Residential Change in Halifax's North End: Inventory and Pattern Analysis

Mackenzie Childs
School of Planning
Dalhousie University
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Supervisor: Dr. Jill Grant

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The photographs of buildings at the beginning of each section are not included in the list of figures. The photographs were taken by the author and are the buildings constructed since 2003. The numbers correspond to the map in Appendix L to show the location of each building.

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Executive Summary

The North End of Halifax has experienced significant change since renewal plans were completed in the 1950s and 60s. The aim was to revitalize a deteriorating neighbourhood but instead the plans caused separation from the rest of the peninsula and led to a state of decline. The North End is currently experiencing changes, some of which could suggest the presence of gentrification.

Gentrification is a process in which higher-income residents move into a deteriorating urban centre and improvement of the housing stock, change from renting to owning, price rises and displacement occur (Hamnett, 2008). The aim for this study was to analyze changes in residential development and analyze to what extent these changes provide evidence of gentrification.

The study area is located in the North End and is composed of census tracts 0010.00 and 0020.00. The focus of the study is on residential infill and redevelopments, rather than renovation to existing buildings. I focused on physical and economic changes since 2003, specifically vacancy rates, rental prices, housing prices, the shift between renting and owning, affordable housing, property values, greenspace and the location of new and proposed developments.

I used a three-step mixed-methods approach involving direct observation, document research and pattern analysis. I determined residential buildings constructed in the past ten years through site visits and researched these buildings further through document research. I researched the physical and economic indicators of gentrification through document research and determined patterns of change.

When examining the North End as a whole, there are indications that gentrification is occurring. Since 2011 vacancy rates have been lower than the Halifax Census Metropolitan Area (CMA). Since 2011 average rental prices have been higher in the North End and although housing prices have generally remained lower in Halifax, there has been a greater increase in the North End prices than the rest of Halifax since 2003. Even with rising prices, vacancy rates are lower, meaning those living in the area can afford these price increases. Ownership rates in the North End have increased more than those in the Halifax CMA, which can be seen as an indication of gentrification (Hamnett, 2008).

I focused not only on the North End and study area as a whole, but on dissemination areas (DA). When I examined the DA's independently it became clear the hypothesis that gentrification may be occurring is too general, as the DA's change independently from one another. DA's with the highest rent and the lowest rent each maintained a higher percentage of renters than owners. Although ownership has increased more in the study area than Halifax, it has only increased in six of the 14 DA's. Even with an increase in ownership, the percentage of owners is much lower in the North End than in Halifax.

It is clear that location and proximity to amenities influence the rate of change occurring in DA's and the spatial location of development. Proximity to greenspace and downtown are characteristics of gentrifying neighbourhoods and may influence change in the study area (Ley, 1985).

The loss of affordable housing is another characteristic of gentrification. Since 2003 five affordable housing developments have been constructed and four proposed developments include affordable housing. Construction of affordable housing is still occurring, but the location of the developments may be influenced by existing affordable and social housing units.

A significant increase in property value is an indication that gentrification is occurring. I analyzed property values of the new buildings and concluded that each property rose in value and some increased substantially. Properties that experienced substantial increases currently contain buildings that are an improvement to what previously existed on the site, whether another building or a vacant lot.

This research suggests that rental and housing prices are increasing, vacancy rates are decreasing, ownership is increasing while remaining much lower than the rest of Halifax, and amenities influence where development occurs. Change is present and it seems as though higher-income residents may be residing in the neighbourhood; however, many factors must be analyzed to understand if gentrification is occurring.

It is impossible to know if gentrification is present in the study area when analyzing only physical and economic factors; social factors are necessary in understanding change. Changes are site specific and involve many different factors. To further understand if the changes are suggesting gentrification it is important to research each factor in greater detail and complete a more in-depth analysis on how they influence change. This research shows that although changes to the study area may suggest gentrification, changes are site specific and must be critically analyzed further.

Introduction



¹ The photographs included at the beginning of each section are the buildings constructed since 2003. The numbers correspond with those on the map in Appendix L to show the location of each building.

Since the 1960s gentrification has been occurring in many nations, including Canada, and has become a universally recognized issue. Various scholarly articles discuss gentrification with specific mention of Halifax, and local newspapers have published articles discussing gentrification and citizens' views on the matter.

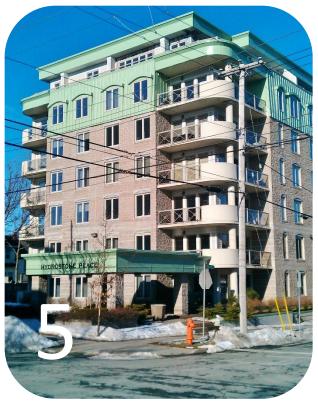
There is no simple definition for gentrification due to contrasting views on the causes and the impacts resulting from the process. Ruth Glass' original definition describes gentrification as "a complex process, or set of processes, involving physical improvement of the housing stock, housing tenure change from renting to owning, price rises, and the displacement or replacement of the existing working-class population by the middle classes" (Hamnett, 2008, p. 331). This definition focused on gentrification as a negative process. Subsequent definitions have varied between describing the process as a negative or a positive occurrence.

With this study I aim to determine what changes in residential development are occurring in the North End of Halifax and to what extent these changes provide evidence of gentrification. The North End has been transforming since the 1960s. The study focuses on the changes occurring specifically within the past 10 years and proposed developments for the area. Evaluating the extent to which the changes in residential development support the assumption gentrification is occurring will be assessed by focusing on types of development, changing market and land values, land use and land ownership.

Although gentrification has been widely studied, including research specifically on Halifax and the North End, to my knowledge there is no documented inventory of the development changes occurring. The study aims to conduct a residential building inventory and development pattern analysis to assist in understanding patterns of change in Halifax's North End. The specific research questions are:

What residential development is occurring in Halifax's North End? To what extent do contemporary development, land use patterns and property information support the verdict that gentrification is occurring?

Literature Review









Gentrification

The process of gentrification has been a major debate among scholars since the word first arose in 1964. Gentrification originated from work by British sociologist Ruth Glass. Gentrification initially held a negative connotation due to the displacement of lower income residents that resulted (Atkinson, 2003). It has since become a universally recognized term although it was not commonly used in Canada until the 1980s (Atkinson & Bridge, 2005; van Berkel, 2007). Extensive literature on the subject reflects the diverse and often conflicting views held on the process.

Glass defined gentrification as "a complex process, or set of processes, involving physical improvement of the housing stock, housing tenure change from renting to owning, price rises, and the displacement or replacement of the existing working-class population by the middle classes" (Hamnett, 2008, p. 331). Gentrification is now understood to be a "global urban process affecting big and small urban centres around the world" (Lees, Slater & Wyly, 2010, p. 4). A wealth of information about gentrification and gentrifiers in various cities around the world has generated increased awareness of the topic (Hamnett, 2008).

The term gentrifier refers to those who unintentionally or purposefully drive the process of gentrification. Identifying the types of people who are gentrifiers is difficult; gentrifiers have different incomes, occupations and lifestyles, which cannot easily be distinguished from other residents (Caulfield, 1989).

The ability to achieve consensus on a definition for gentrification has long been an issue (Meligrana & Skaburskis, 2005). Many definitions have been formulated since the term arose, such as the following passage argued by Hamnett, as discussed by Meligrana & Skaburskis (2005):

Gentrification commonly involves the invasion by middle-class or higher-income-groups of previously working-class neighbourhoods...and the replacement or displacement of many of the original occupants. It involves the physical renovation or rehabilitation of what was frequently a highly deteriorated housing stock and its upgrading to meet the requirements of its new owners. In the process, housing in the areas affected, both renovated and unrenovated, undergoes a significant price appreciation (p.1571-1572).

David Ley defined gentrification as "an upward movement in the social status of a census tract", while Milliard-Ball described it as "the social and physical 'upgrading' of a residential neighbourhood" (Meligrana & Skaburskis, 2005, p. 1572). Some definitions focus solely on the revitalization of existing buildings, while others look specifically the higher-income redevelopment within a neighbourhood.

Terms used in discussing gentrification include redevelopment, renovation, "inner city resurgence, rejuvenation, reinvestment, resettlement, residential up-filtering... the back to the city movement", and revitalization, which encompasses renovation as well as redevelopment (Ley, 1985, p. 3). Often the process of gentrification is "the loss of older inner-city housing through their renovation and upgrade by middle- and upper-income households" (Meligrana & Skaburskis, 2005, p. 1571). Definitions usually focus on infill within a neighbourhood and improvements to previously existing buildings rather than the age of buildings within a neighbourhood (Meligrana & Skaburskis, 2005). Atkinson argues that following the movement of the middle class and their patterns of settlement provides a window into gentrification (Atkinson, 2003).

The Emergence of Gentrification

The cause of gentrification is as debatable as is the definition. Ley (1986) notes there is "no single dominant explanation" (p. 527). Scholars have approached gentrification in two ways: empirically and theoretically. Empirical research has focused on gathering information on what has occurred through specific cases of gentrification, whereas theoretical research focuses on the causes of gentrification (Smith, 1987). Both have been used to study the emergence of the process. Through empirical research Ley (1986) compiled an extensive list of possible explanations including "urban sprawl, escalating energy costs...the problem of commuting...rejecting the perceived 'inauthentic' homogeneity and cultural sterility of suburban landscapes in favor of inner city 'character neighbourhoods' with distinctive architecture, social and cultural diversity, and proximity to downtown amenity and leisure opportunities" (p. 521). In grouping these and other explanations, Ley hypothesized four key elements: demographic change, housing market dynamics, the value of urban amenities and shifts in the economic base. Studies that focus on demographics as the explanation for

gentrification discuss the postwar baby boom, reduction of housing sizes and the desire to live closer to city centres. Hamnett (2008) agrees that demographics are a key factor and that gentrification reflects a shift to a postindustrial society, including a growing middle class, rather than simply the workings of property value.

The arguments which focus on housing markets often discuss the return of people to the city centres due to housing price rises in the suburbs. Ley (1985) believes that neighbourhood change could be evaluated by either the demographic shift or the changes in the housing market. In 1979 the notion of the "rent gap" theory emerged from work by Neil Smith and focused on the housing market. He believed that gentrification occurred due to the difference between the value of the existing use of the property and the optimal value of the land on which the property lies (Hamnett, 2008; Pearsall, 2013). In the mid-20th century disinvestment of inner-cities led to a decrease in land values. Neighbourhoods where the properties have a lower current price than their optimal value are key places for gentrification to occur (Hackworth and Rekers, 2005).

The third explanation discussed by Ley, urban amenities, focuses on material amenities, aesthetic environments and proximity to cultural amenities. A relationship seems to exist between areas of inner-city revitalization and the proximity to greenspace and recreational activities. Other factors which attract people to the city are proximity to cultural amenities and the predominant culture of consumption. Although urban amenities are noted as a possible explanation and strong correlation exists between urban amenities and satisfaction of residents, proximity to amenities is not necessarily the sole cause (Ley, 1986).

The fourth explanation Ley discusses is the change in the economic base, a similar idea to the postindustrial shift posed by Hamnett. The socio-economic shift from a manufacturing society to the service sector began in the 1970s, the same time gentrification increased in Canada (Atkinson & Bridge, 2005) (Hamnett, 2008). This change initiated a switch from the poor working class living close to their work in the urban centres, to the growth of the service sector and a new and larger professional middle class (Hamnett, 2008). The new professional middle class desired urban living, which displaced the working class within the city centres (Pearsall, 2013).

Hamnett (2008) discusses an alternative explanation to gentrification – technology, as argued by Redfern (2003). The ability to gentrify can only be a reality with the correct technology and its availability; when these technologies are made available, gentrifiers are able to proceed. Redfern (2003) believes that people gentrify because they *can* and not because they have to. He believes gentrification results from the ability to improve a dwelling that was not previously seen as amenable to improvement (Redfern, 2003). If the technology necessary to construct or modernize a house is available and affordable, Redfern (2003) believes people will gentrify. Hamnett (2008) does not necessarily agree, insisting that other characteristics are involved.

The possible explanations and the discussion exemplify the varying conceptualizations of gentrification. A crucial characteristic of gentrification, however, "is that it involves not only a social change but also, at the neighbourhood scale, a physical change in the housing stock and an economic change in the land and housing markets" (Smith, 1987, p. 463).

Gentrification as a Problem

There are many different views on why gentrification occurs and many arguments for and against gentrification. Until the late 1980s gentrification was largely seen as a negative outcome among scholars who criticized displacement of lower-income residents. Researchers with this view worked to understand the phenomenon (Slater, 2006). Much of the literature on gentrification focuses on the negative impacts on lower-income residents due to the loss of affordable housing and the disruption of neighbourhoods (Byrne, 2002). Due to renovation and development of higher priced dwellings tens of thousands of households were displaced from the core of six of Canada's largest cities between 1971 and 1981 (Ley, 1988). Affordable housing has become less available and residents can no longer afford to live in the inner city.

The replacement of the lower class led to conflict over ownership (Atkinson, 2003). Studies from 1964 until 2001 suggest that "gentrification has had largely negative impacts on many neighbourhoods", with one of the key issues being displacement of the poorer population (Atkinson, 2003, p. 2345). The racial aspect of gentrification has been researched as a problem (Atkinson, 2003). Cahill focused on six young women of different racial backgrounds in the Lower East Side of New York City (Cahill, 2008). These women experienced

discrimination, inequality, lack of affordable housing, and for over 20 years the process of gentrification (Cahill, 2008). Some researchers and scholars suggest there can be both positives and negatives to the process. For example, Atkinson and Bridge (2005) list known positive and negative impacts of gentrification on neighbourhoods (See Figure 1).

Figure 1: Summary of Neighbourhood Impacts of Gentrification

Positive	Negative
Stabilize declining areas	Displace residents through rent/price
	increases
Increase property values	Cause secondary psychological costs of
	displacement
Reduce vacancy rates	Cause community resentment and conflict
Increase local fiscal revenues	Reduce amount of affordable housing
Encourage and increase viability of further	Create unsustainable speculative property
development	price increases
Reduce suburban sprawl	Increase homelessness
Increase social mix	Increase spending on lobbying/articulacy

(Atkinson and Bridge, 2005)

Gentrification as a Solution

More recently some scholars view gentrification as a positive transformation to a neighbourhood, rather than focusing on the negative aspects (Skaburskis, 2011). It is not as much a change towards the word itself, which is still controversial, but to the improved image and changes to the neighbourhoods that result. Positive assessments focus on the rejuvenation of neighbourhoods, brimming with trendy eateries, a diversity of residents, and an artistic crowd (Slater, 2006). Local authorities often believe that gentrification revitalizes streets and neighbourhoods, and attracts a wealthier crowd (Skaburskis, 2011).

Among the scholars writing about gentrification in a positive light, is American Peter Byrne, who was criticized in Slater's article *The Eviction of Critical Perspectives from Gentrification Research* (2006). Byrne believes that gentrification has positive effects on cities

and defines it as "people of higher income [moving] into lower income urban areas and [seeking] to change its physical and social fabric to better meet their needs and preferences" (Byrne, 2002, p. 406). Byrne (2002) believes that gentrification aids in preventing suburban sprawl as people move to the metropolitan centres instead. He argues that there is inconclusive evidence to support the claim that middle- and upper-class whites displace lower-income occupants by living in newly renovated buildings (Byrne, 2002).

Some cities use gentrification as an approach to renew destitute areas, with middle class gentrifiers seeing themselves as role models to the poorer class (Atkinson, 2003). In Chicago, for example, the government is demolishing and redeveloping public housing into mixed-income housing, with hopes to revitalize neighbourhoods (Chaskin & Joseph, 2013).

Where Gentrification Occurs

Many studies document how gentrification is affecting and changing cities. Cities throughout the world have experienced, or are currently experiencing gentrification, and even attractive villages in rural areas are beginning to notice the process occurring. Certain characteristics create places where gentrification seems to thrive. Having a strong and growing economy is one characteristic, as are districts built before the twentieth century (Hamnett, 2008). There seems to be a degree of selectivity when looking at where investment occurs. Historically significant areas tend to be attractive to gentrifiers, where there is often greater availability of affordable older houses. Oftentimes, gentrification begins in smaller concentrations within neighbourhoods before expanding (Zukin, 1987). Ley (1985) noted that low costs are not the only reason people are attracted to an area.

Meligrana and Skaburskis (2005) focused on changes in 10 urban areas in Canada between 1981 and 2001. They studied gentrification specifically through renovation of older housing, focusing on neighbourhoods with a large amount of older housing, as such areas have higher chances of gentrifying. These areas, when situated in lower-income neighbourhoods specifically, are also a key area for gentrification to occur (Meligrana & Skaburskis, 2005). Ley's work reinforces this idea, stating that heritage buildings attract gentrifiers. Other characteristics of gentrifying neighbourhoods are those situated near parkland, those in proximity to higher-income areas, those with a central location, and those with desirable natural environments

(Ley, 1985). Central location is important – even if the cost is higher than in suburban areas (Ley, 1988).

Measuring Gentrification

It is difficult to determine exactly when gentrification has begun in a neighbourhood and how the process is developing. Although indicators of gentrification have been recognized, it is challenging to say if any indicators are more important than others or if there is a certain level of change, that when reached, indicates gentrification is occurring. These indicators have been measured using both empirical and theoretical studies and although ample research has been conducted there are still many uncertainties due to the difficulty to observe and measure the process (Hammel & Wyly, 1996).

Bourne (2010) discusses problems with the way gentrification is currently evaluated. The major cities of focus tend to have specific identifiers commonly used to define attractive cities for gentrifiers. Another problem is "a lack of comparative standards against which to assess the role of gentrification" (p.56). Specific changes must be focused on in order to understand gentrification: "social change but also, at the neighbourhood scale, a physical change in the housing stock and an economic change in the land and housing markets" (Smith, 2010, p. 100). Throughout the five decades over which gentrification has been studied, research has continued to focus on these factors. However, there are still no comparative standards or specific levels of change within these factors that must be reached for gentrification to be considered occurring.

Social factors include changes in the income, education, race and ethnicity, and occupation of residents (Bourne, 2010). Physical factors include displacement of residents, quick turnover of recently purchased properties, renovation to existing buildings, decline in manufacturing within the city centre, and an increase in hotels, convention centres, 'hip' retail stores and restaurants (Lees, Slater & Wyly, 2010; Sumka, 2010; Smith & Williams, 2010). Economic indicators are the increase of rent and housing prices, decrease in affordable housing, a shift to the service sector, a shift to ownership and condominiums over apartments, and a substantial increase in property values (Sumka, 2010; Smith & Williams, 2010; Zukin, 1987; Lees, Slater & Wyly, 2010; Ley, 1988).

Census data is often used to determine certain socio-economic indicators of gentrification. There are positives and negatives to this method. Census data provides a comprehensive view of the neighbourhood over time and provides quantitative data to analyze. Studies have been completed focusing on specific cities or neighbourhoods as case studies and comparative studies have been conducted, both utilizing census data to inform the research (Ley, 1988; Ley, 1986; Bourne, 2010).

There is academic research on gentrification in Halifax, predominantly in comparison to other Canadian cities. Ley (1985; 1986; 1988) and Meligrana and Skaburskis (2005) have completed studies focused on gentrification in multiple cities, including Halifax. Little research focuses specifically on the North End, and no research on the recent physical and economic changes occurring in residential development. This study aims to provide an understanding of physical and economic changes to the residential structure of the North End and to explore these changes in terms of gentrification.

Gentrification in Halifax









The North End as a Location for Gentrification

Gentrifiers are attracted to areas in the city centre and cultural places, such as the North End of Halifax, which has an eclectic feel from the local arts scene (Ley, 1985; Beaumont, 2013). The North End contains older houses and is in close proximity to the waterfront, the city centre and parks, all of which are ideal characteristics for gentrifiable areas (Ley, 1985).

Four groups contribute to gentrification: gentrifiers, the property industry, the public sector, and financiers (Ley, 1985). The property industry has begun to recognize the North End's assets, with realtors "marketing properties as 'located in Halifax's chic arts district'" (Beaumont, 2013, para. 15). Halifax has a history of gentrification, and new developments continue to emerge. The North End has changed drastically over the years.

Brief History of the North End

Out of the commonly defined neighbourhoods in Halifax – downtown and the South, West and North Ends – the North End was the first to develop and is the most culturally diverse (Erickson, 2004). It began as an affluent neighbourhood with spacious lots, churches, mansions, and "elaborate villas with wrought-iron gates and carriage lanes" (Erickson, 2004, p. xii). Then on December 6, 1917, the Halifax Explosion devastated Halifax. There were efforts to rebuild the North End with help from Thomas Adams, a planner from Ottawa, who devised a plan to redevelop the area. Due to an economic recession and the Great Depression, the attempts were not entirely successful, leaving the North End poor and unstable (Erickson, 2004).

In the 1950s and 1960s renewal plans promised to improve the North End. Older buildings were demolished, high-rises constructed and Scotia Square and Cogswell Interchange built. The construction of Scotia Square and the Cogswell Interchange physically separated the North End from the rest of the peninsula. This led to a decline in the North End population of forty-two percent from 1961 to 1976. In the 1970s people once again returned to city centres and the North End began to gentrify (Erickson, 2004). Between 1971 and 1981, although changes were occurring, the North End did not experience a large degree of renovation and reinvestment. It was not until the 1980s that changes became apparent (Ley, 1988).

Africville

The expropriation of Africville was part of the urban renewal plans of the 1950s and 1960s. Africville was situated on the edge of the Bedford Basin, and was home for upwards of seventy families who arrived as refugees after the War of 1812 (Nelson, 2000). The community was created in the 1840s and leading up to the final demolition the city continuously encroached onto the land. In the 1960s community was demolished and residents displaced (van Berkel, 2007). Most settled elsewhere in the North End, predominantly in public housing, to places such as Mulgrave Park and Uniacke Square (Erickson, 2004; Nelson, 2000). The final building in Africville was demolished in the 1970s and the land became a park (Nelson, 2000).

Price Changes

Since the demolition of Africville, the North End has continued to change. Recently, newspaper articles have been published regarding the continuous and recent changes in the area, specifically discussing gentrification. The Coast published a story in August on the changes occurring in the North End. The article specifically discussed Gottingen Street's population decrease from 1961 to 1971, its continued decline until the 1990s, and its rise in population over the past 15 years (Beaumont, 2013). As the population increased over these 15 years, housing prices throughout the North End have changed as well. In 1998 a detached bungalow was \$86,000 whereas by 2013 the price had risen to \$275,000. This is an increase of 319%, a larger increase than other areas of the Halifax peninsula. In the West End of Halifax the cost of a detached bungalow was \$175,000 in 1998 and \$290,000 in 2013, which is an increase of 165%. In the Clayton Park/Fairmount/Rockingham area a detached bungalow was \$128,000 in 1998 and \$337,000 in 2013, up 260% (Royal LePage, 2013). Although average prices have increased throughout Halifax, the North End has undergone the greatest increase at 319%. Not only have housing costs increased, but average rental prices increased from \$563 to \$962 from 1997 to 2012 in the North End (Beaumont, 2013). Even prior to this, housing prices changed throughout the city, with a rise in the 1970s, and an even larger rise of 25-30% between 1981 and 1983 (Ley, 1985). Some people see these changes as 'revitalization' of the neighbourhood, choosing to use a term with a positive association. There are others who are negatively affected by increases though, resulting in displacement from their neighbourhood (Beaumont, 2013).

Approach & Methods



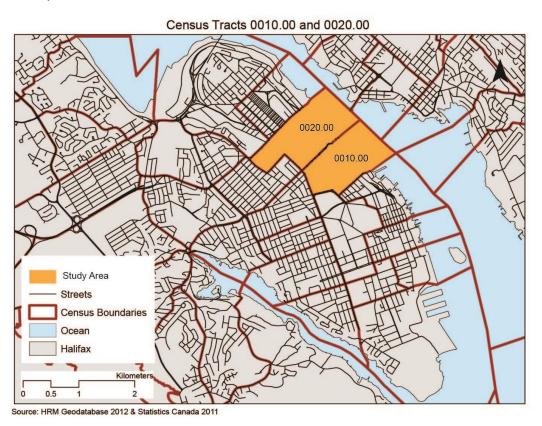






The aim of the research is to gain insight into the development changes occurring among residential units in the North End of Halifax to determine if the changes support the premise that gentrification is occurring. The study area is located in the central section of the North End and is composed of census tracts 0010.00 and 0020.00, as shown in Figure 2. In order for an area to experience gentrification there must first be a stage of decline, which the North End has undergone, making these census tracts an appropriate study area (Hammel & Wyly, 1996).





The focus of the study is on redevelopment and infill within the neighbourhood, rather than renovation to existing buildings. Redevelopment involves the construction of a new dwelling, or a complete re-creation of a building from an existing structure, whereas renovation involves the addition or improvement of a portion of a dwelling, for example a garage or a single room. Residential development is the focus of the study and includes single-unit dwellings, multi-unit dwellings and mixed-use buildings with a residential component.

For the study, recent development is considered to have been built within the past ten years – that is, since 2003. The aim was to collect data from within this time range; however, because different companies and agencies collect and present data over certain years, the data collected reflects the period from 2001 to 2013.

Gentrification is identified through social, physical and economic changes. Demographic data such as education, occupation and income is often used in collaboration with property information to study gentrification (Wyly & Hammel, 2008). Although studying each category is necessary to understand the overall presence of gentrification, I focused on the physical and economic changes of residential development, rather than social changes. Understanding these changes is essential to analyzing what is happening in the area. The specific indicators I analyzed in the study are vacancy rates, changing rental prices, the distribution and change of renting versus owning, changing housing prices, availability of affordable housing, changing property values, location of new and proposed developments and proximity to greenspace.

I used exploratory research methods and inductive reasoning – beginning the research with no hypothesis – as the object was to understand the changes rather than attempting to make initial assumptions (Palys & Atchison, 2008). I used a mixed-methods approach of qualitative research included three overlapping steps. The first step involved direct observation and completion of an inventory of developments. The second step investigated assessed property values, housing and rental market data, census data, land-use data, proposed developments and new developments noted through the site visits. The third step was to display and analyze the collected data to understand patterns to see if these patterns support the indication of gentrification. The three steps were completed in order, yet not independent of each other, as site visits occurred throughout the entire timespan of the project and general analysis of the data occurred while research was being completed.

Direct Observation and Visual Survey

In order to understand gentrification and gain familiarity with the subject, I visited and experienced the study area through direct observation. As Hammel & Wyly (1996) suggest, "visible evidence in the housing stock is a near-universal byproduct of the process, providing a good indicator for [the] study" (p. 251). The visual survey was used to retrieve empirical

evidence of redevelopment and locations for potential infill. Through these visits new buildings, empty lots, construction sites and sites with development notices were accounted for.

I designed inventory sheets to complete during site visits by collecting important data on each site. There were two inventory sheets – one for existing buildings and one for other lots – with the only difference being a column for classifying the site as residential, mixed use, empty lot, for sale, or under construction. A copy of the inventory sheet can be seen in Appendix A. The information gathered through site visits was: address; type of site; number of units; material of building; company, manager or building name; parking availability; building description; location on the street; number of storeys and any other necessary information. A space for sketching the building was included to provide context to the information and to gain familiarity with the building.

I took photographs of the buildings to document the current state of the study area and to provide a visual reminder of the change occurring. Patch (2006) discusses using photographs in the method of visual sociology to complement research by creating an impact and advancing an argument. Including photographs in the project provides a visual understanding of what new development is being constructed in the study area.

Document Research

In collaboration with observation, I collected quantitative data to obtain a more complete study of the developments. I read newspaper websites – such as The Coast, Metro and The Chronicle Herald – to gather information on proposed developments. I searched various development forums – such as Development Duffet, CondoNova and Skyscraper Page Forum – to obtain information on proposed developments and newly constructed developments. These websites often contained links to credible sources, such as webpages of developers and HRM Case documents, and provided information through the form of discussion threads.

I searched community and municipality websites – such as the Planning and Design

Centre (PDC) and Halifax Municipality documents – to find information on proposed and recent developments, zoning, and land ownership. Research on zoning and what land is municipally, provincially or federally owned is important in determining if there are any restrictions on

development, or any reasons why development may or may not be occurring in certain areas. I analyzed municipal documents discussing appeals and amendments of by-laws to gather information on specific lots and developments.

Rental and housing market information from 2003 to 2013 came from Royal LePage and Canada Mortgage and Housing Corporation (CMHC). Documents from these sources provide rental and housing data for the North End and provide a comparison to the rest of Halifax. The North End as defined in these reports encompasses a larger area than that of the study area; any data collected from these reports focuses on the entire North End rather than the two census tracts focused on in this study.

I collected assessed property values through Viewpoint Realty Services and Property Valuation Services Corporation (PVSC). Property Valuation Services provided data from 2003, 2009 and 2013 on the lots of new developments determined from the site visits. I collected census data from 2001, 2006 and 2011 from Statistics Canada. The census data collected included population, number of rental dwellings, number of owned dwellings, and structural information on dwellings. This data was collected for census tracts (CT) 0010.00 and 0020.00 and the dissemination areas (DA) within. The data for dissemination areas was used to provide a more detailed view of the census tracts as information for census tracts may be too generalized.

Information on housing types and costs are important to note as gentrification involves change in housing types with an increase in mixed-use and increase in housing costs. Rental prices and the number of rental dwellings are required, as studies suggest that an increase in rental prices and a reduction in rental units indicate gentrification (Newman & Wyly, 2006).

Reviewing multiple sources provided the construction dates of buildings located in the site visits, whether any developments include affordable housing, whether developments are apartments or condominiums, and whether developments have or will replace another building.

Pattern Analysis

I analyzed the data collected through site visits and the document research to identify patterns of development, determine why development may be occurring in some places yet not

in others and to understand the changes in the rental and housing markets. I identified and mapped new residential structures, proposed developments, empty lots and lots under construction to visualize the area. Displaying the information on maps provides a useful tool to understand where change is happening and allows visual analysis with other forms of quantitative data.

I separated the new developments into dwelling type – mixed-use, residential buildings under five storeys and residential units of five storeys and above. In addition to mapping the location of the buildings, the type of structure is useful to visualize change occurring and to differentiate the structures being constructed.

To understand the land uses permitted throughout the study area and to identify areas which prohibit residential development I created a zoning map. I created a land ownership map to display municipally, provincially and federally owned land, private land and land owned by government services. A land ownership map will display where development is prohibited and I can compare ownership to patterns of recent and proposed development.

I analyzed rental reports from 2003 to 2013, and compared key information and created charts to display the changes in the study area over time. The study area is located within the Halifax Peninsula North zone in the rental reports, which I compared to the Halifax census metropolitan area (CMA). In comparing the two areas I was able to learn if the changes are unique to the study area or if they are occurring across the Halifax CMA. Graphs and maps created from this data provides a visual display of information.

I collected housing market information from the Royal LePage House Price Surveys from 2003 to 2013. In addition to comparing the results for the North End to those of Halifax I collected pricing information for new condominium projects in the area to compare to the North End and Halifax averages.

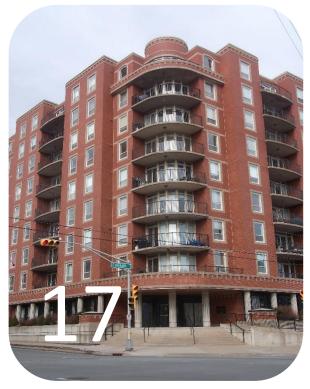
I collected assessed property values for the properties identified through site visits and compared them over the three years – 2003, 2009 and 2013. I took into account substantial changes as these can suggest a new building constructed on a previously empty lot, or a building constructed in place of a lower quality or older building. Assessment in Nova Scotia is

based on market value, which is influenced by factors such as dwelling size and age (Property Valuation Services Corporation, n.d.).

I obtained the census data through the Canadian Census Analyzer and manipulated it in order to import it into ArcMap. To compare the categories of data over time I created maps. With these maps I was able to compare data on renting and owning and average rents costs over time in comparison to the Halifax census metropolitan area and within the study area.

Obtaining data through various methods allowed me to gather a comprehensive collection that may not have been possible through a single method. Site visits offered empirical insight which is not possible through document research. I obtained quantitative data from various sources in the document research, which provided information that cannot be determined through site visits. Analyzing and comparing data from each of the sources provided a thorough overview of what can be determined regarding physical residential changes in the North End. Patterns of residential development emerged and I examined to what extent the patterns reflect gentrification.

Analyzing Change in the North End









Vacancy Rates

Peninsula North and Halifax CMA

According to rental market reports for Halifax, vacancy rates have fluctuated slightly in Peninsula North and Halifax. Vacancy rates provide insight into the percent of properties considered vacant at the time of the statistical survey. Vacant properties are considered those physically unoccupied and available for rental immediately (CMHC, 2003-2013). Figure 3 displays the comparison of rental apartment vacancy rates of Peninsula North and the Halifax CMA. Appendix B displays the specific comparison of numbers. Vacancy rates have remained between 1.6% and 3.7% in Peninsula North from 2003 to 2013. The lowest vacancy rate of 1.6% occurred in 2003 and the high of 3.7% occurred in 2006. In 2005, 2007, 2008, 2009 and 2010 the vacancy rate was higher in Peninsula North than Halifax. In 2010 to 2011 the vacancy rates for Peninsula North drastically decreased and in 2011-2013 vacancy rates were lower than in the rest of Halifax (CMHC, 2003-2013). Throughout the Halifax CMA vacancy rates have remained between 2.3% and 3.4% from 2003 to 2013. The vacancy rates were lowest in 2003 and highest in 2008. (CMHC, 2003-2013).

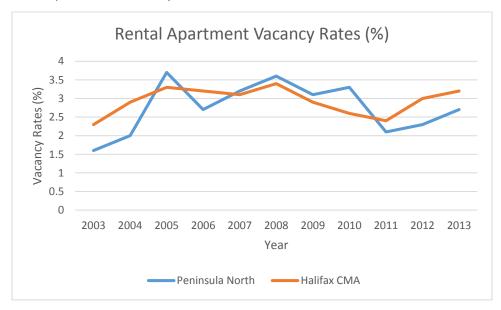


Figure 3: Rental Apartment Vacancy Rates

(CMHC, 2003-2013)

Rental Prices

Peninsula North and Halifax CMA

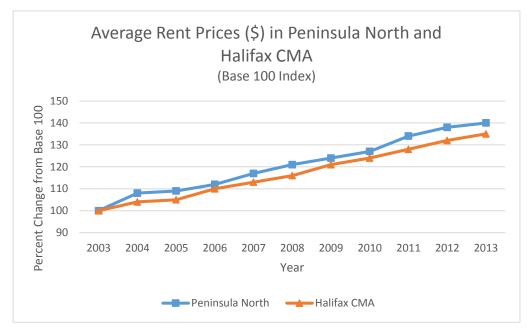
In Peninsula North and the Halifax CMA the average rental price of all units has steadily increased. Prices have remained similar in Peninsula North and the Halifax CMA. In 2003, 2006, 2009 and 2010 the average rent in Peninsula North was lower than in the Halifax CMA, although similar, and for the years following, average rent was higher in Peninsula North. The chart in Figure 4 displays these patterns. The graph in Figure 5 shows that although the North End prices have fluctuated above and below those of the Halifax CMA, the rent prices have increased from the 2003 price more than the Halifax CMA prices have increased.

Figure 4: Average Rent Prices

Average Rent Price	Average Rent Prices (\$) in Peninsula North and Halifax CMA													
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013			
Peninsula North	657	712	718	734	767	794	814	833	879	906	921			
Halifax CMA	675	705	709	744	760	780	817	836	866	893	912			

(CMHC, 2003-2013)

Figure 5: Average Rent Prices (Base 100)



(CMHC, 2003-2013)

Bachelor apartments in Peninsula North have always had a lower average rent whereas two bedroom units have been consistently higher (Figures 6 and 8). From 2003 to 2007 there was only a \$6 or less difference in the average rents for one bedroom apartments, with Peninsula North maintaining lower rents from 2003 to 2006. From 2007 onwards, the average rent was higher in Peninsula North with 2011 to 2013 having the greatest difference in rent over the past ten years, as shown in Figure 7 (CMHC, 2003-2013). There was no data available for 2003 and 2004 regarding 3 plus bedroom apartments in Peninsula North but from 2005 to 2008 the average rent was just above that of the Halifax CMA. From 2009 to 2011 the average rent was lower in Peninsula North and in 2012 and 2013 the average rent was higher in Peninsula North. Figure 9 displays the data (CMHC, 2003-2013).

Figure 6: Bachelor Apartment Average Rent

Average Rent Price	Average Rent Prices (\$) for Bachelor Apartments													
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013			
Peninsula North	482	510	517	526	534	562	586	587	646	675	667			
Halifax CMA	537	560	552	575	577	599	638	632	670	690	703			

Figure 7: One Bedroom Apartment Average Rent

Average Rent Price	Average Rent Prices (\$) for One Bedroom Apartments												
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013		
Peninsula North	599	607	625	644	665	716	712	724	784	805	821		
Halifax CMA	596	612	626	648	659	683	710	732	753	773	785		

Figure 8: Two Bedroom Apartment Average Rent

Average Rent Price	Average Rent Prices (\$) for Two Bedroom Apartments												
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013		
Peninsula North	729	769	789	808	843	853	887	923	937	962	979		
Halifax CMA	720	747	762	799	815	833	877	891	925	954	976		

Figure 9: Three Bedroom Apartment Average Rent

Average Rent Price	Average Rent Prices (\$) for Three or more Bedroom Apartments											
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
Peninsula North	N/A	N/A	976	1043	1072	1084	1035	1053	1129	1221	1303	
Halifax CMA	955	1014	946	1029	1065	1064	1091	1146	1182	1191	1237	

(CMHC, 2003-2013)

Even though rental costs consistently rose in Peninsula North and Halifax, and vacancy rates in Peninsula North and Halifax increased, the vacancy rates in Peninsula North were lower than in Halifax from 2011 to 2013. Bachelor apartments were consistently cheaper in the North End, one bedroom apartments were more expensive to rent in Peninsula North from 2011 to 2013, two bedroom apartments were always more expensive and 3 plus bedroom apartments were more expensive in 2012 and 2013 in Peninsula North. Although the average rent was more expensive in Peninsula North from 2011 to 2013, the vacancy rates were lower and were the lowest they had been since 2005.

Study Area

The following sections discuss data unique to dissemination areas. Dissemination areas are a geographic unit of measurement composed of smaller dissemination blocks and have a population of 400 to 700 people (Statistics Canada, 2013a). The maps in Appendix C show the location of each dissemination area (DA) and the corresponding identification number. Dissemination areas can be re-delineated from one census year to the next. From 2001 to 2006 the boundaries of DA 12090345 in the study area changed; however, the DA identification number remained the same. DA identification numbers are long and in order to keep the following sections clear and concise I created a map (Figure 10) displaying aliases for the identification numbers which will be used.

From 2001 to 2011 rental prices in the study area have steadily increased; however, each dissemination area has changed independently. Maps displaying the changes over time can be found in Appendix D. DA 10, located in the centre of census tract 10 along Gottingen Street has maintained an average rent below \$400 in 2001 and 2006 and increased only slightly in 2011 to \$452. Two other DA's (5 and 11) maintained an average rent below \$400 in 2001 and 2006 and in 2011 had an average rent of >\$600 to \$700 or had no data available (Statistics Canada, 2013b).

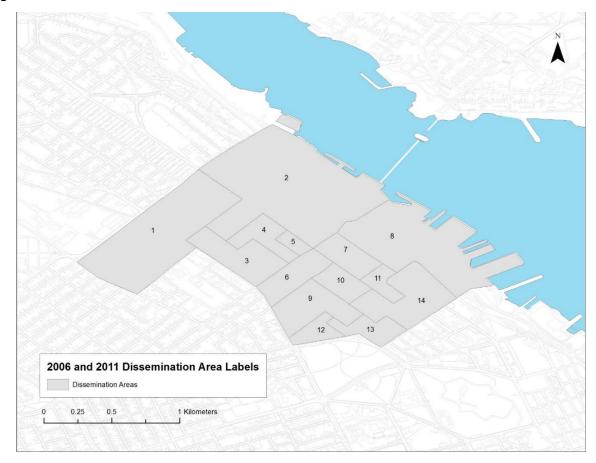


Figure 10: Aliases for Dissemination Area Identification Numbers

(CMHC, 2003-2013; HRM Geodatabase, 2012)

The low average rents within these DA's could be influenced by their location and uses within them. DA 5 is occupied mostly by Northwood Manor, a retirement home with rental units. DA 11 contains half of Uniacke Square. Uniacke Square is a public housing development and Northwood Manor an affordable housing development for seniors, so these lower-priced developments may have a large effect on the average rental costs (Northwood, 2014).

In terms of area, in 2001 the majority of the study area had average rents of >\$400 to \$500, in 2006 there was a wide range of average rent and in 2011 a large portion had average rents of >\$800 to \$900. Comparing the whole area to the Halifax CMA, the average rent prices of the study area were relatively similar to the average rent prices for Halifax which were \$866 in 2011, with the north end of the peninsula slightly higher at \$879. Figure 11 compares the average rent of Peninsula North to the Halifax CMA. Maps displaying the average rent for the

Halifax CMA in 2001, 2006 and 2011 can be found in Appendix E (Statistics Canada, 2013b; CMHC 2003-2013).

Figure 11: Average Rent of Peninsula North and Halifax CMA

Average Rent Price	Average Rent Prices (\$) in Peninsula North and Halifax CMA												
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013		
Peninsula North	657	712	718	734	767	794	814	833	879	906	921		
Halifax CMA	675	705	709	744	760	780	817	836	866	893	912		

(CMHC, 2003-2013).

One DA changed significantly from 2001 to 2011. DA 1, the northernmost DA along Windsor and Almon Street, had an average rent of >\$600 to \$700 in 2001, >\$700 to \$800 in 2006 and then increased to >\$1200 to \$1253 in 2011 (Statistics Canada, 2013b). The drastic increase could be due to the number of new mixed use and large scale residential buildings constructed within the DA boundaries. Since 2003 three multi-unit buildings have been constructed and other buildings have been renovated. In 2008 an auto glass building existed on 5552 Kaye Street where a new seven-storey 30 unit mixed-use building currently stands (Michael Napier Architecture, n.d.; Halifax History, n.d.). In 2005 a garage was demolished on 5516 Kaye Street where a 5-storey 25 unit residential building is now located (Halifax History, n.d.). Hydrostone Place is a 7-storey 25 unit residential building which was constructed in 2009 on 3051 Isleville Street (Condo Company, 2014).

Percentage Owned

One factor often said to be representative of gentrification is a tenure change from renting to owning (Hamnett, 2008). From 2001 to 2011 ownership increased in some DA's but in others it remained the same or even decreased. Two DA's maintained a rate of 0% ownership over the span of ten years – DA's 8 and 11. Two other DA's had 0% ownership in 2011 as well, and in 2001 and 2006 only had a rate of 1-10%. Overall only six DA's increased in ownership from 2001 to 2011. Three of these DA's are located near the Common and closer to downtown, which may factor into why ownership has increased. (Statistics Canada, 2013b).

By comparing the entire census tracts to the rest of Halifax, rather than specific dissemination areas, more general changes in ownership are present. Ownership has increased

in the study area and in Halifax from 2001 to 2011; however, the study area has experienced a greater increase. Census tract 10 experienced an increase of 6% ownership, census tract 20 a 9% increase while Halifax only saw an increase of 1% (Statistics Canada, 2013b). Figures 12 and 13 display the changing values for renting and owning. Appendix G includes the charts with specific numerical data.



Figure 12: Renting in the Study Area and Halifax

(Statistics Canada, 2013b)

Figure 12 shows that in Halifax renting has increased since 2001. In the study area renting sharply decreased from 2001 to 2006 and at 2011 still remained below the values of 2001. Figure 13 shows that in Halifax ownership has increased but not as drastically as in the study area. Ownership in census tract 10 has increased substantially from 2001 and census tract 20 has increased, particularly from 2006 to 2011.

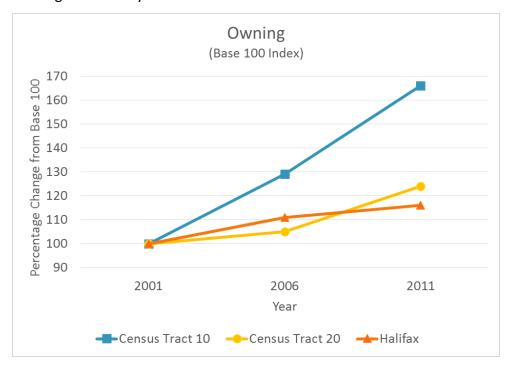


Figure 13: Owning in the Study Area and Halifax

(Statistics Canada, 2013b)

Through the comparison of larger census tracts and smaller dissemination areas it is clear that an increase in ownership is site specific. Although the study area has increased more than Halifax, not each dissemination area has. The location of the DA's may influence ownership rates, or perhaps the amount and location of new condominiums and apartments has affected where ownership and renting has increased.

Study Area in Comparison to Halifax

Over the ten years of study, ownership is much greater elsewhere in Halifax than within the study area. In the study area the percentage of dwellings owned never exceeded 60%. 2011 was the only year in which between 51 and 60% of the dwellings in a DA were owned; in 2001 and 2006 the percentage owned never surpassed 50%. In other areas of Halifax DA's have experienced up to 91-100% ownership, as shown in the maps in Appendix H (Statistics Canada, 2013b). Although there is an overall increase in ownership in the study area the percentage owned is still much lower than elsewhere in Halifax. As the graphs in Figure 12 and 13 and the

charts in Appendix G state there has been a greater increase in ownership in the study area than in Halifax, even if the number of dwellings owned is still lower.

This shows that although there is an overall increase in ownership in the census tracts, it is not the high percentage of ownership found elsewhere in Halifax. As some DA's have increased and others have decreased it is difficult to interpret what future changes the study area will experience. It would be useful to expand the study further in time to see what changes will continue and if ownership will begin to increase. As approximately half of the proposed developments are condominiums this could predict an even greater increase in ownership; however, there are still many apartments being proposed. The location of proposed developments may also suggest where new development and ownership will be occurring. As the map in Figure 14 shows, the condominiums are proposed close to each other and the apartments are similarly clustered.

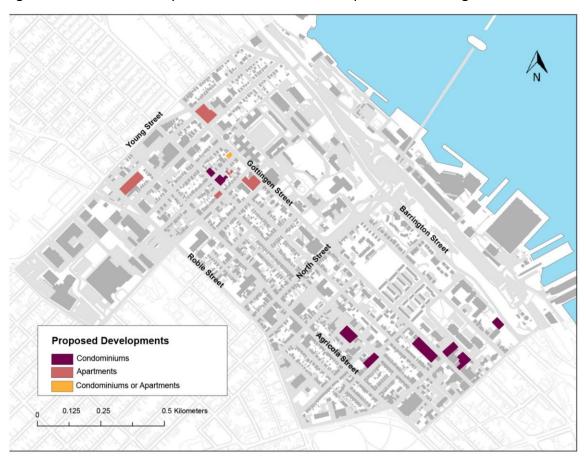


Figure 14: Location of Proposed Condominiums and Apartments through Mixed Methods

(Base Map: HRM geodatabase, 2012)

Comparing Average Rent to Percentage Owned Study Area

Comparing the average rent of dissemination areas to the percentage of dwellings owned demonstrates the relationship between the prices of rental units to the number of people renting properties over ten years. Figure 15 displays the percentage of dwellings owned in each DA in 2001, 2006 and 2011 and Appendix F includes maps displaying this information.

Figure 15: Percentage of Dwellings Owned

Percentage of Dwellings Owned									
DA	Alias	2001	2006	2011					
12090351	1	40	36	58					
12090355	2	43	34	32					
12090350	3	20	28	17					
12090349	4	30	44	41					
12090348	5	6	0	0					
12090347	6	13	12	12					
12090345	7	15	17	6					
12090356	8	0	0	0					
12090340	9	41	42	43					
12090346	10	3	7	0					
12090344	11	0	0	0					
12090341	12	20	14	25					
12090342	13	9	15	13					
12090343	14	3	16	18					

(Statistics Canada, 2013b)

2001

In 2001 DA 12 had the highest average rent at >\$700 to \$800, with the next highest rent, >\$600 to \$700, found in almost half of the DA's. Two DA's had the third highest average rent and an average rent of \$0 to \$400 was found in four DA's (Statistics Canada, 2013b).

In 2001 the DA with the highest average rent had 11-20% of dwellings owned, leaving 80-89% of dwellings still being rented. The DA's with the second highest average rent had a ranging percentage of dwellings owned, from 0-50%. One of the DA's with the third highest rent had 11-20% ownership and the other had 41-50% ownership. Those with \$0 to \$400

average rent had 1-10% or 0% owned, leaving the majority of dwellings rented (Statistics Canada, 2013b).

The DA's with the highest percentage of ownership, 51-60% are the most northern DA on the harbour (2) and one located along Robie Street between North Street and the Common (9). Those with 0% ownership are the most southern DA on the harbour (8) and one located on Gottingen Street adjacent to the one along the harbour (11) (Statistics Canada, 2013b).

Even though rent is highest in DA 12, the majority of the dwellings are being rented. The DA's with the lowest rent have an even higher percentage of renters with a maximum of 10% ownership (Statistics Canada, 2013b). It is important to research these patterns further, as both the highest priced DA and the lowest priced DA's have some of the highest percentage of renting. These rates are likely affected by other factors than simply the average rent as the prices are at either end of the scale and those with average rents in the middle vary in ownership.

2006

In 2006 the DA with the highest rent remained the same; however, the rent increased to >\$900 to \$1000. The second highest average rent occurred in DA 2, the most northern DA on the harbour. The majority of the DA's have average rent of between \$500 and \$800 and three of the lowest priced DA's from 2001 are still those with the lowest rent in 2006 (Statistics Canada 2013b).

The DA with the highest rent had an ownership percentage of 11-20% while the three lowest priced DA's maintained a maximum of 10% ownership. DA 9 still has the highest percentage of ownership but DA 2 has declined to 41-50% and DA 4 has increased to the highest percentage of 51-60% (Statistics Canada, 2013b).

2011

In 2011 DA 12 maintained the highest rent at >\$1200 to \$1253 as well as in DA 1. The next highest rent was >\$800 to \$900, showing a significant gap between the highest rental prices. The lowest average rent was found in DA 10 which has consistently been a DA with the

lowest rent. The DA's with the highest rent in 2011 had ownership rates of 31-40% and 51-60% and the DA with the lowest rent had 0% ownership. DA 1, which is located along Young Street and Robie Street has an ownership rate of 51-60% and in 2001 and 2006 it was only 31-40% (Statistics Canada, 2013b).

There are certain uses within the DA's that are important to note as they may factor into the average rent or the amount of properties owned and rented. The majority of DA 2, which has had ownership rates between 31% and 60% from 2001 to 2011 is occupied with CFB Stadacona. DA 8 has maintained a 0% ownership rate from 2001 to 2011 and contains the dockyards. Another DA which has maintained a 0% ownership rate each year contains approximately half of Uniacke Square. This DA maintained an average rental rate of less than \$400 in 2001 and 2006 which increased to \$600 to \$700 in 2011. The other half of Uniacke Square falls within DA 7, which has had an average rent of \$400 to \$600 from 2001 to 2011. The percentage of ownership was 11-20% in 2001 and 2006 which decreased to 1-10% in 2011. DA 5 had one of the lowest average rent rates at \$0 to \$400 in 2001 and 2006, with no data available for 2011 and had only 1-10% ownership. The majority of the DA is occupied by Northwood Manor, a retirement home which consists of rental units (Statistics Canada, 2013b).

Condominiums and Apartments

Many residential buildings have been constructed in the study area over the past ten years and there are more proposed projects. The newly constructed buildings range in tenure, building style, size and number of units. Some contain commercial space while others are entirely residential. Over 70% of the newly constructed buildings are primarily residential but over half of the developments proposed for the study area are mixed-use projects. An increase in mixed-use developments can be seen as a contributing factor to gentrification as it provides new residential units as well as the potential to bring in businesses geared to wealthier residents (Roth, 2013).

There are a number of vacant lots in the study area as shown in the map in Figure 16. Many of the lots are locations for proposed developments as shown in Figure 17. A few vacant lots do not have any projects proposed, but as infill is occurring in the area these lots may be suitable places for future development.

Vacant Lots

Vacant Lots

Figure 16: Location of Vacant Lots

(Base Map: HRM Geodatabase, 2012)

0.5 Kilometers

Buildings

Out of the proposed developments approximately half will be condominiums and the other half apartments, as shown in Figure 14. An increase in ownership, exemplified by an increase in condominiums, is a determining factor of gentrification. Polycorp has proposed two condominium projects in the study area: the Q-Lofts (Figure 18) on the corner of James and Roberts Street which is currently under construction, and the Jazz Condos for Barrington Street which will begin construction after Q-Lofts are completed (Zaccagna, 2012, March 27).

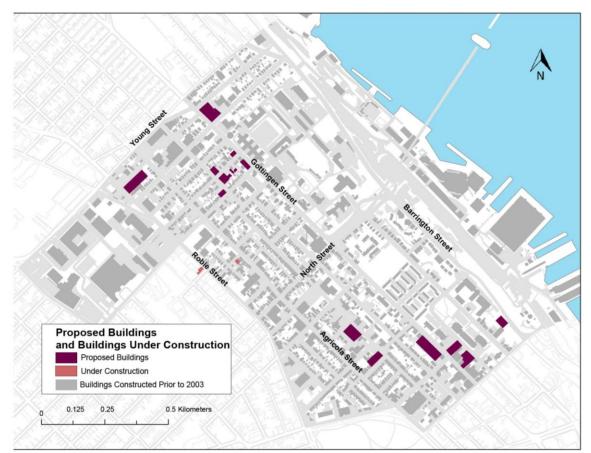


Figure 17: Location of Proposed Developments

(Base Map: HRM geodatabase, 2012)





(Polycorp, 2013)

PFK Properties has proposed a condominium and townhouse project for the corner of Bilby and Isleville Street (BuzzBuzzHome, 2014a). A development on Harris and Maynard Street, Harris East (Figure 19), by Atlantic Developments Ltd., currently under construction, will consist of 56 condominium units (Zaccagna, 2013, October 22).



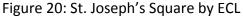


(Zaccagna, 2013, October 22)

The Camille Residences are proposed by Onyx Properties for the corner of Bilby and Isleville Street: an eight-storey condominium building with 33 units and four townhouse units (Zaccagna, 2013, August 12). Gottingen Street is home for a number of proposed condominiums. Gottingen Terrace was initially proposed in 2009 and has been reimagined for 2260-2280 Gottingen Street (Benjamin, 2013, January 31). The lots of the Former MET building and the Former Diamonds Bar, located on Gottingen Street, have condominiums and affordable housing proposed by the Housing Trust of Nova Scotia (Housing Trust of Nova Scotia, 2014a; Housing Trust of Nova Scotia, 2014b). A development has also been proposed for 2842 Gottingen Street at the corner of Bilby Street, however the developer is undecided on if it will be condominiums or apartments (CondoNova, 2013a).

The apartments proposed for the study area are all located in close proximity to one another, in the north end of census tract 20. The Stackhouse, proposed by FH Construction for

Bilby Street, will consist of 32 apartment units (Halifax Regional Municipality, 2013, October 28). Bloomfield Place which is proposed for 2776 Gottingen Street will be comprised of 70 apartment units within the eight-storey building (CondoNova, 2013b). On the corner of Isleville and Almon Street a seven-storey apartment building is proposed by Galaxy Properties Ltd (Zaccagna, 2013, August 12). A 19-storey building is proposed for the corner of Robie and Demoine Street and will consist of 17 floors of rental units (Zaccagna, 2012, February 3). St. Joseph's Square (Figure 20) is proposed for Russell Street at the former location of St. Joseph's Church. Initially the development was proposed as condos but has been changed to consist of 93 apartment units (CondoNova, 2013b; St. Joseph's Square, n.d.).





(St. Joseph's Square, n.d.)

Housing Prices

I examined four dwelling types when analyzing housing prices: detached bungalows, standard condominiums, standard townhouses and standard two-storeys. In regards to housing prices Halifax is considered to be Clayton Park, Fairview, Rockingham, the North End and the West End, as taken from the Royal LePage House Price Surveys. In Halifax and the North End housing prices have increased since 2003. The North End housing prices have remained lower than Halifax in all dwelling types but the townhouses. Only in 2008 were the prices of townhouses higher in Halifax than the North End, at \$187,666 in Halifax and \$180,000 in the

North End (Royal LePage, 2013). The charts in Figure 21 display the housing prices of each dwelling type from 2003 to 2013.

Figure 21: Housing Prices in the North End and Halifax

Housing Prices (\$) for Detached Bungalows											
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
North End	140,000	141,000	141,000	143,000	160,000	185,000	200,000	215,000	239,500	250,000	275,000
Halifax	158,706	162,166	162,666	173,333	190,666	207,333	216,333	246,833	264,833	273,333	294,666

Housing Prices (\$) for Standard Condominiums											
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
North End	95,000	98,300	98,500	103,000	118,000	130,000	144,000	152,000	180,000	190,000	203,200
Halifax	138,666	141,600	142,000	155,333	179,333	201,333	200,333	206,166	226,000	237,333	250,966

Housing Prices (\$) for Standard Townhouses											
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
North End	143,000	147,500	148,500	166,000	171,000	180,000	250,000	280,000	285,000	295,000	298,000
Halifax	129,333	132,500	133,333	161,166	168,666	187,666	233,333	255,000	259,833	271,666	282,000

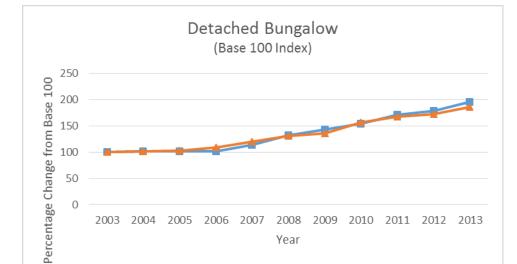
Housing Prices (\$) for Standard Two-Storeys											
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
North End	165,082	167,000	167,500	172,000	178,000	229,000	240,000	249,800	269,000	285,000	294,500
Halifax	185,290	179,500	179,666	197,000	200,000	246,333	260,666	278,266	298,000	306,666	319,833

(Royal LePage, 2013)

Although housing prices for dwelling types other than townhouses remained lower in the North End, prices have risen significantly since 2003 – particularly since 2008. Through comparing the housing prices with a base 100 index, it can be seen that the housing prices in the North End have increased more since 2003 than prices in Halifax since 2003. The graphs from Figure 22 to 25 show the housing price changes for the four dwelling types.

In 2008 the increase in housing prices for detached bungalows in the North End increased more since 2003 than in Halifax. In 2009 housing prices for condominiums increased more from their price in 2003 than Halifax. Since townhouses were consistently more expensive in the North End than in Halifax, the housing price increase from 2003 was lower than in Halifax. In 2008 housing prices for two-storey dwellings in the North End surpassed Halifax in the increase of price since 2003 (Royal LePage, 2013). The reason for a greater increase in housing prices in the North End than Halifax is unknown. The fact that this change is present,

however, shows that within the past few years it is becoming increasingly more expensive to own property in the North End than it has since 2003.



Year

North End Halifax

Figure 22: Detached Bungalow Housing Price Changes

(Royal LePage, 2013)

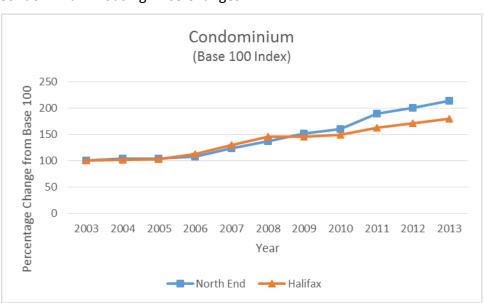


Figure 23: Condominium Housing Price Changes

(Royal LePage, 2013)

Townhouse (Base 100 Index)

250
200
150
100
2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013
Year

North End
Halifax

Figure 24: Townhouse Housing Price Changes

(Royal LePage, 2013)

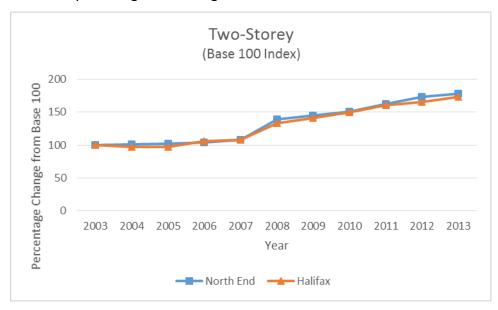


Figure 25: Two-Storey Housing Price Changes

(Royal LePage, 2013)

Buildings constructed since 2003

The newly constructed condominiums in the area have a wide range of unit prices and number of units. Condominium and apartment prices are important to analyze as the presence

of gentrification is often measured through an increase in housing prices (Hamnett, 2008, p. 331). Figure 26 displays the locations of the new developments, some of which are condominiums.

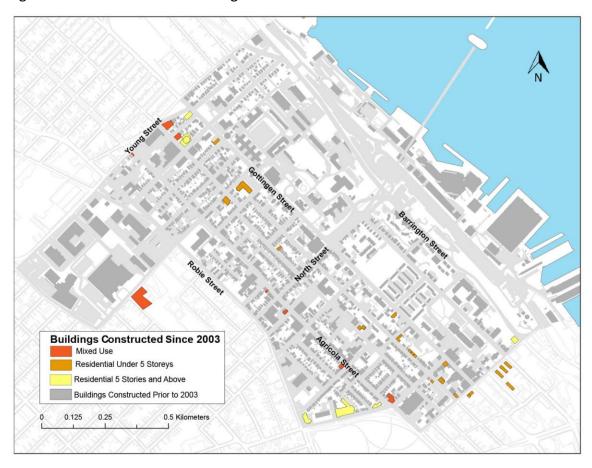


Figure 26: Location of New Buildings

(Base Map: HRM geodatabase, 2012)

The following are housing prices for some of the recent condominium developments in the study area:

- Hydrostone Place has condominiums that range from \$325,000 to \$336,000 with 25 units.
- Spice Condos has condominiums that range from \$250,000 to \$375,000 and there are
 80 units.

- The Brickyard is a development of four separate buildings with prices ranging from \$290,000 to \$340,000 and there are 82 units.
- Armoury Square units range from \$315,000 to \$600,000 and there are 97 units of apartment and townhouse style.
- Armoury Villa condominiums range from \$200,000 to \$1,300,000 and there are 15 units.
- 5769 Cunard Street ranges from \$265,000 to \$330,000 and there are 20 units.

(Condo Company, 2014).

When comparing these to condominium prices throughout Halifax, the prices listed are much higher. In 2013 standard condominiums had average prices of \$203,200 in the North End and \$250,966 in Halifax (Royal LePage, 2013). Luxury condominiums prices were not calculated for the North End or Halifax, but in Bedford they were \$390,000; still lower than some of the units in the new condominiums (Royal LePage, 2013). The high cost to purchase a condominium unit in the new North End buildings may affect who is able to move into or stay in the neighbourhood.

Proposed buildings

As for proposed buildings, units vary in prices. The Q-Lofts are a condominium project currently under construction at the corner of James and Roberts Street. There will be 72 units and the prices will range from \$339,900 to \$499,900. The Q-Lofts are described as "high-end European-style lofts designed to appeal to anyone seeking a 'true urban experience'" (Davenport, 2013, October 8, para. 1). The condominium development Harris East is expected to have units priced between \$200,000 and \$300,000 as it is meant to target first-time homeowners (CondoNova, 2013, October 23). If residential and mixed-use condominium developments proposed for the area continue to follow the trend of higher unit prices, it may have an effect on future residents of the area and property values.

Comparing Housing Prices to Percentage Owned

Ownership has increased in census tract 20 since 2001 and experienced a significant increase since 2006. Ownership has increased in census tract 10 by over 60% from the values in 2001. These trends can be seen in Figure 13. This increase has occurred even though housing

prices have increased since 2001 and substantially increased since 2006. The correlation between ownership and housing prices may signify that there has been a change in the study area demographics.

Affordable Housing

Gentrification is often thought to involve the loss of affordable housing due to the number of new higher-priced developments and the attraction of middle and upper-class residents. Lower-income residents are often displaced due to price increases and inadequate affordable housing options. Among the many high-priced condominiums proposed for the North End, some developments include affordable housing units. In Canada affordable housing means a dwelling costs less than 30% of household income, prior to taxes. Affordable housing encompasses a range of housing tenure and includes social housing as well as that provided by private, public and non-for-profit sectors (CMHC, 2014).

The former MET building on Gottingen Street is a proposed development in which 58 out of the 120 apartments would be affordable housing (Housing Trust of Nova Scotia, 2014a). The former Diamonds Bar, also proposed for Gottingen Street, would include 64 affordable units among the 153 apartments (Housing Trust of Nova Scotia, 2014b). The 19-storey apartment building proposed for the corner of Robie Street and Demoine Street would have affordable housing for at least 10% of the units (Zaccagna, 2012, February 3). On the old Sobeys site, 2260-2280 Gottingen Street, Gottingen Terrace has been proposed by the Creighton/Gerrish Development Association; a non-profit developer with a goal to provide neighbourhood stability and affordable housing in the Cunard, Gottingen, Buddy Daye (previously Gerrish) and Creighton Street block (Canadian Architect, 2009, July 1). Initially proposed in 2009, it has been reimagined and will include affordable housing units among those at market price (Benjamin, 2013, January 31).

There are affordable housing units already located within the study area, including developments constructed since 2003. The Harbour City Homes development completed in 2008 is located on the corner of Buddy Daye Street and Creighton Street. This development consists of 12 affordable housing units and was completed by the Creighton-Gerrish Development Association (Canadian Architect, 2009, July 1). The Creighton-Gerrish

Development Association also completed the Creightons in 2004, which provides six affordable townhouses (Canadian Architect, 2009, July 1). In 2008, a building was developed on 2437 Maynard Street with 19 units of supported housing (Metro Non-Profit Housing Association, n.d.). The mixed use building where Café Aroma Latino is located, on the corner of Agricola and North Street consists of 24 affordable and accessible rental units (Halifax Regional Municipality, 2007, June 12). On the corner of Cunard and Gottingen Street Shelter Nova Scotia opened The Rebuilding, an apartment building for men transitioning from shelters to more independent living (Shelter Nova Scotia, n.d.). The majority of proposed and new developments do not include affordable housing units but some will contribute to providing housing options for lower-income residents.

The location of the new developments with affordable housing may correlate with their surroundings. Each of the developments are located in census tract 10, south of North Street, and four out of the five developments are located in close proximity to one another. They are located close to Uniacke Square and to the Creighton-Gerrish block. The goal of the Creighton-Gerrish Development Association is to provide high-quality affordable housing in this urban block (Canadian Architect, 2009, July 1). Two of the new developments are Creighton-Gerrish projects, which explains the placement of the developments.

Three out of the four proposed developments that would include affordable housing are located in close proximity to one another. The former MET building, the former Diamonds bar and Gottingen Terrace are all proposed for Gottingen Street in the same block. Gottingen Terrace is proposed for the Creighton-Gerrish block and the two other developments across the road.

Affordable housing being located within a small area may have an effect on the demographics of the area, ownership values, and condominium and apartment prices. The location of previously existing amenities, affordable housing and social housing may also influence where new affordable housing is located.

Property Values

Property values have increased throughout the HRM; however, the commercial manager with Property Valuation Services Corporation states "the increases are most significant on the peninsula and in the north end, in particular, where the demand is highest" (Power, 2012, August 3, para. 13). Current property values for the buildings in the study area constructed since 2003 range from as low as \$207,300 for a single unit to \$17,550,000 for a mixed use building (Property Valuation Services Corporation, n.d.). Property value assessments for 2003 could not be obtained for each property. Through analyzing those that were collected I noticed all of the developments increased in property value, some only slightly and others more so. Some have increased significantly in comparison to others. Appendix I includes a spreadsheet with the assessed property values for each new property. Figure 27 includes the developments that have experienced large increases in property value.

Figure 27: Developments with Significant Increases in Property Value Assessment

Address	Name or Description	Previous Value	2013 Value
2414 Agricola	Q Loft Centre	\$129,000 (2003)	\$1,380,200
2594 Agricola	Café Aroma building	\$378,900 (2009)	\$2,034,400
2751 Gladstone	Gladstone North	\$1,163,100 (2003)	\$17,550,000
5522 Buddy Daye	Harbour City Homes	\$135,700 (2003)	\$1,080,000
5506 Cunard	The Rebuilding	\$22,100 (2003)	\$1,240,000
5552 Kaye	Garden Stone Place	\$211,500 (2003)	\$8,098,500
5516 Kaye	Hydrostone Suites	\$188,000 (2003)	\$3,360,000
2437 Maynard	Affordable Housing	\$23,500 (2003)	\$1,830,000
2393 Robie	The Lexington	\$480,000 (2003)	\$7,440,000

(Property Value Services Corporation, n.d.)

These drastic changes in property values present a pattern that these new developments are an improvement to what used to exist on the lot or that the lot was empty prior to construction. Exploring what buildings existed where new buildings are currently

located could provide insight into why property values have risen and how the study area is changing.

The two buildings on Kaye Street were constructed after 2005 and after 2008. An auto glass building used to be located at 5552 Kaye Street and a garage at 5516 Kaye Street (Halifax History, n.d.). The property values increased in correlation with the dates of construction for both buildings. The Harbour Homes Development on Buddy Daye was constructed in 2008 where the Newman building used to stand, which was in poor condition upon removal (Canadian Architect, 2009, July 1). Gladstone North was being constructed in 2010 which explains the upsurge in property value between 2009 and 2013 (SkyscraperPage Forum, 2010). The Rebuilding at the corner of Cunard and Gottingen opened in 2012, explaining the property assessment increase between 2009 and 2013 (Shelter Nova Scotia, n.d.). Prior to the construction of 2594 Agricola Street, a mixed use building on the site had commercial on the ground floor and two residential units above. The new building consists of 24 units with commercial uses still at ground level, which explains the large increase in property value. Amendments were proposed for the Municipal Planning Strategy and Land Use By-law in 2007 but the property value did not increase until after 2009, suggesting the building was constructed after 2009 (Halifax Regional Municipality, 2007, June 12; Property Valuation Services Corporation, n.d.).

The overall average of property value assessments for the North End for 2003 was \$113,931 and the average for the Halifax peninsula was \$169,129. In 2013 these have risen to \$240,738 in the North End and \$367,192 for the peninsula (Property Valuation Services Corporation, 2014, April 8). This is an increase of \$126,807 in the North End and \$198,063 in the peninsula. Although some individual assessments have increased substantially in the study area, the North End did not increase as much as the Halifax average.

Proximity to Greenspace

The study area has many small parks within the boundaries. Some are school property such as Joseph Howe Elementary School Park and St. Joseph's-Alexander McKay Elementary School Park. There are two parks which are associated with recreation centres, the George Dixon Centre Park and the Bloomfield Centre Park. There are smaller parks and parkettes in the

study are and two larger parks directly outside the study area boundaries: Fort Needham Memorial Park and the Halifax Common.

Comparing Location of Greenspace to Rent Prices and Housing Prices

Proximity to parkland is important to analyze as gentrification often occurs in areas close to parks. By comparing maps displaying the location of parks (Appendix J) and the average rents of the DA's (Appendix D), I was able to identify certain patterns. DA 12 is situated North of the Halifax Common, on the corner of Cunard and Robie Street has the highest average rent in 2001 at >\$700 to \$800. In 2006 the average rent was >\$900 to \$1000 and in 2011 it increased to between >\$1200 to \$1253. Over the ten year period, almost every DA increased in average rent, however this DA maintained the highest average rent over the ten years (Statistics Canada, 2013b).

DA 1 contains Hydrostone Park, is near the Bayers Road/Windsor Street Park, the Bloomfield Centre Park, Bilby Street Park, St. Joseph's-Alexander McKay Elementary School Park and Fort Needham Memorial Park. The average rent for the DA was >\$600 to 700 in 2001, >\$700 to \$800 in 2006 and >\$1200 to \$1253 in 2011. The drastic increase between 2006 and 2011 probably was not due to parkland as the parks are not new to the area. The average rent was also the same in many other DA's in 2001 and as others in 2006 so the proximity to parkland may not be a major factor in rental prices in the DA. There are many parks in and around the DA and many are small in comparison to Fort Needham and the Common, so it is impossible to assess if the average rent is in relation to parkspace (Statistics Canada, 2013b).

It is difficult to determine the correlation of average rent with location of parks as it is not the sole factor affecting price changes; close proximity to parkland does not necessarily correspond to higher rent. For example there is greenspace and the George Dixon Recreation Centre within DA 7, which has maintained an average rent below \$600 for the past ten years. Part of Uniacke Square is located within this DA, a public housing project which opened in 1966 (Statistics Canada, 2013; Kimber, 2007, March 1). As this is an area for lower-income residents, the rent will maintain a lower average even if there is a park within the DA.

Rent prices are also not the only factor affected by parkland. Parkland may affect housing prices and property values as well as rental prices. I gathered housing prices for three

condominiums located adjacent to the Common, each of which were higher than the average prices for the North End and Halifax. The other condominium prices I analyzed were higher than average, yet were not in close to proximity to large areas of greenspace. Although greenspace may be a contributing factor to where development occurs and the prices of units, it is not the sole factor.

Zoning and Land Ownership

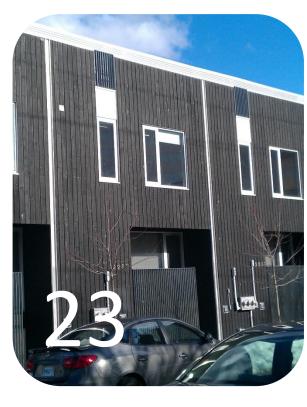
Zoning and the location of government owned land influences where development can occur as they each place certain restrictions. As displayed in Appendix K certain zones do not permit residential developments including the C-5 Harbour-Related Industrial Zone, the CFB Canadian Forces Base Zone and the P Park and Institutional Zone. Within zones permitting residential uses there are limitations on the type of dwelling. The R-1 Single Family Dwelling Zone does not permit residential dwellings apart from single detached homes and special care homes of less than ten people. The R-2 General Residential Zone does not permit any buildings containing more than four apartments. The R-2A General Residential Conversion Zone does not permit buildings larger than four units unless it is a townhouse or a converted multiple dwelling house (Halifax Regional Municipality, 2013, November 16). These restrictions limit the areas in which larger apartments or condominiums can be developed, unless permitted through development agreement.

Comparing zoning to the location of new and proposed developments may offer insight into patterns of development. The proposed developments are generally located in two areas; the south end of Gottingen Street and in the north end of the study area around Gottingen and Bilby Street. The majority of the proposed developments are located in zones permitting their construction, implying that zoning may be a factor in where the developments cluster. In comparing dwelling location to land ownership it is also evident that no proposed developments will be located on HRM, Provincial, Federal, Private or Park land.

Do the Patterns of Change Provide Evidence of Gentrification?









Focusing on the study area as a whole, as separate census tracts and as separate dissemination areas provides insight into patterns of change. Signs of gentrification are present at each level of analysis, yet contradictions arise when analyzing specific factors of gentrification in different levels of detail.

What residential development is occurring in Halifax's North End?

New residential development is present in the form of single-family homes, townhouses, semi-detached homes, apartments, condominiums and mixed-use buildings. Development has occurred since 2003 throughout the study area and focused around anchor points such as affordable housing and developments similar to those being constructed. More condominiums and apartments are proposed for the area and focus around opposite ends of the study area. Direct observation helped illustrate the various types of development occurring and can be seen in the photographs throughout the report.

To what extent do contemporary development, land use patterns and property information support the verdict that gentrification is occurring?

Focusing on the North End

Examining the study area through statistics general to the entire North End provides an understanding that gentrification may be occurring. Vacancy rates have remained low yet fluctuated above and below the average vacancy rates of Halifax. After a drop in 2010, vacancy rates rose but those for the North End remained lower than the Halifax average. Low vacancy rates do not indicate gentrification is present on their own, yet show that the prices changes occurring are not drastically affecting the ability or desire for people to reside in the study area.

From 2011 to 2013 when vacancy rates were lower in the North End, rental prices were higher. Prior to 2011 rental prices fluctuated above and below those of Halifax, as did the vacancy rates. In addition to rent prices rising above those in Halifax, prices have increased more since 2003 in the North End than they have in Halifax. Although rental prices increased people were still able to afford to stay or move to the study area. No conclusion can be extracted from this but I can hypothesize that this relationship may suggest higher-income residents are moving into the study area, as they can afford the higher rents.

Housing prices have generally remained lower in the North End than in Halifax from 2003 to 2013. The housing prices in the North End have increased from their 2003 levels, most significantly since 2008. As with rental prices, housing prices reflect that it is becoming increasingly more expensive to reside in the North End. This relates to the prior hypothesis that even though prices are rising, people are able to afford these units.

Since 2001 ownership rates have increased in Halifax and the North End. When comparing the rates of increase, the study area has experienced a greater increase in ownership. Census tract 10 experienced an increase of 6% ownership, census tract 20 a 9% increase while Halifax only saw an increase of 1%. As both of the census tracts increased more than Halifax, this could be interpreted as a sign of gentrification. Ownership is increasing even when housing prices are increasing, again presenting the pattern that the North End is attracting higher-income residents.

Focusing on Dissemination Areas

A hypothesis can be made that changes occurring in the North End suggest gentrification is occurring. Focusing on the North End as separate dissemination areas (DA) suggests this hypothesis may be too general when focusing on the area in greater detail.

Rental prices have increased in the study area since 2003, exceeding those of Halifax from 2011 to 2013. Analyzing each DA independently shows that rental prices vary greatly between each one. Prices varied from less than \$400 to over \$1200 over the span of 10 years. Some DA's maintained similar average rents while others doubled in price. Focusing on rental prices alone it could be hypothesized that the DA's that have experienced the highest rental increases could be gentrifying.

Through this study I cannot determine why rental prices have fluctuated so greatly; however, I can suggest contributing factors. The location of the DA and what is located within it can affect the rental prices. Some DA's that have retained low rental prices contain affordable and social housing. DA's 7 and 11 contain Uniacke Square and DA 5 is primarily comprised of Northwood Manor. The construction of new buildings may increase the rental prices of DA's. DA 1 increased significantly, particularly from 2006 to 2011. Around this period two garages were demolished and replaced with a 7-storey mixed use building and a 5-storey residential

building, and Hydrostone Place was constructed. Hydrostone Place is a condominium, not apartment, yet the higher than average prices of units and the new addition to the DA may influence rental prices in the area. An increase in rental and housing prices is an indication of gentrification and the influence of nearby developments may suggest that the area is gentrifying.

Condominium prices in the study area seems to suggest the area is changing. Compared to average condominium prices for Halifax and the North End the unit prices are generally higher. I can hypothesize that this will influence the demographics in the area by attracting higher-income residents, as they can afford these units.

Comparing ownership and rental rates to average rent costs shows that renting is still more common even if rental prices are high. In 2001 the DA with the highest rent had 80-89% of the dwellings rented and the DA with the lowest had 90-100% of dwellings rented. In 2006 the DA with the highest rent had 80-89% of dwellings rented and the DA's with the lowest had up to 90% rented. In 2011 the DA's with the highest rent decreased to a renter percentage of 60-69% and 40-49%; although the percentage decreased there was still a higher percentage of dwellings rented. The DA with the lowest rental prices in 2011 had 100% of the units rented. This demonstrates that average rent is not the sole factor in determining the amount of renters as there is high percentage rented in both higher and lower priced DA's.

Although ownership has increased in the study area more than Halifax, it has only increased in six out of the 14 DA's. Three of these DA's are located near the Common and downtown. Proximity to parkland and areas in a central location are characteristics of a gentrifying neighbourhood, so the proximity to these amenities could increase the incentive for people to live there (Ley, 1985).

Ownership levels are much lower in the study area than they are in Halifax; the study area never exceeds 60% ownership in any DA whereas DA's elsewhere in Halifax have up to 100% ownership. In comparison to Halifax, the study are does not seem to be gentrifying if ownership rates are being analyzed. In comparing the study area over time from 2003 to 2013, ownership rates have increased, which could imply the presence of gentrification. It is

impossible to construct a hypothesis on whether gentrification is occurring simply from analyzing ownership rates, but it is an important factor to consider.

A decrease in affordable housing is an economic indication of gentrification. Since 2003, five affordable housing developments have been constructed. The majority of the proposed developments do not include affordable housing, but four do. The proposed developments and those recently constructed are located in close proximity to one another. There are specific anchor points that seem to influence development in a certain area. The affordable units are located near Uniacke Square and the Creighton-Gerrish Development block. Even if affordable housing is not decreasing, as gentrification often exhibits, the location of new affordable housing may be influenced by existing uses in the study area.

A substantial increase in property values is another identifier of gentrification. The property values of the residential dwellings constructed since 2003 widely range but some have experienced significant increases. The construction dates of these buildings correlate with the drastic rise in property value. Some of these developments replaced much smaller, unkempt buildings and I can hypothesize that the other new developments were also an improvement to what previously existed on the site, resulting in an increase of property value. Each development in the study area has increased in property value but without a comparison to other areas of Halifax it is difficult to determine how substantial the increases were.

Areas experiencing gentrification are often noted as being in close proximity to greenspace. Patterns became apparent when comparing greenspace locations to rental and housing prices. DA 12 continuously maintained high rent prices and is located directly adjacent to the Common. DA 1 shared the highest rent prices in 2011 and is close to multiple parks and parkettes; however, the price of rent increased drastically from 2006 to 2011 even though the parks existed previously. This permits me to hypothesize that although greenspace may have an effect on rental prices or where developments are constructed, it is not the determining factor and many other indicators must be present to conclude gentrification is present.

Comparing different factors of gentrification to each other and focusing on them independently provides insight into the changes present in the North End. It is not possible to determine if gentrification is occurring simply by analyzing the quantitative data I gathered.

Identifiers of gentrification presented themselves through analysis but there were instances of data suggesting the area is not gentrifying. Through this study I could determine that patterns are different depending on the scale of analysis. Indicators of gentrification were present when focusing on the study area as a whole, but were not as obvious at the dissemination area level. One overall pattern that presented itself at each level of analysis was that higher-income residents may be moving into the North End.

Location is an important factor when attempting to decipher patterns. The proximity to greenspace, new developments, social housing and downtown may each have an effect on if an area is showing signs of gentrification. There are anchor points that influence development. Proposed affordable housing is located in close proximity to existing affordable housing and clusters of developments are located closer to large tracts of greenspace and downtown. It is important to understand that although there may be factors influencing change, it is impossible to generalize what is happening when only focusing on a few factors; more in depth analysis must be completed on each influencing factor. Physical and economic factors are important to analyze, but combining social factors is important to generate a complete representation of the study area.

Recommendations for Future Study

This report provides and in depth focus on economic and physical transformations occurring in census tracts 10 and 20 in the North End of Halifax. No conclusions can be made to state if gentrification is occurring or not but hypotheses were constructed. I focused on recently constructed and proposed buildings but as gentrification includes renovation to buildings, completing an inventory of renovations would help to create a more accurate representation of the area.

I focused on many factors and for future study it would be useful to analyze each one in more detail. Property values in particular are useful to study. Comparing averages of the North End and Halifax for 2003 and 2013 and comparing specific values to values elsewhere in Halifax would help determine if property values in the North End are increasing substantially.

It would be useful to focus on social factors as well as physical and economic factors in attempts to determine if gentrification is occurring. Combining the quantitative data from this

report and qualitative data from interviews and other empirical research would help create a more thorough understanding of change. Statistics can only show so much, as can empirical research, so combining them would provide a comprehensive approach to understanding gentrification in the North End.

The census tracts I focused on only constitute part of the North End. Completing a study on a larger area would provide a greater representation of the North End than could be provided from studying two census tracts. I did not include census tract 9 in the study area, which is located closer to downtown and is experiencing a lot of change. If census tract 9 was analyzed it may provide more insight into where development is occurring spatially.

Limitations and Delimitations

There were limitations and delimitations encountered when completing the research for this report. I was not able to obtain property values for all PIDs in 2003. This limited the understanding I could gain regarding changing property values. I obtained the 2003 average property values for the Halifax peninsula and the North End from Property Valuation Services Corporation (PVSC). They attempted to eliminate all vacant parcels and non-residential properties to provide me with accurate data on residential properties; however, the data was transferred from an old system and it is not 100% certain that these property types were not included.

I was unable to obtain all assessed values online through the PVSC website because some of the large apartments and condominiums had too many units to record in a timely manner. I provided the range of values for these units for 2013. I was unable to obtain earlier values because the PVSC website only permits you to view the details of 10 properties at a time; some of these developments had upwards of 100 units. I had to use both PVSC and Viewpoint to find property values for some buildings and certain addresses were different on PVSC than Viewpoint, which also proved to be a limitation. As I recommended, it would be beneficial to look at each factor in more detail as there is a lot of information regarding each factor, such as the property values.

I was unable to receive dates of construction for all new buildings I recorded, which limited the certainty that the buildings were constructed within the past ten years. As I

completed site visits and used my own judgement to determine which buildings were constructed within the past ten years this may have resulted in missing some or including some constructed prior to 2003. When comparing the buildings recorded through site visits to the dates of construction I was able to find it did reassure me that my judgement was accurate.

I had to search through multiple sources to find proposed and approved developments for the area. I focused a lot of time on searching for these developments and I believe I was successful in finding those that are currently proposed; however, I cannot be completely certain.

I used online copies of the Royal LePage House Price Surveys to obtain data. Halifax data was separated into three sections: Clayton Park/Fairmount/Rockingham, North End and West. The reports in the online historical database did not specify which 'Halifax' was which, they were each listed as 'Halifax'. I was unable to obtain paper copies of the Royal LePage Housing Surveys to see if they included more detail. The 2013 online report had the North End as the second 'Halifax' in the list, so from that and looking at the numbers in comparison to other areas, I used the second 'Halifax' down for each year. This limited the accuracy of the housing prices.

Conclusions









The North End of Halifax is undergoing a period of change. Claiming that this change is gentrification, is the onset of gentrification, or does not suggest gentrification is impossible from this study. When comparing changes in the North End to Halifax certain patterns supporting substantial change are present. When focusing on the dissemination areas as a smaller unit of measurement different patterns of change are presented, often contradicting those focused on a larger area.

Although no specific conclusions have been made, hypotheses have been generated. The patterns of lower vacancy rates and higher rental prices, as well as increasing housing prices and increasing ownership may suggest higher-income residents are moving into the area. Increasing prices may affect who is able to live there in the future. Spatial development patterns are affected by location, amenities and anchor points. Recent and proposed residential buildings are being developed in specific areas. Affordable housing is being constructed where affordable housing already exists, clusters of recent development are located around the Hydrostone, towards the Common and towards downtown, and new apartments and condominiums are being developed where similar buildings already exist.

This study provides a strong background on physical and economic changes occurring in census tracts 10 and 20. It is too much of a generalization to say if the study area or the entire North End is gentrifying or not, from the results of this study alone. From this background, future studies can be completed with a more in-depth analysis on each identifying factor of change. A larger study area must be analyzed in order to conclude overall changes occurring in the North End.

Each of the factors analyzed in this project are necessary to understand the characteristics and patterns of change, and can be analyzed further to establish a more concrete conclusion. Residential development is occurring in the North End but the extent to which the development patterns indicate gentrification cannot be gathered from this study alone but should be analyzed in the future.

References

- Atkinson, R. (2003). Introduction: Misunderstood saviour or vengeful wrecker? The many meanings and problems of gentrification. *Urban Studies, 40*(12), 2343-2350. doi: 10.1080/0042098032000136093
- Atkinson, R. & Bridge, G. (2005). *Gentrification in a global context: The new urban colonialism*. New York, NY: Routledge
- Beaumont, H. (2013, August 8). Pushed out. The Coast.
- Benjamin, C. (2013, January 31). Gottingen Terrace back from the dead. *The Coast*. Retrieved from http://www.thecoast.ca/RealityBites/archives/2013/01/31/gottingen-terrace-back-from-the-dead
- Bourne, L. S. (2010). The demise of gentrification? A commentary and prospective view. In Lees, L., Slater, T. & Wyly, E. (Eds), *The Gentrification Reader* (55-64). New York, NY: Routledge
- BuzzBuzzHome. (2014a). *Bilby and Isleville Street*. Retrieved from http://www.buzzbuzzhome.com/bilby-and-isleville-street
- Byrne, J. P. (2002). Two cheers for gentrification. *Howard Law Journal*, 46, 405-432.
- Cahill, C. (2008). Negotiating grit and glamour: Young women of colour and the gentrification of the Lower East Side. *City and Society, 19*(2), 202-231. doi/10.1525/city.2007.19.2.202/pdf
- Canadian Architect. (2009, July 1). *Eastern promises*. Retrieved from http://www.canadianarchitect.com/news/eastern-promises/1000337454/?&er=NA
- Caulfield, J. (1989). 'Gentrification' and desire. *Canadian Review of Sociology, 26*(4), 617-632. doi: 10.1111/j.1755-618X.1989.tb00437.x
- Chaskin, R. J. & Joseph, M. L. (2013). 'Positive' gentrification, social control and the 'right to the city' in mixed-income communities: Uses and expectations of space and place.

 International Journal of Urban and Regional Research, 37(2), 480-502.

 doi: 10.1111/j.1468-2427.2012.01158.x
- CMHC. (2003-2013). *Government of Canada Publications*. Retrieved from http://publications.gc.ca/site/eng/92859/issues.html

- CMHC. (2014). *About affordable housing in Canada*. Retrieved from https://www.cmhc-schl.gc.ca/en/inpr/afhoce/afhoce 021.cfm
- Condo Company. (2014). Buildings. Retrieved from http://condo-company.ca/buildings
- CondoNova. (2013a). *Development watch*. Retrieved from http://www.condonova.ca/development-watch-0
- CondoNova. (2013b). *North End Halifax construction favouring apartments over condos.*Retrieved from http://www.condonova.ca/blog/north-end-halifax-construction-favouring-apartments-over-condos
- CondoNova. (2013, October 23). *North-end Halifax draws another new condo building*.

 Retrieved from http://www.condonova.ca/blog/north-end-halifax-draws-another-new-condo-building
- Davenport, R. (2013, October 8). Developer bringing upscale loft condos to Agricola neighbourhood. *Metro News*.
- Erickson, P. (2004). Historic North End Halifax. Halifax, NS: Nimbus Publishing Limited
- Hackworth, J. & Rekers, J. (2005). Ethnic packaging and gentrification: The case of four neighbourhoods in Toronto. *Urban Affairs Review, 41*(2), 211-236 doi: 10.1177/1078087405280859
- Halifax History. (n.d.). *Vanishing city*. Retrieved from http://www.halifaxhistory.ca/Standard%20Auto%20Glass%20Kaye%20Street.htm
- Halifax Regional Municipality. (2007, June 12). *Case 00895*. Retrieved from http://www.halifax.ca/council/agendasc/documents/Case00895.pdf
- Halifax Regional Municipality. (2012). *GIS data download*. Retrieved from http://gisdata.library.dal.ca/gis/index.php?token=cffb9c3bb2e51e5e49494cc02abdd13c &valid=true
- Halifax Regional Municipality. (2013, October 28). *Memorandum: Case 18591*. Retrieved from http://www.halifax.ca/boardscom/D78PAC/documents/18591REDACTED.pdf
- Halifax Regional Municipality. (2013, November 16). *Land use by-law Halifax peninsula*.

 Retrieved from https://www.halifax.ca/planning/documents/HalifaxPeninsula LUB.pdf

- Hammel, D. J. & Wyly, E. K. (1996). A model for identifying gentrified areas with census data. *Urban Geography*, 17(3), 248-268.
- Hamnett, C. (2008). Gentrification, postindustrialism, and industrial and occupational restructuring in global cities. In G. Bridge and S. Watson (Eds.), *A companion to the city* (chapter 28). Retrieved from http://edmontonfreeschool.com/wp-content/uploads/2012/03/HAMNETT-Gentrification.pdf
- Housing Trust of Nova Scotia. (2014a). Former MET Store, Gottingen Street, Halifax. Retrieved from http://www.housingtrust.ca/projects/met-store/
- Housing Trust of Nova Scotia. (2014b). Former Diamonds Bar, Gottingen Street, Halifax.

 Retrieved from http://www.housingtrust.ca/projects/diamonds-bar/
- Kimber, S. (2007, March 1). Inside the Square. *The Coast*. Retrieved from http://www.thecoast.ca/halifax/inside-the-square/Content?oid=960417
- Lees, L., Slater, T. & Wyly, E. (2010). Introduction to part one. In Lees, L., Slater, T. & Wyly, E. (Eds) *The Gentrification Reader* (3-6). New York, NY: Routledge
- Ley, D. (1985). *Gentrification in Canadian inner cities: Patterns, analysis, impacts and policy*.

 University of British Columbia.
- Ley, D. (1986). Alternative explanations for inner-city gentrification: A Canadian assessment.

 Annals of the Association of American Geographers, 76(4), 521 535.
- Ley, D. (1988). Social upgrading in six Canadian inner cities. Canadian Geographer, 32(1), 31-45.
- Meligrana, J.& Skaburskis, A. (2005). Extent, location and profiles of continuing gentrification in Canadian metropolitan areas, 1981-2001. *Urban Studies, 42*(9), 1569-1592. doi: 10.1080/00420980500185462
- Metro Non-Profit Housing Association. (n.d.). *History*. Retrieved from http://homeatmnpha.ca/?page_id=15
- Michael Napier Architecture. (n.d.). *Garden Stone Place*. Retrieved from http://mnarch.ca/Garden%20Stone%20Place/Projects%20%20Garden%20Stone%20Place.html
- Nelson, J. (2000). The space of Africville: Creating, regulating and remembering the urban 'slum'. *Canadian Journal of Law and Society*, *15*, 163-185.

- Newman, K. & Wyly, E. K. (2006). The right to stay put, revisited: Gentrification and resistance to displacement in New York City. *Urban Studies. 43* (1), 23-57. doi: 10.1080/00420980500388710
- Northwood. (2014). Our legacy. Retrieved from http://nwood.ns.ca/about/our-legacy/
- Palys , T. & Atchison, C. (2008). *Research decisions: Quantitative and qualitative perspectives*.

 United States of America: Nelson Education Ltd.
- Patch, J. (2006). The embedded landscape of gentrification. *Visual Studies, 19*(2), p. 169-187. doi: 10.1080/1472586042000301674
- Pearsall, H. (2013). Superfund me. A study of resistance to gentrification in New York City. *Urban Studies, 50*(11), 2293-2310.

 doi: 10.1177/0042098013478236
- Polycorp. (2013). Q Lofts: Building [Image]. Retrieved from http://qlofts.ca/building/
- Power, B. (2012, August 3). *Rising property values in North End a Catch-22*. Retrieved from http://thechronicleherald.ca/business/123572-rising-property-values-in-north-end-a-catch-22
- Property Valuation Services Corporation. (n.d.). *Nova Scotia Property Assessment*. Retrieved from http://www.pvsc.ca/en/home/default.aspx
- Roth, N. (2013). North End Halifax in transition: A current examination of change and redevelopment on Gottingen Street. Retrieved from http://theoryandpractice. planning.dal.ca/neighbourhood/student-research.html
- Royal LePage. (2013). *House price survey*. Retrieved from http://www.royallepage.ca/ realestate/info-and-advice/market-reports-and-surveys/house-price-survey-historical-database/
- Shelter Nova Scotia. (n.d.). *The Rebuilding*. Retrieved from http://www.shelternovascotia.com/facilities-and-services/cunard-street-apartments
- Skaburskis, A. (2011). Gentrification and Toronto's changing household characteristics and income distribution. *Journal of Planning Education and Research*, *32*(2), 191-203. doi: 10.1177/0739456X11428325

- SkyscraperPage Forum. (2010). *Halifax Gladstone Ridge North*. Retrieved from http://forum.skyscraperpage.com/showthread.php?t=183597
- Slater, T. (2006). The eviction of critical perspectives from gentrification research. *International Journal of Urban and Regional Research*, *30*(4), p. 737-757.

 doi: 10.1111/j.1468-2427.2006.00689.x
- Smith, N. (1987). Gentrification and the rent gap. *Annals of the Association of American Geographers*, 77(3), 462-478.
- Smith, N. (2010). Commentary: Gentrification and the rent gap. In Lees, L., Slater, T. & Wyly, E. (Eds) *The Gentrification Reader* (99-106). New York, NY: Routledge
- Smith, N. & Williams, P. (2010). Alternatives to orthodoxy: Invitation to a debate. In Lees, L., Slater, T. & Wyly, E. (Eds), *The Gentrification Reader* (9-10). New York, NY: Routledge
- Statistics Canada. (2011). *Boundary files*. Retrieved from http://www12.statcan.gc.ca/census-recensement/2011/geo/bound-limit/bound-limit-eng.cfm
- Statistics Canada. (2013a). *Dissemination area (DA).* Retrieved from http://www.statcan.gc.ca/pub/92-195-x/2011001/geo/da-ad/da-ad-eng.htm
- Statistics Canada. (2013b). *Canadian Census Analyzer*. Retrieved from http://dc1.chass.utoronto.ca/census/index.html
- St. Joseph's Square. (n.d.). *St. Joseph's Square.* Retrieved from http://www.stjosephssquare.com/
- Sumka, H. J. (2010). Neighbourhood revitalization and displacement: A review of the evidence.

 In Lees, L., Slater, T. & Wyly, E. (Eds), *The Gentrification Reader* (324-332). New York, NY:

 Routledge
- van Berkel, L. (2007, April 12). Where goes the neighbourhood? *The Coast.* Retrieved from http://www.thecoast.ca/halifax/where-goes-the-neighbourhood/Content?oid=960614
- Wyly, E. K. & Hammel, D. J. (2008). Modeling the context and contingency of gentrification. *Journal of Urban Affairs*, 20(3), p. 303-326.
- Zaccagna, R. (2012, February, 3). Spacious Halifax suites touted. *The Chronicle Herald*. Retrieved from http://thechronicleherald.ca/business/58782-spacious-halifax-suites-touted

- Zaccagna, R. (2012, March 27). Polycorp juggles condominium projects. *The Chronicle Herald*.

 Retrieved from http://thechronicleherald.ca/business/78072-polycorp-juggles-condominium-projects
- Zaccagna, R. (2013, August 12). Bringing condos home. *The Chronicle Herald*. Retrieved from http://thechronicleherald.ca/business/1147338-bringing-condos-home
- Zaccagna, R. (2013, October 22). Halifax condos set to start. *The Chronicle Herald*. Retrieved from http://thechronicleherald.ca/business/1162166-halifax-condos-set-to-start
- Zukin, S. (1987). Gentrification: Culture and capital in the urban core. *Annual Review of Sociology*, *13*, 129-147.

Appendices

- A) Inventory sheet
- B) Vacancy rates chart
- C) Maps of dissemination area names for 2001 and 2006/2011
- D) Maps of average rents in study area
- E) Maps of average rents in Halifax CMA
- F) Maps of percentage of dwellings owned in study area
- G) Renting versus owning charts in percentages and numbers
- H) Maps of percentage of dwellings owned in Halifax CMA
- I) Spreadsheet of property values
- J) Map of location of parks
- K) Map of zoning and land ownership
- L) Map of study area showing new buildings with corresponding numbers

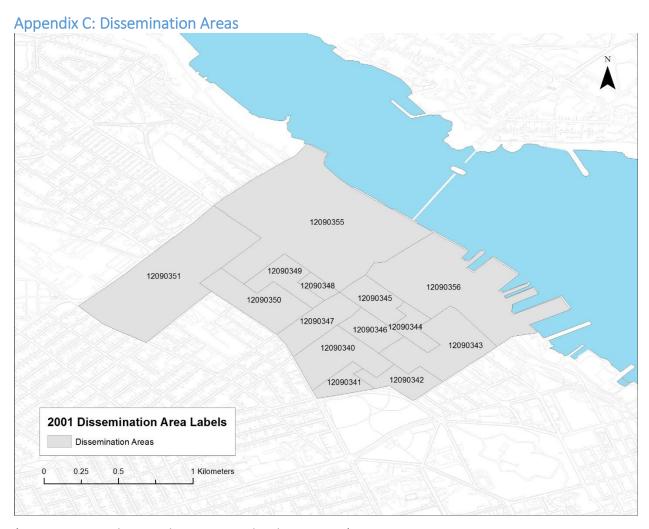
Appendix A: Inventory Sheet

#	Address	Res or Mixed	Units	Material	Company/Manager/ Building Name	Parking	Description	Location on Street	Storeys	Other
					<u> </u>	1				
ŧ	Address	Res or Mixed	Units	Material		Parking	Description		Storeys	Other
					Building Name			Street		

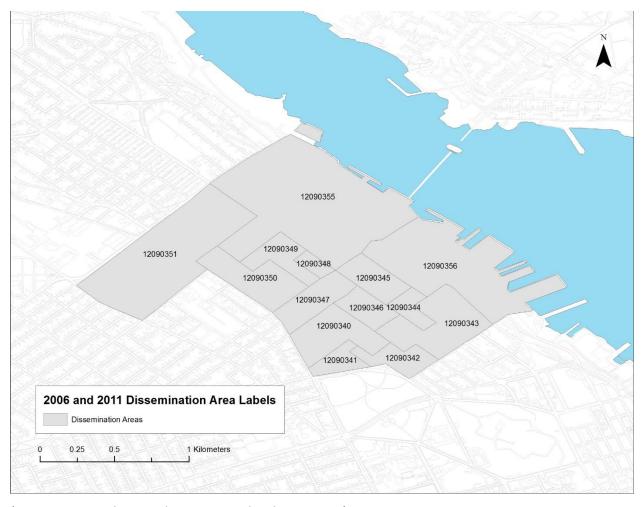
Appendix B: Vacancy Rates

Vacancy Rates (%) for Peninsula North and Halifax CMA											
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Peninsula North	1.6	2	3.7	2.7	3.2	3.6	3.1	3.3	2.1	2.3	2.7
Halifax CMA 2.3 2.9 3.3 3.2 3.1 3.4 2.9 2.6 2.4 3									3.2		

(CMHC, 2003-2013)

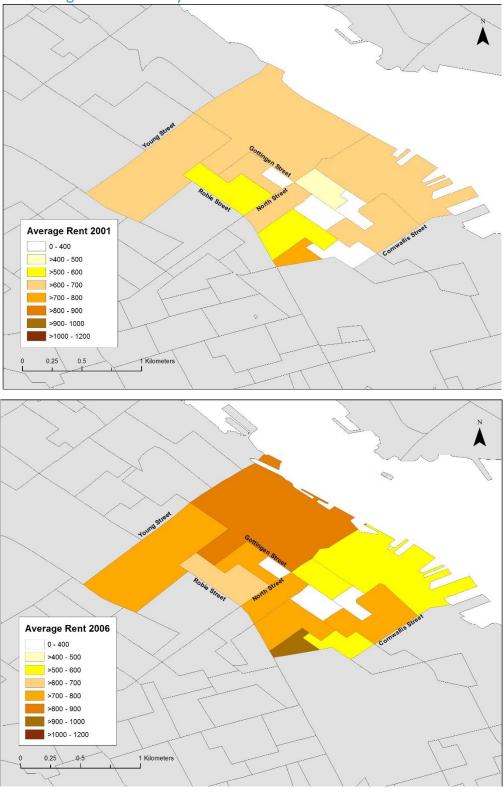


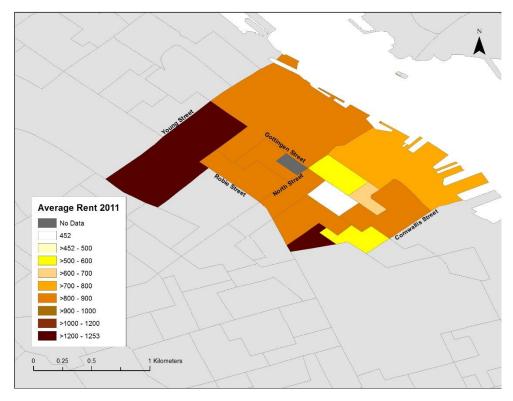
(Statistics Canada, 2013b; HRM Geodatabase, 2012)



(Statistics Canada, 2013b; HRM Geodatabase, 2012)

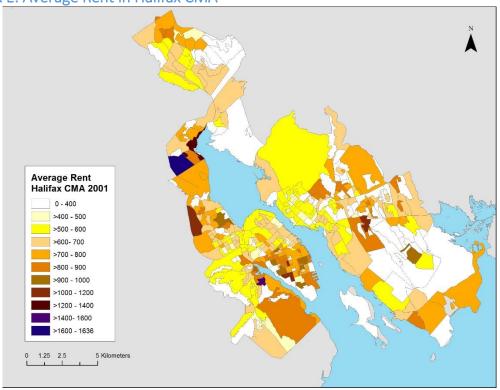


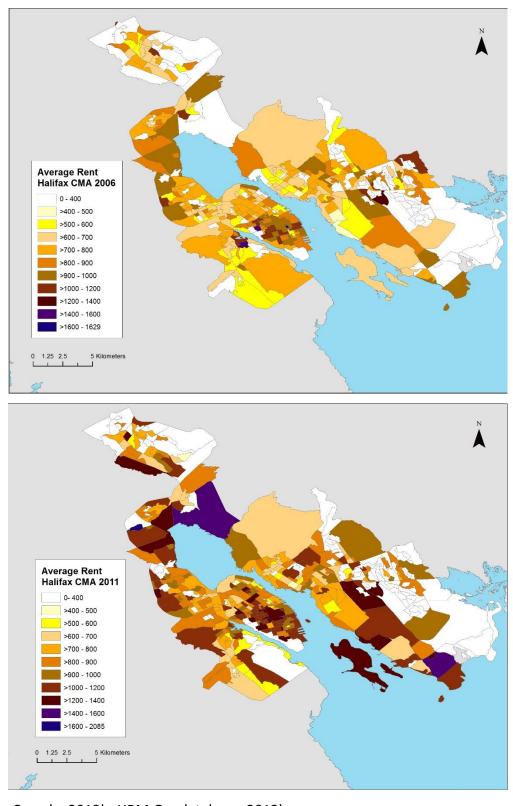




(Statistics Canada, 2013b; HRM Geodatabase, 2012)

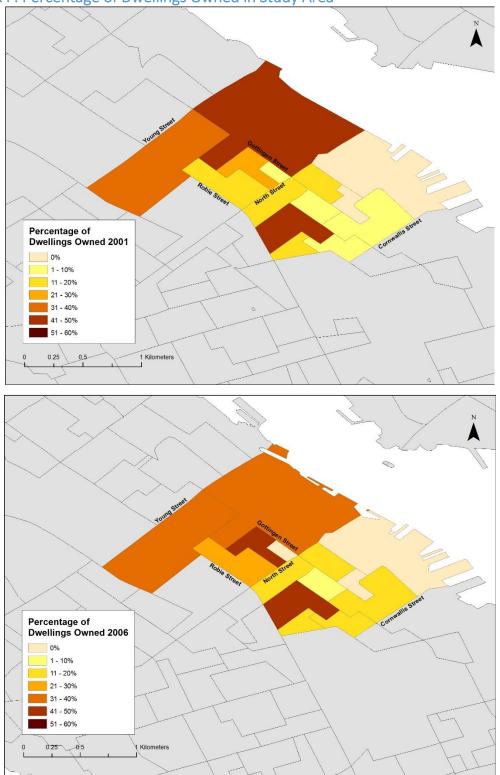


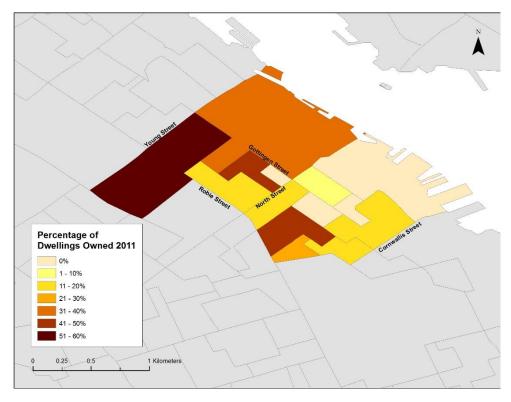




(Statistics Canada, 2013b; HRM Geodatabase, 2012)







(Statistics Canada, 2013b; HRM Geodatabase, 2012)

Appendix G: Renting versus Owning

Number of Dwellings Owned and Rented

Census Tract 0010.00				Census Tra	nsus Tract 0020.00				
	2001	2006	2011		2001	2006	2011		
Renting	2355	2175	2310	Renting	765	640	655		
Owning	275	355	455	Owning	310	325	385		

Halifax										
	2001	2006	2011							
Renting	55210	55805	61455							
Owning	89180	99245	103670							

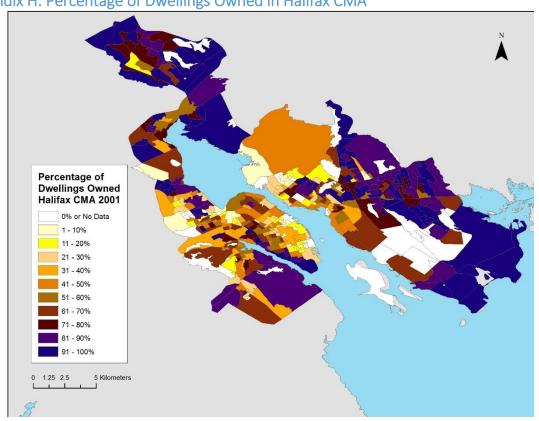
Percentage of Dwellings Owned and Rented

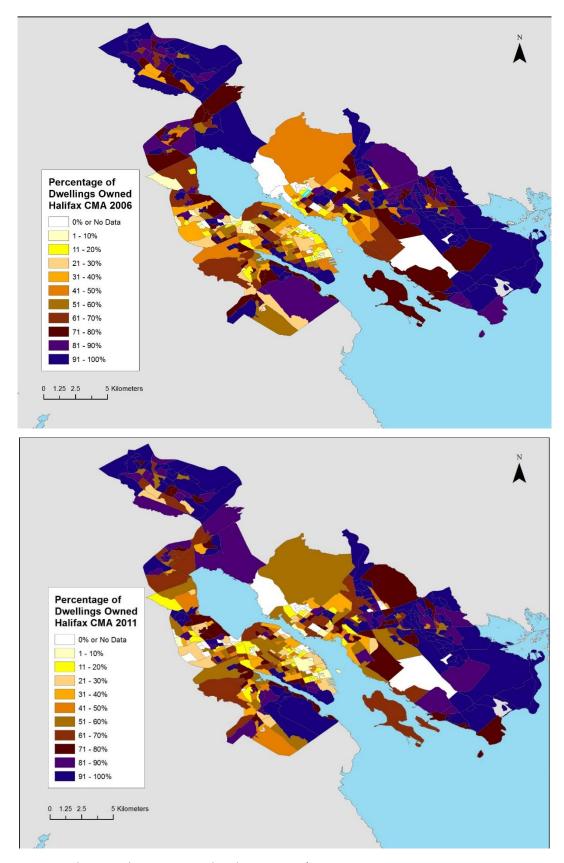
Census Tract 0010.00				Census Tract 0020.00				
	2001	2006	2011		2001	2006	2011	
Renting	90	86	84	Renting	72	66	63	
Owning	10	14	16	Owning	28	34	37	

Halifax									
	2001	2006	2011						
Renting	38	36	37						
Owning	62	64	63						

(Statistics Canada, 2013b)

Appendix H: Percentage of Dwellings Owned in Halifax CMA





(Statistics Canada, 2013b; HRM Geodatabase, 2012)

Appendix I: Assessed Property Values

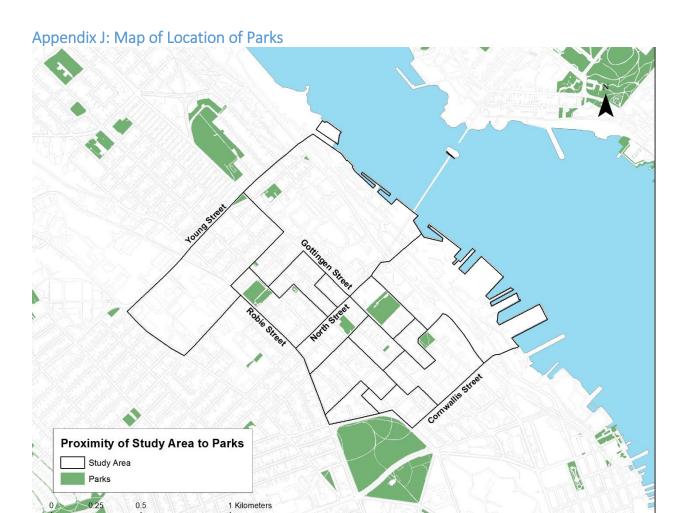
Appendix I: Assessed Property Values				
Existing Buildings				
Addresses highlighted in the same colour are within one development or building				
Address	Current Property Value	Property Value 2009 (5 years)	Property Value 2003 (10 years)	PID
2414 Agricola	1,380,200	93,500	129,000	00151 233
2620 Agricola	489,500	219,900	112,300	00167 411
2594 Agricola	2,034,400	378,900		00169 276
5640 Almon	1,043,300	1,560,000	90,300	00161 737
6136 Almon (or 2761/2751 Gladstone)	17,550,000	1,237,900	1,163,100	00005 074
5534 Almon	4,635,700	3,900,500		41109 000
5522 Buddy Daye (or 2377 Sequoia)	1,080,000	210,900	135,700	40877 292
2253 Creighton (or 2252 Sequoia)	474,500	393,900		41092 883
2257 Creighton (or 2254 Sequoia)	509,800	377,200		41092 875
2261 Creighton (or 2256 Sequoia)	493,900	379,400		41092 867
2249 Creighton	493,900	446,100		41092 891
2262 Creighton	529,500	217,900	150,000	00635 433
2337 Creighton	314,500	239,400	28,400	41069 055
2339 Creighton	314,500	239,400	28,400	41069 048
2343 Creighton	314,500	239,400	28,400	41069 030
2345 Creighton	314,500	239,400	28,400	41069 022
2349 Creighton	314,500	239,400	28,400	41069 014
2351 Creighton	314,500	239,400	28,400	41069 006
5512 Cornwallis	357,500	285,000		41142 944
5514 Cornwallis	357,500	285,000		41142 951

5516 Cornwallis	469,600	60,800	41	1275
		, , , , , , , , , , , , , , , , , , , ,		46
5520 Cornwallis	357,500	285,000	41	1142
			98	35
5404 Cornwallis	303,300			1272
			05	55
5406 Cornwallis	312,100			
5408 Cornwallis	302,000			
5410 Cornwallis	308,200			
5412 Cornwallis	303,000			
5414 Cornwallis	310,500			
5416 Cornwallis	299,800			
5418 Cornwallis	307,600			
5420 Cornwallis	299,800			
5422 Cornwallis	314,900			
5424 Cornwallis	299,800			
5426 Corwallis	307,600			
5428 Cornwallis	299,800			
5430 Cornwallis	316,400			
5432 Corwallis	273,000			
5434 Corwallis	312,100			
5436 Corwallis	271,700			
5438 Cornwallis	277,400			
2117 Maitland	299,800			
2119 Maitland	312,300			
2121 Maitland	310,800			
2123 Maitland	275,700			
2125 Maitland	310,800			
2127 Maitland	306,500			
2129 Maitland	310,800			
2131 Maitland	306,500			
2133 Maitland	314,100			
2135 Maitland	309,500			
2137 Maitland	311,200			
2139 Maitland	296,900			
2141 Maitland	315,700			
2143 Maitland	289,700			
2159 Maitland	321,500			
2161 Maitland	339,400			
2163 Maitland	299,800			
2165 Maitland	307,600			
2167 Maitland	270,000			
	=,0,000			

2169 Maitland	276,900			
2171 Maitland	270,000			
2173 Maitland	276,900			
2175 Maitland	272,700			
2177 Maitland	279,400			
5221 Cornwallis	358,100	314,600		41289 448
5537 Cornwallis	433,000	13,700	1,600	00155 648
5506 Cunard	1,240,000	55,800		00155 499
5839 Cunard	237,900 to 834,600		22,100	41158 304L
5689 Cunard				41336 884
5689 Cunard-101	207,300	182,900 (2012)		
5689 Cunard-102	207,300	182,900 (2012)		
5689 Cunard-103	233,400	211,700 (2012)		
5689 Cunard-104	2,400	2,200 (2012)		
5689 Cunard-201	208,200	183,700 (2012)		
5689 Cunard-202	220,200	194,300 (2012)		
5689 Cunard-203	348,600	307,700 (2012)		
5689 Cunard-204	306,700	270,700 (2012)		
5689 Cunard-301	248,100	218,900 (2012)		
5689 Cunard-302	255,400	225,300 (2012)		
5689 Cunard-303	370,000	326,500 (2012)		
5689 Cunard-304	336,600	297,100 (2012)		
5689 Cunard-401	255,500	255,400 (2012)		
5689 Cunard-402	255,500	255,400 (2012)		
5689 Cunard-403	380,900	336,100 (2012)		

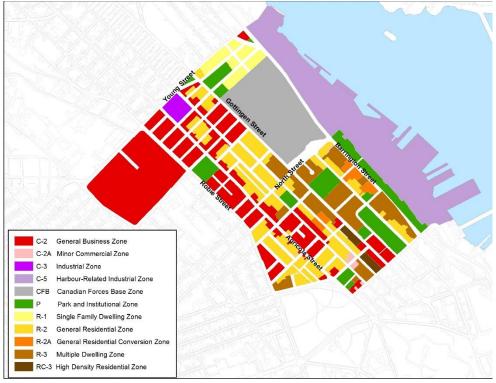
5689 Cunard-404	349,500	308,400		
		(2012)		
5689 Cunard-501	1,251,500	531,900		
		(2009)		11252
5769 Cunard				41262 742
5769 Cunard-101	316,000	222,100		
5769 Cunard-102	261,600	173,700		
5769 Cunard-103	260,500	197,600		
5769 Cunard-104	326,100	228,300		
5769 Cunard-201	316,000	222,100		
5769 Cunard-202	310,600	218,400		
5769 Cunard-203	265,800	201,600		
5769 Cunard-204	326,100	228,300		
5769 Cunard-301	316,000	222,100		
5769 Cunard-302	310,600	218,400		
5769 Cunard-303	265,800	201,600		
5769 Cunard-304	326,100	228,300		
5769 Cunard-401	316,000	222,100		
5769 Cunard-402	315,500	221,700		
5769 Cunard-403	265,800	201,600		
5769 Cunard-404	326,100	228,300		
5769 Cunard-501	316,000	222,100		
5769 Cunard-502	315,500	221,700		
5769 Cunard-503	265,800	201,600		
5769 Cunard-504	326,100	228,300		
2663 Fuller	521,600	84,700	40,700	00168 278
2882 Gottingen	804,600	578,400	280,500	00127 340
2380 Gottingen	409,300	148,300	104,300	00148 833
3051 Isleville	241,800 to 547,900	260,400 to 474,100 (2010)		41297 409
5552 Kaye	8,098,500	306,400	211, 500	00127 092
5516 Kaye	3,360,000	2,895,000	188,000	00127 134
2437 Maynard	1,830,000	128,000	23,500	00149 468
2393 Robie	7,440,000	5,329,000	480,000	41072 810

5560 Sullivan	310,400	188,000	115,500	40634
				479
5558 Sullivan	308,600	188,000	115,500	40634
				461
5556 Sullivan	308,700	188,000	115,500	40634
				453
5554 Sullivan	300,500	188,000	115,500	40634
				446
5710 Young	614,400	127,500	101,000	00004
				234

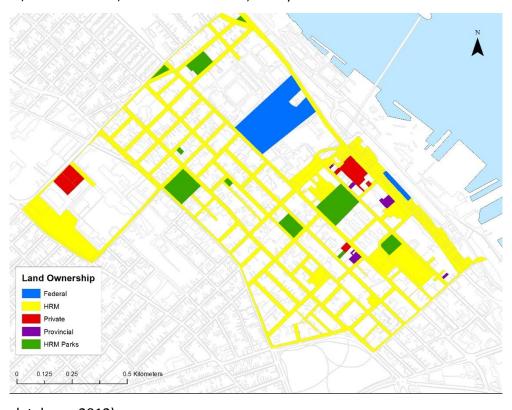


(HRM Geodatabase, 2012)

Appendix K: Zoning and Land Ownership



(HRM, 2013, November 16; HRM Geodatabase, 2012)



(HRM Geodatabase, 2012)



