179,372	3.20%	N/A
2008	21,715	159,838	181,553	1.30%	N/A
2009	22,601	161,375	183,976	1.30%	\$419,000
2010	24,028	162,913	186,941	1.00%	\$297,500
2011	24,343	164,492	188,835	1.00%	\$349,188
2012	24,042	165,914	189,956	1.60%	\$430,286
2013	24,777	166,936	191,713	2.30%	\$504,180
2014	25,997	168,258	194,255	1.90%	\$418,807
2015	26,780	169,643	196,423	2.70%	\$450,933
2016	27,149	171,431	198,580	2.70%	\$394,500
2017	28,272	173,862	202,134	0.70%	\$501,878
2018	29,609	173,635	203,244	0.60%	\$568,680
2019	30,386	176,279	206,665	2.00%	\$590,581
2020	31,785	178,343	210,128	3.10%	\$642,208
2021	33,719	179,707	213,426	1.40%	\$612,300
2022	33,842	184,196	218,038	1.20%	\$654,060
2023	34,604	188,267	222,871	0.80%	\$646,003
<b>Change 01-23 (#)</b>	<b>16,381</b>	<b>35,493</b>	<b>51,874</b>	<b>-0.6%</b>	<b>489,558</b>
<b>Change 01-23 (%)</b>	<b>90%</b>	<b>23%</b>	<b>30%</b>	<b>-43%</b>	<b>313%</b>

Source: Queens University Institutional Data, Fall-November 1 Headcount & Statistics Canada Population Report

Table 10: Historical Student Population of Queen’s University versus Kingston Average Household Pricing

The City of Kingston considers a vacancy rate of 3% to indicate a healthy rental market (City of Kingston, 2024). However, data from the city reveals that the ten-year average vacancy rate stands at 1.9%, with a significant decline to 0.8% in 2023 (Statistics Canada, 2024). This low vacancy rate suggests an unbalanced market where housing demand exceeds supply. According to the City, addressing the current rental housing shortage would require the addition of over 3,200 units, including 2,300 units for households earning less than \$30,000 annually, 400 units for homeless households, and 500 units for market-rate rentals (City of Kingston, 2024). These figures are used to assess whether the current housing supply is affordable and whether vacancy rates in specific census districts meet the City of Kingston’s standards.

The final affordability test examined the impact of increasing student enrollment on the rental market. Historical enrollment data from Queen’s University was analyzed to assess trends in student enrollment, population growth, and vacancy rates. From 2001 to 2023, student enrollment surged by 89%, while the permanent population of Kingston grew by only 23%. Over this period, vacancy rates fluctuated but generally remained below the 3.0% threshold, the standard for a healthy rental market. The analysis reveals that as student enrollment has increased, vacancy rates have generally declined, indicating an increasingly unbalanced rental market (**Figure 21**). Excluding the anomalies of 2007 and 2020—marked by the financial crisis and the COVID-19 pandemic—vacancy rates rarely exceeded 2.50%. In the student hotspot neighbourhoods, the most recent vacancy rate is just 1.0%, underscoring even greater disparities and the acute pressure on the housing market.

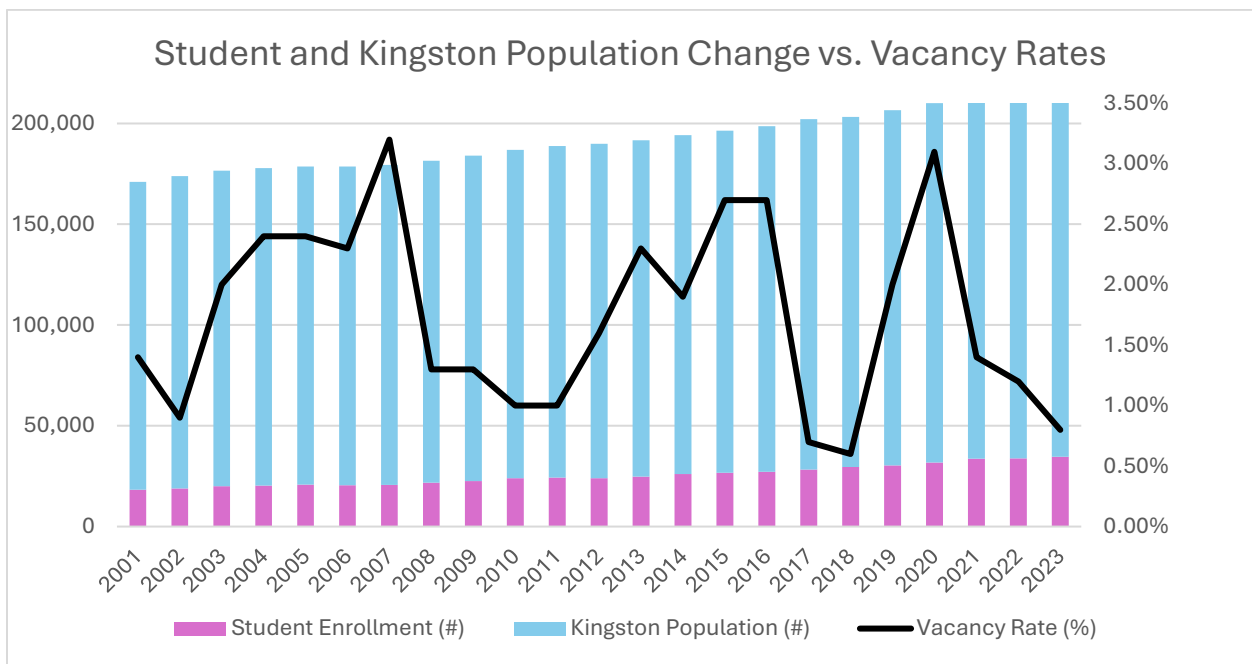


Figure 21: Population Growth versus Vacancy Rates

The findings from phase three illustrate a clear and troubling pattern: both the homeownership and rental markets in Kingston have become increasingly unaffordable for

students and older adults on fixed government incomes. Despite rising student enrollment and escalating demand, housing supply—whether for ownership or rental—has not kept pace, leading to a competitive and unsustainable market. For students, the combination of high property values and limited affordable rental options forces many to spend well beyond the recommended affordability thresholds, while older adults, particularly those on fixed incomes, face diminishing opportunities to either maintain homeownership or find affordable rentals. This dynamic not only jeopardizes housing security but also exacerbates financial pressures on both groups, deepening socio-economic inequalities. The continued intensification of the housing market, driven in part by the rising cost of real estate and the influx of students, creates a vicious cycle where affordability gaps widen, exacerbating housing challenges for vulnerable populations. Addressing these disparities is critical to fostering long-term stability and inclusivity within Kingston’s housing landscape.

## 4.4: Phase 4

The fourth phase of this research aimed to determine whether storefronts in Kingston's downtown adapted to changes in student enrollment over a ten-year period. This phase was crucial for assessing whether Kingston experienced a loss of "third places"—public spaces essential for the socialization and interaction of older adults. This phase has one research hypothesis:

**Hypothesis 1: Studentification is associated with the conversion of retail establishments, leading to a shift from resident-oriented businesses to student-focused amenities such as bars and fast-food outlets.**

A total of 195 storefronts were examined, and establishments were classified based on their address, name, store description, and type of operation. Addresses and store names were used to confirm whether an existing operation simply rebranded operations, moved or became vacant. Online store descriptions are used to determine the type of operation, such as clothing retailer, nightlife, cultural amenity etc. as defined in the Phase 4 methodology. This data was cross-referenced using both Google Earth and Google Maps. The same methodology was applied in 2009 and 2018 to assess any shifts in commercial and retail operations over time. The length of street investigated was determined based on the boundaries of the downtown core as outlined by the Downtown Kingston BIA in **Figure 22**.

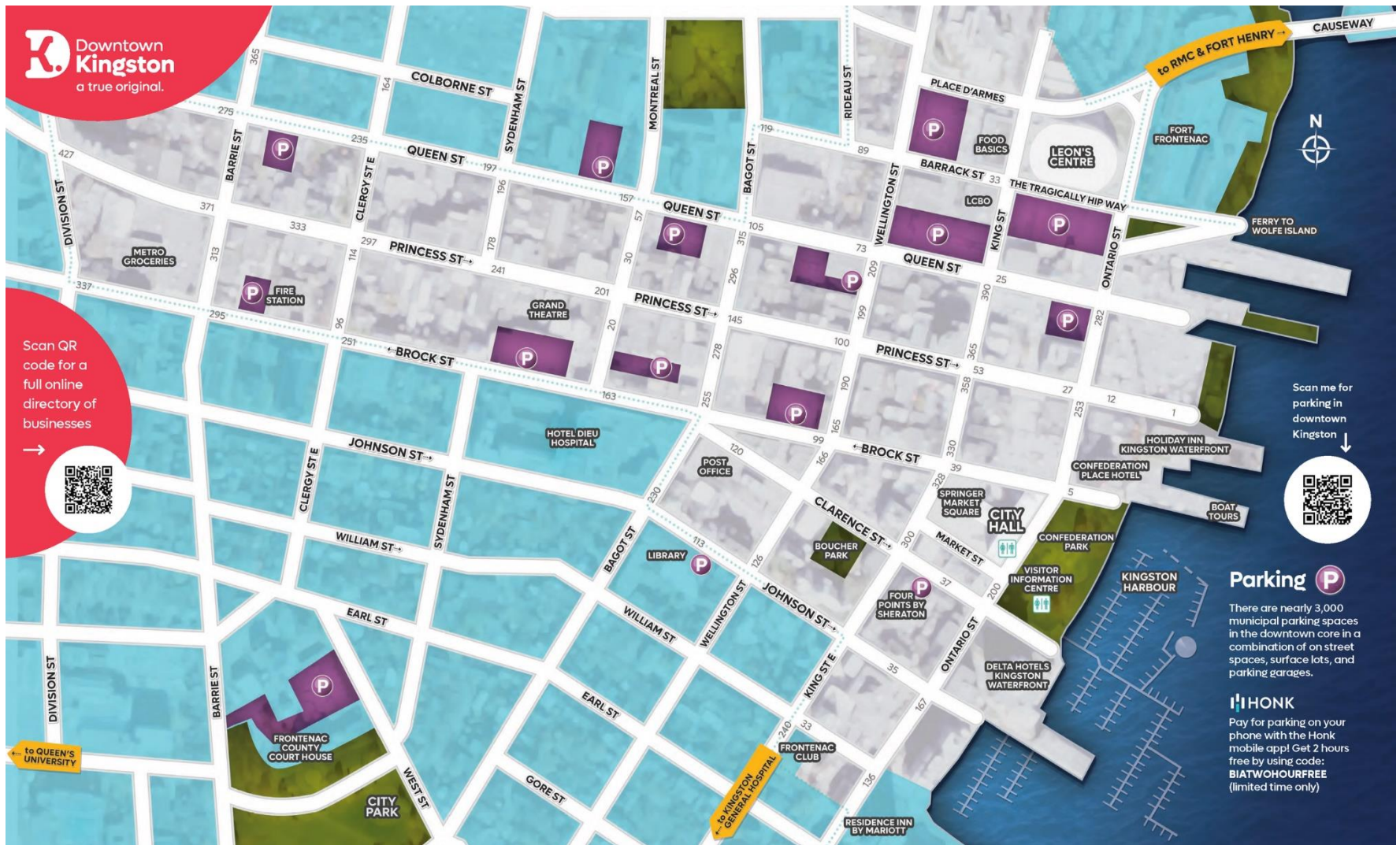


Figure 22: BIA Boundary Map, Downtown Kingston (n.d.)

As shown in **Figure 23**, there was a sizable increase in food establishments during the observation period. Fast-food operations surged by 35%, whereas traditional food operations, such as restaurants, increased 61% over the same period. Nightlife establishments also increased by 27%. At the same time, there was a marked decline in non-student retail stores catering to community residents, dropping by 20%. Specifically, clothing stores not marketed to young adults declined by 83%, and clothing stores marketed to students dropped by 44%. Non-food businesses along Princess Street experienced a 33% decline, with many transitioning to predominantly food-based operations.

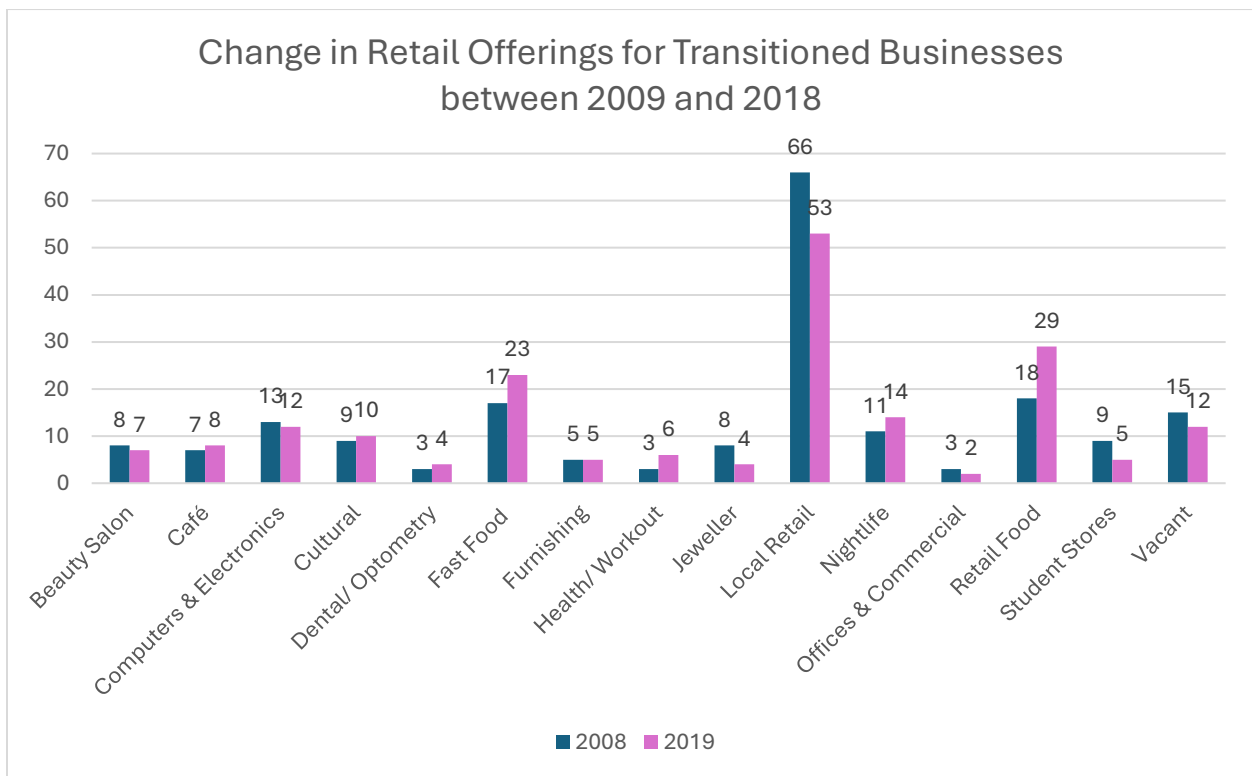


Figure 23: Change in Retail Operations between 2009 and 2018, Author Generated 2024

A comparison bar chart was used to visually represent the changes in operations (**Figure 24**). Of the 195 storefronts surveyed, 102 underwent changes between the two time periods. Twenty-six stores changed ownership but retained the same type of business, a pattern common in sectors like beauty salons or restaurants, where the layout and equipment are suited for similar

operations after lease transfers. As these stores maintained continuity in their services, they were excluded from the comparison analysis.

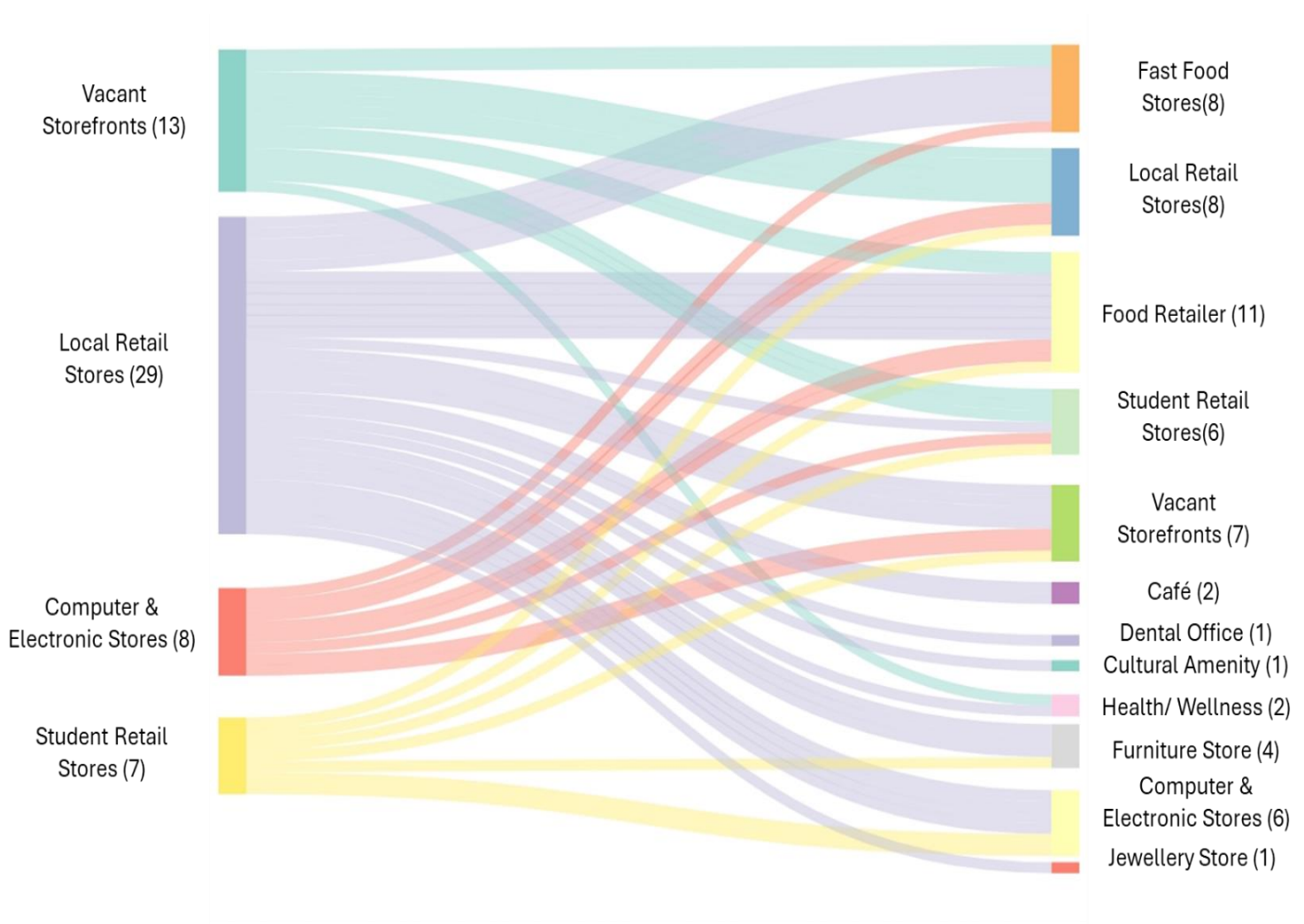


Figure 24: Comparison Bar Chart of Shifting Operations of Storefronts in Downtown Kingston between 2009 and 2018, Author Generated 2024.

**Figure 24** focuses in on the changes to four specific categories from the 2009 observations; vacant storefronts, student retail stores, non-student retail stores and computer & electronic stores. One significant finding from the comparison chart is the decline of local retailers during the study period. This was the largest category from the 2009 observations and had the most storefront activities under its definition. Many of these stores were replaced by businesses catering to students, including food outlets, electronic stores, or left vacant. Student-oriented businesses also

transitioned into food retail, local retail, or electronic shops. Interestingly, electronic stores saw a notable increase in storefronts during this time, reflecting the rising integration of technology in daily life. Although classified separately, electronics retailers—dominated by stores like Canada Computers—primarily serve the student market.

This analysis reveals three key findings. First, the growth of electronic stores highlights the shift in retail strategies to capitalize on the increasing role of technology in everyday life. Second, the reduction in local retail stores limits the opportunities for permanent residents to engage with the downtown core, with broader implications for transportation networks, urban vibrancy, and infrastructure. Third, the rise of food retail, particularly fast-food outlets, has resulted in fewer sit-down dining options, favouring ready-made or take-out services. Collectively, these trends contribute to a decline in "third places" for permanent residents and older adults, making the downtown less of a destination for social interaction and more of a transient space. This dynamic risks exacerbating social isolation, reducing community engagement, and intensifying tensions between students and other demographic groups.

The final query examined the distribution of storefronts on either side of Clergy Street, a recognized boundary for student activity as identified through interviews with students and representatives from the Kingston BIA. **Figures 25 and 26** illustrate the spatial distribution of storefronts in 2018, highlighting a notable shift in commercial offerings east of Clergy Street. Most strikingly, the presence of computer stores and nightlife establishments—key indicators of student-oriented retail—declines substantially, dropping from 15% and 17% west of Clergy Street to just 4% and 3% respectively. Similarly, fast-food establishments decrease from 27% of storefronts to 9%, while full-service restaurants and other retail food offerings increase, suggesting a shift toward a more permanent residential clientele or those with higher purchasing power. Additionally, there

is a marked rise in locally owned storefronts east of Clergy Street, reinforcing the idea that businesses in this area cater primarily to long-term residents rather than the transient student population. This area is also characterized by a higher proportion of tourist attractions such as City Hall and the waterfront, potentially changing the composition of storefronts in the area.

Despite this shift, student-oriented businesses are still present east of Clergy Street, albeit with a different clientele. This transition in commercial activity presents challenges for planners, local residents, and the Kingston BIA, as downtown Kingston appears to be evolving into two distinct commercial zones: one catering to students and another serving permanent residents. This spatial separation raises concerns about place attachment, as students may remain within familiar commercial areas, limiting their engagement with the broader city. Likewise, older adults and long-term residents may be less inclined to frequent areas dominated by student-oriented businesses, reducing opportunities for intergenerational interaction.

## DISTRIBUTION OF SERVICES WEST OF CLERGY STREET

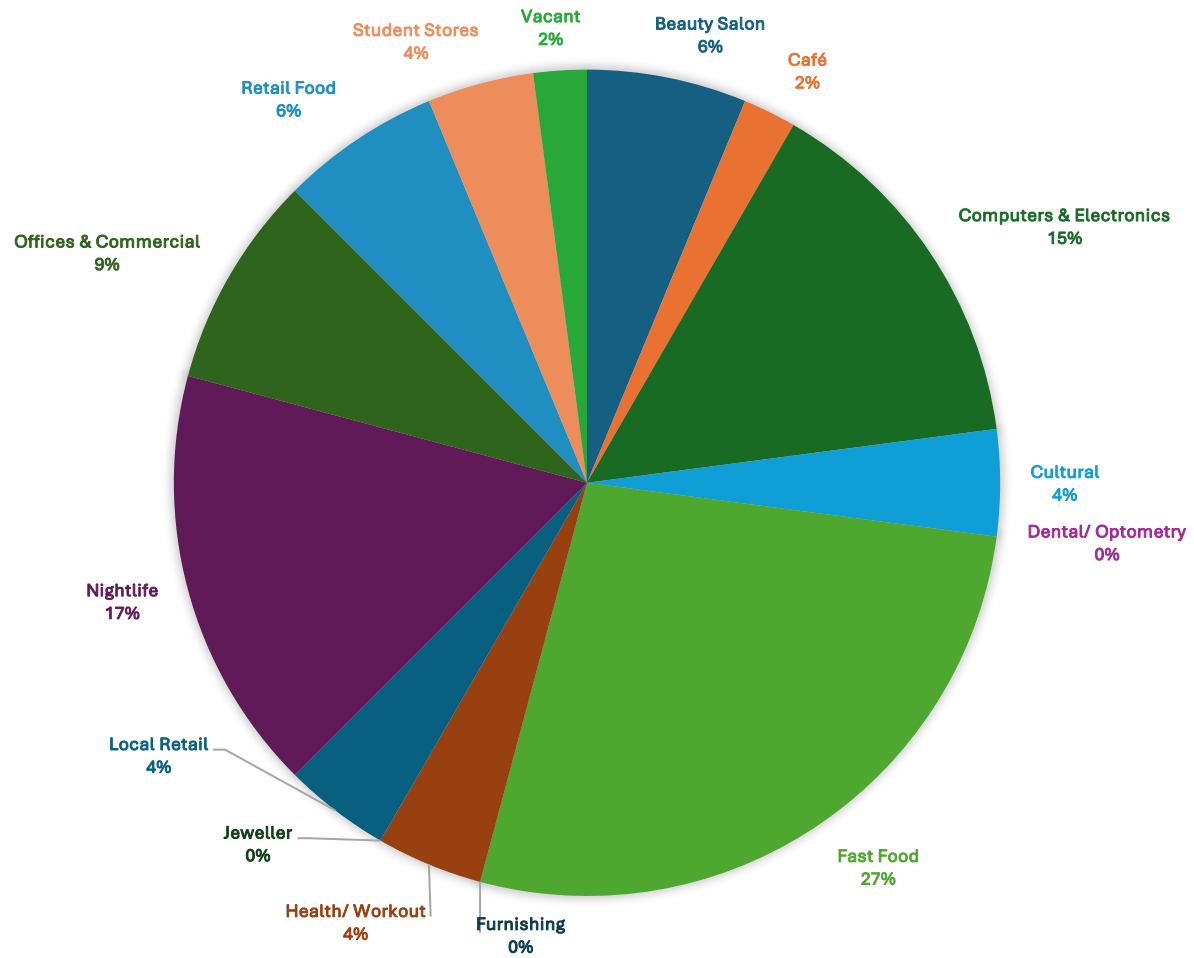


Figure 25: Composition of storefronts, 2018 Google Earth

## DISTRIBUTION OF SERVICES EAST OF CLERGY STREET

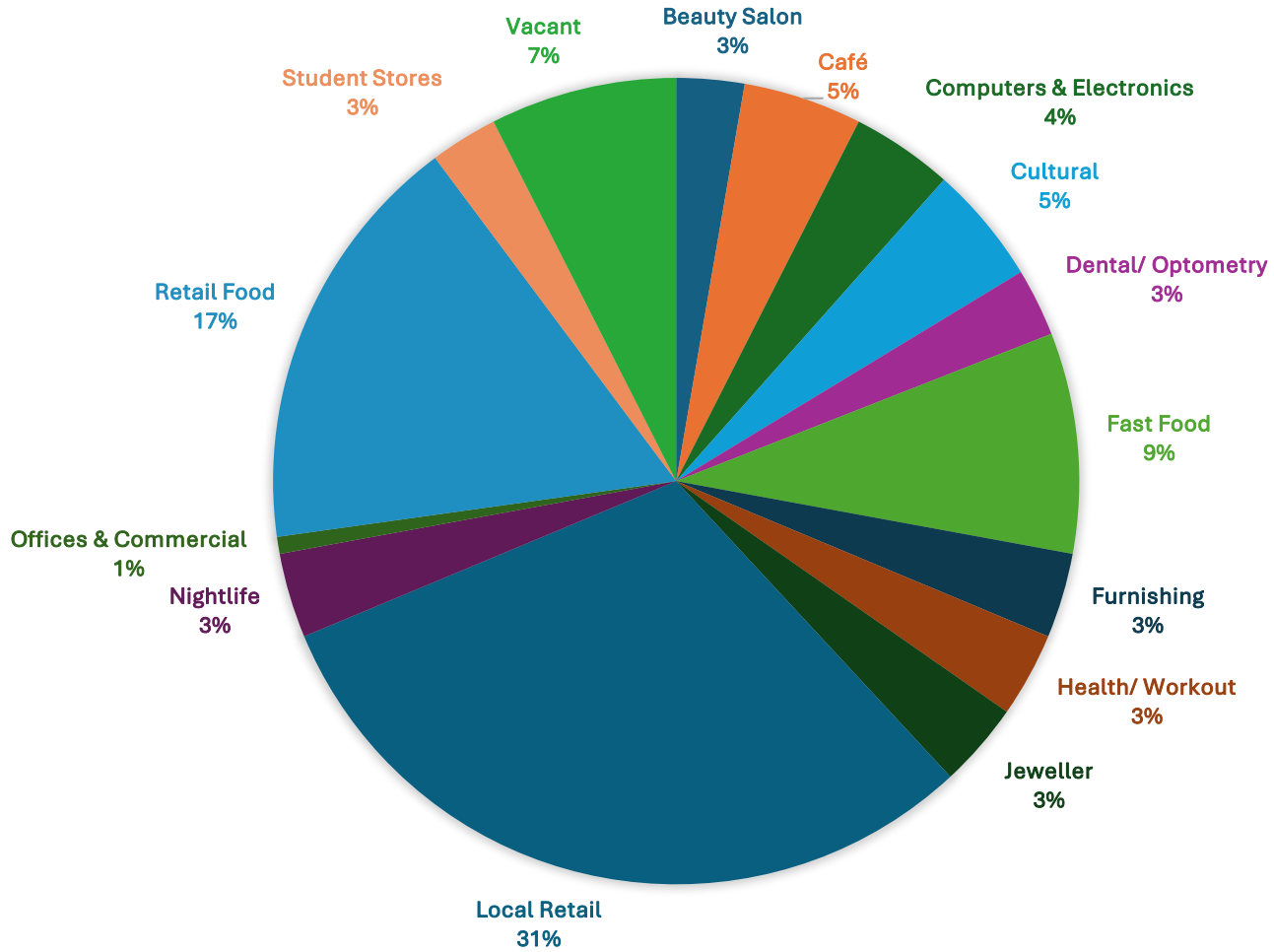


Figure 26: Composition of Storefronts, 2018 Google Earth

## 4.5: Phase 5

The final phase of this research involved nine semi-structured interviews conducted with students, older adults, and professionals to gain qualitative insights into the housing challenges and community dynamics in Kingston, Ontario. These interviews provided a nuanced understanding of how the intensifying housing market affects different demographic groups. Interviews ranged in length from 25 to 60 minutes in length, and key themes were identified to summarize the findings.

### Housing and Affordability

Students expressed growing concerns over rising rental costs, particularly the trade-off between proximity to Queen's University and affordability. Student 1 voiced "*I pay more in rent than I do in tuition.*" and Student 2 aptly remarked: "*Student housing is gross*". Beyond cost, all students highlighted dissatisfaction with housing quality, citing issues such as poor maintenance, cleanliness, and landlords neglecting structural repairs. This frustration led to decreased incentive for students to care for their living spaces, reinforcing cycles of disrepair. Municipal planners acknowledged these challenges but emphasized the limitations of current enforcement tools, noting that meaningful regulatory changes, such as a landlord registry, would require citywide implementation.

Similarly, older adults shared these struggles, particularly with aging in place amid rising housing costs and limited rental availability. Those on fixed pensions or lacking strong social networks faced the greatest challenges, frustrated by long waitlists to live in urban dense environments downtown. One participant reflected:

*“The vacancy rate here is incredibly low. We lucked out in finding a spot but we also come from a place of privilege. But looking at the market it does surprise me that prices are as high as they are here. Its quite a shock. Its obvious to me that there has been an outsized increase in rents. We are aware of the massive increase in demand so we obviously have a supply problem.”* (Older Adult 1)

Notably, none of the older adults interviewed lived in or near the student hotspot neighbourhoods. While they expressed sympathy for the challenges faced by families and long-term residents in these areas, none had firsthand experience with the impacts of studentification. Instead, most older adults resided in apartment buildings downtown, where they prioritized walkability, and access to amenities. This geographic separation further reinforced the divide between students and older residents, limiting their direct interactions and shared experiences.

## The Shift to PBSA

Between the deteriorating conditions of housing in the traditional student neighbourhood, the identified hotspots, and increasing rental costs, many students sought alternative accommodations in newly developed purpose-built student housing (PBSA). While more expensive, these units offered modern amenities and better upkeep. Notably, all students interviewed either lived in PBSA or had moved beyond traditional student areas. This shift suggests that single-detached homes in older student neighbourhoods are primarily occupied by undergraduates, while graduate students and senior undergraduates opt for higher-quality housing in quieter areas.

Interestingly, students living outside the student district reported stronger relationships with their neighbours. One student reflected on the informal community connections they built:

*“I was lucky to have older neighbours who were retired professors. And they introduced me to another neighbour who was the local handyman. So they adopted me in a weird way and helped me settle in. Same with the florist. He sometimes gave me free flowers when I asked about his*

*shipments and spent the time chatting. But outside of those occurrences there aren't any formal channels to connect with the community or volunteer your time.” (Student 3).*

This sentiment was echoed by other students, who, through their daily routines such as walking to school, developed weak social ties with local residents.

## Retail & Downtown Services

Both students and older adults frequently visited Kingston's downtown, though their engagement differed. Students typically went downtown two to three times per week for essential services, shopping and nightlife. Conversely, older adults frequented downtown for essential services but with a larger focus on socializing. This in turn led to older adults building relationships with local businesses, often knowing shopkeepers by name. The extent to which students explored downtown appeared to correlate with age, as younger students were less likely to venture beyond campus, a phenomenon supported by literature on the self-sufficiency of university campuses (Bruning et al., 2006).

Despite the frequency of trips downtown, students felt excluded from certain downtown stores. Older, smaller businesses were cited as particularly exclusionary, though interviews with BIA members stressed that this was simple marketing behaviour and good business practice to have an identified and specific target audience. Nevertheless, students noted:

*“If you go into some of the older or small business store, they couldn't care less about the students and are there for the tourism brings in or the older crowds. You can tell by the people working there, sometimes I walk into stores and you don't even get greeted. You don't feel like it's a store for you.” (Student 1)*

*“I don’t really see students interacting with members of the community very often. I also feel like there are places downtown that are mainly for students while there are other places mainly frequented by non-students” (Student 2)*

Older adults, on the other hand, were primarily concerned with gaps in retail offerings, particularly the absence of a hardware store and limited retail options for men. Despite any misgivings about students, older adults generally recognized the positive economic impact of the student population, particularly in contributing to the diversity of storefronts and food establishments.

The Kingston BIA highlighted concerns about the growing presence of fast-food franchise in vacant storefronts, mirroring the findings from Phase 4 indicating the rise in these establishments. One BIA representative explained: *“When storefronts become vacant, a franchise will move in, and it’s usually a cheap food franchise” (BIA 1).*

With enough economies of scale to afford a brick-and-mortar business storefront downtown, these franchises may be edging out smaller entrepreneurs from entering the market. While Kingston’s BIA has a strong working relationship with the City, unlike the adversarial dynamic in some municipalities (Durnan, 2020; Newcombe, 2024), there remain ongoing challenges in maintaining a diverse and locally driven retail landscape.

## Sense of Community

A key theme from student interviews was a perceived sense of isolation from the local community. Many students felt unwelcome, reinforcing a divide between temporary and permanent residents:

*“Students know where they do and do not belong” (Student 1).*

*“Most students live in a student bubble”* (Student 4).

*“Residents don’t want us here”* (Student 3).

Conversely, older adults described having strong community ties. Interestingly, many had direct connections to Queen’s University, whether as former employees, alumni, or employers of students. Those who ran businesses saw students as valuable contributors to the local economy and workforce. The overall sentiment indicated a desire for a mutually beneficial relationship, where businesses could collaborate with students in ways that supported both academic and community needs. As one participant explained, these partnerships created a “win-win” dynamic where research initiatives, student experience, and community interests aligned benefitting all parties involved.

This acceptance of the student presence aligns with findings by Woldoff and Weis (2018), who suggest that older adults with previous ties to universities are more likely to normalize the challenges associated with studentification. While older adults acknowledged wanting students to treat the city with respect, the benefits of the population outweighed the negatives. Planners and interviews with BIA staff echoed this sentiment, that students were largely seen as a positive addition to the city.

However, despite these strong social connections, older adults and business owners acknowledged that external challenges were straining the fabric of the community. Issues such as rising housing costs and shifting demographics were shaping the local landscape. More pressing, however, were concerns about broader social issues affecting downtown, particularly the increasing visibility of homelessness and the opioid crisis.

A growing concern among older adults and the BIA was the increasing visibility of homelessness and the opioid crisis downtown. One participant remarked:

*“I rarely go for walks now because of the homeless an opioid crisis. we used to go for walks down princess street in the summer and I rarely do that now. I’ve definitely curtailed that because of the drug users and homeless guys. I don’t blame these people for their predicaments, it’s a collective problem. But its something we have to deal with now.”* (Older Adult 2)

Interestingly, older adults felt that students’ presence in downtown spaces increased their sense of safety citing students as “diluting the homeless presence” (Older Adult 1). Male students in particular were said to be deterrents, adding to a positive experience downtown. This finding challenges much of the existing literature on studentification (Kenyon, 1997; Smith & Holt, 2007; Fox, 2019; Bruning et al., 2006), which often frames students as contributing to social fragmentation and isolation.

### Third spaces

While students felt there were adequate storefronts catering to them, older adults raised concerns about the lack of accessible social spaces. One participant reflected:

*“I do appreciate the new benches and foliage so that’s nice and creating space for people to stop and rest.....but again, there are so few free democratic spaces. We used to have late night cafes where people could congregate .... You could gather together and talk. I’m sad that that seems to be lost.”* (Older Adult 1)

Kingston’s lack of free, democratic spaces for community interaction remains an ongoing challenge. Outside of Market Square, few environments encourage organic interactions between students and permanent residents.

## Town and Gown Relations

The interviews highlighted shared frustrations with housing affordability but also revealed distinct ways students and older adults navigate Kingston's housing landscape. Both groups questioned whom new housing developments were meant to serve, as affordability remained out of reach for both transient and permanent residents.

Municipal planners emphasized the difficulty of balancing housing demand with infrastructure constraints, all while avoiding "people zoning"—a discriminatory practice of restricting certain groups from particular areas. They also noted a need for better public education, as many residents directed complaints to planning departments instead of bylaw enforcement agencies.

The Kingston BIA stressed the ongoing challenge of maintaining institutional memory in student-government relations. Each new generation of students requires re-engagement, and staff turnover within the BIA and Queen's administration further disrupts continuity. While this does not relate directly to the relationship between students and older adults, it perpetuates the cycle of student isolation, removing them from the downtown and from establishing a sense of place in the community. This in turn can contribute to the negative effects such as housing deterioration and noise complaints.

Looking forward, all participants highlighted the need for improved public spaces, stronger landlord regulations, and alternative housing models to improve affordability. More inclusive planning approaches, alongside partnerships between Queen's University, the City of Kingston, and the BIA, could help foster a greater sense of place and belonging for students and permanent residents alike

## Chapter 6: Recommendations & Conclusion

This thesis has explored the complex and multifaceted impacts of studentification in Kingston, focusing on its effects on housing affordability, neighbourhood composition, and commercial transformations. Through a mixed-methods approach that combined spatial analysis, statistical modeling, and qualitative interviews, the research has provided new insights into how student populations shape urban landscapes. The findings reinforce existing literature on studentification while introducing new perspectives on intergenerational dynamics, commercial shifts, and the challenges of maintaining balanced and inclusive neighbourhoods.

As cities across Canada experience increasing pressures from student housing demand and real estate investment, understanding the broader consequences of studentification is crucial for policymakers, planners, and community stakeholders. This study not only confirms trends observed in other student-dense cities but also identifies emerging patterns unique to Kingston, particularly in the relationship between student density, commercial transitions, and the experiences of older adults. The following sections revisit the key hypotheses and findings, discussing their implications for urban planning and policy initiatives.

**Determine the relationship between studentification and the socioeconomic and demographic structure of neighbourhoods.**

Hypothesis 1: Neighbourhoods abutting Queen's University will have a higher percentage of unoccupied dwellings.

Hypothesis 2: Dwellings in studentified neighbourhoods will have a higher average monetary value in comparison to average dwelling values across Kingston.

Hypothesis 3: A higher percentage of students in a neighbourhood will have an inverse relationship to total income per household.

Hypothesis 4: A higher percentage of students in a neighbourhood will have an inverse relationship to the proportion of older adults residing in the same area.

Hypothesis 5: A higher percentage of students in a neighbourhood will have an inverse relationship on housing condition and repair status.

The findings from this thesis confirm Hypothesis 1, demonstrating that students overwhelmingly congregate in neighbourhoods adjacent to Queen's University, forming well-defined "hotspots." This aligns with previous research by Hubbard (2008) who identified similar clustering patterns in other university towns, reinforcing the concept that studentification is a spatially concentrated phenomenon.

Second, the data reveal that dwellings in these hotspot neighbourhoods have increased at a higher rate than in other dissemination areas across Kingston. This aligns with Kinton et al. (2018) and Smith (2005) who argue that studentification leads to intensified housing demand in university-adjacent areas. The escalating competition for housing in these neighbourhoods presents challenges for students attempting to secure rental accommodations and for long-term residents who face affordability barriers when entering the housing market (Slater, 2017).

Third, this thesis identifies an inverse relationship between hotspot neighbourhoods and total household income, supporting previous findings that student-dominated areas tend to have lower reported household incomes due to the temporary employment status of students (Cortes, 2004). Additionally, this study highlights a correlation between unoccupied dwellings and demographic variables such as the proportion of older adults, suggesting inverse relationship

between the two variables. This thesis also suggests that properties in hotspot areas are more likely to be held as investment units to take advantage of the rent gap, as suggested by Munro et al. (2012) in their study on student rental markets.

Similarly, the data indicate that student-dense neighbourhoods contain a lower percentage of older adults compared to other areas in Kingston. While this trend aligns with broader demographic shifts observed in university towns (Zasina, 2021), it is likely a long-standing pattern rather than a sudden transformation, making it difficult to establish statistical significance or predictive power. However, as Bromley (2006), Pickren (2012), Kinton et al. (2016) and Gu (2019) argue, the displacement of older adults from these areas can have significant implications for social cohesion and intergenerational interactions.

Finally, the findings reveal a negative relationship between housing quality and student density, reinforcing previous literature that neighbourhoods experiencing studentification often exhibit higher levels of housing in disrepair (Cortes, 2004; Miessner, 2021). This trend is well-documented in studies on the physical impacts of studentification, where high tenant turnover, absentee landlords, and the short-term nature of student rentals contribute to declining property maintenance (Johnson et al., 2009). This persistent issue highlights the need for targeted policy interventions to improve housing conditions in student-dense areas while balancing affordability concerns.

**Estimate the impacts of studentification on residential stability and affordability for older adults.**

Hypothesis 1: Investors actively entering the housing market as student enrollment grows.

Hypothesis 2: Homes marketed for sale to student-investors, not owner-occupiers, will be spatially concentrated around Queen’s University.

Hypothesis 3: Homes marketed for sale to student-investors will sell for a higher value than homes marketed for sale to owner-occupiers.

Hypothesis 4: Housing in studentified neighbourhoods will not meet Canadian affordability standards for ownership (for-sale) properties.

Hypothesis 5: Both older adults and students will face challenges affording average rental prices in studentified neighbourhoods.

Hypothesis 6: Increasing student enrollment will correlate with decreasing vacancy rates in studentified neighbourhoods in Kingston.

The second objective of this thesis—defining the relationship between stability and affordability for older adults in studentified neighbourhoods—proved more challenging to quantify. However, the findings reinforce the growing prevalence of housing being marketed as student investment properties, with these listings increasing between 2009 and 2023. This aligns with Revington and August (2020), who discuss the financialization of student housing and its impact on local real estate markets. The trend suggests that housing transactions in these areas are increasingly driven by investment motives rather than long-term residency, reinforcing the commodification of student rental properties (Revington, 2020).

While the study confirmed a higher spatial concentration of investment properties surrounding Queen’s University, supporting findings by Sage, Smith, and Hubbard (2012a) on the capitalization of student demand, the price disparity between student investment properties and non-investment properties within hotspot areas was smaller than anticipated. This neither fully

proves nor disproves the hypothesis that student investment properties command significantly higher prices. However, the findings suggest that the broader housing market trends in Kingston—including population growth—may be influencing price appreciation across the city, rather than investment properties alone driving price inflation (Kinton, 2018).

To assess affordability, the research distinguished between ownership and rental properties. This distinction is crucial, as it accounts for both older adults relocating to Kingston and those seeking rental accommodations in desirable areas. The data revealed that, based on the minimum and average salaries of Kingston's top industries, hotspot neighbourhoods are largely unaffordable to permanent residents, echoing findings from Allinson (2006) on affordability barriers created by studentification. This raises concerns not only for older adults hoping to reside in these areas but also for students who face increasing financial burdens as housing costs rise (Zasina, 2020).

For renters, the analysis confirmed that the annual incomes of students and older adults on fixed incomes would not meet affordability standards in studentified neighbourhoods. This supports research by Chatterton (2010) and Rugg et al. (2004), which found that studentification can erode affordability for multiple demographic groups. However, students may mitigate affordability challenges by living with multiple roommates, whereas older adults are less likely to share accommodations, potentially forcing them to relocate to less desirable areas. This reinforces patterns of spatial isolation, as student-dominated neighbourhoods become increasingly segregated from other demographic groups (Hubbard, 2008).

The findings are further supplemented by the vacancy rate analysis, which highlights an unbalanced market in Kingston's studentified zones. The presence of persistently low vacancy rates in these neighbourhoods exacerbates affordability issues, contributing to the cyclical nature of housing investment and demographic shifts (Kinton, 2018). Together, these findings indicate

that housing in hotspot neighbourhoods is largely unaffordable for both students and older adults, reinforcing concerns about the long-term social and economic sustainability of studentified neighbourhoods.

## Determine the linkages between studentification and the conversion of retail establishments in densely populated student areas

Hypothesis 1: Studentification is associated with the conversion of retail establishments, leading to a shift from resident-oriented businesses to student-focused amenities such as bars and fast-food outlets.

The final analysis reveals a clear trend in the conversion of storefronts on the 1-kilometre stretch of Kingston's downtown, demonstrating a shift toward student-oriented businesses. This aligns with findings from Hubbard (2008) and Sage, Smith, and Hubbard (2012b), who note that studentification often results in commercial adaptation, with local businesses evolving to cater to the dominant demographic. The most notable changes in Kingston include the rise of nightlife establishments, cafés, fast food outlets, and computer and electronics stores—sectors that align with student consumption patterns (Chatterton, 2010). Interviews with the Kingston Business Improvement Area (BIA) further confirm this transformation, particularly highlighting the growing presence of fast-food retailers in recent years.

The analysis of vacant storefronts further supports this trend, as empty retail spaces are overwhelmingly repurposed into student-focused businesses. This reflects broader studentification patterns observed in cities with high student populations, where commercial landscapes shift in response to seasonal and short-term demand (Hubbard, 2009). The dominance of fast-food operations and student-oriented retail in vacant storefronts suggests that landlords and business

owners are prioritizing enterprises with a high turnover of young consumers, rather than businesses that cater to long-term residents.

Another aspect of this thesis was testing the composition of storefronts on either side of Clergy Street, an informal but widely recognized boundary between student-dominated spaces and areas catering more to Kingston's permanent residents. This division was noted in interviews with both students and the BIA. The analysis reveals a striking contrast in the retail landscape: to the west of Clergy Street, the dominant commercial establishments include fast food restaurants, nightlife venues, and electronics stores—businesses that directly cater to students and their spending habits. This supports Minton (2002), who argues that studentification often creates spatially concentrated zones of youth-oriented commerce, displacing businesses served a broader demographic.

Conversely, storefront composition east of Clergy Street is more balanced, with 31% of businesses explicitly targeting permanent residents. While nightlife establishments and fast-food eateries remain present, their share is substantially lower than on the west side. Instead, there is a higher proportion of retail food operations (restaurants), indicating a demand for sit-down dining experiences rather than quick-service eateries. This shift suggests an attempt to cater to both local residents and the student population with more disposable income, aligning with research from (Moss, n.d.), which highlights the growing importance of coffee shops and restaurants for students.

Overall, these findings highlight a spatial divide within Kingston's downtown commercial core. The presence of student-oriented businesses west of Clergy Street reinforces the perception of an entertainment and convenience district, while the east side maintains a more traditional retail mix that serves a broader population. This divergence presents both opportunities and challenges

for planners and business owners, as it raises questions about the long-term sustainability of a commercial landscape that heavily caters to one transient demographic group.

## Moving Forward

This thesis has demonstrated the complex relationship between studentification, demographic change, and the financialization of housing as an investment vehicle. Affordability emerged as a key concern for all groups, regardless of income or age, highlighting common ground for connection. While universities operate as separate entities, they can no longer afford to remain isolated. To foster stronger relationships and work toward sustainable solutions, four key recommendations are proposed.

### Strengthen Communication Channels

A recurring challenge in town-gown relations is the lack of effective communication. Both the City of Kingston and the Kingston Downtown BIA cited difficulties in engaging with Queen's University administration, as well as limited avenues for connecting meaningfully with students due to the annual turnover of student government representatives.

To address this, a student outreach position could be established with a two-year term, providing continuity for external organizations to build relationships. Additionally, orientation week events should include booths from the City of Kingston, the Kingston BIA, and other relevant groups to introduce students to community resources early in their university experience.

Another innovative approach could be a "Know Your Neighbours" challenge, encouraging students to engage with their neighbourhoods as shared spaces rather than transient accommodations. If structured effectively, such an initiative could foster weak social ties between

students and permanent residents, promoting a greater sense of responsibility and community cohesion.

## Regulated Housing

Students consistently expressed frustration with poor housing conditions and negligent landlords, while older adults also voiced concerns about property maintenance in student-dominated neighbourhoods. If a citywide landlord registry is not feasible, Queen's University and the City of Kingston could provide students with educational materials on tenant rights, complaint processes, and building code enforcement. While this would not resolve the issue of housing being treated as an investment commodity, it would help hold landlords accountable for maintaining adequate living conditions.

## Intergenerational Living

To bridge generational divides, both rental and ownership-based housing models could be adapted to support intergenerational living arrangements. Kingston's zoning allows for co-living in many student-dominated neighbourhoods, presenting an opportunity for older homeowners to rent to students, benefiting financially while also fostering social connections.

Queen's University could formalize this concept by developing a student-older adult rental platform, facilitating matches between students and older adults while ensuring oversight and support. This approach was positively received by both student and older adult interviewees, with potential benefits including mentorship, cultural exchange, and economic relief.

## Place Activation

Enhancing the vibrancy of underutilized public spaces downtown could help bridge the gap between students and permanent residents. This could include place activation initiatives, such as transforming vacant spaces with public art, interactive installations, and seasonal programming. The Kingston BIA has already taken steps in this direction, but further collaboration with the City of Kingston and Queen's University could expand these efforts. Additionally, incorporating immersive experiences, such as virtual reality exhibits showcasing Kingston's history, could foster a sense of place for students while deepening their connection to the broader community.

## Concluding Remarks

Studentification is not a new phenomenon, nor is it unique to Kingston. However, its impacts can be managed through proactive engagement and creative solutions. Despite a history of strained town-gown relations, the future does not need to mirror the past. By strengthening communication channels, enhancing housing regulation, encouraging intergenerational living, and revitalizing public spaces, Kingston has the potential to transform studentification into a force for inclusive and sustainable community growth. Through these efforts, students and permanent residents alike can contribute to a more cohesive, dynamic, and thriving city.

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# Appendices

# Ethics Approval



## Queen's University General Research Ethics Board (GREB)

### RE: GREB Initial Ethics Approval

September 11, 2024

Mrs. Savage  
Faculty of Arts and Science\Geography and Planning\Unit REB Geography and Planning  
Queen's University

TRAQ #: 6041996

Study Title: "Studentification Unveiled: Navigating Socioeconomic Shifts, Housing Pressures, and Community Cohesion in Aging Communities"

Co-Investigator: Dr. Maxwell Hartt

Review Type: Delegated

Date of Full Board Meeting: N/A

Date Ethics Approval Issued: September 11, 2024

Date of Expiry of Ethics Approval: September 11, 2025

Dear Mrs. Savage

Thank you for submitting the above referenced study to The Queen's University General Research Ethics Board (GREB). GREB has reviewed the study and granted initial ethics approval for this study as of the date noted above.

#### Documents Approved:

Document Name	Comments	Version Date
Letter of Information	LOI with REO comments - clean	2024/09/08
Recruitment Letter/Email/Notice/Poster	Email Script	2024/08/16
Protocol	Verbal Consent Log	2024/08/16
Protocol	Master linking log	2024/08/16
Interview Guide	Interview guide (3 of 3)	2024/08/16
Interview Guide	Interview guide (2 of 3)	2024/08/16
Interview Guide	Interview guide (1 of 3)	2024/08/16
Consent Form	Consent form (clean)	2024/08/16
Recruitment Letter/Email/Notice/Poster	Letter of Invitation (clean)	2024/08/16

#### Documents Acknowledged:

Document Name	Comments	Version Date
Supervisor's letter/ e-mail	Supervisor Approval	2024/08/16

No deviations from, or changes to, the protocol should be initiated without prior written approval from GREB,

except when necessary to eliminate immediate hazard(s) to study participants.

On behalf of the GREB, I wish you success in your research.

Sincerely,

A handwritten signature in black ink that reads "Jacob Brower". The signature is written in a cursive style with a large initial 'J'.

Jacob Brower  
Chair, General Research Ethics Board (GREB)  
Associate Professor and Distinguished Faculty Fellow of Marketing,  
Academic Co-Director (Business), Master of Digital Product Management  
Smith School of Business  
[chair\\_greb@queensu.ca](mailto:chair_greb@queensu.ca)  
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Kingston, ON K7L 3N6

GREB operates in compliance with, and is constituted in accordance with, the requirements of the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS 2); the International Conference on Harmonisation Good Clinical Practice Consolidated Guideline (ICH GCP); Part C, Division 5 of the Food and Drug Regulations; Part 4 of the Natural Health Products Regulations; Part 3 of the Medical Devices Regulations and the provisions of the Ontario Personal Health Information Protection Act (PHIPA 2004) and its applicable regulations. Federalwide Assurance Number: FWA#: 00004184, IRB#: IRB00003062. GREB members involved in the research project do not participate in the review, discussion, or decision.

# Letter of Information



## **Letter of Information**

**Study Name:** Studentification Unveiled: Navigating Socioeconomic Shifts, Housing Pressures, and Community Cohesion in Aging Communities

### **Principal Investigator (PI):**

Caley Savage

Master of Planning (MPI) Candidate, Department of Geography and Planning

Queen's University, Kingston, Ontario

Phone: (416) 258-5236

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### **Research Supervisor (RS):**

Dr. Maxwell Hartt

Associate Professor, Department of Geography and Planning

Queen's University, Kingston, Ontario

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Funded by Social Sciences and Humanities Research Council 2024 Graduate Scholarship

### **What is this letter about?**

You are invited to take part in a Master's Research Study. Participation is voluntary, and you can decline to participate in any aspect of the research without penalty. This letter will explain what the study is about and any potential risks and benefits. It will also describe your rights as a participant. Please contact the PI with any questions or concerns before giving consent. The Consent Form is attached to this letter.

### **What is this study about?**

The purpose of this study is to explore studentification and its impacts on the socioeconomic and demographic structure of neighbourhoods in Kingston, Ontario. Studentification is a phenomenon in which a growing student population moves into a traditionally non-student neighborhood, creating social, cultural and environmental changes. The primary goal is to define the impacts of

Version Date: September 8, 2024

studentification on older adults, with a particular emphasis on assessing displacement pressures and determining the role of commercial businesses for aging in place. This research is especially relevant in Kingston where there is a large older adult and student population.

**NOTE REGARDING CONSENT:** If you wish to take part in the study, you will be asked to give consent prior to taking part in the interviews.

### **1. Responsibilities as a Participant**

#### **What does participation involve?**

With your consent, you will take part in an interview with the Principal Investigator. The interview will take about one hour to complete and will be recorded. Interviews will take place on Queen's University campus, at places of work or at a mutually beneficial location determined by the principal investigator and interviewee. The PI will ask a series of questions related to urban planning, housing and studentification in Kingston. In-person interviews will be audio-recorded and transcribed. All audio recordings will be destroyed by the PI after transcription is complete. For virtual interviews, participants will be asked to turn off their video camera before recording begins. All recordings will be destroyed by the PI after transcription is complete.

### **2. Your Rights as a Participant**

#### **Is your participation voluntary?**

Yes. You can withdraw from the study at any time. Please contact the PI ([caley.savage@queensu.ca](mailto:caley.savage@queensu.ca)) if you wish to do so. There will be no penalty for declining or withdrawing your consent. The withdrawal of anonymized data from the published report will not be possible. The deadline for data withdrawal is 05/31/2025.

#### **Can you decide not to answer a question?**

Yes. If there is a question you do not want to answer, you may say, "I don't want to answer that question".

#### **Will the study help you or others?**

We do not know if being in the study will help you directly. However, the results of this study will be used to develop a set of policy recommendations to help guide future development in Kingston. The findings of the research will be distributed to relevant conferences, peer-reviewed journals and practitioner magazines.

#### **What are the risks associated with the study?**

The interviews will focus on the relationship between students and older adults, housing pressures and the role of the downtown core as a tool to reduce social isolation for older adults. We do not expect that the questions will be upsetting. If, at any point during the interview, you do not feel

comfortable, please notify the PI and they will ensure you have access to the right resources. If there is a question you do not want to answer, you may say, “I don’t want to answer that question”.

Given the small number of individuals who hold similar positions in the City of Kingston, Student Government and Seniors Associations and that the case study city will be named, there is a small risk of being identified. This risk will be mitigated by anonymizing data and storing it within Queen’s University’s OneDrive.

**What information will I need to provide?**

Participants will be asked to provide the PI with basic demographic information such as name, email address, age, gender, years living in Kingston and location of highest education. Name and email address will be used to contact participants throughout the course of the study. The research team will be taking the necessary steps to safeguard the personal and sensitive information of participants. Outside of the data collection in the study (for example in research papers, conferences, etc.) you will only be identified by an interview group (e.g., Planner #1, Student #2).

**Will my information be confidential?**

Yes. Interview recordings and transcripts will be stored in Queen’s University’s OneDrive. Only the Principal Investigator and the Research Supervisor will have access to the files. After the 5-year retention period has ended, all electronic files will be destroyed. To protect your privacy, you will only be identified in the study documents by a participant ID. The master log linking your name to your participant ID will be stored separately from other study data and will only be accessed by the principal investigator. This master log will not leave the local site.

All the information collected during the research study will remain strictly confidential to the extent permitted by the applicable laws. If you decide to participate in this study, the research team will only collect the information needed. In the dissemination and publication of research, participants will only be referred to by their interview group (e.g., Planner #1, Student #2). Participant confidentiality will be protected to the extent allowed by applicable laws. Interviews will be transcribed by the PI and will be destroyed after transcription is complete.

Authorized Representatives of Queen’s University, its affiliated hospitals and/or Queen’s University General Research Ethics Board (GREB) may request access to study data and/or all other study material used in this research. This study has received ethical approval by the Queen’s University General Research Ethics Board (GREB).

Reminder: Your participation is voluntary, and you may withdraw your consent at any point without penalty. Please contact Caley Savage ([caley.savage@queensu.ca](mailto:caley.savage@queensu.ca)) if you wish to do so.

If you have any ethics questions or concerns, please contact the **General Research Ethics Board (GREB)** at **1-844-535-2988** (Toll Free in North America) or email [chair.GREB@queensu.ca](mailto:chair.GREB@queensu.ca)

# Interview Questions

## Semi-Structured Interview Guide- Planning Practitioners

**Study Title:** Studentification Unveiled: Navigating Socioeconomic Shifts, Housing Pressures, and Community Cohesion in Aging Communities

**Information about semi-structured interview questions:** Approximately nine to twelve one-on-one semi-structure interviews will take place with planning practitioners, student representatives and older adult representatives. Interviews will be roughly 1 hour in duration. The questions listed below are for the first set of interviews with planning practitioners. The questions are open-ended, and the exact wording may differ slightly between interviews. In addition, sometimes other short questions may be asked in order to ensure understanding of a participant's response or if more detail is required on a topic of conversation. For example, supplementary questions to ensure understanding ("So, you are saying that...?"), to get more information ("Could you expand on that?") or gain additional insight ("Why do you think that is...?").

### **Section 1: Demographic Data**

1. How old are you?
2. What gender do you identify as?
3. How long have you lived in Kingston?
4. Where did you attain your highest level of education?

### **Section 2: Current Landscape**

1. What impact does student populations have on local businesses in downtown Kingston?
2. What specific planning policies have been implemented to address the needs and impacts of the student population in downtown Kingston?
3. How do you balance the demands of the student population with the needs of permanent residents in downtown planning?
4. Does student presence impact the accessibility and usability of downtown amenities for older adults?
5. What role do community feedback and engagement play in addressing the needs of both students and older adults in urban planning processes?

### **Section 3: Challenges and Opportunities**

1. Are there any specific strategies that have been successful in integrating student needs with those of other residents and businesses?
2. Have you encountered any challenges or conflicts between student-related developments and other community or business interests? If so, how have these been addressed?
3. Can you discuss any examples of successful community engagement or collaboration between planners, students, and local businesses in downtown Kingston?
4. Are there any emerging planning practices or tools you believe could better address the challenges and opportunities presented by studentification?

## Semi-Structured Interview Guide- Student Representatives

**Study Title:** Studentification Unveiled: Navigating Socioeconomic Shifts, Housing Pressures, and Community Cohesion in Aging Communities

**Information about semi-structured interview questions:** Approximately nine to twelve one-on-one semi-structure interviews will take place with planning practitioners, student representatives and older adult representatives. Interviews will be roughly 1 hour in duration. The questions listed below are for the first set of interviews with student representatives from Queen's University. The questions are open-ended, and the exact wording may differ slightly between interviews. In addition, sometimes other short questions may be asked in order to ensure understanding of a participant's response or if more detail is required on a topic of conversation. For example, supplementary questions to ensure understanding ("So, you are saying that...?"), to get more information ("Could you expand on that?") or gain additional insight ("Why do you think that is...?").

### **Section 1: Demographic Data**

1. How old are you?
2. What gender do you identify as?
3. How long have you lived in Kingston?
4. Where did you attain your highest level of education?
5. Can you describe your role and involvement with the student community in Kingston?

### **Section 2: Housing and Amenities**

1. Can you describe your experience securing housing in Kingston?
2. Can you discuss any challenges or issues you have faced related to housing and living conditions in Kingston?
3. What do you think are the primary factors that influence students' decisions about where to live in Kingston?
4. How often do you think students visit downtown Kingston for shopping, dining, or other activities?
5. Are there any specific businesses or services in downtown Kingston that you feel are particularly student-friendly? What makes them stand out?
6. Have you experienced or know anyone who has encountered any challenges or frustrations related to shopping or accessing services in downtown Kingston? If so, can you describe them?

### **Section 3: Future Outlook**

1. How do you think students perceive their relationship with non-student residents in Kingston?
2. What strategies do you think could improve the integration of students within the Kingston community?
3. What is the City doing well in terms of assisting with students? What could be improved?

## **Semi-Structured Interview Guide- Older Adult Representatives**

**Study Title:** Studentification Unveiled: Navigating Socioeconomic Shifts, Housing Pressures, and Community Cohesion in Aging Communities

**Information about semi-structured interview questions:** Approximately nine to twelve one-on-one semi-structure interviews will take place with planning practitioners, student representatives and older adult representatives. Interviews will be roughly 1 hour in duration. The questions listed below are for the first set of interviews with older adult representatives. The questions are open-ended, and the exact wording may differ slightly between interviews. In addition, sometimes other short questions may be asked in order to ensure understanding of a participant's response or if more detail is required on a topic of conversation. For example, supplementary questions to ensure understanding ("So, you are saying that...?"), to get more information ("Could you expand on that?") or gain additional insight ("Why do you think that is...?").

### **Section 1: Demographic Data**

1. How old are you?
2. What gender do you identify as?
3. How long have you lived in Kingston?
4. Where did you attain your highest level of education?

### **Section 2: Current Landscape**

1. Do you think there are older people in Kingston that face housing-related challenges?
2. Do you feel that downtown Kingston has enough establishments that cater to your, and other older people you know, needs and preferences?
3. Are there places outside of home that you frequently visit for social interactions?

### **Section 3: Student Relationships**

1. How do you feel about the presence of student groups in Kingston?
2. Do you think that you and other older adults have opportunities to engage with students in meaningful ways in Kingston?
3. Have students in Kingston change how you feel about living in Kingston?
4. What would you like students to understand about the needs and experiences of older adults living in Kingston?
5. What would you like city planners and policymakers to understand about the needs and experiences of older adults living in Kingston?