# Barriers to Intensification: A Case Study of Regina's Warehouse District

by

Rylan R. Graham

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# **AUTHOR'S DECLARATION**

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners. I understand that my thesis may be made electronically available to the public.

#### **Abstract**

This thesis examines the barriers that impede intensification (infill and redevelopment) within Regina's Warehouse District (The District). In addition this study provides recommendations to overcome said barriers in order to facilitate residential development. This research expands upon two previous studies from 2002 and 2009, which were initiated by community stakeholders and that identified the need for additional residential development within The District. To date, success of the two previous plans in attracting new infill and redevelopment has been limited. This research looks to understand why this is, through the use of semi-structured interviews with key informants. Additional data from secondary documents and visual observations was collected to substantiate this approach.

This research found that intensification in The District has been limited due to; unbalanced growth, existing municipal policies and zoning, a negative perception, proximity to noxious uses, an absence of amenities and services, unfavourable land development economics, and a soft demand amongst prospective residents.

The second part of this research identified possibilities or factors to facilitate intensification within The District. Similarly these findings are grounded in the discussion with key informants. This data is corroborated by existing planning literature, as well as best practices from a number of North American jurisdictions. This study found that intensification could be facilitated in The District by; balancing growth, revising municipal policy and zoning, increasing public investment, improving the perception, having the city engaged in development, and with increased financial incentives.

This research has explored intensification in two unique contexts, a mid-sized Canadian city and a historically industrial neighbourhood. It has contributed to the academic literature by establishing a better understanding of the barriers to intensification within both contexts. More specifically, it has explored intensification within Regina's Warehouse District, a city that has been largely bypassed by academic planning literature.

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# Dedication

To the Queen City, where my curiosity and passion for spaces, places, and all things planning was born.

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# Chapter 1

#### Introduction

#### 1.1 Introduction

In the decades following WWII, planning practice within Canada concentrated growth at the periphery of the city (Canadian Mortgage and Housing Corporation, 2004b). Among other problems, this form of development has engendered environmental degradation, amplified traffic congestion and automobile dependency, and utilized limited financial resources to expand the network of infrastructure (Cullen, 2005; Tomalty, 2002; Canadian Mortgage and Housing Corporation, 2004b; Filion & McSpurren, 2007). This approach to development and its associated effects has given rise to the term 'urban sprawl.' According to Blais (2010) sprawl is defined as "an inefficient land-use pattern" that, "embodies a misallocation of resources that is wasteful" utilizing "resources that could have been put to more productive uses" (p. 86). With an increasing understanding of the negative consequences of sprawl, planning has sought to address these concerns by managing growth through intensification (Williams, 1999; Curic & Bunting, 2006; Canadian Mortgage and Housing Corporation, 2004b).

One definition of intensification is new residential development within the existing urban area which generally comes in the form of, infill, redevelopment, addition/conversion, lot severing, or adaptive re-use (Curic & Bunting, 2006; Canadian Mortgage and Housing Corporation, 2004b). For the purposes of this research, the focus is on residential infill, and redevelopment, which are further defined in chapter 2. It

should be noted that the term 'intensification' in the context of this study refers to these two forms, unless otherwise stated.

As further discussed in chapter 2, intensification has emerged as a socially, financially, and environmentally responsible form of growth (De Sousa, 2000; Hayek, Arku, & Gilliland, 2010). With respect to these objectives, intensification has been recognized as a planning tool capable of revitalizing neighbourhoods in decline (Hayek, Arku, & Gilliland, 2010; Bunce, 2004). This has become common practice amongst municipalities hoping to redevelop derelict or underutilized industrial districts identified as 'zones of discard.' This term is defined as "an older and rapidly decaying edge of a formerly vibrant part of the Central Business District (CBD) that has been left behind" (Kaplan, Wheeler, & Holloway, 2004, p. 141). An industrial zone of discard is typically characterized by vacant warehouses and closed factories caused by a decline in the North American manufacturing sector (Pacione, 2001; Jones, 1999).

In some cases, the proximity to a healthy downtown, eventually leads to the gentrification of the 'zone of discard.' Although as Schaffer and Smith (1986) note, gentrification was typically associated with residential development, its meaning has come to be recognized more broadly as a "restructuring of central and inner city land uses" (pg. 347). That is, new development through infill or redevelopment leads to an upgrading of the social and economic fabric of the neighbourhood. In the context of a historically industrial neighbourhood, vacant land, or undesirable industrial uses are pushed out or replaced by uses including high-end residential and commercial. Such has been the experience in Regina, Saskatchewan's central neighbourhood, 'The Warehouse District' (The District). Once the industrial heart of the city, the area

regressed come the 1970s and was inundated with vacant buildings, empty lots and generally undesirable uses. Come the end of the 20<sup>th</sup> century the neighbourhood began to transition away from industrial uses, as abandoned warehouses were converted to high-end residential lofts. In the last decade, stakeholders have sought to continue or even accelerate the neighbourhood's transformation and have identified the need to attract additional infill and residential redevelopment. In actuality however, progress has remained limited, as neither development form has come to fruition.

While in theory there is strong support for intensification, in practice there are often a plethora of barriers that limit progress (Farris, 2001; Robertson, 1995; Canadian Mortgage and Housing Corporation, 2004b). Herein lies the principal problem of this research: understanding why infill and redevelopment has remained limited within Regina's Warehouse District despite the apparent support, and assessing how further intensification can be facilitated in an effort to continue the neighbourhood's transformation. More specifically, the primary research questions of this thesis are, Why has intensification been limited within Regina's Warehouse District?; and How can intensification be facilitated within Regina's Warehouse District?

Exploration of the first research question will provide an understanding of the barriers that have and continue to impede intensification in The District. The second point of inquiry will lead to recommendations to facilitate intensification as a means to continue redevelopment efforts in the neighbourhood. These questions are addressed by employing semi-structured interviews with key informants. Additional qualitative and quantitative methods are implemented as a means to support these findings.

#### 1.2 Research Justification

The intent of this thesis is to understand why intensification has remained limited within The District and moreover, to identify how it can be facilitated. The validation in addressing both points comes from two previous studies initiated by key stakeholders. As further discussed in chapter 3, in 2002 (Banadyga Mitchell Partnership Architects, 2002) and 2009 (Regina's Warehouse Business Improvement District, 2009) two separate planning studies were commissioned to create a new vision for The District. In part, both studies identified a need to introduce additional residential development to aid in redevelopment of the neighbourhood. In lieu of this, neither study has been successful in inspiring its anticipated change, which is elaborated upon further in chapter 3.

What informants envisioned in 2002 and 2009 for Regina's Warehouse District is consistent with the literature and further delineated in chapter 2. From De Sousa's (2000) perspective, intensification on former industrial lands can achieve "environmental, social, and economic" goals and objectives (p. 834). Table 1-1 adapted from De Sousa's article *Brownfield Redevelopment versus Greenfield Development: A Private Sector Perspective on the Costs and Risks Associated with Brownfield Redevelopment in the Greater Toronto Area* expands on the aforementioned benefits. This discussion is further explored within chapter 2, citing additional literature that support De Sousa's (2000) perspective.

Table 1-1: Benefits of Intensification (De Sousa, 2000)

#### **Environmental Benefits**

#### 1. Reduced need to develop natural area at the periphery

- 2. Protects public health and safety
- 3. Protects soil and water table
- 4. Restores former landscape
- 5. Enhance the quality of air, water, or land

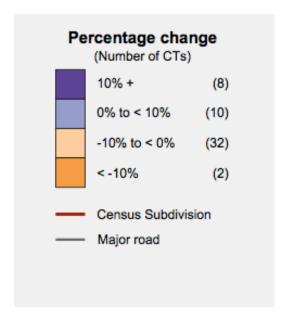
#### **Social Benefits**

- 1. Revitalize city core
- 2. Eliminate stigma associated with the area in decline
- 3. Reduce the fear of poor health, environmental degradation and declining property values

#### **Economic Benefits**

- 1. Attract new investment
- 2. Increase the municipal tax base
- 3. Efficient use of existing infrastructure

Despite the interest from community stakeholders to introduce further intensification to The District, and the supportive rationale from planning literature, as emphasized, infill and redevelopment have remained limited. Census data depicted in Figure 1-1 illustrates this fact.



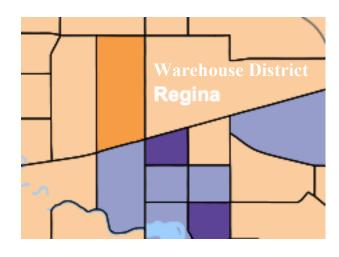


Figure 1-1: Regina's Population Change from 2002-2006 in the Warehouse District Census Tract (Statistics Canada, 2009)

As Figure 1-1 indicates, from 2002 to 2006, the population in the Warehouse District census tract declined. However, Figure 1-2 illustrates, from 2006 to 2011 this trend began to reverse with The District experiencing a modest increase in population.

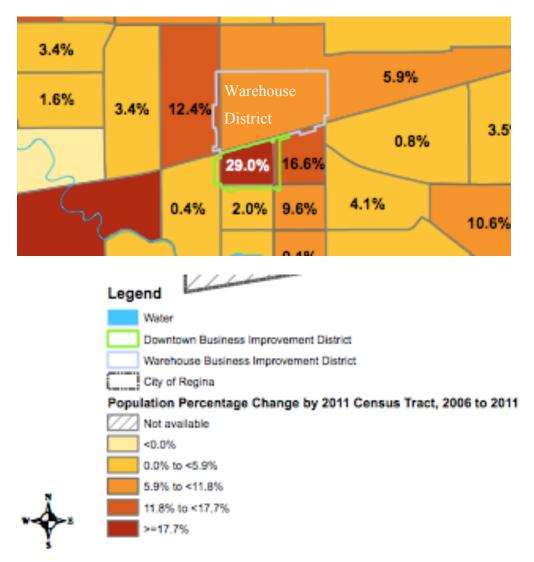


Figure 1-2: Population change in the Warehouse District and surrounding census tracts from 2006-2011 (Statistics Canada, 2012b)

In actuality however, the increase in population during this period was a mere 61 people (Statistics Canada, 2012). Although stagnant growth or even a declining neighbourhood population is a common characteristic of gentrification, further

confirmation of the absence of infill or redevelopment comes from the City's building permits (Meligrana & Skaburskis, 2005).

An examination of the permit records revealed that from 2002 to 2012, there has been no construction of projects under the umbrella of infill or redevelopment within The District. Figure 1-3 offers a snapshot of these findings illustrating the residential building activity within The District and surrounding neighbourhoods from January to June 2012.

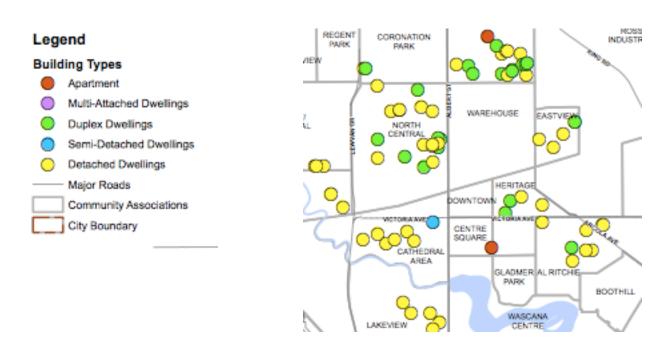


Figure 1-3: New Construction by Residential Building Type January to June 2012 (City of Regina, 2012a)

Upon further analysis of the City's building permits, it was identified that residential development within The District has been limited to adaptive re-use.

Therefore, any population gains noted in the 2006 census can be attributed primarily to residential development through adaptive re-use rather than infill or redevelopment.

This research then intends to understand why both infill and redevelopment have been limited within The District. This study will expand upon what key stakeholders established in the 2002 and 2009 studies; that infill and residential redevelopment are regarded as an appropriate and ideal land use for the Warehouse District. This research intends to go beyond what was concluded then, by delving into the 'why' and 'how.' 'Why' infill and redevelopment have been limited and 'how' these forms of development can be facilitated.

#### 1.3 Objective

This research is intended to achieve two primary outcomes:

- Contribute to the research on intensification, particularly addressing the gap on intensification within the mid-sized Canadian city and within historically industrial districts. More specifically, this research is done within the context of Regina, Saskatchewan, a city largely bypassed within academic planning literature.
- 2. Influence planning practice within Regina by bringing forth recommendations to facilitate intensification within the Warehouse District.

#### 1.4 Thesis Organization

To achieve the aforementioned objectives, this thesis is organized into seven chapters. The subsequent chapter provides a review of the literature beginning with a definition of intensification as well its associated benefits, discusses the drawbacks of intensification and its part in gentrification, offers an overview of barriers that typically impede intensification, highlights factors to facilitate intensification, provides a brief

discussion on the history of inner-city industrial lands, and concludes with a discussion on characteristics of neighbourhood change and recent development trends. Chapter 3 begins with an introduction and overview of Regina and the Warehouse District, and offers a review of past planning initiatives that have attempted to redevelop and intensify the neighbourhood. Chapter 4 provides insight on the methodology employed within this research project. Chapter 5 presents the findings of this research, identifying the barriers to intensification collected through primary and secondary data sources. Chapter 6 offers recommendations to facilitate intensification through both primary and secondary data. Lastly the final chapter, chapter 7, provides a summary of the research, limitations encountered during this study, and possible opportunities for future research.

### Chapter 2

#### Literature Review

#### 2.1 Introduction

The ensuing literature review begins as the foundation for this research. This chapter begins with a summary of what constitutes "intensification" and digresses into its associated benefits and potential drawbacks. Following this, the discussion reviews the common barriers that impede intensification, as well as potential solutions to facilitate compact growth. Additionally, a review of the life cycle of inner-industrial neighbourhoods in North America is provided. This chapter concludes with a discussion on current redevelopment patterns and characteristics of neighbourhood change.

#### 2.2 What is Intensification?

Over the past two decades, municipalities throughout North America have placed an increased emphasis on sustainable planning practice (Williams, 1999). The term sustainability is recognized as "ensuring that development meets the needs of the present without compromising the ability of future generations to meet their own needs" and has been prompted by efforts to mitigate the costly environmental, social and financial implications associated with 'urban sprawl' (Hodge & Gordon, 2008, p. 123; Danielsen, Lang, & Fulton , 1999). One of the foremost planning tools used to counteract sprawl has been the implementation of Smart Growth policies which advocate for; a mixture of land uses, compact building design, diverse housing choices, walkable neighbourhoods, a strong sense of place, preservation of the environment, a variety of transportation options, community involvement, cost effective development,

and lastly and most pertinent to this study, growth directed towards existing urban areas through 'intensification' (Danielsen, Lang, & Fulton, 1999; Edwards & Haines, 2007; Filion & McSpurren, 2007; Smart Growth Network, n.d).

Contrary to urban sprawl, intensification is regarded as development that uses land, infrastructure and services appropriately and efficiently. A review of the literature reveals a number of common characteristics associated with the term 'intensification.' Generally speaking, intensification is recognized as denser than existing residential development (Cullen, 2005; Heydorn, 2007; Curic & Bunting, 2006; Bunce, 2004; Tomalty, 1997). The Canadian Mortgage and Housing Corporation (2012) or CMHC defines intensification as "encouraging housing development in existing urban areas where infrastructure and transit services are already in place" (p. 1). Tomalty (1997) offers a similar description where he defines intensification as "an observed development trend towards higher densities than was conventionally the case and to the public policy objective of achieving such development patterns" (p. 2). Intensification is not limited to an increase in population density but also includes intensifying the built form, from lower density to higher density development.

Tomalty (1997) highlights that the meaning of intensification varies by its location, development within the built form versus development at the periphery of the city. Common examples of intensification within the existing built area are, conversion/addition, infill, redevelopment, lot severing, and adaptive reuse (Barrs, 2004; Tomalty, 1997; Canadian Mortgage and Housing Corporation, 2012; Canadian Mortgage and Housing Corporation, 2004b).

Intensification through conversion is described as increasing the number of residential units within an existing residential structure. This is done through renovations or additions to existing buildings. Common examples include, adding a secondary suite to an existing residential unit, converting a single detached dwelling to a semi-detached residence, or adding residential uses above existing main floor commercial. This form of intensification is acknowledged as having only minimal impact on the surrounding area because of its small increases in density (Tomalty, 1997; Barrs, 2004).

Infill is identified as new housing development on vacant or underutilized parcels, in neighbourhoods that have existing services. Infill is "physically integrated with the surrounding neighbourhood" (Tomalty, 1997, p. 2). Thus gaps within "the existing fabric are 'infilled' with residential development" (Barrs, 2004, p. 1).

Redevelopment is the replacement of existing buildings for residential or mixed-use development. These projects tend to occur where uses or existing structures may be obsolete including former commercial or industrial lands (greyfields and brownfields) (Tomalty, 1997). Redevelopment can also occur by replacing lower density housing with higher density residential (Barrs, 2004).

Lot severing is the process of subdividing an existing lot into one or more parcels. This procedure allows additional residential units to be built on the newly created lots (Canadian Mortgage and Housing Corporation, 2004b).

Finally, the last form of intensification is referred to as adaptive reuse. This is the adaptation of a building from one use to another. Examples of adaptive-reuse are the

conversion of former warehouses, schools, or factories to residential lofts (Tomalty, 1997; Barrs, 2004).

According to Tomalty (1997) the term intensification as applied in areas of greenfield development is generally seen to occur in two ways. The first is by increasing the range of housing types in new developments to establish higher density developments. This is generally non-typical in suburban development as housing is commonly low-density. The second approach to intensification is through the application of zoning standards that promote compact development. Standards such as smaller lot sizes or maximum setbacks increase density within greenfield development (Tomalty, 1997).

It is important to note, not all scholars or practitioners define infill as one process of intensification. Intensification is sometimes used interchangeably with the term "infill." Wheeler (2001) defines infill as "building on vacant lots, reuse of underutilized sites (such as parking lots and old industrial sites), and rehabilitation or expansion of existing buildings" (p. 2).

For the purposes of this research, the term intensification will follow the adopted Canadian definition put forth by CMHC (2004b), which is "encouraging housing development in existing urban areas where infrastructure and transit services are already in place" (p. 1). Additionally, this research focuses on two of the five forms of intensification identified by CMHC (2004b), Tomalty (1997) and Barrs (2004), infill and redevelopment.

During the visual observation, the researcher assessed that the opportunity for intensification through conversion/addition, lot splitting or additional adaptive re-use

was limited within The District. Additionally, this point was emphasized through semistructured interviews with key participants. This discussion is further clarified in chapter 5. As such, community stakeholders identified infill and redevelopment as the future of intensification in The District, and therefore, this thesis focuses on understanding the impediments to these two forms and how they can be facilitated.

#### 2.3 Benefits of Intensification

As previously identified within chapter 1 in Table 1-1, De Sousa (2000) highlights that managing growth through intensification can offer environmental, social and economic benefits. The subsequent discussion expands on how intensification can achieve said goals.

Environmentally, intensification within the built up area, reduces the need to develop new residential at the periphery of the city. Every one residential unit created through intensification is one less that contributes to sprawl. This provides an equal amount of development but uses less land. This is a more sustainable approach to growth as it reduces the need to convert surrounding farmland or natural habitat to urban uses (Vallance, Perkins, & Moore, 2005; Bunce, 2004; Hayek, Arku, & Gilliland, 2010; Jabareen, 2006; De Sousa, 2000; Steinacker, 2003).

Intensification increases population density making mass transit and active transportation more efficient and effective thereby decreasing dependency on the personal automobile. This offers residents a wider range of transportation options than their suburban counterparts. Therefore, growth that promotes intensification over sprawl maintains the quality of water, air and land within the area (Vallance, Perkins, & Moore, 2005; Curic & Bunting, 2006; Jabareen, 2006; De Sousa, 2000).

Economically, intensification offers significant short and long-term cost savings for a municipality. Existing facilities and services such as roads, sewers, schools and libraries can service new development with small or no upgrades. On the contrary, development within greenfield locations typically requires that municipalities invest in new infrastructure to accommodate growth. Financially, the latter can be a taxing form of development that is otherwise eliminated through intensification (Landis, Hood, Li, Rogers, & Warren, 2006; Bunce, 2004; Curic & Bunting, 2006; Jabareen, 2006). Intensification also generates new investment in the area, which increases the municipal tax base, as vacant, underutilized parcels are redeveloped into new tax contributing residential units (De Sousa, 2000).

A growing body of research recognizes that intensification can be a successful instrument to achieve social goals, including revitalizing neighbourhoods in decline (Birch, 2002; Sohmer, 1999; Robertson K. A., 1999; Burchell, Galley, & Listokin, 2001 Steinacker, 2003). Intensification brings new patrons to the area, generating a demand for additional neighbourhood amenities and services (Faulk, 2006; Robertson K. A., 1995; Bunting & Filion, 2000). Moreover, an increase in residents adds activity to the streets, establishes activity beyond normal businesses hours, thereby creating a better sense of security (Faulk, 2006; Robertson K. A., 1999). This helps to decrease or eliminate the negative stigma associated with declining or depressed neighbourhoods.

Although this research follows the 2002 and 2009 studies that identified a need for additional residential development in The District, the environmental, economic and social benefits of intensification identified within the literature provides additional justification. This research then expands upon the previous literature that establishes an

understanding that by intensifying the District, the City of Regina would be managing growth in an economically, socially, and environmentally responsible and sustainable manner.

#### 2.4 Drawbacks of Intensification

Despite intensification being idealized as a responsible form of growth, it is important to note any literature that diverts from this perspective.

Intensification plays a key role in 'gentrification', which is defined as "processes that result in the provision of new dwellings through conversions or redevelopment as well as through the renovation and upgrade of existing housing units" (Meligrana & Skaburskis, 2005, p. 1571). Ley (1996) also incorporates both redevelopment and renovation into his understanding of gentrification but further asserts that gentrification results in social change. More specifically, the literature identifies that gentrification increases housing costs and causes displacement for lower income residents. In the case of industrial districts, a recent study identifies that redevelopment can also lead to the loss of employment lands.

As discussed in the previous section, intensification is acknowledged as a means to revitalize depressed neighbourhoods. However, critics suggest that this leads to gentrification, which increases property values and decreases housing affordability (Ley & Dobson, 2008; Anthony, 2003; Steinacker, 2003; Downs, 2005; Skaburskis & Moos, 2010). Steinacker (2003) outlines that in order for intensification to achieve its goal of reducing peripheral expansion; it must be a "viable alternative to potential suburban residents" (p. 493). As most suburban growth is generated by moderate to high-income earners, "infill development must be targeted to a more upscale housing market" (p.

494). Steinacker identifies that this conflicts with the ability for infill to be developed as affordable housing, thereby alienating low-income earners from new development. Downs (2005) offers support to this discussion identifying that "Smart Growth and affordable housing are inconsistent goals for a single community to pursue simultaneously" (p. 371).

In researching the United State's 50 largest cities, Steinacker's (2003) found that from 1996-2000, construction costs for multi-family units in infill locations tended to be more expensive than new multi-family in suburban areas. Although construction costs were only slightly higher, she suggests that this is still "troublesome, given [that] this is the type of housing most likely to provide affordable units" (p. 505). Further to that, her research found that cities that were successful in attracting new infill had higher housing values compared to their surrounding suburbs. Steinacker (2003) assesses that infill development could potentially be "detrimental to low or moderate-income households that need more inexpensive housing" (p. 505).

The literature further identifies that new development and increased housing costs, can ultimately lead to resident displacement (Landis et al, 2006; Newman & Wyly, 2006; Freeman, 2005; Hodge & Gordon, 2008; Ryan & Hoff, 2010; Ley & Dobson, 2008; Steinacker, 2003; Skaburskis and Moos, 2010). The demolition of rental units for market-rate housing means that existing residents are often forced to relocate and "look to lower-cost neighbourhoods for housing" (Newman & Wyly, 2006). In their study of California, Landis et al. (2006) found that in Los Angeles, as many as 281,000 possible residential units could displace affordable housing units. As they identify then, policies that promote infill development require a balance to ensure that infill does not come "at

the expense of existing residents with the fewest housing options and opportunities" (p. 712). Ryan and Hoff's (2010) study of the City Heights Redevelopment Project in San Diego offers additional findings on the link between intensification and displacement; a developer proposed to demolish existing homes and businesses to make way for a new school, market-rate housing, rental accommodations and other additional neighbourhood amenities. This proposal was founded on the perception that the existing neighbourhood was deteriorating and suffering from aged infrastructure. The redevelopment ultimately displaced 602 residents, with an additional 250 households slated to be removed at the time of the study. As Ryan and Hoff (2010) indicate, this was just the latest development led displacement in San Diego, as previous projects forced more than 2400 residents out of their homes.

Anthony (2003) and Daniels (2010) provide further discussion on the linkages between growth management policies promoting intensification and housing affordability. Both researchers found that enacting policies, such as urban growth boundaries reduces the supply of land for new development, thereby increasing housing costs and creating issues of affordability. Ultimately, unaffordability can generate alarming social issues including a disproportionately high expenditure on housing, increased rental costs, and a decreased ability for renters to become homeowners (Downs, 2005; Anthony, 2003). Daniels (2010) research offers additional insight into the relationships between growth boundaries and housing prices. In his study of six counties he found that a decrease in housing affordability in three of them (Boulder, Marin and Sonoma) were a result of urban growth boundaries. Anthony

(2003) summarizes that an increase in housing prices forces individuals to reduce "critical non-housing expenditures or live in substandard housing" (p. 289).

Alexander and Tomalty (2003) provide similar findings in their exploration of the challenges of smart growth in British Columbia. They found that those communities with households spending more than 30% of their income on housing "have an average unit density of 3.41" whereas those with the highest proportion of household income directed towards housing have an average unit density of 26.63 (p. 403). As they summarize "affordable housing is not automatically a by-product of increased density" (p. 405).

Although not as prevalent within the literature, a recent study by Leigh and Hoelzel (2012) identifies that the concept of 'displacement' can extend beyond residential and include other land uses, including industrial. They underline that Smart Growth Policies, which favour intensification, have a "blind side" as these policies "fail to recognize connections between urban industrial land and the activities it supports with smart growth goals of limiting sprawl and revitalizing central cities" (p. 87). The smart growth movement focuses on building compact cities, by revitalizing neighbourhoods in decline with new mixed-use development. However, as Leigh and Hoelzel (2012) outline, little consideration has been given to maintaining or revitalizing industrial districts with new manufacturing or warehousing. Instead, the emphasis has been on replacing industry with new residential and commercial uses. However, the conversion of industrial lands to non-industrial uses can have a detrimental impact. Leigh and Hoelzel (2012) identify that a loss of these lands could lead to missed opportunities for new economic development as a municipality would no longer have

"productive industrial land and building space located in the right areas, and supported by the right type of urban infrastructure, to meet the needs of industrial businesses" (p. 90). As they specify, this is an important consideration as industrial activity creates more jobs and pays higher wages than other types of land uses.

As the above literature identifies, intensification plays a key role in the gentrification process, which can lead to a variety of social ills including housing unaffordability and displacement. Whether intensification benefits or detracts from the community is subject to much debate, however, as the following discussion presents, the literature reveals that one way or another, intensification is impeded by a myriad of issues.

#### 2.5 Barriers of Intensification

Planners, developers, politicians and other key stakeholders often face a multitude of issues in their efforts to facilitate intensification. These issues frequently hinder intensification by adding time and cost to the process. A review of the literature notes that the typical barriers to intensification are:

- Land Assembly and Cost
- Development Requirements and Red Tape
- Public Opposition
- Brownfield Remediation
- Market Conditions
- Inadequate Infrastructure

The following discussion expands on and provides further detail on the aforementioned barriers.

#### 2.5.1 Land assembly and Cost

Producing a successful project is reliant on the ability to assemble land under common ownership (Shoup, 2008). Farris (2001) outlines that, "land assembly at a reasonable cost in a good market location, is frequently a major deterrent to infill in a central city or built up environment" (p. 9).

Although land prices vary from one market to the next, Farris (2001) identifies that typically suburban land is more inexpensive than land in the built up area. Tomalty (1997) lends support to this argument, outlining that land prices are often highest in a city's central neighbourhoods. Such was the case in Bunting and Filion's (2000) research as they found that housing in the downtown was partially impeded by high land costs, as it made certain development forms economically unfeasible.

On the contrary, not all cities have core neighbourhoods characterized by high property values. In some contexts, low property act as an impediment to intensification. Accordino and Johnson (2000) outline that areas with low property values arise from an abundance of vacant and derelict properties, which "undermines the appearance, and economic value of blocks, neighbourhoods and city districts" (pg. 301). Ultimately this leads to a reduced market demand with no interest to utilize the land for new development opportunities.

Aside from purchase price, Suchman (2002) and Tomalty (1997) note that the availability of land can also impede intensification. This is because infill or redevelopment is frequently restricted due to 'land holding' (McConnell & Wiley, 2010;

Suchman, 2002). Land holding is described as the manner in which property owners refuse to sell land to other interested parties. This typically occurs because owners face a dispute over title ownership, refuse to sell because of tax purposes, or anticipate an increase in land value (Farris, 2001; Suchman, 2002; Shoup, 2008). Such was the case in Bunting and Filion's (2000) study, where speculative landholders in Kitchener were holding out for an increase in property value.

Often developers have to work with a number of different property owners along one development site. This in itself can slow down the process, or increase costs. On the contrary, McConnell and Wiley (2010) highlight that land assembly for greenfield developments is rarely an issue. This is because land at the periphery is typically already under common ownership, and developers generally have to negotiate with only one seller. This deters intensification since the ease of assembling greenfield land is more enticing to the development industry (Shoup, 2008). Bunting and Filion (2000) present similar findings in their study of Kitchener, as they state land at the periphery of the city is abundant, cheaper, and easy to assemble due a plethora of motivated sellers.

Additionally, the literature outlines that municipalities often indirectly support land holding. Vacant parcels are taxed at the lowest rate, which decreases the impetus for owners to redevelop or sell their property (Suchman, 2002).

# 2.5.2 Development Requirements and Red Tape

Farris (2001) notes that zoning requirements are typically not conducive to facilitating intensification. This notion is supported throughout the literature as a number of articles identify zoning as a common barrier to infill and redevelopment

(Wheeler, 2001; Danielsen, Lang, & Fulton, 1999; Farris, 2001; Galli, 1997; Tomalty, 1997; Steinacker, 2003; Haslam, 2009; Levine & Inam, 2004).

In the case of Scarborough, Ontario, Curic and Bunting (2006) found the existing policy framework to be outdated and unsupportive of infill development. Wheeler (2001) provides support to this discussion, noting that zoning restricts intensification by prohibiting mixed-use development, setting maximum building heights, or restricting density. These requirements not only run contrary to the concept of intensification but also, are difficult to accommodate on smaller lots (Steinacker, 2003; Soule, 2006).

Research conducted by Levine and Inam (2004) found that municipal regulations often impede compact development. In their survey of developers and home-builders located throughout the United States, respondents identified that "a relaxation of regulations such as zoning, floor area ratio or transportation standards would lead them to build more densely" (p. 424).

The literature outlines that many municipalities have yet to implement an effective framework for intensification, making it a regulatory nightmare for developers. As Downs (2005) identifies, a shift towards intensification often results in an increase in bureaucracy or municipal red tape. Downs (2005) along with Wheeler (2002) highlight that municipalities often require developers to undertake impact studies (traffic, historical, environmental) to assess whether or not development is appropriate prior to obtaining approval. Farris (2001) and Wheeler (2001) further establish that intensification is impeded by municipal standards, which penalize compact growth by necessitating expensive and time-consuming plan amendments.

As the literature outlines, municipal planning departments with inflexible regulations or an arduous approval process have the ability to undermine intensification (Wheeler, 2001; Tarnay, 2004; Barrs, 2004; Levind & Inam, 2004;). As the saying goes, 'time is money' and rigid regulations and unexpected delays add uncertainty and increase expenses to a point where a development may no longer be feasible (Smart Growth Network, n.d; Porter, 1995).

In light of this, it is important to note that much of the literature discussing rep tape as an impediment dates back to the late 90s and early 2000s. Therefore the existing literature may not fully encompass the realities of 2012. Many cities, acknowledging the benefits of intensification, have focused on managing growth through intensification and thus municipal requirements may no longer present the obstacles that they once did.

# 2.5.3 Public Opposition

Public opposition or NIMBYism (not-in-my-backyard) is identified throughout the literature as a common barrier to infill and redevelopment (McConnell & Wiley, 2010; Tarnay, 2004; Bunting & Filion, 2000; Tomalty, 1997; Hodge & Gordon, 2008). Danielson et al. (1999) found community resistance to be the greatest challenge in implementing smart growth measures, such as, higher density development. According to Curic and Bunting (2006) opposition originates because adjacent residents typically oppose change, especially when development forms are seen as unconventional.

Farris (2001), Bunce (2004), Tarnay (2004), and Vallance et al. (2005) found that existing residents are often fearful of the alleged changes that intensification will bring. Jenks (2000), and McConnell and Wiley (2010) identify that a perception exists that

intensification will threaten or alter particular neighbourhood qualities. The primary concerns of intensification identified within the literature include, increased traffic congestion and crime, loss of open space, crowded schools, shadowing effects, and a decrease in property values (Farris, 2001; Danielsen, Lang, & Fulton, 1999; Curic & Bunting, 2006; Downs, 2005; Hodge & Gordon, 2008). In addition Danielson et al. (1999), and Curic and Bunting (2006) found residents to be resistant to the types of people new development can bring to the neighbourhood. Residents often oppose intensification with the conviction that it will bring neighbours who do not fit within the social constructs of the area (Danielsen, Lang, & Fulton, 1999).

Curic and Bunting (2006) highlight that local opposition is detrimental to intensification because of its ability to influence approval authorities. Filion and McSpurren (2007) point to a number of instances where community opposition prevented redevelopment within a number Toronto's inner city neighbourhoods. Farris (2001) identifies a similar scenario in Portland, Oregon where public resistance was successful in persuading politicians to deny a 7500-unit residential project.

In light of the discussion above, not all of the literature views NIMBYism in the same manner. Sénécal and Reyburn (2006) assess that the "negative image commonly associated with the NIMBY syndrome is misleading" (p. 246). Instead NIMBYism is a demonstration of citizens enacting their ability to protect their surrounding environment (Sénécal & Reyburn, 2006; Smith, Michaud, & Carlisle, 2004). McClymont and O'Hare (2008) identify that public participation is encouraged in planning, and even those that present opposition are "not only exercising their democratic rights, but also assuming their civic responsibility" (p. 322). Hodge and Gordon (2008) offer a

similar perspective, identifying that NIMBYism is a sign of public involvement and that democratic participation is a core value of planning. They outline that NIMBYism culminates from the desire "to alert planners and politicians to local concerns, and to bring local knowledge, which is often invaluable" to the planning process (p. 318). In some occasions the adverse reaction to intensification does not come from fear but rather is a result of failures in the planning process as affected parties are not always properly consulted on proposed changes (Hodge & Gordon, 2008).

These perspectives distinguish that opposition to intensification should be viewed as a legitimate reaction. As such planners have to be willing to accept it and address concerns through "consensus building and dispute resolution" (Hodge & Gordon, 2008, p. 320).

## 2.5.4 Brownfield Redevelopment

De Sousa (2000) identifies that "the legacy of a negligent industrial past has left its scars on the urban landscape in the form of countless underused or abandoned industrial and commercial properties, commonly referred to as 'brownfield' sites" (p.831). Brownfields are defined as "abandoned, idled, or under-used industrial and commercial facilities or sites where expansion or redevelopment is complicated by real or perceived environmental contamination" (De Sousa, 2000, p. 833). Steinacker (2003) outlines that the sheer size of former industrial parcels and their complications due to contamination provides difficulty in their reuse. According to Hayek et al. (2010) there are an estimated 100,000 brownfields across the Canadian landscape while De Sousa (2000) further estimates that as much as 25% of the land in Canadian cities could be

classified as brownfields. In the United States alone, 2002 estimates suggested \$650 billion was needed to remediate all of the country's contaminated land (Wheeler, 2002).

Farris (2001) outlines that environmental remediation is often required before any new development may begin. He further highlights that the finances and time required for remediation often makes businesses, developers and lenders hesitant to become involved with these sites (Farris, 2001). Hayek et al. (2010) provide a similar view, outlining that clean up costs frequently exceed the worth of the land, creating a negative land value that discourages development. De Sousa's (2000; 2006) findings suggest that brownfield redevelopment is less cost-effective and poses greater risk to developers. Both issues add expense and uncertainty, which deters intensification.

Furthermore, Hayek et al. (2010) and De Sousa (2000) found that the abundance of greenfield land limits infill or redevelopment on brownfield sites. They outline that the large supply allows developers to avoid the risk of redeveloping contaminated lands.

In addition, Hayek et al. (2010), De Sousa (2000) and Barrs (2004) found that intensification on brownfields is constrained by liability complications. All three studies identify that developers are hesitant to pursue brownfield redevelopment, as they may be held legally responsible for any issues that may arise due to past contamination.

Lastly, De Sousa (2000) summarizes that brownfields as a barrier to intensification have been especially prevalent in Canada. In his findings he highlights that various levels of government in Canada have been slower than American or European bodies to introduce redevelopment programs and policies. This has

constrained redevelopment because the private sector has been reluctant to undertake the financial burden (De Sousa, 2000).

#### 2.5.5 Market Conditions

As the literature outlines, successful intensification is largely dependent on the presence of a strong market demand. Although the literature identifies an increased interest for intensification, it distinguishes that the market still tends to favour lower density housing at the periphery of the city (Danielsen, Lang, & Fulton, 1999; Vallance, Perkins, & Moore, 2005). As Danielsen et al. (1999) further outline, people favour suburban housing because it is believed to offer access to better schools and lower crime. In turn, Hayek et al. (2010) and Bunting and Filion (2000) respectively found that in the cases of London and Kitchener, two mid-sized Canadian cities, intensification was linked to locations with high crime rates, creating a poor perception of the area and decreasing the demand for residential development.

Bunting and Filion (2000) and Birch (2006) outline that the lack of demand for housing in the inner city is due to a lack of amenities and services. More specifically, Bunting and Filion (2000) found that weakness in the market was partially attributed to a lack of basic services such as a supermarket or other shopping amenities.

Alexander and Tomalty (2002) and Hayek et al. (2010) argue that the lack of demand for intensification comes from the excessive quantity of suburban land available for development. Developers find it both easier and cheaper to build at the periphery and will continue to do so as long as the opportunity remains (Hayek, Arku, & Gilliland, 2010; Wheeler, 2001). In their analysis of Nanaimo, British Columbia, Alexander and Tomalty (2002) found that there is enough remaining residential land to

manage growth for the next 14-28 years. They outline that a strong market for intensification will not emerge until all of the existing greenfield land has been developed.

On the contrary however, not all cities face a weak market demand for intensification and thus the market does not act as an impediment. This issue is conditional upon context. This point is further delineated later in this chapter.

## 2.5.6 Inadequate Infrastructure

As the literature identified, intensification is often heralded as development that can utilize existing infrastructure and services, which reduces the need to dedicate limited resources to developing new infrastructure. However, contrary to this, Landis (2006) outlines, "most infill sites are infrastructure deficient, especially compared with their newer suburban counterparts" (p. 719). Falconer and Frank (1990) take a similar position, stating, "it is clearly erroneous to make a blanket assertion to the effect that infill development can be accomplished at little expense to the community because infrastructure capacity is already available" (p. 147-148). In their study of infill development in Orlando, Falconer and Frank (1990) found that the hypothesis that infill prevents the need for new infrastructure to be only partially true. As part of their research they examined the serviceability of 9,237 acres of land available for infill. They found that there was sufficient capacity for water, sewer and solid waste disposal; supporting the claim that infill puts to use underutilized infrastructure. On the contrary however, they identified that the existing network of roads, and supply of elementary schools could not accommodate any additional cars or students without impacting the current level of service.

Farris (2001) provides a similar perspective, outlining that in many instances existing infrastructure needs to be upgraded before new development can occur. Farris (2001) provides a number of examples where this has been the experience and where cost savings due to infill have not been the case. In one instance, Farris (2001) points to a 125 unit infill development in Washington D.C. which required the provision of "a new four-lane road, a new traffic signal, and improved storm water management" (p. 15).

Although much of the literature regards intensification as responsible development that uses existing and underutilized infrastructure, as noted above not all subscribe uniformly to this assessment. In some instances existing infrastructure is deteriorated or under capacity and unable to service new development. Thus inadequate infrastructure serves as an impediment, as any expected costs savings are instead spent on having to upgrade existing infrastructure for development.

#### 2.5.7 Conclusion

Although intensification has emerged as a popular strategy to manage growth, there remain considerable barriers that impede its implementation. As the previous discussion highlights, the literature reveals that the common barriers include; costs and difficulty in land assembly, delays from municipal requirements and processes, public opposition, risk of brownfield redevelopment, a soft market demand, and inadequate infrastructure.

### 2.6 Facilitating Intensification

As the previous chapter outlined, the literature reveals a number of common impediments to intensification. Despite the barriers hindering compact growth, the

subsequent discussion offers strategies to facilitate intensification, as identified within the literature.

## 2.6.1 Involvement of Public Sector

The literature provides a clear understanding that the public sector should play a key role in facilitating intensification. Curic and Bunting (2006) outline that this can begin by having the municipality enact policies that support intensification. Or as Danielson et al. (1999) highlight, infill and redevelopment projects depend on municipalities introducing a supportive zoning and land use framework.

Bunting and Filion (2000) note that developers often have little experience with development in the inner city and therefore the public sector needs to simplify the process. Suchman (1997) and Farris (2001) provide a similar perspective, outlining that expediting the review process and making it more efficient could lead to increased intensification.

In addition, Bunting and Filion (2000) along with Farris (2001) and Suchman (2002) assess that a municipality can become involved in development by accumulating land for immediate or future needs. Bunting and Filion (2000) further highlight that a municipality can gather information, waive development fees, or provide incentives, to facilitate intensification. As their findings suggest, this would help narrow the discrepancies between intensification and greenfield development (Bunting & Filion, 2000).

## 2.6.2 Promoting Intensification

The literature outlines that a market for intensification depends on two factors; limiting greenfield development, and providing amenities to make living in denser neighbourhoods more attractive to prospective residents.

Alexander and Tomalty (2002) underline that stronger consideration needs to be given in curbing greenfield development. As they outline, a reduced supply of land at the periphery, pushes developers towards land in the existing built up area. The literature identifies that this can be achieved through the implementation of an urban growth boundary (Danielsen, Lang, & Fulton , 1999; Alexander & Tomalty, 2002; McConnell & Wiley, 2010; Brueckner, 2000; Jabareen, 2006). As Brueckner (2000) explains, an urban growth boundary "is a zoning tool that slows urban growth by banning development in designated areas on the urban fringe" (p. 167).

Aside from restricting suburban growth, Wheeler (2001) and Hayek et al (2010) advocate that municipalities must create a more attractive urban environment to create a demand for intensification. As Filion et al. (2004) summarize, in order to attract housing downtown strategies need to focus on making the area "hospitable" (p. 340). Birch (2009) found that a number of major American markets have taken this approach including, Chicago, St. Louis, and Philadelphia. These municipalities have created "open space amenities to make downtown attractive to its multiple users: residents, workers, and visitors" (Birch, 2009, p. 151). In Bunting and Filion's (2000) study, they reached a similar conclusion as informants suggested that an increase in amenities would generate greater demand for inner city housing. As Filion et al. (2004) outline, an urban environment should "harbor retail and services that are suited to the needs and

tastes of people who are attracted downtown" (p. 340).

As the literature underlines, limiting greenfield opportunities, improving the perception, and providing amenities that appeal to an array of residents, creates a demand for intensification (Suchman, 2002; Hayek, Arku, & Gilliland, 2010; Faulk, 2006; Bunting & Filion, 2000). As Wheeler (2002) summarizes "cities that aggressively improve and market infill districts can help build interest amongst potential residents" (p. 45-46).

## 2.6.3 Public Education and Engagement

The literature identified that in order to facilitate intensification, planners need to work in partnership with the community. Bunce (2004), and Reynolds and Jeffrey (1999) highlight that the success of intensification relies on obtaining public and political support. Bunce (2004) further outlines that involving citizens early in the process is necessary as it can play a critical role in reducing neighbourhood opposition.

Additionally Bunce (2004), Tarnay (2004), and Curic and Bunting (2006) found it necessary that planners actively boast the benefits of intensification. This includes educating the public and politicians on its merit as a component to achieve sustainability (Curic & Bunting, 2006). Curic and Bunting (2006) also found "dissemination of information" as an essential component in facilitating infill (p. 216). Constant two-way dialogue with the public and politicians can correct inaccuracies that might otherwise lead to widespread opposition of a development (Curic & Bunting, 2006).

Filion and McSpurren (2007) note that ensuring new development benefits the entire community can appease NIMBY concerns. As they outline, this could include "retailing and services, as well as improved transit and more animated and engaging streets" (Filion & McSpurren, 2007, p. 517). Wheeler (2001) and Barrs (2004) presents similar findings, outlining that by including amenities such as local shops, restaurants, cafes, parks, or public spaces, new development can add value to the surrounding neighbourhood. This would work to alleviate opposition as nearby residents would then begin to see a direct benefit from new development (Tarnay, 2004; Filion & McSpurren, 2007). Additionally, Alexander and Tomalty (2002) further consider that urban design should consider recommendations from local residents. They found that "when people are consulted and their design preferences are taken into account, initial reservations can be turned into acceptance and support for positive change in their community" (Alexander & Tomalty, 2002, p. 405).

### 2.6.4 Urban Design

Danileson et al. (1999), Suchman (2002), Murphy (1994), Young (1995), and Vallance et al. (2004) highlight urban design as an important factor in successfully facilitating intensification. As the literature stresses, design that fits within its surrounding context is an easier sell to prospective buyers (Danielsen, Lang, & Fulton, 1999). Alexander and Tomalty (2002), and Bunting and Filion (2000) offer a comparable perspective, highlighting that higher density development that incorporates good design creates a more attractive living environment that can lure new residents.

Lastly, Young (1995), Wheeler (2001) and Suchman (2002) outline that guidelines save architects and developers time and money. Aside from creating more aesthetically

pleasing buildings and reducing opposition, clear and concise guidelines offer developers a more fluent approval process. This makes intensification more appealing as it provides a clear understanding of municipal expectations, therefore reducing the need for plan revisions (Wheeler, 2001; Young, 1995).

## 2.6.5 Brownfield Redevelopment Programs

Given the finances and time required, many developers are wary of redeveloping brownfield sites. However, many brownfields offer numerous advantages, including proximity to the downtown and access to good transit. In De Sousa's (2000) study of Toronto he found strong motivation from the private sector for brownfield sites, provided that development could lead to profit. Wheeler (2001) along with De Sousa (2000; 2006) advise that feasible redevelopment often requires the public sector take a principal role in the process.

Both Wheeler (2001) and De Sousa (2000) found that throughout the United States and Europe, various levels of government have introduced policies and programs to assist with brownfield redevelopment. These initiatives provide much needed financial and technical assistance for the private sector. De Sousa (2000) points to the US Environmental Protection Agency (EPA) as one organization that has helped facilitate intensification on brownfield sites. The EPA have assisted the private sector by reducing regulatory requirements, offering financial assistance for pilot projects, and establishing a variety of financial incentives (De Sousa, 2000). De Sousa (2000) and Suchman (2002) further outline that local and higher levels of government can become more involved in the development process by remediating land, establishing land bank programs, or setting up agencies to coordinate redevelopment.

In De Sousa's (2000; 2006) findings, he outlines a number of programs or policies that could be implemented to assist in brownfield redevelopment. From his 2006 study, informants highlighted a need for increased financial incentives. Hayek et al. (2010) received a similar response outlining that, "redevelopment prospects hinged on the availability of financial incentives" (p. 397). De Sousa (2000) indicates that incentives could include tax abatements or direct funding from the public sector. He also stipulates that public funds could subsidize the cost of demolition or site remediation as well as provide low-interest loans to make redevelopment feasible. De Sousa (2000) and Hayek et al. (2010) found that implementing these types of programs would make brownfield redevelopment more attractive to the private sector by becoming economically feasible.

#### 2.6.6 Conclusion

Despite the extensive barriers that frequently impede intensification, the above discussion has highlighted options to facilitate compact growth. The literature expresses that with support from the public sector, limited peripheral growth, public education and engagement, good design, and incentives for redevelopment, growth through intensification is more feasible and therefore likely.

As the subsequent discussion identifies, intensification has emerged as a common approach to redevelop derelict industrial districts. The following section begins with a brief history of inner-city industrial neighbourhoods. This discussion is followed by characteristics typical of inner-city gentrification and an overview of current redevelopment strategies.

## 2.7 Inner-City Industrial Districts

Come the mid 19<sup>th</sup> century, Canada entered a period of rapid industrialization. The rise of the steam engine fostered connections between Canada's resource hinterland and manufacturing heartland (Bone, 2005). During this period, transportation demands significantly influenced the location of industry (Howland, 2010). For these reasons, factories and warehouses clustered near the city centre close to the rail yard or harbour (Gormon, 2003; Hodge & Gordon, 2008). However, come the late 1940s change emerged with respect to the heart of the city as the preferred location for industry.

Following World War II, North America's industrial sector was significantly impacted by changes to the continent's economic structure (Howland, 2010). This phenomenon was heavily influenced by the rise of the automobile, as well as the continent's diminishing industrial base (Ling, 2008; Howland, 2010; Hodge & Gordon, 2008).

As Gorman (2003), Hodge and Gordon (2008), Howland (2010), and Leigh and Hoelzel (2012) indicate, the decline of inner-city industrial uses was largely influenced by the emergence of the automobile. Once dependent on rail lines and ports, shipping methods instead turned towards automobiles (Leigh & Hoelzel, 2012). Hodge and Gordon (2008) highlight that "mass automobile ownership and expressways gave Canadians a transportation alternative that was private, convenient, flexible, and fast" (p. 111). Gorman (2003) evaluates that at this time, manufactures reassessed their need to remain near the city centre, as proximity to rail or ports was no longer essential to operate. Instead, manufacturing and warehousing abandoned the inner city, relocating to new industrial parks, which offered convenient access to nearby highways (Leigh &

Hoelzel, 2012; De Sousa, 2000; De Sousa, 2006; Grant, 2001). As Bunting and Filion (1999), Hodge and Gordon (2008), and Leigh and Hoelzel (2012) highlight, the decentralization of industry was influenced by the need for access to trucking and the demand for large parcels of land to accommodate low-density development. Furthermore, suburban industrial parks were more accessible to employees and consumers who had also retreated to suburbia (Gormon, 2003; De Sousa, 2006; Hodge & Gordon, 2008).

Secondly, North America's declining industrial sector contributed significantly to the decay of the inner city. In 1960, 28% of North America's labour force was employed in manufacturing, generating one-third of the continent's wealth. By the early 21<sup>st</sup> century, only 16% of the population was employed within the manufacturing sector, dropping its share of the continent's GDP to less than a fifth (Fellmann, Getis, & Getis, 2007).

Canada's declining manufacturing sector was a product of economic restructuring across North America (Fellmann, Getis, & Getis, 2007; Bone, 2005). Initial jobs losses were a result of foreign firms undercutting Canadian based companies. Canadian manufacturers, particularly those that were labour-intensive, saw sales plunge as retailers imported lower priced goods from foreign destinations such as China (Bone, 2005). These markets could offer cheaper products as they paid their employees a fraction of the Canadian wage (Bone, 2005). In an effort to remain competitive, Canadian companies relocated operations to countries that offered reduced costs and a chance to remain competitive (Leigh & Hoelzel, 2012; Bone, 2005).

The departure of industry from Canada's inner cities created areas engulfed by urban decay, evident through the plethora of underused factories and abandoned warehouses (De Sousa, 2000; De Sousa, 2006). Much like the downtown, the years following World War II were detrimental to Canada's inner-city industrial districts. However, as discussed in the subsequent section, in more recent years, planning efforts have brought new life to these forgotten neighbourhoods.

#### 2.8 New life for Industrial Districts

Despite industrial lands being historically associated with dirty, polluting, and generally undesirable uses, these districts offer numerous advantages for redevelopment. A stock of historic buildings, with attractive waterfront views, and a central location, have made these neighbourhoods prime for redevelopment (Grant, 2001).

The process of converting industrial lands for alternative purposes began in a number of America's largest cities. Marshall (2001) offers Baltimore as one of the first cities to redevelop its industrialized waterfront. Beginning in the 1960s, the 'Inner Harbour Redevelopment' transformed derelict industrial land into a vibrant, mixed-use community. According to Marshall (2001), Baltimore's redevelopment has exceeded expectations with more than \$13 billion invested by public and private construction, property values increasing by 600%, and 15,000 new jobs. The success in Baltimore and other pioneer cities has encouraged additional municipalities to redevelop neglected industrial districts. Cities have varied in their approach to transform these neighbourhoods, but the common theme has emphasized a transition away from

manufacturing and warehousing and instead towards attracting a mixture of commercial and residential development.

Robertson (1995) and Grant (2001) highlight that many American cities, have redeveloped these areas into entertainment zones attracting bars, restaurants, boutiques and clubs. In other cities, convention centres and farmers markets have been constructed on derelict industrial land, in an effort to spur additional development of hotels, restaurants, and shops (Robertson, 1995). These strategies have salvaged historic buildings, and brought residents and tourists back to a deserted core. Grant (2001) and Bunce (2004) note that aside from commercial uses, municipalities often emphasize the need for residential development to revitalize derelict industrial districts.

Birch (2002), Sohmer (1999), and Robertson (1995) highlight the popularity that has emerged in converting factories and warehouses for residential purposes. The trend has proven so successful that in San Francisco, Seattle and Portland the stock of available warehouses has reached near exhaustion (Sohmer, 1999). In turn, developers have turned their attention towards infill and redevelopment projects on derelict industrial sites.

Such has been the case in a number of Canadian cities. Beginning in the 1960s Kingston, Ontario transformed sections of its industrialized waterfront to luxurious apartments (Filion, Bunting, Hoernig, & Sands, 2004). As Filion et al. (2004) highlight, this has helped to maintain the vitality of the city centre. Bunting and Filion (2000) underline that in Kitchener, Ontario industrial lands were repurposed for residential development because of a lack of interest to maintain it for manufacturing or warehousing. Coupland (1997) and Bunce (2004) note that Toronto has long targeted

abandoned industrial lands close to the central business district for residential purposes. In the late 1970s Toronto's St. Lawrence project redeveloped 44 acres of underutilized industrial land for a variety of uses, with a strong emphasis on residential development (Young, 1995). As Toronto continues to grow Bunce (2004) notes that this will continue to be the norm as the former industrialized Port Lands District has been earmarked to accommodate 100,000 future residents.

Tomalty (1997) notes that aside from Toronto, Montreal and Vancouver have also redeveloped their declining industrial districts and waterfront. Beginning in the 1970s and stimulated by Expo '86 and the 2010 Olympics, Vancouver has transformed its industrialized waterfront by focusing on residential and recreational uses (Bain, 2010).

The previous discussion on barriers to intensification identified the market as a frequent impediment to development. However, the above discussion outlines that this varies by context. The experiences in cities like Toronto, Montreal and Vancouver identify that a strong market can instead be a driving force behind the redevelopment and intensification of historically industrial lands.

As the literature highlights, cities across North America have strategized how to redevelop obsolete industrial lands. As further identified within the literature, residential development has emerged as a common strategy.

#### 2.9 Socio-Economics of Gentrification

Beyond municipal policies, change in the inner city is often a result of larger socio-economic factors. Ley (1986) provides an account of factors that influenced gentrification come the 1960s and 70s. More specifically, he considers demographic change and a city's economic base as drivers of gentrification.

Ley (1986) asserts that demographics had a critical influenced on change in the inner city. He outlines that the postwar baby boom resulted in a large cohort of 25-30 year olds, which increased the demand for housing. As he states, this expanded cohort may have pushed many first-time homebuyers towards the inner city. Ley (1986) further outlines that gentrification is influenced by a change in household size and structure. As he underlines, more women were entering the workforce, as well an increase of singles and a higher divorce rate also increased the demand for housing.

Lastly, Ley (1986) outlines that a municipality's economic structure plays a critical role in the gentrification process. More specifically, a city with a post-industrial economy that is instead comprised largely of white-collar employment is more apt to gentrification. Ley (1986) identifies that Lipton (1997) conducted one of the earliest studies on inner-city revitalization. Examining America's 20 largest cities from 1960 to 1970, Lipton found that there was a strong correlation between "high status inner-city neighborhoods and the amount of office space downtown" while on the contrary "a negative correlation with the size of the blue-collar labor force" (Ley, 1986, p. 525).

Ley (1986) outlines that Canada's quaternary sector has been "concentrated not only in national and regional centres, but disproportionately in the downtown cores of these cities" (p. 525). At the time of the study, downtown Toronto accounted for 55% of the metropolitan office space, while 56% of the regional office space in Vancouver "was concentrated in the downtown peninsular" (p. 525). Ley outlines that the downtown work force is comprised of "private and public corporate employees, professionals, university and hospital staff, and those engaged in the arts and media" (p. 525). He

further identifies that these are the professions of the middle class, and it is largely this group that gentrifies the inner city.

Although Ley's 1986 account of factors driving gentrification, are a reflection of the temporal context, more recent literature provides a similar perspective. Kaplan et al. (2004) maintain that gentrification is driven by the abundance of childless households and single individuals who are attracted to areas with interesting architecture and access to amenities. Skaburskis and Moos (2010) outline that gentrification in the inner city is attributed to the growth of small, non-family households. Ley (1996) describes this group as the new middle class who are highly educated, work in the quaternary sector, primarily younger than 35, typically childless, receiving moderate or high incomes, and containing small proportions of minorities or non-English speakers. Meligrana and Skaburskis (2005) provide a similar description of the socio-economic factors that drive gentrification, that is a "rapid increase in average rents and personal incomes; a larger percentage of single-person households; faster decline in persons per household; a more mobile population; a higher share of young adults (25–39); and a higher and rapidly increasing proportion of population with a university education" (p. 1589).

With an understanding of the socio-economic characteristics that are typically associated with gentrification, this criterion is reexamined in chapter 5. This discussion will assess whether these factors impede or allow for intensification within Regina's Warehouse District.

## 2.10 Research Contributions and Methodology of Previous Literature

One of the primary objectives of this study is to contribute to the literature on intensification. Although a number of studies have explored barriers and facilitating factors of intensification, where this research addresses the gaps is in relation to context.

The majority of past literature that pertains to barriers to, and facilitating factors for intensification has largely concentrated on the American context (Farris, 2001; Tarnay, 2004) or from the perspective of Canada's largest municipalities (Tomalty, 2002; Tomalty, 1997; Bunce, 2004; Curic & Bunting, 2006). Few studies have examined the impediments to infill and redevelopment, and factors to facilitate intensification in the context of a mid-sized Canadian city (Hayek, Arku, & Gilliland, 2010; Bunting & Filion, 2000).

Of note, only Bunting and Filion (2000) have taken a holistic approach to understanding the barriers that impede intensification in a mid-sized Canadian city. Bunting and Filion (2000) found that a market exists for downtown housing in Kitchener, Ontario, but it is limited by a number of factors including; cost of development, fragmented land ownership, public opposition, land contamination, problems with financing, and a lack of amenities. As well, their research identified approaches to facilitate housing in downtown Kitchener.

This research explores the concept of intensification in a mid-sized Canadian city from the context of Regina, Saskatchewan. To date, studies pertaining to intensification in Saskatchewan are non-existent and as the province is becoming increasingly urbanized, this is an important area of research.

Moreover, this study begins to fill the gap on the literature pertaining to intensification within historically industrial neighbourhoods. Past studies, on intensification have research the concept from alternative contexts (Bunting & Filion, 2000; Wheeler, 2001; Curic & Bunting, 2006; Alexander & Tomalty, 2002; Tomalty, 1997). Where there has been research on intensification on industrial lands (Hayek, Arku, & Gilliland, 2010; De Sousa, 2000; De Sousa, 2006) it has focused solely on issues of brownfield redevelopment. It is expected then, that this profile of Regina, will be one of the first to research the barriers to intensifying an industrial district.

Exploring the concept of intensification within the context of an industrial district is an important and relevant topic. As municipalities look to manage growth through intensification, obsolete and underutilized industrial districts will be viewed as prime for redevelopment. However, in order for intensification to be successful, a clear understanding of the barriers, and a means to overcome said barriers will be necessary. This research provides insight into addressing these points of inquiry.

The focus of this research in the context of a mid-sized Canadian city is also an important and relevant area of study. As Seasons (2003) and Robertson (1999) note, Canada's mid sized cities have not been well studied within academia. Instead, the majority of planning literature undertaken in Canada has focused on Canada's largest cities (population exceeding 500,000 people). Seasons (2003) notes that this means, "we know very little about planning practice in mid-sized Canadian cities" (p. 63). This research helps to address this gap by contributing to the discussion on planning in a mid-sized Canadian city.

By examining intensification within these unique contexts, this research seeks to affirm whether the barriers and factors to facilitate intensification identified within previous literature, are relevant to the context of a mid-sized city, or more specifically Regina, Saskatchewan. Additionally, the findings of this research will affirm whether the barriers to intensifying an industrial district are similar to those encountered within the literature, which has not explored the discussion from this context.

In examining the literature, it is also important to note previous studies that employed a similar methodology as this research. More specifically, understanding the methodology employed for research that dealt with the concept of intensification. This establishes an understanding that this methodology, which utilizes semi-structured interviews as the primary method, is an appropriate means to address the research. Providing this ensures that the research is "qualitatively reliable" which "indicates that a particular approach is consistent across different researchers and different projects" (Cresswell, 2009, p. 232).

The 2010 study by Hayek et al. 2010, Assessing London, Ontario's brownfield redevelopment effort to promote urban intensification employs a similar methodology to assess the barriers to intensification on brownfield sites in London, Ontario. With a focus on qualitative data, the authors conducted 17 in-depth interviews to measure "participation in brownfield redevelopment, barriers to brownfield redevelopment in the city, and perceptions about financial incentives in the city's Brownfield Community Improvement Plan" (p. 389). This research takes a similar approach in that understanding the barriers to intensification comes through informant interviews. In

the case of this study as well as Hayek et al. (2010), the findings are not intended to make widespread generalizations but instead are specific to the context in study.

Curic and Bunting in their 2006 study *Does Compatible Mean Same As? Lessons*Learned from the Residential Intensification of Surplus Hydro Lands in Four Older Suburban

Neighbourhoods explore the relationship between infill and NIMBYs within four Toronto

neighbourhoods. Curic and Bunting (2006) employed a mixed methods approach, with

an emphasis on qualitative methods "to collect information on the attitudes, beliefs, and

opinions of residents and key informants-planners, developers, builders, politicians and

an OMB member-towards residential infill development" (p. 208). In this study, 96

neighbourhood residents and 19 key informants were engaged through semi-structured
interviews.

This research offers similarities in the approach used by Curic and Bunting (2006). Specifically, this research also engages key informants through semi-structured interviews to assess why intensification has been limited. This research differs in that it does not assume any specific barriers are impeding intensification in The District. Instead, the understanding of those barriers is grounded in the insight of informants. In the case of Curic and Bunting's research they worked with the understanding that resident opposition is a real impediment to infill in the four neighbourhoods of study.

This research follows a similar approach employed by Bunting and Filion's 2000 study, *Housing Strategies for Downtown Revitalization in Mid-Size Cities: A City of Kitchener Profile.* Both studies expanded on previous findings that rationalized the understanding that inner city residential is a desired use for the core. In their study, they also surveyed key informants who could offer insight into understanding why residential

development has been limited in the core. Individuals who represented the development industry, consultants, real estate agents and a financial institution were engaged through interviews or a focus session. Through this an understanding of the barriers to residential development in downtown Kitchener emerged. In addition, similarly to this study, further discussion emerged from informants that identified what needed to occur to instead facilitate housing in the core.

Lastly, Barrs' 2004 study, *Residential Intensification Case Study: Built Projects* profiles completed residential projects that overcame the barriers to intensification.

Barrs examined the relationship by first selecting 23 projects as case studies. Subsequent to this, he approached municipal officials, developers and residents who were involved in each project to obtain a general overview of the common barriers that impede intensification. Through the interviews Barrs' also formalized approaches that could be implemented to facilitate intensification.

Although this research follows a similar methodology as the aforementioned studies, it also digresses slightly in its approach. This study, like the previous, has its findings grounded in the views of participants. However it differs in that it uses a number of methods to substantiate the findings of the semi-structured interviews. As part of this study, an analysis of municipal documents, a review of the literature and best practices, and visual observations were employed to corroborate or validate the findings from the semi-structured interviews.

#### 2.11 Conclusion

This Chapter began by defining intensification, and distinguishing its benefits as a strategy to manage growth, as well as potential drawbacks. The discussion then

identified the common barriers that impede intensification, as well as factors that can facilitate compact growth. Following this, the chapter provided an overview on the history of inner-city industrial districts as well as emerging planning practices for these areas and characteristics typical of inner city change. Additionally, this chapter has outlined how this research will contribute to the literature to 'fill in the gaps.' Moreover, it has identified past literature that has studied intensification and the methodology employed as part of those research projects.

# Chapter 3

# **Case Study Discussion**

#### 3.1 Introduction

The plan to increase the residential population in Regina's Warehouse District has been ongoing for the past decade. Despite enduring efforts, success has remained limited. The following discussion begins with an overview of the context of the case study. The subsequent sections will bring to light past initiatives to intensify the neighbourhood and offer a concise overview as to why they have been largely unsuccessful.

# 3.2 Regina, Saskatchewan

Regina is the capital city of Saskatchewan and the second most populous municipality within the province. Regina's current population is 218,400, accounting for approximately 20% of all Saskatchewan residents (Derek Murray Consulting and Associates, 2010). Within Canada, Regina is the 17<sup>th</sup> largest Census Metropolitan Area (CMA) and by Canadian standards considered a mid-sized city (Seasons, 2003). Figure 3-1 highlights Regina's whereabouts within the context of Canada.



Figure 3-1: Location of Regina within Canada (Knight's Canadian Info Collection, 2011)

Regina has a diverse economy that includes strong government, technological, knowledge and service sectors. Recent economic prosperity continues to attract population growth to the city. Following years of stagnant growth, intermixed with periods of decline, in 2011 Regina was identified as Canada's third fastest growing CMA (Leader Post, 2011; Derek Murray Consulting and Associates, 2010; Thraves, 2007; Government of Saskatchewan, 2011).

With uppermost growth projections adding 100,000 people over the next 25 years, it is critical that growth follows best practices and is accommodated in a

sustainable and responsible manner (Derek Murray Consulting and Associates, 2010). Moreover, Regina's municipal leaders hope to become "Canada's most vibrant, inclusive, attractive, sustainable community, where people live in harmony and thrive in opportunity" by the year 2020 (City of Regina, 2012b). Given the benefits of intensification outlined in chapter 2, it is expected that infill or redevelopment can play a leading role in addressing the aforementioned municipal objectives.

Recent City initiatives, including The Regina Downtown Neighbourhood Plan (2008) and Core Regina Action Plan (2006), have taken steps towards reaching these goals by encouraging intensification in the inner city. Although positive strides have been made, additional neighbourhoods have yet to be recognized through municipal policy as areas opportune for intensification. One of those areas is Regina's Warehouse District also known as 'The District' a historic neighbourhood adjacent to the Downtown.

#### 3.3 Regina's Warehouse District

The development of Regina's Warehouse District can largely be attributed to the construction of the adjacent Canadian Pacific Rail line in the late 1800s (City of Regina, 2002; Thraves, 2007). Regina's early population growth was a result of a thriving agriculture sector, which spurred the development of new buildings and neighbourhoods across the bald prairie (Regina Warehouse District, 2012b). The commercial sector within the downtown flourished, as businesses sprung up to serve the growing population. To the north of the downtown the "Wholesale District" now known as the Warehouse District, attracted new industrial business including General Motors, John Deere and Sears warehousing (City of Regina, 2002). Figure 3-2 illustrates

the proximity of The District to the Downtown as well as other central neighbourhoods within Regina.

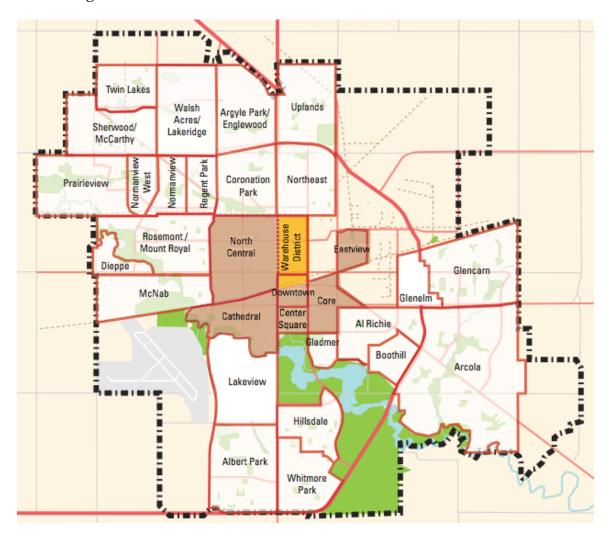


Figure 3-2: Neighbourhoods of Regina (Government of Saskatchewan, 2010)

Following World War II, the importance of Regina's Warehouse District as the central hub for industrial activity declined dramatically. A growing population, the emergence of the automobile as the primary shipping method, and a demand for large parcels of land pushed industry away from the core (City of Regina, 2002). Instead

industrial development gravitated towards suburban locations, such as Ross Industrial Park in the city's northeast (City of Regina, 2002).

To fill the void "many new businesses representing a great diversity of land uses" established themselves in the area, lured by the relatively inexpensive rental rates (City of Regina, 2002, p. 1). One use to emerge in more recent years is residential. Faced with vacant buildings, developers mirrored the experiences in other North American municipalities and began converting industrial buildings to main floor commercial and upper floor residential (Regina Warehouse District, 2012b). The central location, low cost, and unique architecture made these buildings ripe for redevelopment (City of Regina, 2002).

The District encompasses 80 blocks, defined by Albert Street, Winnipeg Street, 4<sup>th</sup> Avenue and the Canadian Pacific Rail yard. Figure 3-3 illustrates the area that demarcates the Warehouse District.

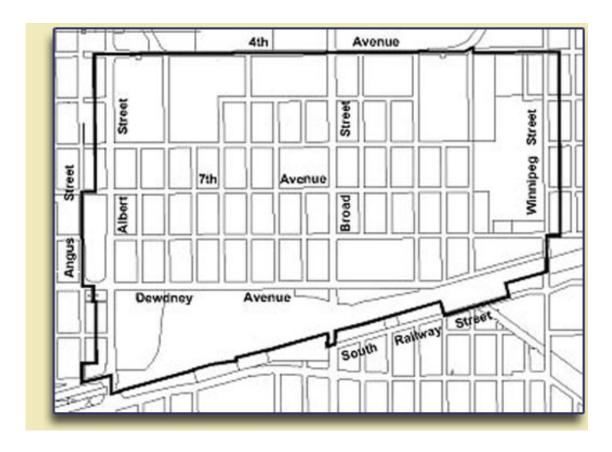


Figure 3-3: Boundaries of Regina's Warehouse District (Regina Warehouse Business Improvement District, 2012a)

Today, the neighbourhood is celebrated for its mix of land uses with its stunning historic buildings, boutique retailers, lively entertainment venues, and as seen in Figure 3-4, one-of-a-kind residential living.









Figure 3-4: Former Warehouses Converted to Residential Uses

However, these residential uses are located adjacent to a variety of undesirable uses including overgrown and unkempt lots, or as seen in Figure 3-5 unsightly industrial facilities.





Figure 3-5: Industrial Uses in The District

Two previous studies have hoped to continue the trend of residential development within the neighbourhood. The subsequent section will further explore these initiatives and assess why their impact has been limited.

## 3.4 Past Planning Initiatives for The District

As introduced in chapter 1, the basis for this research builds off of two previous studies that identified the need to intensify and redevelop The District. The subsequent discussion analyzes both studies, highlighting the role of residential development and assesses why both initiatives have been largely ineffective.

# 3.4.1 Regina's Old Warehouse District Planning Study

In 2002, the Regina Warehouse Business Improvement District (RWBID) along with key stakeholders initiated 'Regina's Old Warehouse District Planning Study.' The report was prepared to accomplish two primary objectives; create a framework to guide future development, and establish a plan to market the neighbourhood. Additionally, the study was envisioned to be a starting point for a new Secondary Plan for the area. At this time, the existing Secondary Plan was considered to be out of date and unresponsive to the realities of The District (Banadyga Mitchell Partnership Architects, 2002).

Community members believed that The District had not been receiving appropriate recognition or attention from the politicians and administration at city hall. It was thought that new policy initiatives were being directed towards other areas of the city, failing to address or consider the needs of The District.

Stakeholders anticipated that a new study that represented the collaborative vision of area patrons would raise greater awareness of the opportunities. Moreover it was hoped that a new study would bring the attention of The District to municipal bureaucrats who could initiate change in the area (Banadyga Mitchell Partnership Architects, 2002). As such, stakeholders lead by the Regina Warehouse Business Improvement District, initiated 'Regina's Old Warehouse District Planning Study.'

In the early 2000s, municipal growth projections were expected to be small following years of provincial out-migration. Even so, the study identified residential development as critical for the future of the neighbourhood. The study emphasized that housing development could stimulate positive change and generate confidence for private investors. Specifically the report suggested residential development should occur in the following four ways:

- Continued conversion of former warehouse buildings to residential lofts.
- Developing affordable housing.
- Provision of "live-work" accommodations, targeted towards artists.
- Student Housing to service the University of Regina and SIAST (Banadyga Mitchell Partnership Architects, 2002)

The report recommended three areas where the City could assist in helping to facilitate three forms of residential:

- 1. The City of Regina should extend housing incentives to developments within The District.
- 2. The City of Regina should present municipal owned land as an opportunity for housing development.

3. The City of Regina should relocate their material storage and maintenance yards outside of The District. The land could be utilized for new commercial and housing development (Banadyga Mitchell Partnership Architects, 2002).

The recommendations offered scenarios as to how further residential development could be facilitated within The District. Ultimately however, the plan's influence has been limited.

The study's central objective to initiate a revision of the Secondary Plan never came to fruition. The Secondary Plan that was present then remains in effect today. Furthermore, its hope to attract the four specified housing types has remained limited. Of the four recommendations only the continued conversion of warehouses to lofts occurred. The District has not had any development of what would be considered affordable housing. The University of Regina has elected to maintain residential development at its main campus. Lastly, a concentration of live-work artist studios has not emerged within the neighbourhood.

Additionally, the success of the three recommendations put forth to the City has also been limited. The City of Regina has not played a central role in land assembly, nor have they relocated their maintenance yards from The District for potential redevelopment opportunities. The City did ultimately extend housing incentives to residential development within The District, however it is difficult to say whether that was influenced by the recommendations outlined in 'Regina's Old Warehouse District Planning Study.' City Council adopted the tax incentive program for The District in 2006, four years after the study was first published.

Despite the rationale of the 2002 study, it lacked the 'teeth' to influence any proposed changes in policy. The study had no legislative power in itself and a new secondary plan, based off its recommendations, never came to fruition. Despite the City of Regina being a partner in the report, it has been suggested there was little political appetite for developing a new master plan for the area at the time (Regina's Warehouse Business Improvement District, 2009)

## 3.4.2 Regina Warehouse District 2029 Vision

In late 2009, the WDBID commissioned a study to create a new vision for the neighbourhood. Titled as 'Towards a Vision for the Regina Warehouse District in 2029' the primary intent was to identify what was needed to transition the Warehouse District into a "vibrant community" (Regina's Warehouse Business Improvement District, 2009, p. 3) Through the use of focus sessions and online questionnaires, the concerns and comments of over 220 participants were collected. To achieve its objective, five key questions were posed to informants:

- 1) What do you like about the Warehouse District?
- 2) What is the most important issue facing The District?
- 3) If you had unlimited resources to make the district a better place, what would you do and why?
- 4) What other changes would you most like to see in The District?
- 5) Over the next few years the freight facility will relocate from Dewdney Avenue. What vision do you have for that space?

The consensus to emerge amongst stakeholders was that The District has great potential to develop into a vibrant, attractive and unique area of the city (Regina's Warehouse Business Improvement District, 2009).

One of the emphasized themes to emerge was that informants expressed an interest in additional residential development within the neighbourhood. The study outlines that stakeholders had differing interpretations on the appropriate form of housing however; the clear consensus was that The District needed to grow its residential base (Regina's Warehouse Business Improvement District, 2009). More specifically; 40% of respondents identified housing for singles, families and couples as the most important need for the neighbourhood, 45% said it was above retail housing and mixed use structures, 60% indicated it was loft, studios and live/work space and 25% said it was the development of co-operative housing. Lastly, an overwhelming, 67.7% suggested that people living near their place of employment was the most significant priority for The District (Regina's Warehouse Business Improvement District, 2009). These figures summarize that the community identifies housing as both important and critical for the future of the District.

The 2029 study offers many similarities to the previously discussed, 'Regina's Old Warehouse District Planning Study.' Both studies were headed by the RWBID in conjunction with key stakeholders, provided a vision formulated by the community, and offered practical next steps to realize the vision for additional residential development. However, similar to the 2002 study, its influence appears to be limited. An earlier review of building permit records indicates that there has been no infill or redevelopment within the neighbourhood that corresponds with the aforementioned

housing types. Like Regina's Old Warehouse District Planning study, the 2029 vision did not have the necessary legislative power to initiate change. Moreover, it is difficult to assess whether or not the study has made an impression on policy makers at City Hall. Until the City takes greater interest in the redevelopment of The District, the 2009 study remains solely as a visionary exercise offering long-term community inspired objectives.

#### 3.5 Conclusion

The 2002 and 2009 studies offered a detailed and comprehensive vision for the Regina's Warehouse District. Within this, both plans set a goal to attract residential development including infill and redevelopment. Despite clear and rational objectives to facilitate intensification, neither plan had the power to facilitate change. As such, it can be assessed that past planning initiatives to intensify The District have been largely unsuccessful.

This research builds off these past two studies that identified residential development as the future of The District. Understanding that stakeholders in the community have identified the need for residential growth in The District, this research then looks to understand why that has not occurred. Chapter 5 analyzes primary and secondary data to offer insight onto those barriers that impede intensification in The District. Prior to this however, the following chapter provides a discussion on how the data was both collected and managed.

## Chapter 4

# Research Methodology

### 4.1 Introduction

The following chapter provides insight as to how research was executed within the breadth of this study. This study employs a mixed method approach to answering the overarching research questions. To attain this data, a number of data collection methods were utilized, including a visual observation, semi-structured interviews, analysis of pertinent municipal documents, and the collection of statistical data.

## 4.2 Type of Data Collection Methods

The primary intent of this research is to answer the questions: Why has intensification been limited within Regina's Warehouse District; and How can intensification be facilitated within Regina's Warehouse District? In order to answer the research questions put forth in this study, both qualitative and quantitative data were collected.

As Creswell (2009) explains, taking a mixed method approach allows for "more insight to be gained from the combination of both qualitative and quantitative research than either form by itself" (p. 203). The use of either approach in solitude is often "inadequate in addressing the complexities of the research problem" (Creswell, 2009, p. 203). With that said, it is important to note that although this research uses both qualitative and quantitative data, an emphasis is placed on the former while the latter is gathered to supplement and support the former.

Table 4-1 provides an overview of attributes often associated with qualitative and quantitative research. This table is adapted from Rob Kitchen and Nicholas J Tate's book *Conducting Research in Human Geography: Theory, Methodology and Practice.* 

Table 4-1: Characteristics of Qualitative and Quantitative Research (Kitchen & Tate, 2000)

Qualitative	Quantitative
Humanistic	Scientific
Subjective	Objective
Data are words, pictures and sounds	Data are numbers
Data gathered personally	Data gathered by technology or prescription
Individuals	Populations
Inductive	Deductive
Interpretive	Functionalist
Specificity	Generality
Small Sample sizes	Large Sample Sizes
Participants	Subjects/Objects

Evaluating the characteristics above, it is fair to say that the nature of these research questions aligns more with that of a qualitative approach. This research is intended to be inductive; that is to say, themes are to emerge from the bottom up. As Creswell (2009) outlines, inductive research involves "collaborating with the participants interactively, so that participants have a chance to shape the themes or abstractions that emerge from the process" (p. 175). This research follows this approach to answer why intensification has been limited and how it can be facilitated. The researcher assessed that the indicators of what are impeding intensification or what could be done to overcome those barriers would be best answered by gathering words

and pictures from key informants and visual observations. This approach comes in contrast to deductive research, which aligns with quantitative research methods, where the researcher deducts what is happening and puts forth a hypothesis. This research is structured to not assume what the barriers are to intensification, or how they might be overcome; instead it inductively allowed the answers to emerge through interaction with participants. As Creswell (2009) outlines, this is typical of qualitative research where "the researcher keeps a focus on learning the meaning that the participants hold about the problem or issues, not the meaning that the researchers bring to the research" (p. 175).

Understanding that the views of participants could be considered highly subjective, there was need to ensure validity. Creswell (2009) identifies that a number of strategies can be employed that "demonstrate the accuracy of their findings and convince readers of this accuracy" (p. 235). Drawing on the advice of Creswell, this research provided legitimacy in two ways, triangulation and member checking.

Triangulation involves using a number of data sources to cross-reference information and to establish justification for the findings. Creswell (2009) outlines that using multiple sources of data is typical of a qualitative study, as opposed to quantitative research, which typically relies on a lone data source. This research triangulated semi-structured interviews with other data sources including documents, and visual observations. Where possible, these methods offered validation of the informant interviews. Moreover, further justification of the data from the semi-structured interview came by cross-referencing semi-structured interviews with one another.

Member checking was also utilized as a means to address any issues of validity. Thoughts and quotes attributed to participants were emailed to the appropriate individual to ensure that the findings were accurate. Participants identified only minor word changes to be made, and reiterated that the thoughts or quotes initially gathered were still representative of their views.

This study utilized qualitative methods as it was identified that key informants held a wealth of information on the concepts of intensification and Regina's Warehouse District. Thus it was surmised that a qualitative approach would provide a clear understanding of the wide spectrum of factors that impede intensification within the District, including those factors that could not be measured quantitatively.

The following discussion highlights the methods that were employed, as well as their rationale, to extrapolate both qualitative and quantitative data.

#### 4.3 Data Collection Methods

Data collection for this study was carried out in three steps; 1) Reviewing past studies that discuss intensification in The District, and collecting statistical data 2) Visual observations followed by semi-structured interviews with key informants 3) An analysis of municipal documents, and a review of the literature and best practices.

The subsequent discussion offers further detail on how each method was employed within the breadth of this research.

### 4.3.1 Review of Past Initiatives and Statistical Data

This study began with a review of two past planning studies from 2002 and 2009 that were created in an effort to initiate the redevelopment of Regina's Warehouse

District. Through this review, it was discovered that in both plans, introducing further residential development has long been an objective of the Regina Warehouse Business Improvement District, in conjunction with other community stakeholders. Through the researcher's own understanding and experiences in the neighbourhood, it was apparent that past objectives to intensify The District have been limited in scope. In order to corroborate this position, the researcher utilized quantitative data.

This step began by reviewing census data from 2001-2012, the period directly proceeding and following the development of the 2002 and 2009 plans. This data was collected to substantiate the claim that residential population has remained limited within The District. Given that that this research is focused on facilitating infill, and redevelopment, the researcher sought to understand how successful either of these two forms has been, given the little growth in population. Building permits since 2002 were pulled to assess whether projects under the umbrella of infill, or redevelopment (as defined in chapter 2) have been introduced to The District. It was revealed through building permits that there have been no new projects considered as infill, or redevelopment. The assessment of the building permits indicated that any increase in residential population in The District is largely attributed to intensification through adaptive re-use, the conversion of warehouses to residential units.

Statistical data was also gathered to assess whether the socio-economics of Regina are conducive to inner city change or redevelopment. A review of the literature indicated that certain characteristics are typically associated with gentrification of the inner city. With this understanding, 2006 and 2011 census data was obtained to see whether those characteristics were present in Regina.

### 4.3.2 Key Stakeholder Interviews

The principal method of data collection involved the use of semi-structured interviews. This was the primary method employed in this research as a means to address the research questions. That is to say, the barriers to intensification and factors to facilitate intensification are grounded in the data collected through this approach.

In anticipation of the semi-structured interviews, the researcher first conducted a visual observation of the neighbourhood. This process began at the end of August 2011 where the researcher spent several hours walking around the neighbourhood.

To document the visual observation, the researcher photographed various elements throughout the area. This included but was not limited to buildings, sidewalks, roads, pedestrians and street furniture. Due to a poor vantage point, a number of photographs taken by the researcher did not perfectly depict what was seen through visual observation. In order to obtain a more effective image, the researcher utilized Google Maps. This offered a perspective that was seen by the researcher but which could not be captured due to logistics. In these instances, Google Maps was credited with the image.

Utilizing the visual observation method provided the researcher a better understanding of the area. Although the researcher had spent countless hours previously in The District, this was largely done for leisurely purposes. Experiencing the area as part of this study allowed the researcher to view the physical environment through a different lens. After confirming that intensification has been limited in the area (through the aforementioned collection of statistical data), the researcher surmised that perhaps some of the barriers that impeded infill or redevelopment might relate to

elements that could be captured on camera. As Creswell (2009) explains, the advantages of photographs are that they are an unobtrusive method of data collection and further, it is a creative method "in that it captures attention visually" (p. 180). This approach however, did not offer direct insight into what impedes infill or redevelopment or how to facilitate either form. Instead it was considered that the photographs captured could potentially offer validation to the data gathered through the semi-structured interviews. It should be emphasized that this method was employed strictly as a means to supplement the findings of the semi-structured interviews.

Despite the merit in visual observation, alone it does not adequately answer the research questions. To truly address the research, the subsequent step in the process was to conduct semi-structured interviews with key informants. Interviews were arranged with those who could offer insight into the topics of intensification, and Regina's Warehouse District. That is to say, this thesis employed a purposeful sampling approach. As Creswell (2009) explains, purposeful selection involves choosing interview participants who are best suited to answer the research questions. There are a number of advantages that interviews have as a method of data collection. Specifically, participants are able to provide historical information, and moreover, the researcher has control over the question period (Creswell, 2009).

The semi-structured interview process began with a submission to the Office of Research Ethics at the University of Waterloo on November 7, 2011. Ethics approval for this research project was obtained on November 11, 2011. As part of the approval, the researcher submitted a detailed outline of questions to be posed to informants.

Interview participants were asked questions from four different categories with supplementary questions posed to representatives of the development industry.

The initial category opened up with questions to understand the interviewee's position and relationship with the concept of intensification as well as the context of The District.

The second set of questions had informants comment on the suitability of introducing additional residential uses to the neighbourhood.

The third set of questions had informants identify those factors that have and continue to impede intensification within The District.

The fourth grouping of questions had informants offer their insight on what could be done to facilitate intensification within The District.

The final set of questions was posed only to those who identified themselves as developers. These questions were employed to assess further barriers that impede intensification from the developer's perspective and additionally, what could be done to facilitate their involvement with intensification. An extra set of question for developers was important to understand their sentiment to infill or redevelopment in The District because they have a critical role to play in the process.

Interview candidates were selected based on their knowledge of the concepts of intensification, and Regina's Warehouse District. This led to the understanding that those affiliated with particular professions or organizations would best be able to speak to the aforementioned topics. Specifically, the researcher pursued planners, municipal politicians, real estate agents, neighbourhood representatives, developers and/or architects. A range of 10-20 interview participants was sought from these various

associations. This range was identified as an appropriate number that could accurately address the research questions. Contact was initiated through email by inviting potential interview candidates to participate in this research project. This introductory email can be seen in Appendix A. Attached to the email was the list of interview questions that would guide the discussion. This allowed participants an opportunity to peruse the questions prior to the interview, providing ample time to contemplate their thoughts or consider questions that they may be uncomfortable with. The questions posed can be viewed in Appendix B. An agreed date was established between the interviewer and interviewee and the length of discussion ranged from 30 minutes to 90 minutes depending on the scope of answers provided by informants.

Interviews occurred in person at a location of the interviewee's preference. In some instances face-to-face discussion was not possible due to the interviewer being located in Kitchener-Waterloo and interviewees situated in other Canadian municipalities. In these cases a telephone interview was arranged at a time that worked for both parties.

The first set of interviews was conducted with participants who were personal contacts of the researcher. After years of involvement with the planning and development industry in Regina, the researcher had formed connections with individuals who could offer valuable insight. Where additional interview candidates were required, the snowball sampling technique was employed. Patton (2002) suggests snowball sampling occurs by asking well-situated people for the names of other individuals to speak with. As Patton (2002) further describes, the snowball gets larger and larger by accumulating more and more new information. As such, at the end of the

interview, participants were asked whether or not they could provide additional candidates who could offer insight into this research. An email was sent to these newly acquired contacts to inquire whether or not they would be willing to participate in this study.

In total, interviews were conducted with 14 individuals beginning on December 14, 2011 and ending March 20, 2012. A breakdown of the informants and their respected organizations can be seen in Table 4-2.

**Table 4-2: Participants by Organization** 

Organization	Number of Informants
Public Sector Planners	4
Private Sector Planners and Architects	4
Community Groups	2
Developers and Real Estate Agents	3
Municipal Politicians	1

The diverse representation of organizations allowed for a varied perspective on intensification in The District. The researcher tried to maintain a balance of the affiliations to ensure that a particular group was not overrepresented. Although ideally each group would have had equal representation, a low response rate from those invited to participate and an absence of other suitable candidates made this a difficult task. To ensure validity and to manage biases, responses were cross-referenced with other data collection methods and other informant interviews.

During the interview process, data was written into a word document specific to each participant. Additionally, with the permission of participants, interviews were recorded and later transcribed to verify the accuracy of the answers. This also allowed the researcher to confirm direct quotes recorded during the interviews. The consent form to allow for recording and to have direct quotes attributed to names can be found in Appendix C. Only one participant chose to participate in this studied under anonymity. In the case of this individual, a non-identifying code was used in place of their name.

When necessary, an additional email was sent to participants to further extrapolate or clarify answers provided during the interview. Final contact was made with participants for member checking; as well to verify that quotes and thoughts ascribed to their name could be placed within the thesis. Appendix D provides an exact copy of the language used in this email.

## 4.3.3 Municipal Document, and Literature and Best Practices

After participants identified that municipal policies and regulations have impeded intensification in The District, the researcher sought to better understand why and how. Thus municipal documents that influence intensification in The District were included as a method of data collection. Specifically, the applicable documents include the Regina Development Plan, Warehouse District Secondary Plan, and Zoning Bylaw #9250.

All of these documents were originally retrieved from online sources.

Specifically, the Development Plan, Warehouse District Secondary Plan, and Zoning

Bylaw #9250 were downloaded from the City of Regina's website, which makes all

planning documents available to the public. When possible, additional hardcopies of the documents were retrieved from the Planning Department at City Hall. Although online and hardcopies were one in the same, the preference of the researcher was to have physical copies in hand. As Creswell (2009) explains, one advantage of a document analysis is this ability for the researcher to access the data at a convenient time. Moreover, as the data has already been written, it saves the researcher from having to transcribe (Creswell, 2009). An analysis of these documents was identified as an appropriate method because it could provide validation of the findings from the semi-structured interviews.

Additional data from secondary sources was collected after the semi-structured interviews, but before formulating the recommendations chapter. Although the recommendations to facilitate intensification in The District are grounded in the findings of the semi-structured interviews, additional information was sought to provide rationale. This began by revisiting the literature from chapter 2. In addition, best practices on facilitating intensification were researched, drawing from successes in other jurisdictions. This data offered examples in practice that could corroborate the recommendations put forth.

After collecting all of the data, the next step in the process was to appropriately manage it.

## 4.4 Data Management and Analysis

The following discussion expands on the data management and analysis phase. All three data collection methods were organized individually at this point in the research.

The photographs documented were organized to ensure they could be easily identified with respect to their whereabouts. The images were uploaded to the researcher's personal computer. From there they were renamed by street name and address. When the researcher needed to find the exact location of an image taken, Google Maps was used.

Organizing the informant interviews and prepping the data for analysis offered a more complex process. As identified in the collection phase, during the interviews the researcher recorded participant answers into a word document specific to each individual. After all the interviews were complete, the data was merged into one central spreadsheet. Participant names were organized into rows and questions probed during the interviews were arranged into columns. This allowed the researcher a better understanding of how informant interviews related to one another. All of the interviews were played several times to ensure accuracy of the answers given.

At this point, the secondary data sources including relevant municipal documents and the literature and best practices on facilitating intensification did not have to be managed. These documents were however, explored in the following step.

The second step in the management and analysis phase was to gain a better sense of what the data was suggesting. Pictures were viewed a number of times, documents re-read and interviews replayed to begin to understand the general sentiment of the data. This allowed the researcher to begin to think about how the data might be put to use.

The third step was to begin coding informant interviews. Coding is "the process of organizing the material into chunks or segments of text before bringing meaning to information" (Creswell, 2009, p. 186). The informant interviews were initially categorized into two pre-determined codes; 'factors impeding intensification' and 'ways to facilitate intensification.' These categories helped to organize the data so that it could best answer the two central research questions of this study.

Initial findings were applicable for the first code, 'factors impeding intensification.' Informants shared thoughts and insight on what impedes intensification in The District. Words or brief phrases were used to demarcate responses and were categorized under this code. Moreover, from the second category, 'factors to facilitate intensification,' additional findings identified what needed to happen to encourage intensification. Again, words or brief phrases that represented informant's perspectives were recorded under this code. The same two codes were applied to all of the interviews, which allowed the researcher to effectively identify the similarities or differences.

From this process, more specific and common themes began to emerge that identified specific barriers to intensification and factors to facilitate intensification.

These specific themes that emerged were utilized to code additional data sources.

Data collected from the visual observation and document analysis were coded after the semi-structured interviews, using the codes that spoke to the barriers impeding intensification. Those codes were municipal growth policies, unsupportive

zoning and processes, absence of amenities and services, proximity to undesirable uses, brownfield re-development, inadequate infrastructure, and soft market demand.

In coding the municipal documents, the researcher employed a form of 'content analysis.' This was utilized to extrapolate additional information that could support the findings of the semi-structured interviews. The aforementioned codes that emerged during the semi-structured interviews were used to analyze the Development Plan, Secondary Plan and Zoning Bylaw.

Documents were reviewed for existence of these codes, and wherever they appeared they were recorded in writing. Upon completion of this step, the information was examined for relevance to the case study of the Warehouse District. In circumstances where the information was not applicable to the neighbourhood or the context of this research, it was discarded. That is to say, only content that offered insight into the barriers of intensification within The District was retained.

Coding photographs obtained during the visual observations involved reviewing the images one additional time. While doing so, the researcher kept in mind the previously discussed themes that emerged from the semi-structured interviews. The images captured were labeled with the appropriate code that delineated which barrier to intensification the image validated.

Following this, a new word document was created that combined the interview findings with the data from the content analysis and images obtained from the visual observations. The combination and analysis of all this data provided insight into the barriers to intensification in The District.

It is important to note that not all of these codes were present or appeared within the document review or visual observations. That is to say, the analysis of municipal documents and visual observations could not supplement all of the findings to emerge from the informant interviews.

A similar approach was taken with regards to data supporting the recommendations on facilitating intensification. Themes or codes that emerged from the informant interviews including; balanced growth, reformed municipal policies, programming to improve the perception, greater involvement from the City in development, and better fiscal incentives were sought within existing literature and best practices. This provided validation that could support the findings of informant's views on how best to facilitate intensification.

The codes to emerge during the data management and analysis phase are presented as major findings in chapters 5 and 6. The findings presented are those that were most frequently cited by key informants. Two additional themes were presented as findings despite not being common amongst participants. These were included because they were identified within the literature, which validated their consideration within the context of this research.

# Chapter 5

# **Findings**

### 5.1 Introduction

This chapter explores the barriers to intensification in Regina's Warehouse District. This begins by assessing whether the demographics in Regina are conducive to gentrification or redevelopment of the inner city. Specific neighbourhood barriers are identified through semi-structured interviews. These findings are supported through visual observations and an analysis of municipal documents.

### 5.2 Characteristics of Gentrification

Prior to delving into the more specific barriers impeding intensification within The District, one must consider whether the larger demographics of Regina are conducive to inner city redevelopment or gentrification. This is an important point to consider as Filion (2001a) notes, "the city is both shaped by, and contributes to, society-wide social and economic trends" (p. 85). Utilizing the previous literature on driving factors of gentrification, this is now considered within the context of Regina. The data is compared against averages from Toronto, Montreal, Vancouver, Calgary and Ottawa, five cities that have experienced gentrification in the inner city (Meligrana & Skaburskis, 2005).

Reviewing the 2006 census data indicates that Regina has a high proportion of its population employed in the quaternary sector. The quaternary sector is comprised of well paying, service oriented jobs and the literature identified that gentrification is typically lead by individuals who are employed in this sector of the economy. The quaternary sector includes occupations relating to, finance and real estate, health care

and social services, education services, business services and other services. Come 2006, 70.2% of Regina's population was employed in the aforementioned sectors, trailing only Ottawa (76.5%) but exceeding Vancouver (66.8%), Toronto (63.3%), Montreal (62.7%), and Calgary (60.9%) (Statistics Canada, 2009).

The literature also identified that gentrification is often lead by couples without children. In Regina, 52% of the population is either categorized as married without children or common law without children. This was a greater percentage than all five of the other cities examined. Montreal (51%) was most alike Regina followed by Vancouver (50%), Ottawa (50%), Calgary (48%), and Toronto (46%) (Statistics Canada, 2012a).

A high proportion of singles was also noted as having an effect on inner city redevelopment. All six cities, including Regina (30%) have a relatively equal proportion of the population that is single. The highest proportion is Montreal (31%) followed by Ottawa (30%), Vancouver (30%), Toronto (30%) and Calgary (29%) (Statistics Canada, 2012a).

In addition, a youthful population is a typical trait associated with gentrification. Regina is a relatively younger city in comparison to four of the five cities examined. The median age of Regina in 2011 was 37.3. (Statistics Canada, 2012a). Only Calgary (36.4) had a lower median age than Regina while Toronto (38.6), Ottawa (39.1), Montreal (39.7) and Vancouver (40.2) all had older populations. Further to that, gentrification typically is lead by a high proportion of individuals in the 25 to 39-age cohort. In Regina, 21.2% of the population falls within this age bracket. Only Calgary (24.2%) had a larger percentage of its population in this cohort. Vancouver (21.2%) tied Regina, and

Montreal (20.9%), Toronto (21.1%) and Ottawa (20.3%) all had a smaller percentage of their population within this age bracket (Statistics Canada, 2012a).

Post-secondary education was also identified as an important trait of individuals who affect inner city change. In Regina, 48% of the population has some level of post-secondary education, which was lower than the five other comparison cities. Ottawa (58.2%) was the most educated city in 2006 followed by Calgary (56.2%), Vancouver (55.6%), Montreal (55.5%), and Toronto (54.7%) (Statistics Canada, 2009).

Lastly, the literature identifies that gentrification is often associated with a financially stable population. In 2006, the median household income in Regina was \$71,174 per year. During the same time period, Calgary (\$68,579), Toronto, (\$69,321), Montreal (\$61,361), and Vancouver (\$64,332) all had lower median household incomes than Regina. Of the five cities examined, only Ottawa (\$80,388) had a higher median household income (Statistics Canada, 2009).

As illustrated above, the data suggests that Regina has characteristics favourable of gentrification. Of the six cities explored (Regina, Toronto, Montreal, Vancouver, Calgary, Ottawa) it has the highest median income, and the highest percentage of the population without children. In addition, aside from Calgary, it is the second youngest city. Its proportion of single individuals was consistent with the other five cities explored. Lastly, although it had the smallest proportion of the population with post-secondary education, this data dates back to 2006 and since then, enrollment at the University of Regina has increased, suggesting that the data may be inaccurate of the 2012 realities (University of Regina Office of Resource Planning, 2012). In summary, Regina demonstrates comparable or in some cases more favourable socio-economics

than Toronto, Montreal, Vancouver, Ottawa and Calgary, all of which have experienced gentrification within the inner city. With this understanding it can be surmised that Regina has the socio-economics typical of gentrification, and that these broader issues are not impeding redevelopment within Regina's inner city. Rather it can be inferred that the barriers to intensification within The District are more specific to the neighbourhood. The following section expands on this discussion.

#### 5.3 Barriers of Intensification

The following discussion provides an overview of the factors that are limiting intensification in The District. As identified through informant interviews, the most cited barriers can be categorized into six themes:

- 1. Growth Management Initiatives
- 2. Warehouse District Planning Policy and Zoning
- 3. Negative Perception
- 4. Proximity and Absence
- 5. Land Development Economics
- 6. Niche Market

These themes emerged through the semi-structured interviews. Where possible, these findings are supported through visual observations and an analysis of secondary documents. The following discussion provides additional detail on how each factor has hindered intensification.

### 5.4 Growth Management Initiatives

The majority of informants identified that current municipal growth strategies impede intensification within Regina. As Informants suggested this is due to current policies strongly prompting residential growth at the periphery of the city. As one planning consultant interviewed stated:

The focus of development at the edge of the city, and the apparent lack of focus in the inner city isn't going to benefit the inner-city neighbourhoods in the long run. There is such a lack of development in the inner-city neighbourhoods right now and it's probably due to that there is so much on the edges. There's no balance (Planner, 2012).

Although a number of initiatives have been developed to encourage intensification, including the newly adopted Regina Downtown Plan, the consensus amongst informants is that policies promoting peripheral growth are winning out. The Chair of the RWBID, David Froh (2012) advises, "the incredible growth in the Northwest of the city probably runs contrary to some of the same statements that might have been made in the Downtown plan." Jennifer Keesmaat (2012), former principle planner at Dialogue Consulting and now Chief Planner for the City of Toronto, emphasized that this is because a limited amount of growth in mid-sized cities can contribute to only a finite number of objectives. If policy emphasizes growth at the periphery as the key objective, then it comes at the expense of intensification.

Figure 5-1 acquired from Regina's Development Plan, supports the notion from informants that growth at the periphery has remained as a major objective for the City.

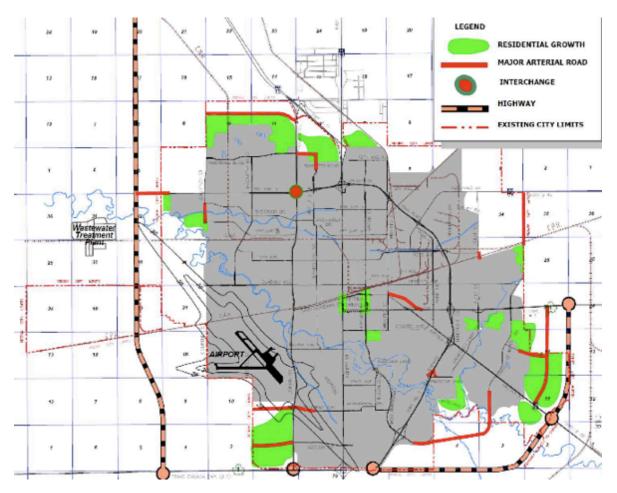


Figure 5-1: Growth Management for 235,000 people (City of Regina, 2008)

As illustrated above, the City anticipates that greenfield development will be the predominant form to accommodate a population of 235,000 people. In this scenario, intensification is intended to encompass only a small proportion of total growth.

Table 5-1 formulated from data in Regina's Development Plan, provides further analysis as to how and where the city will grow to accommodate a population of 235,000 people.

Table 5-1: Population Growth by Neighbourhood for 235,000 people (City of Regina, 2008)

Area	Land Area (ha)	Population
Maple Ridge	35	1,500
Lakeridge/Garden Ridge	68	4,300
Fairways West	37	2,100
Kensington	33	1,300
North of Argyle Park	70	3,100
North of Lakeridge/Maple Ridge	60	2,600
Parkridge/Creekside	16	700
Windsor Park	48	2,200
Wascana View	21	900
New Southeast Neighbourhoods	330	14,500
New Southwest Neighbourhood	220	9,700
Greenfield Subtotal	750	34,300
Riverside	37	1,600
Gardiner Park Addition (BACM)	9	800
Riverbend	13	1,500
Other Infill	58	5,100
Infill subtotal	117	9,000

Analyzing the data, it corroborates the point that the City is emphasizing growth at the periphery, as a mere 20% of residential development is expected to come through intensification (infill) (City of Regina, 2008). Upon further examination the City proposes infill in the neighbourhoods of Riverside, Gardiner Park Addition and Riverbend will accommodate 3900 new residents. Although these three areas are identified as infill locations, in actuality all three are located in relatively recent growth

areas and have characteristics that are typical of suburban neighbourhoods. This leaves only 5100 new residents (approximately 12% of growth) to be dispersed throughout Regina's remaining neighbourhoods, including core areas like the Warehouse District.

Figure 5-2 from Regina's Development outlines the areas targeted for long-term growth, for a population exceeding 300,000.

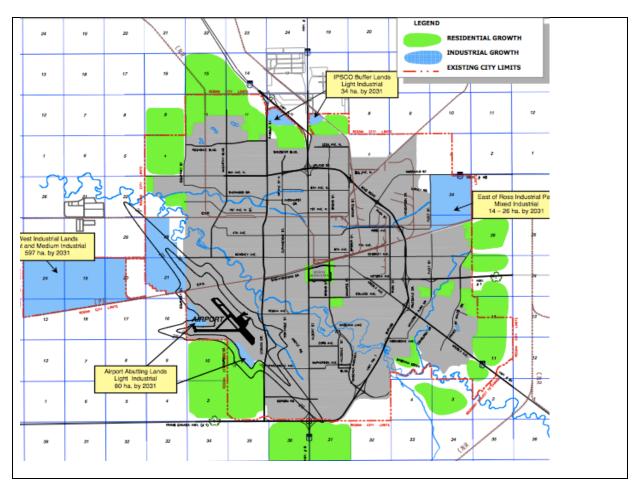


Figure 5-2: Growth Management for 300,000 people (City of Regina, 2008)

Similarly to projections for 235,000 people, growth is directed towards greenfield development with limited focus on intensification. Through the analysis of both growth scenarios it confirms the validity of what informants identified. The City of Regina

anticipates that the majority of growth will occur through peripheral expansion, leaving little need to intensify neighbourhoods like The District.

Additionally, a number of informants identified that aside from reducing demand for intensification the sheer amount of suburban growth has cultivated decline in the inner city. As one informant highlighted:

There are a lot of incentives for developing greenfield residential, incentives for developers, and that certainly has had an impact on the revitalization of the city core, including the Warehouse District. Increasing greenfield development is having a serious impact on the ability of the city core to survive (Planner, 2012).

Urban decay in the inner city impedes intensification in that it serves as a deterrent to attracting residents. It is unlikely that the average resident will proactively choose to live in an area they feel is deteriorating. On the contrary, individuals will choose to locate in newly developed neighbourhoods where private and public resources are being directed.

Through informant interviews and as corroborated by an analysis of Regina's Development Plan, greenfield development has prevailed over intensification as the predominate form of growth. Unless actions are taken to strike a balance, municipal growth strategies will continue to constrain intensification in neighbourhoods such as The District.

# 5.5 Existing Municipal Policy and Zoning

At a finer level, respondents were quick to suggest that existing municipal policy has not encouraged intensification in The District. Additionally, the development standards outlined in the City's Zoning Bylaw prescribe requirements that do not support intensification within the neighbourhood.

Specifically, participants noted that policies in the Warehouse District Secondary Plan have not established the appropriate vision for residential development. This thought was supported through the analysis of the area's Secondary Plan. Within this document, sub-areas have been overlaid throughout The District's 80 city blocks. These specialized zones have been categorized based on common land use characteristics. As table 5-2 outlines, the areas identified do not highlight any areas opportune for residential development.

Table 5-2: Sub-Areas in the Warehouse District (City of Regina, 2005)

Sub-Areas	Description
Albert/Broad Street Strip Development	High Traffic, Newer Development, Retail/Service Uses
Winnipeg Street Strip Development	High Traffic, Service/Office/Industrial Uses
Dewdney Avenue (Albert Street to Broad Street)	Historic Dewdney Avenue Streetscape, Multi-Storey Warehouse Buildings, Limited Parking, High Traffic, Adaptive Reuse (Mixed Commercial/Industrial, Entertainment)
Small Business Commercial Core	Diverse Mix of Commercial/Industrial Uses, Small/Old Buildings on Small Sites, Limited Parking
Land Extensive Industrial	Industrial, Large Sites, Storage/Maintenance (e.g. City and Sask Power Yards)
Industrial Commercial Transition (1)	Industrial/Commercial Mix, Large Sites, Outdoor Storage
Industrial Commercial Transition (2)	Industrial/Commercial Mix, Limited Retail/Service Use
Warehouse Commercial	Historic Multi-Storey Warehouse Buildings, Adaptive Reuse (Retail Specialization - e.g. Furniture Sales)
Industrial	Industrial, Large Sites, Large Buildings, Public Utilities
C.P.R Lands	C.P.R. Lands

Instead, these sub areas establish The District for commercial or industrial development. As informants suggested, policies in the Secondary Plan still view the area to be primarily industrial, intended for a mix of light and medium industrial land uses.

The general consensus amongst interviewees is that the neighbourhood's Secondary Plan is no longer reflective of the realities in The District or modern planning practice. The plan was originally established in 1996, with the last revision occurring over a decade ago. Regina has changed considerably within the past ten years, most notably, transitioning from a slow growth city to one of the fastest growing CMAs in Canada. Moreover, the Warehouse District continues to evolve away from an area primarily for industrial purposes. Nonetheless, the 1996 plan remains as the primary document to guide development within the area.

Residential as a land use is only briefly mentioned within the Secondary Plan.

Pertaining to 'area 1' delineated in Figure 5-3, the plan makes note of the emergence of converting upper floors of Warehouse buildings to residential.

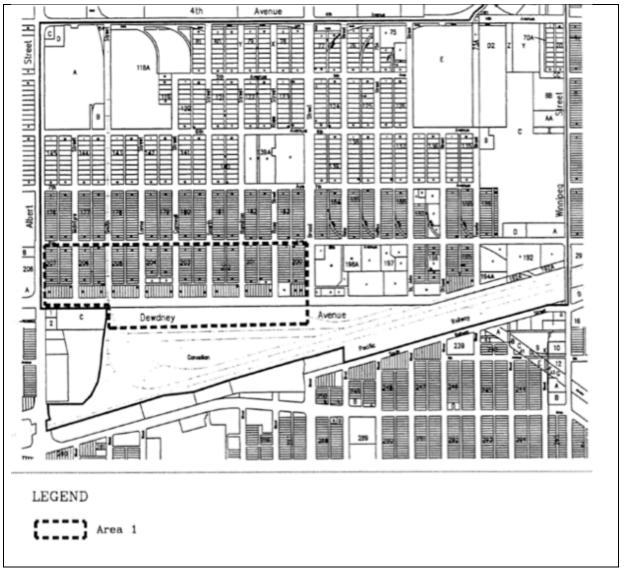


Figure 5-3: Sub-Area 1 (City of Regina, 2002)

The policies for this sub-area submit that the area would be enhanced by "unique residential living opportunities (e.g. mixed residential/commercial use of upper floors of historic warehouse buildings)" (City of Regina, 2002, p. 10). This is the extent of the discussion regarding residential land uses in The District. A number of informants noted, that little has changed. Notably, Deputy City Manager of Community Planning and Development, Jason Carlston (2011) explains:

I don't think our OCP (Official Community Plan) or even our area plans have fully capitalized on the opportunity for residential. For the most part. [Residential] has sort of grown organically due to market demand for a niche loft product. It has happened and there seems to be a certain appreciation from those who live in the district, but it hasn't been an overarching policy objective to this point nor has it been a city development priority.

Expanding on this perspective, informants made it clear that unsupportive municipal policy has acted as a major deterrent to intensification in The District. The absence of a vision for intensification means developers, residents, and other key stakeholders have not been attracted, enticed, or lured by the proposition of living or developing in the area. Successful intensification relies on buy-in from the community and until the City creates intensification as an objective for The District, it will likely remain as a niche concept.

Through a discussion with informants and an analysis of the City's Secondary Plan, it is evident that The District is still largely viewed as an area for industrial or commercial purposes. This perspective is further supported through the visual observation method. Depicted in Figure 5-4 are just a few of the many industrial uses located in the neighbourhood.







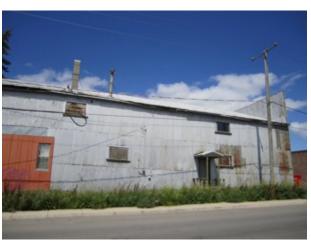


Figure 5-4: Industrial Uses within The District

On the contrary, residential uses appear to be largely an after thought only incorporated due to the organic growth that has occurred. Although the Secondary Plan views the neighbourhood as 'mixed use,' residential and industrial uses are generally viewed as incompatible where one typically limits the other. Considering that the Secondary Plan encourages and supports noxious industrial uses it appears as if opportunities for intensification are constrained. This in itself suggests that the City's highest-ranking document is serving as a hindrance to intensification in The District.

Taking direction from the Development Plan, Regina's Zoning Bylaw #9250 also holds The District as an area primarily for commercial and industrial development. Where informants see the Warehouse District Secondary Plan as policy that has not encouraged residential development, informants indicated that the Zoning Bylaw is directly deterring intensification.

As Figure 5-5 establishes, zoning within The District has been set to accommodate light and medium industrial development.

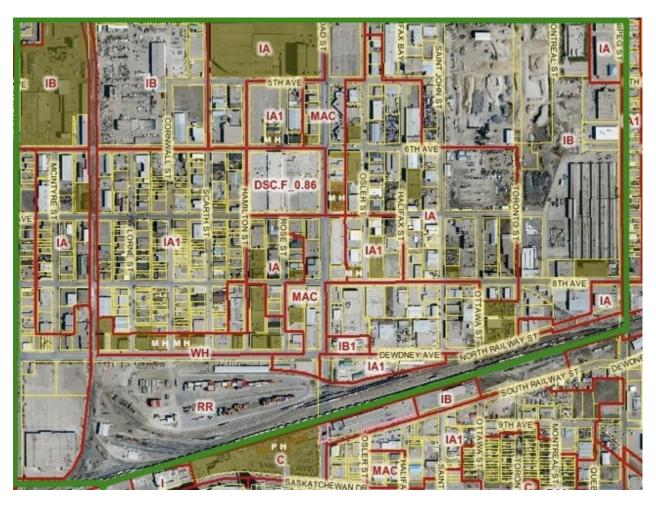


Figure 5-5: Zoning in Regina's Warehouse District

Table 5-3 offers further detail, defining the six zoning types present in the aforementioned figure.

Table 5-3: Existing Zoning in Regina's Warehouse District (City of Regina, 1992)

Land Use Zone	Designation
Light Industrial	IA, IA1
Medium Industrial	IB, IB1
Dewdney Avenue Warehouse	WH
Railway	RR
Designated Shopping Centre	DSC
Major Arterial Commercial	MAC

As Table 5-3 clearly demonstrates, zoning prepares the area for commercial and industrial development and limits the opportunity for residential. Table 5-4 formulated from data in the City's Zoning Bylaw, shows the residential uses contemplated within The District's industrial zoning.

Table 5-4: Contemplated Residential Uses in Industrial Zoning (City of Regina, 1992)

Land Use Type	Land Use Zone		
	KEY: P=Permitted Use,		
	D=Discretionary Use,		
	Blank=Prohibited Use		
	IA, IA1	IB, IB1	WH

Dwelling Unit, In	D		D
Reconstructed			
Building			
Dwelling Unit,	D		
Detached			
Dwelling Unit,	D	D	
Accessory			
Secondary Suite	Р		

Industrial zoning present in The District is not conducive to residential development. The zoning framework rigorously limits the type of residential that may be developed. This confines the likelihood of development for a number of reasons including market demand and economic feasibility.

Commercial zoning in The District is more responsive to residential development. Table 5-5 specifies residential uses contemplated in the Major Arterial Commercial (MAC) and Designated Shopping Centre (DSC) zones.

Table 5-5: Contemplated Residential Uses in Commercial Zoning (City of Regina, 1992)

Land Use Type	Land Use Zone	
	KEY: P=Permitted Use, D=Discretionary Use, Blank=Prohibited Use	
	MAC	DSC
Apartment Dwelling Unit	D	P

Apartment, Low Rise	D	P
Apartment, High Rise	D	P
Apartment, Seniors	D	Р
Assisted Living – Low		
Rise		
Apartment, Seniors	D	Р
Assisted Living – High		
Rise		
Dwelling Unit	D	P
Dwelling Unit,		
Converted		
Dwelling Unit, Detached		
Dwelling Unit, Duplex		
Dwelling Unit, Fourplex		P
Dwelling Unit, Planned		P
Group		
Dwelling Unit, Semi-		
Detached		
Dwelling Unit,		P
Townhouse		
Dwelling Unit, Triplex		P
Rooming House		
Secondary Suite	Р	

Although the DSC and MAC zoning offers greater opportunity for residential development, the extent of commercial zoning in The District is limited. Both the MAC

and DSC zones are restricted along the Broad and Albert Street corridors and cover only a small portion of land in The District. Additionally, as this zoning is largely intended for commercial uses, it is likely that developers see it primarily for commercial development and gives little consideration for developing residential.

As indicated by a number of informants and supported through tables 5-4 and 5-5, the current zoning requires either a discretionary use or zoning amendment to obtain city approval for a residential project.

The understanding is that these processes are cumbersome, which causes delays and increases costs. Local developer and real estate agent, Rob Pederson identified the discretionary use process as nothing but a "money grab" that served no purpose other than to impede development. Local architect Kurt Dietrich (2011) offers a similar thought, suggesting that the lack of supportive policy from the City deters developers from pursuing intensification. Specifically Dietrich (2011) notes that:

What developers won't do is be the first one to challenge city rules, spend time and money working out new rules, and then have other developers jump on board at the end and profit. Rarely will a developer take the initiative to change the environment - they will most often work the angles available for easy return (and why not?)

Informants identified that developers are discouraged due to the complex municipal processes necessary for approval. Local developer, John Aston's (2012) experiences developing in The District lends support to this argument:

The zoning of our site, which again is 12 acres, it [zoning] largely precluded any residential development, it would have taken a fairly significant rezoning or discretionary use process. On our particular site it is really something we looked at very seriously. I know that it was basically precluded on our site so it wasn't an option.

Due to the restrictive regulations Aston's (2012) specifies that instead the development industry is pulled towards areas of the city that offer an easier approval process.

Aside from unsupportive policies for residential development, the presence of industrial uses in the area further impedes intensification. As expressed by a number of municipal planners, provincial legislation regulates the distance between residential land uses and hazardous or dangerous waste facilities. Zoning Bylaw #9250 outlines this requirement as:

Every hazardous waste facility shall be located at least:

- I. 100 metres from a residence, hospital, senior citizens' home, school, day care centre, prison, group home or health care facility where materials are in indoor storage;
- II. 500 metres from a residence, hospital, senior citizens' home, school, day care centre, prison, group home or health care facility where materials are in outdoor storage (City of Regina, 1992).

As one planner outlined, a developer may intend to pursue residential at a particular location, however those expectations may be impeded by an existing facility with hazardous waste (Searle, 2011). The opportunity to circumvent this regulation is limited and as such the possibility for intensification is constrained to specific locations outside of the required separation distances.

Similarly, this regulation also limits the development of particular neighbourhood amenities that are critical in attracting prospective residents.

Specifically, the standard demands a minimum separation between 100 metres to 500 metres to distance hazardous materials from schools, day care centres or health care

facilities. As delineated later in this chapter, without these sorts of neighbourhood amenities the demand for residential is reduced.

As informants outlined above, intensification has and continues to be impeded by unsupportive policies, regulations and processes. Until an appropriate framework is introduced, the ability to intensify The District is limited.

## 5.6 Negative Perception

The majority of informants identified that The District is hindered by a negative perception. Specifically, this perception relates to two specific qualities, high crime and a deteriorating physical environment. As informants outlined, the negative perception associated with The District impedes intensification.

Informants emphasized that concerns over safety was the driving force behind the neighbourhood's poor perception. There was some disagreement amongst informants as to whether crime within the area was a real concern versus a perception without validity.

A number of respondents emphasized that the area becomes desolate after 5:00 pm Monday to Friday, creating a lifeless environment that establishes a perception that the area is unsafe and unwelcoming. Dietrich (2011), whose architecture firm is located in The District, emphasized crime as a key issue that deters people from choosing to reside in the area. He recalled how others questioned his decision to locate within the neighbourhood. Local City Councilor Wade Murray (2012) shared a similar opinion suggesting that the Warehouse District's proximity to North Central and Downtown, two neighbourhoods susceptible to crime, poses challenges in attracting residents to The District.

Pederson (2011), agreed that "people worry about crime because it's [the area] technically inner-city" but from his own experiences living in the area, there is little truth to the matter. Rather he suggested he was exposed to crime more frequently in neighbourhoods "outside of the inner-city" that are generally perceived to be safe. Despite Pederson's personal experiences he agreed with the majority of informants who identified that there is a prevailing perception that the area suffers from high crime. Informants stressed that prospective residents are unlikely to live in an area they perceive as unsafe, softening the demand for residential.

The District's negative perception is further entrenched by the physical condition of the built environment. Informants suggested that the District's physical environment is defined by crumbling sidewalks, rusted streetlights and a lack of vegetation. The deterioration of the neighbourhood's physical environment prompted one informant to suggest that the area "looks abandoned" (Planner, 2012). This same respondent mentioned that in their own dealings they had encountered the opinion that the area is "not well tended by the city" relating to a lack of upkeep, including poor road maintenance, and no streetscape improvements. Informants suggested that the public realm in the area looks grimy and uncared for. The Dewdney Avenue streetscape shown in Figure 5-6 illustrates this perspective.



Figure 5-6: Dewdney Avenue Streetscape

Several municipal planners interviewed reiterated the thought that the public realm is serving as an impediment to attracting residential development. As they suggested, infrastructure within The District has been poorly maintained and without continuous investment from the municipality. As a small number of informants identified, developers are unlikely to invest in an area that is physically deteriorating.

These two factors contribute to a negative perception of Regina's Warehouse District. Through the semi-structured interviews it was clear that certain pre-conceived notions or feelings associated with The District were acting as a major impediment with respect to intensification. As a number of informants outlined, a negative perception impedes intensification in two ways, by limiting demand from potential residents, and discouraging private investment from developers.

## 5.7 Proximity and Absence

An overwhelming majority of Informants identified that the proximity to undesirable land uses impedes intensification. Moreover, informants offer a similar perspective suggesting that absence of certain neighbourhood amenities and services has also served as a hindrance.

With respect to proximity, there is a strong consensus amongst informants that the industrial nature of the area impedes residential development. Many informants suggested that the area is still seen and treated as an industrial district with uses not typical desired by prospective residents. As Froh (2012) outlines, residents within The District are subject to living near unwelcome uses. Specifically, Froh outlines that his own residence was down the street from an industrial cleaning factory and across from Habitat for Humanity Restore; an organization that collects used building materials. Searle (2011) suggests that the interface between residential and industrial uses causes tension. Figure 5-7 illustrates this perspective, as residential and industrial uses are within close proximity to one another throughout the neighbourhood.



Figure 5-7: Interface of incompatible uses

As informants outlined, there is not a large affinity for living in close proximity to these types of uses. Aston (2012) provides support to this argument, suggesting that as a developer he would avoid the area because the undesirable land uses would likely be a difficult sell to residents.

Aside from proximity, informants further identified that intensification is deterred by the absence of community amenities. As Keesmaat (2012) expressed "we typically think of neighbourhoods as places that have schools, and parks, and places to gather." She further elaborates that within The District there "is no place to gather" or "no neighbourhood hub." One informant summarized that "there is still an absence of certain residential infrastructure" within The District (Carlston, 2011). This was the common theme amongst informants who outlined that the Warehouse District lacks basic yet essential neighbourhood amenities. As Dietrich (2011) explains "there is a lack of amenities from convenience stores through grocery stores to restaurants to personal

service shops like drycleaners and drug stores. This lack of functions impedes development since most people want to live somewhere convenient." Other informants echoed this assertion, highlighting that the district lacks pocket parks, public plazas, local schools or nearby commercial services. Informants argued that this impedes intensification because people are deterred from living in a neighbourhood that cannot satisfy their needs. Instead informants expressed that the demand for residential is directed towards neighbourhoods that can offer the convenience of nearby amenities.

One informant expanded beyond amenities and suggested that municipal services are also lacking within The District. As Froh (2012) indicates "the City of Regina gives considerably less service to the Warehouse District than it does to other areas, be it from trash pickup to bus service." He further emphasizes this point arguing:

If you look at the property values they are very comparable to some of the more affluent areas in the city, but the services and amenities that they would get from the city are considerably less. They are paying the same amount of property taxes as someone living in Wascana View – but there's no community centre, no park, the bus service is slow and there's no trash pickup.

This perspective shows how the lack of services can soften the market for intensification in The District. This is because residents are more likely to live in neighbourhoods where their tax dollars are being appropriately directed towards their benefit. However, there are difficulties in providing the expected amenities and services. Carlston (2011) outlines that just because there is a local interest to see amenities and services developed, does not mean that the neighbourhood has the critical mass to warrant the investment. This view underlines the dilemma or as both Froh (2012) and Dietrich (2012) outline, a "chicken or the egg" predicament that exists in the ability to use neighbourhood amenities to attract residential development.

Without public investment to establish neighbourhood amenities or services, demand for residential will remain constrained. On the contrary, without a growing residential base, politicians, planners and other key decision makers likely do not see the need for public investment and instead direct resources towards new development at the periphery of the city.

As emphasized by informants, the proximity to industrial uses continues to deter residents and new development. As informants specified, few will choose to reside in an area that is neighbouring noxious uses. Additionally, intensification has been limited within The District because of an absence of amenities and services needed to attract a residential population. Unless measures are taken to distance residential from incompatible industrial uses, and the neighbourhood can offer expected amenities and services, few will see the benefit of living in The District.

# **5.8 Land Development Economics**

Informants identified that intensification in The District is impeded by the economic feasibility of development. The predominant themes to emerge were the availability and cost of land and buildings for re-development, costs incurred through brownfield remediation, and exorbitant infrastructure upgrades.

### 5.8.1 Limitations to Adaptive Re-Use

As previously discussed, to date the predominant form of residential development in The District has been through adaptive re-use. There have been a dozen conversions of former factories or warehouses to residential. Although adaptive-reuse has created a solid residential base, informants were near unanimous in saying that the

opportunity for further conversion is limited. This was generally viewed from three angles, the first being that the stock of Warehouses available for conversion has been nearly exhausted. As informants expressed, this has been a successful model of development and developers have already capitalized on the opportunity by converting the upper floors of their buildings to residential.

The second hindrance to further adaptive re-use is the viability of remaining buildings to be converted. There was a general consensus amongst informants that the "easy" buildings have been converted and those that have not typically have qualities that make conversion to residential impractical. Generally the reasons identified relate to either an unworkable lay out or floor plate size, success of the current operating use, or the physical condition of the building.

The third limitation has emerged only in recent years. A number of informants identified that in some cases office development has become the preferred form of conversion (pictured in Figure 5-8).



Figure 5-8: Warehouse Partially Converted to Office Use

Policies in the City of Regina have traditionally concentrated and directed office development towards the downtown. However, with Regina's office vacancy the lowest in Canada at approximately 1%, demand has surfaced for office space outside of the downtown (Leader Post, 2012). Informants identified that building owners have looked to cash-in by converting space to accommodate office rather than residential. One developer who undertook a number of office conversions within The District, confirmed that the low vacancy rate strongly influenced their decision to develop office rather than residential (Dupuis, 2012).

With the potential for adaptive re-use limited, informants confirmed that the future of residential development would have to come through new construction.

Pederson (2011) expressed that "using existing buildings is not the future of residential"

development in the Warehouse District" and moreover "anything to try and get any kind of density there [in the Warehouse District] has to be new construction."

With reduced opportunities for additional adaptive re-use, an important avenue of intensification has been constrained. As such, this offers additional confirmation to the 2002 and 2009 studies, and the visual observation that infill and redevelopment are necessary forms in order for residential development to occur within The District.

## 5.8.2 Cost of Development and Difficulty in Land Assembly

Informants identified the cost of purchasing or difficulty in finding and assembling land, as a hurdle to intensification. One informant suggested that with the "cost issue of land and [difficulty in] assembly, it is easier for a developer to pursue [development] at a different location" (Aston, 2012). Pederson (2011) reiterated this point suggesting that "there's not a tonne of available space to do it [residential]" and further that developing within the area is "unbelievably expensive" where profit margins are lower and risks higher. Pederson (2011) further assessed, that he knows individuals who would like to develop residential in The District but that they have been turned off by the cost or absence of land.

Aston (2012), emphasized that the cost of developing in the District is constraining development opportunities. As Aston (2012) states:

The value of the buildings, with their current use of commercial or industrial, would be too great for a developer to come in and try to make it a residential building. For a complete knock down to build new, it is cheaper to do it elsewhere, it's probably cheaper to build that same building elsewhere, the market does not justify a higher sales price here because it doesn't view it as a plus or a bonus to live in this area.

Aston's point emphasizes that development in the District increases costs but does not warrant a higher selling price to absorb added expense. Both Dietrich (2011) and Senior City Planner, Ben Mario (2012) offer support to this argument, emphasizing that developers can do more with their money in suburban locations without the financial risk of developing in The District.

All of the developers interviewed expressed interest in developing residential in The District. However, they were also adamant that until the economics make sense, infill and redevelopment would remain limited.

### 5.8.2.1 Brownfield Remediation

Neighbourhoods transitioning from industrial to residential, are often impeded by the costs and risks associated with redeveloping contaminated land. Although this is well documented within the literature on brownfields, it was not a consideration heavily emphasized by participants in this research.

As previously discussed, informants identified that the current industrial nature of The District impedes intensification. However, this thought was generally applied to the current industrial businesses in operation, or policies that continue to permit industrial development. There was little discussion on how the past legacy of industrial uses in The District might influence future residential development. Only two informants identified that contaminated land in The District may serve as a barrier to intensification. One of those two, Carlston (2011) explains that brownfields do complicate development:

Having past zoning of industrial, there may be certain financial restrictions imposed by contamination. There may be additional

challenges based on the neighbourhood's history as an industrial area, to facilitate residential.

These informants argued that the expenses incurred by remediation often make a project financially unfeasible. Further to that, developers are tentative to redevelop brownfield sites given the added risk. Both of these factors reduce the likelihood of intensification on brownfield sites, or as Mario (2012) explains:

[Remediation] often catches developers off guard. There have been cases where the City will require a higher-level assessment, where one was not expected. In a tight development market, such requirements can have significant implications with regard to cost or timing of a project. I'm not suggesting that the need for an environmental assessment could necessarily break a project, but from a developer's prospective it is just one more impediment to development that puts infill sites, particularly brownfield sites at a competitive disadvantage with greenfield sites.

Based on the existing literature on brownfield redevelopment, this limiting factor as underlined by these two informants is worth noting. Parcels and buildings in The District may appear ripe for development, but in actuality the site may suffer from contamination, which has not been well documented. It is this uncertainty that pushes developers away from intensifying The District. As new development occurs within The District, this is likely a point of concern that will gain more recognition.

## 5.8.3 Deteriorating Infrastructure

Similarly to contamination issues only a small minority of informants identified that the existing capacity of underground infrastructure may impede intensification.

Despite this, it is worth consideration as a plausible barrier to development in The District given that it was recognized in the literature.

Intensification is strongly revered as a sensible approach to growth and development. As discussed in Chapter 2, one of the benefits often associated with

intensification is the ability to utilize existing infrastructure. Using existing roads, sewer lines, water mains and electrical connections prevents the need to build new infrastructure. However, in some instances existing infrastructure may be unable to accommodate higher density development due to its size or physical condition. As Figure 5-9 identifies, above ground infrastructure in The District is deteriorating. It is possible then that infrastructure such as sewers and water mains are also in a similar state and unable to accommodate development.

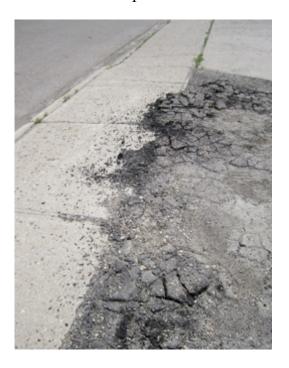


Figure 5-9: Deteriorating Infrastructure in The District

Informants noted that this is particularly relevant to more mature neighbourhoods such as the Warehouse District. As informants outline, if existing infrastructure is unable to handle the demands of a higher density development, then the costs to upgrade infrastructure is at the expense of the developer. As one informant outlined:

The concern [regarding infrastructure capacity] is similar to environmental remediation. The City does not have complete records readily available for a land purchaser to do their due diligence, and the requirement for infrastructure upgrades can come as a surprise to developers. Again, from experience, the City has asked for upgrades to surrounding infrastructure to service the development where such an upgrade was not budgeted for (Mario, 2012).

The prevailing belief amongst informants is that the economics of developing in The District are impeding intensification. A large number of informants identified that the cost of purchasing land in The District decreases the feasibility of development.

In addition, despite not being identified by the majority of informants, contamination and crumbling infrastructure present potential complications. The lack of acknowledgment on these topics from participants should not diminish their significance as a barrier. On the contrary, the lack of discussion would suggest that there is little understanding on the subject as well as an absence of policies, incentives or programs in place to address these issues.

In conclusion, participants identified that the risk associated with development in The District is not worth what is to be gained. As one informant summarized:

These are impediments to development in an infill context as compared to a greenfield site where the review process is simple. There are no environmental concerns, infrastructure capacity concerns, [or] NIMBY concerns. Designing in context is usually pretty simple if the only context is bare land pre-graded for development (Mario, 2012).

#### 5.9 Niche Market

A number of Informants outlined that intensification in the District has been stymied by a soft demand for higher density developments in urban locations.

Keesmaat (2012) emphasized this point suggesting that Regina's market for infill has

not been well established, pointing to a number of examples where infill projects have been slow to progress. There appears to be a certain capacity for intensification in areas like the Downtown and Warehouse District. A number of informants highlighted that these areas are competing with one another for a limited market, meaning that development in areas such as the downtown likely come at the expense of The District.

Additionally, a number of participants suggested that living in The District does not have widespread appeal. As informants summarized, living in the area is a niche market popular largely with retired couples, young professionals, higher income earners, or those drawn to a unique living experience. Additionally informants identified that The District offers little appeal to families. As many of these qualities are quite specific it eliminates the majority of citizens and appeals only to a small minority.

As one City Councilor explained, the reduced market demand for intensification in The District is a result of the city's relatively small size. He describes, as a mid-sized city Regina is easy and quick to navigate by car (Murray, 2012). With short commuting times, prospective residents have not been enticed by the increased accessibility that living in core neighbourhoods like The District can offer.

A number of informants identified that a soft market for intensification is evidenced by a lack of development in the area. Informants recognized that if there was a strong market for residential in The District that the development industry would be first to acknowledge the opportunity.

As informants identified, until a stronger market emerges for residential in The District, it is likely that residential development within the area will remain as a niche concept.

### 5.10 Conclusion

The preceding discussion has identified the barriers that have and continue to impede intensification within Regina's Warehouse District. Informants identified a variety of factors that limit residential development in the neighbourhood including growth policies, municipal zoning and processes, proximity of undesirable uses, and absence of amenities and services, unfavourable development economics and a niche market. These impediments limit intensification in two ways, by reducing the demand from prospective residents, and creating an unwelcoming framework for the development industry. With a clear understanding of the factors that limit residential development in The District, the subsequent step of this research is to provide recommendations based on the data collected that can overcome said barriers.

# Chapter 6

### Recommendations

### 6.1 Introduction

The preceding discussion highlighted the barriers to intensification within Regina's Warehouse District. Having established a clear understanding of the issues that impede intensification the research now ventures into recommendations to facilitate infill and redevelopment. The strategies outlined in the subsequent section are based off semi-structured interviews as well as best practices, and existing planning literature. The recommendations for Regina's Warehouse District are as follows:

- 1. Balance Growth
- 2. Revise Municipal Policy and Zoning
- 3. Commit Public Investment
- 4. Programming to Improve the Perception
- 5. City Involved in Development
- 6. Provide the Incentive

The following discussion explores each of these points in greater depth.

#### 6.2 Balanced Growth

To encourage intensification in The District, informants were unwavering in their belief that the City of Regina needs to implement policies that enact a stronger balance between intensification and greenfield development. Informants identified that intensification in neighbourhoods such as The District is hindered by the unparalleled growth occurring at the periphery of the city. As Keesmaat (2012) stresses, a market for intensification is contingent on policies that emphasize compact growth. She highlights

that Vancouver and Portland, two cities highly regarded for compact growth, achieved this by enacting the appropriate policies.

One method to increase intensification is through the introduction of a growth boundary, thereby limiting the opportunity for greenfield development (Municipal Research & Services Center of Washington, 1997). The City of Regina in conjunction with the Province of Saskatchewan, could implement a growth boundary that acts as a control to continuous peripheral growth. Through this, developable suburban land would be restricted and developers would have to look towards intensifying the existing built area. This would make areas such as The District more attractive for development opportunities.

Currently, Regina's municipal policy has set an objective of 20% intensification to 80% greenfield development. By comparison, Vancouver has set its sights on achieving a minimum of 70% of growth through intensification by 2021. By 2014, the Province of Ontario has set a goal to achieve 40% intensification for Ontario's Golden Greater Horseshoe (Urban Strategies Inc., 2005; City of Regina, 2008). It is apparent that Regina's target for intensification is low relative to other Canadian municipalities. As such, the City should increase its requirement from 20% intensification to be in line with practices in other Canadian jurisdictions. This figure can grow on a yearly basis in an effort to transition away from peripheral growth and towards intensification.

Moreover, it is imperative that the City implement measures to ensure targets are met. Regina's current requirement for 20% is set simply as an aspirational goal with no requirement that it be achieved. Measures should be introduced to track the ratio of

greenfield growth to infill and redevelopment projects. This would ensure that the set objectives are realized.

Although this recommendation is not specific to the Warehouse District, it is expected that policies focusing on increasing intensification would have a major impact on The District. As a central neighbourhood, in close proximity to the downtown, it would be prudent to designate The District as a node for intensification.

## 6.3 Revise Municipal Policy and Zoning

Intensification is shaped and guided through municipal policy and zoning. Through discussion with informants and as supported through analysis of existing municipal policies and regulations, it became evident that the City's directives are impeding intensification. It is imperative that the City of Regina update policies and regulations encompassed in the Warehouse District Secondary Plan, and Zoning Bylaw #9250 in order to facilitate intensification.

## 6.3.1 Secondary Plan

As described in the preceding chapter, participants identified that Regina's Warehouse District Secondary Plan has not provided the appropriate framework for residential development. Wheeler (2002) offers that infill development can be slow to occur in neighbourhoods where the municipality has not established a vision. Additional residential development in the District begins with a clear direction. Informants emphasizes that this could be achieved by developing a new neighbourhood plan.

Without an established vision for the neighbourhood, informants were steadfast in their belief that residential development would remain limited within the area. If the City were to create a new plan for the neighbourhood, it could provide the necessary framework and vision to direct residential development in both the short and long term. As Dietrich (2012) emphasized, in order to facilitate intensification "the City administration has to step up to the plate and create a master plan for the area, to say where it [residential] is going to go." An updated plan with appropriate policies would help to establish buy in from potential residents, developers and other community members. Through this it can be expected that a new plan would guide the growth and development of a modern and attractive core neighbourhood.

A new Secondary Plan for The District should ultimately lead to the City establishing appropriate urban design guidelines for the neighbourhood. Wheeler (2002) highlights that until recently little attention was paid towards designing infill to fit the surrounding context. The Warehouse District is a unique neighbourhood with one of a kind architecture, and new development must compliment its distinct built form. Standards should be introduced to control the position, placement and orientation of new development. Additionally, design should focus on creating high quality, attractive facades.

Figure 6-1 shows the approach two recent commercial developments in The District have taken with respect to design. The first building depicted shows a development that has drawn on planning and design features from its surrounding context. The second shows a development that has not taken its environment into consideration.





Figure 6-1: Commercial Development in The District

The former contributes more successfully to creating an attractive, livable, pedestrian friendly environment. A strong emphasis on encouraging high quality design will create a neighbourhood that is attractive to prospective residents. Future infill or redevelopment projects in The District should follow a similar pattern to best position itself as a desirable place to live.

In order to facilitate residential development in The District it is critical that municipal zoning be revised. Participants identified that the City needs to do away with the current land use framework that impedes intensification and ensure that standards are conducive to residential development.

## 6.3.2 Zoning Bylaw

The City would be wise to amend the Zoning Bylaw and introduce land use typologies that permit new residential construction in The District. A range of housing types should be permissible to provide a number of options for developers. The current zoning caters to industrial development and as such developers pursuing residential development in the area are subject to approval through City Council. As discussed in chapter 5, having to gain approval from council can be both a timely and costly process. Establishing land uses that permit residential will bypass cumbersome approval processes. Instead it provides a simplistic framework making intensification an attractive option for developers.

As Keesmaat (2012) advises, Regina might be wise to follow the lead of Toronto who created a unique zoning framework in the 'Kings' neighbourhoods. Both areas historically served as industrial districts and fell into decline following the suburbanization of Toronto's industrial sector in the 1970s (Canadian Mortgage and Housing Corporation, 2004e). With no interest from the market to maintain these areas for industrial purposes, the City instead eliminated regulations that stipulated only industrial development (Keesmaat, 2012; Canadian Mortgage and Housing Corporation, 2004e). Rather the City opened the area up to an array of uses and introduced design standards to preserve the character of the neighbourhood. These

changes have revitalized both areas and attracted mixed-use development, including residential. It is expected that both neighbourhoods combined will house 7000 new residential units upon completion (Canadian Mortgage and Housing Corporation, 2004e).

Aside from establishing appropriate land use zoning to permit intensification, it is of upmost importance that the City addresses the limitations that industrial zoning has on residential development. Residents need to be assured that in the future they will not be subject to residing near incompatible industrial operations. It would be prudent for the City of Regina to reconsider the sub-areas previously established within the Secondary Plan. Revised sub-areas would include residential uses, and direct commercial, and industrial development appropriately. This measure would ensure that the proximity of incompatible land uses to residential is controlled.

Carlston (2011) lends support to this thought stressing that intensification should initially be focused in specific precincts, rather than trying to do "everything, everywhere." As a number of informants identified, residential along certain blocks in The District would likely be unsuccessful due to the complete lack of amenities in certain parts of the neighbourhoods. Existing residential in The District has been concentrated along Broad Street and Dewdney Avenue (see Figure 6-2) and a small base of neighbourhood amenities has emerged within the surrounding area. Residential development should continue to build up along or adjacent to these corridors. By focusing residential within target areas, it creates a critical mass spurring development of more amenities and services in the immediate vicinity. This builds a more complete neighbourhood, which can attract additional development and residents.



Figure 6-2: Intensification along Dewdney Avenue

It should be noted that not all industrial land uses should be barred from being developed in close proximity to residential uses within The District. Some land uses that would typically be categorized as industrial can function compatibly with residential, such as artist's fabrication studios, bakery shops, and microbreweries. By continuing to allow these types of uses within The District, they can provide goods and services that are desired by nearby residents, maintain employment opportunities within the neighbourhood, and assist in creating a vibrant and active environment. Instead, the separation of industrial from residential uses should focus on those uses that are visually unappealing, create noise and odour pollution, and which generate large volumes of truck traffic (Broward County Environmental Protection and Growth

Management Department, Planning and Redevelopment Division, 2009). The location of these heavier industrial uses should be allocated to areas where their impact on residential uses is negligible.

Following the inclusion of appropriate land use zoning, it is also necessary that The City of Regina ensure development standards in the Zoning Bylaw are conducive to residential development. As the literature suggests, zoning requirements are frequently viewed as inflexible and typically serve as a detriment to intensification. Development standards for The District need to be flexible to accommodate the complex issues that hinder intensification. Zoning needs to permit the appropriate density and height needed to make a project economically feasible.

Creating a supportive policy and zoning framework will establish an environment that is conducive to intensification. Through this the risk and delays associated with intensification will be alleviated and instead infill and redevelopment will be an attractive option for developers to pursue.

### **6.4 Commit Public Investment**

In order to attract private interest and prospective residents, the City of Regina needs to direct public investment towards The District. Committing financial resources would work to improve the image of the area, provide necessary amenities and services, and as well, ensure that infrastructure is able to accommodate future development.

## 6.4.1 Improvements to the Streetscape

The predominant belief amongst informants is that the public realm in The District looks aged and is in desperate need of renewal. Participants suggested that there is a need to improve the urban environment in The District in order to facilitate infill and redevelopment.

In reference to a downtown environment, Shields and Farrigan (2001) assert that people will be attracted to an area by improving its physical appearance. In order to encourage intensification, informants stressed a need to improve the public realm through streetscape renewal. The City of Regina, Warehouse District Business Improvement District (WDBID), and local businesses could provide the funding for these improvements.

Streetscaping efforts as advocated by Zelinka and Harden (2005) play an important role in creating an attractive public realm. Through the use of street furniture, public art, bus shelters, vegetation, lighting and signage, a more attractive public realm would emerge within The District.

The City of Regina could look to the City of Kitchener to see how streetscape renewal can create an attractive public realm. Kitchener's streetscape improvements included wider sidewalks complete with new bollards, and upgraded lighting, benches and planters (City of Kitchener, 2010). Figure 6-3 provides a before and after look at the changes that have helped to transform the area.





Figure 6-3: Before and After, Kitchener's King Street (Complete Streets for Canada, 2012)

Zelinka and Harden (2005) emphasize that streetscaping should invoke a 'sense of place' by highlighting an area's unique cultural attributes. Such was the case in Harlem, New York where the 'Harlem Gateway' enhancement project was created to help revitalize the neighbourhood. The City of New York developed streetlights that incorporated a map of the area and included images of residents who had made positive contributions to the neighbourhood (Zelinka & Harden, 2005). In the case of Regina's Warehouse District, streetscape elements, as seen in Figure 6-4, should continue to draw on the early 20<sup>th</sup> century architectural features prevalent in the neighbourhood.





Figure 6-4: Existing Streetscaping in The District

Moreover design details should reflect the historical function of the area including its legacy as a major rail hub and centre for warehousing and manufacturing.

Through this a stronger identity and a more attractive environment would materialize within The District.

One important component of an improved streetscape involves planting street trees along sidewalks and boulevards. As Duany et al (2000) suggest, neighbourhoods with healthy vegetation tend to be places people want to live in and contrarily, areas with few trees are often places to avoid.

Presently, vegetation in The District is few and far between. Planting street trees along major corridors can beautify the area and create a more welcoming environment for potential residents. In the summer of 2011 the City of Regina embarked on a new street tree-planting program within the boundaries of Downtown (see Figure 6-5).

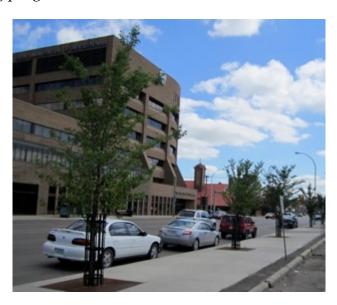


Figure 6-5: Regina Downtown Street Trees

Although this program is still in its infancy there is potential to extend the program beyond the downtown core and incorporate streets within The District. Planting should begin within areas where intensification is likely to occur first. As

resources become available and residential development spreads further into The District, the planting program can be extended to additional streets.

Aside from creating a more aesthetically pleasing environment, trees offer a variety of additional benefits including: sheltering pedestrians from the elements and adjacent vehicular traffic, and reducing air and noise pollution. These factors further contribute to making the area a more enjoyable place for residents.

By embarking on streetscape efforts within The District, the neighbourhood's aesthetic value and identity will be enhanced. The quality of the streetscape has a significant influence on how people perceive and interact with their environment. Improving the public realm with a revitalized streetscape has the potential to create an environment where people want to live and developers want to build.

## 6.4.2 Neighbourhood Amenities

Suchman (1997) underlines that municipalities who provide public facilities or amenities in target areas are better suited to attract intensification. Part of the lure to living in an urban environment is the expected proximity to nearby amenities including parks, plazas, schools, or commercial services. Bunting and Filion's (2000) research supports this thought as in their findings, 45.1% of informants felt the addition of a grocery store or convenience shopping could attract residents to the downtown. Additionally, in the same study 43.8% felt that the addition of a school in close proximity to the core would effectively draw more residents (Bunting & Filion, 2000). As found in this research, informants offered a similar perspective, emphasizing that the absence of amenities and services within The District needs to be addressed by both the public and private sector.

The City of Regina can facilitate intensification by providing an array of public amenities that residents demand. Specifically, the City needs to develop public parks, plazas and recreational or cultural facilities. By delivering the necessary amenities, the District would emerge into a more livable neighbourhood, more attractive to a wider array of residents. A continued lack of amenities will see residents choose to reside in neighbourhoods that can meet their needs.

Informants were also adamant that local commercial services such as grocery stores were severely lacking in The District. Although these types of operations are typically beyond the scope of the public sector, the City or the WDBID can facilitate their development. Either organization can conduct market research, which can offer rationale as to why the private sector should locate commercial services in The District.

Lastly, a number of informants identified that access to amenities and services could be delivered by establishing stronger physical linkages between The District and Downtown. The Downtown offers a wide array of conveniences that could meet the demands of current and future District residents.

Presently, physical connections between the two neighbourhoods are limited. The existing Canadian Pacific rail yard and rail lines serves as both a physical and psychological barrier. Existing connections are limited to only two streets and informants identified that these walkways are dark, dirty and unsafe. Despite the close proximity, pedestrian traffic between the two areas is marginal. Figure 6-6 provides a glimpse at the hostile Broad Street underpass, which connects The District to Downtown.



Figure 6-6: Broad Street Underpass (Google Maps, 2012)

The City should establish stronger linkages between the two neighbourhoods by improving the physical state of the connecting streets. Both the Albert and Broad Street corridors should be redeveloped with better lighting and more appealing materials to create safe and welcoming gateways. Additionally as Figure 6-7 illustrates, the City should follow through with their proposal to develop pedestrian bridges over the

existing Canadian Pacific rail lines.

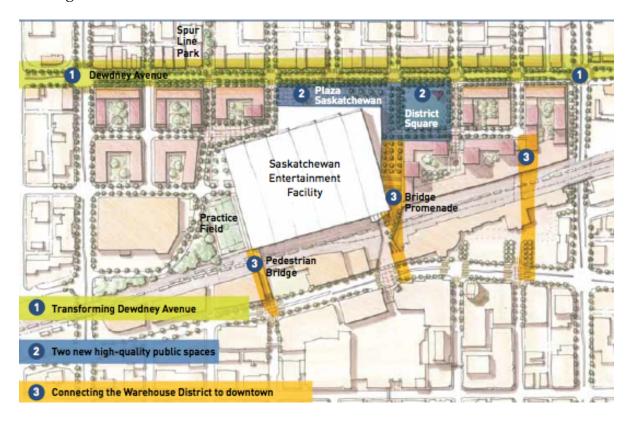


Figure 6-7 Proposed Pedestrian Linkages Between Downtown and the Warehouse District (Government of Saskatchewan, 2010)

This initiative comes as part of a plan to redevelop the Canadian Pacific rail yards, an area that falls between Downtown and the Warehouse District. Although debate continues on the appropriate use of the land, creating connections between the two neighbourhoods should remain regardless of the end result. As Keesmaat (2012) explains, by creating pedestrian bridges between the Downtown and Warehouse District, "you suddenly connect these two very important areas of the city, you heal the urban fabric over the tracks, and suddenly it's a 5 minute walk from Bushwakkers to O'Hanlon's, whereas right now it's a 25 minute, very unpleasant walk."

### 6.4.3 Services

Suchman (1997) highlights that municipalities need to provide a high standard of services in areas where they are looking to attract infill or redevelopment. This may include but is not limited to garbage collection, transit, road repair and maintenance, or recreational programming.

As expressed through informant interviews, District residents are subject to some of the highest taxes in Regina. However, residents do not receive the same standard of municipal services afforded to more traditional residential neighbourhoods. The City of Regina needs to undertake a comprehensive review of city services to ensure taxes paid reflect the level of service delivered. Until services mirror that of other residential neighbourhoods, it is unlikely that citizens will be attracted to living in the District.

The addition of amenities and services could have a prolific impact on attracting intensification to The District. As one informant summarized, "amenities offer opportunities to interact and travel the local district, providing for ongoing activity at the street level that inhibits direct crime, subsequently stimulating the experience, the environment, and eventually promoting additional growth" (Dietrich, 2012). As improvements are made to both the quality of amenities and level of services, it will create a perpetuating cycle. By increasing the residential population, it spurs the development of additional amenities and services, thereby attracting more residents to the area.

### 6.4.4 Infrastructure

The City of Regina can further facilitate intensification in The District by ensuring existing infrastructure is in operable condition. As the literature identified

within mature neighbourhoods there is often uncertainty regarding the state of existing infrastructure. As a smaller number of informants identified, there are concerns in The District regarding the condition of underground infrastructure and whether it has the capacity to accommodate higher density development. These potential complications push developers towards greenfield development where infrastructure is easier and less costly to construct.

The City can offer more certainty to prospective developers by being pro-active with underground infrastructure. The City can upgrade infrastructure in areas where they intend to attract residential development within The District. This establishes a better account on the condition of infrastructure and reduces the financial burden typically placed on developers. Increased certainty and decreased overheads can make intensification in The District more attractive to developers.

Improvements to the streetscape and underground infrastructure, as well as the provision of amenities and services increase the likelihood of residential in two ways. First, it can dramatically improve the image of the area and make the neighbourhood a more attractive place for prospective residents. Furthermore, it demonstrates to the development industry that the municipality is committed to intensification. If a private investor sees public money being invested into the neighbourhood, they will be encouraged to do the same. Such was the case in Calgary's East Village neighbourhood, where infrastructure improvements have served as a catalyst for private sector development. Since 2007, the municipality has committed \$150 million for infrastructure upgrades, which has been the primary influence in attracting 1200 proposed residential units (Calgary Municipal Land Corporation, 2012).

### 6.5 Programs to Improve the Perception

As previously identified, informants were adamant that improving the perception of the area could attract new residential development to The District. In part and as discussed previously, physical improvements play a significant role in improving the perception of the neighbourhood. In addition however, changing the perception of The District can occur through programming that focuses on marketing and safety.

## 6.5.1 Increased Marketing and Awareness

In an effort to improve the perception, it is critical that strategies be devised to establish a stronger understanding of what encompasses The District. Shields and Farrigan (2001) offer a number of marketing tools that can be implemented to change the perception of an area. These steps include:

- Developing a comprehensive marketing strategy
- Host special events to bring activity to an area
- Strong public relations which ensure that false perceptions are not being circulated
- Seek media partners such as newspapers, radio, or television stations to assist in getting the message out about what is happening in the area

Shields and Farrigan (2001) and Bunting and Filion (2000) underline that these strategies can highlight the area in a positive manner whereby the public then sees the unique qualities of the neighbourhood. These strategies help to make the area more attractive to potential residents (Shields & Farrigan, 2001). Moulton (1999) also advocates the use of festivals and events to improve a neighbourhood's perception. She

suggests that these events bring thousands of people to the core where their perception of a dark and uninviting place changes. Instead, residents begin to see the area as an attractive place to live.

Informants recognized that the RWBID should play a critical role in changing the perception, given its existing mandate to promote The District. As one informant identified, through the engagement of local media, recent initiatives have been undertaken to promote the unique commercial vendors in the area (Planner, 2012). There is an opportunity then to expand marketing efforts to showcase residential living in The District. As a number of informants identified, many Reginians are unaware of the residential component within the neighbourhood and increased marketing would have them see the area as a potential area of residence.

The WDBID should focus on producing a comprehensive marketing strategy that showcases the types of residential available, as well as, the unique features that make the area a desirable place to live. Moreover, the WDBID in conjunction with appropriate partners should organize and host special events. Outdoor festivals should celebrate the heritage of The District and showcase the unique qualities of the area. These types of events will establish a better understanding and perception of the neighbourhood, as one that is an attractive place to live. As Carlston (2011) summarizes, the neighbourhood needs to be marketed as a viable place to live.

#### 6.5.2 Safety

Moulton (1999) underlines that the perception of high crime in the core is a common phenomenon throughout North America. Additionally she offers that concerns over safety often deter citizens from ever stepping foot downtown. In order

for inner-city neighbourhoods to become desirable places to live, they need to be both safe in reality and by perception. Bunting and Filion (2000) offer a similar perspective, in their research on housing in downtown Kitchener. In their study, 41.3% of informants identified that an increased police presence could attract additional residents to Kitchener's core. As informants within this research recognized, to attract development and residents to The District, addressing the concerns of safety need to be at the forefront.

As Searle (2011) indicated, the City of Regina might begin to make The District a safer place for residents by introducing policies and zoning that support the principles of Crime Prevention Through Environmental Design (CPTED). CPTED is a planning strategy that enhances the perception or likelihood that an individual engaged in illegitimate behaviour will be caught (MetLife Foundation, 2007). Through carefully planned design, and maintenance of the built environment, the fears and realities of crime can be reduced. The following four points are the principal approaches to creating an effective CPTED strategy:

- Natural Surveillance Increases the probability that an individual will be caught,
   by increasing the likelihood of being seen by others. This occurs by designing
   the built environment to maximize visibility. Examples include:
  - o Transparent building facades overlooking adjacent sidewalks and streets
  - Appropriate lighting that illuminates the area and reduces potential dark or blind spots.
  - Ensure vegetation is well maintained to retain direct sight lines and surveillance.

- Natural Access Control Reduces crime by controlling entrance in and out of a neighbourhood, park or building. This limits access to potential criminals and increases the perception of risk. Common examples include:
  - o Limiting the quantity of entrances or exits to a building or space.
  - Using locks and gates to restrict access.
- *Natural Territorial Reinforcement* Establishes well-defined borders indicating space as either private, semi-private or public. This creates ownership over areas reducing the likelihood of illegitimate behaviour. Typical examples involve:
  - A restaurant placing tables and seating on the adjacent public sidewalk
     affirms ownership over the space.
  - Residential units defining the property line with a short fence or wellmanicured hedge.

(MetLife Foundation, 2007)

The City of Regina can better incorporate the principles of CPTED into municipal policies and processes. The City can integrate standards supportive of CPTED principles including appropriate lighting, landscaping, or façade design through revisions to the Zoning Bylaw. Through this, a stronger connection between the built environment and its influence on crime can be supported through municipal regulations.

As an additional check, the City of Regina can introduce a safety audit to the development review process. This procedure can be applied to all new private and public developments or street improvement plans. A staff person with formal training in CPTED should be circulated on all new proposals in The District. A full safety audit

on the proposal will be completed to ensure its compliance with the principles of CPTED. The staff person can identify potential concerns and work in conjunction with the developer to propose alternative designs that better promote safety.

The Municipal Research & Services Center of Washington (MRSC) (1997) suggests that municipal officials in Sarasota, Florida implemented a pilot project in 1990 to reduce crime in a trouble neighbourhood. Officials increased their police presence and changed development standards to follow the principles of CPTED. Moreover, a full CPTED review was completed for all new developments in the neighbourhood. From 1990 to 1996, crime rates dropped by a whopping 40% in the neighbourhood, while crime rates citywide declined by only 9%.

The principles of CPTED also identify ongoing maintenance of a building or community as critical in deterring crime. Specifically, referring to the following as an effective approach:

- Image Maintaining property in an attractive manner suggests there is a human presence and someone to defend the property. Criminal activity is attracted to areas or buildings that appear rundown as they lack a sense of ownership.
   Common practices to maintain a building include:
  - o Replacing broken windows or doors.
  - o Removing graffiti
  - o Pruning trees and shrubs

Moulton (1999) suggests that come the nineties improving safety in the core was a major concern for Denver, Colorado. In an effort to attract a larger residential population in the downtown, the Denver downtown BID was tasked with keeping the

area free from graffiti and litter. Although Regina's Warehouse District employs a crew of three to keep The District clean, it has traditionally been on part-time basis during the spring and summer months. The WDBID should extend this program on a full-time, year-round basis to keep the area clean and to maintain a favourable image of The District.

In the early stages of intensification, CPTED will not be as critical as other strategies in facilitating development in The District. However, as intensification increases in the neighbourhood, this will be an effective tool to reduce crime, thereby generating additional demand for residential development.

Moulton (1999) highlights that the Downtown Denver BID established a police force to focus solely on crime prevention within the inner city. In conjunction with the Regina Police Service (RPS), the Warehouse District BID might also look to increase its police presence in the area. In 2008, the RPS retooled its operations and created a new policing district operating out of the North Central neighbourhood. This precinct has a mandate to increase policing efforts within the three inner-city neighbourhoods that have the highest rates of crime (Downtown, North Central and Core Richie). The Warehouse District has not been encompassed into this coverage despite being just north of the Downtown and east of North Central. The BID should work with the RPS to extend the precinct's coverage to the Warehouse District. An expanded police presence adds to the perception and reality of a safer neighbourhood. Moulton (1999) found that crime in downtown Denver and its surrounding neighbourhoods has decreased by 20 percent since the downtown police district was formed. Proponents of

the downtown have used this statistic extensively as a means to attract new residents (Moulton, 1999).

Although improving the perception of The District is influenced heavily by physical improvements, the literature suggests that effective programming also plays a key role. Programs aimed at marketing The District and reducing neighbourhood crime would increase the area's appeal from prospective residents, thus furthering the demand for new residential development

### 6.6 City involved in Development

Participants identified that given the multitude of complexities that impede intensification it may be necessary for the City of Regina to play a more active role in development. This could be achieved through the creation of a land bank program, or assuming a role in development.

Informants identified that the absence of available land for development needs to be addressed to stimulate intensification. As expressed within chapter 2, land assembly programs are an effective means to address a shortage of developable land. At present the City of Regina manages city owned land through its Real Estate Branch. However, the focus of this entity is limited to selling existing property with no mandate to gather land for development purposes. A change in directive is needed. Instead, the City's Real Estate Branch should accumulate land for immediate or future need through expropriation, tax defaults, land swapping, or purchase. The City can sell this land to the private sector or use it for public sector projects that meet municipal objectives. The City of Regina need only look to other Canadian municipalities to see the successes of a land assembly program. The City of North Vancouver and their participation in the

Lower Lonsdale area offers clarity. Similarly to Regina's Warehouse District, the area's original function pertained to the industrial sector. As industry declined, the City began to accumulate land for future development. By 2004, City staff had assembled 75 city owned sites, which were then zoned, planned, and marketed to the private sector for redevelopment. Residential development has played a critical role in the neighbourhood's transition with an expectation that the area will house over 4000 residents once all city lands have been developed (Canadian Mortgage and Housing Corporation, 2004a).

Given the plethora of barriers that impede intensification in The District, participants identified that new residential construction has not been a priority for the development industry. Developers are often wary of being pioneers and typically wait for others to prove that an opportunity exists. In a market like Regina, where a number of informants identified the development industry as being conservative, it may be necessary that the City 'prove' that development in The District can be successful. The City itself could establish a development corporation or agency that undertakes residential development on city owned land. As Carlston (2011) explains, a development corporation could initiate the early developments such as a pilot project to "create momentum and demonstrate success." The MRSC (1997) suggests demonstration projects can be an effective approach in convincing key stakeholders that a market exists for specific housing types.

The public sector playing the role of developer may be uncommon in Regina however; it is anything but a new concept. In 1976 the Province of Nova Scotia created a development corporation to lead the redevelopment of their historic industrialized

waterfront. Similarly to Regina's Warehouse District, the sixties brought decline to Halifax's waterfront. However, the involvement of the public sector has "helped transform the waterfront from a desolate area into a vibrant mixed-use destination and living area" (Canadian Mortgage and Housing Corporation, 2004c, p. D1) Residential development has played a key role in the neighbourhoods evolution. By 2004, the development corporation had constructed over 600 units with an expectation that by total build out, 1000 more residents would call the waterfront home (Canadian Mortgage and Housing Corporation, 2004c).

In addition, a number of informants identified that the City of Regina could encourage intensification by engaging local housing providers. As informants highlighted, there is a shortage of affordable housing throughout Regina. The City could work with agencies such as Regina Housing Authority and Saskatchewan Housing to locate affordable housing projects in The District.

Expanding upon the theme of affordable housing, the City might also reassess its strategy on the matter. The pattern of residential development within The District has created a neighbourhood that is almost exclusively for higher income earners, establishing it as a niche product. By pursuing a strategy for The District that concentrates on introducing housing for lower and moderate income earners, it would address the limitations of the market by appealing to a broader socio-demographic.

Participants identified that the City should look beyond Saskatchewan to retain developers. As Froh (2012) stresses "you would probably be wise to attract and embrace developers who have experience doing work in these type of areas." Informants suggested that organizations or companies, who have developed in neighbourhoods

with similar characteristics, could bring an expertise largely absent in the local development industry. Keesmaat (2012) explains that by bringing in experienced developers from elsewhere, they could show the local companies the opportunity that exists, spurring additional development. Such a task might come with relative ease, as one informant identified that there has been interest in developing in The District from parties outside Saskatchewan (Planner, 2012).

With the City playing a prominent role in the development process it alleviates some of the risk and complications typically subject to developers. The legislation and resources available to the municipality allow it to more easily produce a financially viable project. Moreover, the private sector will be more encouraged to pursue development in The District if the City has proven that opportunity exists or are willing to partner in a project, sharing in the risk.

#### 6.7 Provide the Incentive

Through informant interviews, it became clear that not enough has been done to attract intensification to The District. The extensive list of barriers decreases the likelihood that a developer would choose at freewill to pursue infill or redevelopment in the area. Thus, there is a clear need for the City of Regina to provide stronger fiscal incentives that facilitate intensification.

Currently, the City offers one financial incentive for residential development within The District. This program is known as the Regina Warehouse Housing Incentive Program (RWHIP) and provides a maximum tax abatement of \$7500 per new residential unit over a five-year period. Although informants recognized this as a nice gesture, its effectiveness in facilitating residential development has been questioned. A

number of informants identified it as a marketing tool that could be an attractive feature for potential buyers, but as Aston (2012) highlights, development would likely occur with or without the program. Moreover, as Froh (2012) outlines, the incentive has not kept up with the increases in Regina's housing market, meaning that the RWHIP is less effective now than when it was first implemented.

As informants expressed, the City of Regina needs to expand on its financial incentive programs. Froh (2012) stresses, that incentives are needed to "foster additional development in the area, so that developers can take [the] risk" associated with intensification in The District. Searle (2011) further suggests that there needs to be consideration for new types of incentives so that development in the area is viable. Lastly, Carlston (2011) assesses that any new incentives need to focus on assisting the developer to stimulate intensification.

Creating stronger incentives could begin by increasing the maximum tax abatement beyond \$7500 per unit. However the City also needs to identify new programs to make development possible. As the Ontario Ministry of Municipalities and Housing (2000) found, cities across Ontario have utilized financial tools to facilitate residential development in the core. The following list offers a review of financial tools that the City could introduce to entice developers to pursue intensification:

 Waive or Refund Application Fees – Fees that are required for building permits, discretionary uses, zoning amendments, signage or other municipal processes can be waived or refunded for development.

- Interest Free or Low Interest Loan The City lends capital for residential development providing more reasonable rates on loans compared to financial institutions.
- Forgivable Loans Loans that do not have to be repaid, provided agreed upon conditions have been met.
- Loan Guarantee The City does not provide direct financial assistance but instead deposits money or co-signs a loan, acting as collateral for an agreement between a developer and lender.
- Gap Financing Provides additional financial assistance to cover the gap left by conventional financing options.

(Ministry of Municipal Affairs and Housing, 2000; Canadian Mortgage and Housing Corporation , 2004f)

The success of a number of these programs has been demonstrated in Winnipeg, Manitoba. The City of Winnipeg in partnership with CentreVenture, a private-public organization, have provided gap financing in the amount of \$200,000, tax credits to the tune of \$175,000, and grants totalling \$500,000 which have helped to facilitate new residential development in the downtown. These programs have "been very successful at using limited public funds to leverage private investment in the downtown area" (Canadian Mortgage and Housing Corporation , 2004f, p. L-5). More specifically, on avergae eight dollars of private funding have been invested for every one public dollar (Canadian Mortgage and Housing Corporation , 2004f, p. L-5). This has helped to increase tax revenues by \$250,000 a year.

Specific incentive programs also need to be targeted to increase the probability of brownfield redevelopment. Although the extent of brownfields in The District is unclear, given the neighbourhoods industrial legacy it is critical that the City be prepared for the possibility that sites will require remediation. As the literature in chapter 2 highlighted, given the added costs and risk to remediating and redeveloping brownfield sites, the City of Regina needs to instill programs that will make redeveloping brownfields practical. The City of Regina might follow the lead of Cambridge, Ontario, where the City offers a program that provides grants to cover 100 percent of remediation costs for new construction on contaminated land (up to a maximum of \$1,500 per residential unit and/or \$10 per square metre of gross floor area) (Canadian Mortgage and Housing Corportation, 2004d). Cambridge's program has turned brownfield sites into residential development, which has achieved the City's objective to create more residential in the core (Canadian Mortgage and Housing Corportation, 2004d). It is important that the City of Regina introduce similar tools that make brownfield redevelopment profitable and therefore enticing to the development industry. Without a program to assist with remediation costs, it is likely that these sites will remain undevelopable for financial reasons.

With an understanding that financial incentives are needed, it is imperative that the City determines which programs will be most effective in facilitating intensification within the context of the Warehouse District.

#### 6.8 Conclusion

Informants provided a thorough review of the current impediments to intensification within The District. Despite these complex issues, the proceeding

discussion has highlighted six recommendations that the City of Regina in conjunction with other key partners can implement to facilitate residential development in The District. These recommendations include; balanced growth between greenfield and intensification, revised municipal policies and zoning, increased public investment, focused marketing and crime reduction programs, a City engaged in development, and lastly, appropriate and effective financial incentives and programs. These recommendations were formulated through primary research with key informants and were further supported through best practices and academic literature. It is believed that these strategies can offer practical solutions that can assist in intensifying The District.

# Chapter 7

# Summary, Limitations and Future Opportunities

#### 7.1 Introduction

The following chapter provides a summary of this research project, outlines future research possibilities, and addresses the limitations experienced within this study.

### 7.2 Research Summary

Regina's Warehouse District is a historic neighbourhood, north of the downtown, in the heart of the city. The District originally thrived as a result of early 20<sup>th</sup> century industrialization, however the 1970s brought decline as the North American industrial sector weakened. To fill the void, abandoned factories and warehouses have been converted to new uses including residential. Past initiatives have looked to continue the influx of residential development, identifying the need for new infill and redevelopment. Despite this, residential land uses in Regina's Warehouse District have remained limited. This research set out to answer why this is, and understand how that could be changed, by specifically addressing the questions:

- Why has intensification been limited with Regina's Warehouse District?
- How can intensification be facilitated within Regina's Warehouse District?

Answering these central research questions began with a review of two previous studies, to understand why past attempts to intensify have been largely unsuccessful. Subsequently, barriers to intensification were explored through the use of semi-structured interviews with key informants. The findings of this research are grounded within the informant interviews. These perspectives are further supported through the

use of two other data collection methods, visual observations and an analysis of relevant municipal documents. The following six barriers emerged as the most common impediments to intensification in The District:

- 1. Municipal Growth Management
- 2. Warehouse District Planning Policy and Zoning
- 3. Negative Perception
- 4. Proximity and Absence
- 5. Land Development Economics
- 6. Market

After identifying the barriers, the following chapter provided recommendations to facilitate intensification. These recommendations were based off of informant interviews and their perspectives were supported by best practices and existing literature. The following six recommendations were identified as an appropriate means to encourage intensification in The District:

- 1. Balanced Growth
- 2. Revised Municipal Policy and Zoning
- 3. Commit Public Investment
- 4. Transform the Perception
- 5. City Active in Development
- 6. Provide the Incentive

This research has achieved its objective in that it has clearly identified the elements that have and continue to impede infill and redevelopment in Regina's

Warehouse District. Furthermore, this study has identified practical planning policies, tools and incentives that can be implemented to facilitate intensification.

#### 7.3 Research Contributions

It is believed that this research has made valuable contributions to both academia, and planning practice.

This thesis has contributed to academia in a number of ways. Firstly, the findings of this research confirm that a number of the barriers identified within the literature are relevant to the mid-sized Canadian city and an industrial neighbourhood. These barriers include unsupportive municipal policies, red tape, difficulties and costs in assembling land, a lack of core area amenities and services, inadequate infrastructure, and a negative perception of the inner city. However, this research digresses slightly in our understanding of the barriers to intensification within the context of a mid-sized Canadian city and an industrial neighbourhood.

To begin with, despite being identified as a common impediment within the literature, environmental contamination was not a common response within this research. This may be due to the fact that by comparison, the extent of the industrialized landscape in the mid-sized city or at the very least, within Regina, is relatively small. This comes in contrast to; Canada's largest municipalities, mid-sized cities in Ontario where Canada's industrial sector has been historically concentrated, or within American cities, once dependent on the manufacturing sector. As such, brownfields as a constraint to intensification may not be as a significant of a barrier in a mid-sized Canadian city, like Regina, due to the fact that the industrial legacy is limited, meaning that the quantity of sites contaminated is minor.

The literature also identified public opposition as a common and significant barrier to intensification. However, this did not emerge as a finding within this study. This is likely due to the fact that redevelopment or intensification of industrial districts begins with little to no existing residential base. The role of NIMBYs as an impediment is likely more significant within primarily residential neighbourhoods, where a critical mass exists that is entrenched in its values and who may oppose change. As industrial districts intensify, and the population expands, this could potentially emerge as a barrier to intensification. However, in historically industrial neighbourhoods like The District where gentrification is in the early stages, it does not appear to be a limiting factor of intensification.

In addition, this study found that intensification within industrial districts is impeded by its proximity to incompatible uses. Although there is some discussion in the literature (Birch, 2006) about locally undesirable land uses (LULUS), as an impediment to intensification in the downtown, the extent of the discussion was limited. It is likely that this problem is amplified within industrial neighbourhoods as residential and many industrial uses are generally viewed as incompatible. As these districts to some extent still have noxious industrial businesses operating within the area, it deters prospective residents from relocating to the neighbourhood. This was a common finding within this research, suggesting that it is a problem more typical of industrial districts than in other types of neighbourhoods.

With respect to market demand, the literature presented diverging views on this subject. In some cases the literature identified that the market for intensification is weak, while in other instances the literature identified that the market was not a barrier

but rather a driver of intensification. Similarly to Bunting and Filion (2000) this research suggests that the latter is not the experience for the mid-sized Canadian city. A strong market demand, in the Canadian context is more typical of the largest cities such as Toronto and Vancouver who have experienced notable transformations within historically industrial areas.

The redevelopment of Toronto's port lands and Vancouver's waterfront are driven by a highly involved public sector and from pressures of an expanding population. On the contrary, in the mid-sized Canadian city there appears to be less of a need or market for intensifying industrial districts. Slower population growth, coupled with opportunities elsewhere in the city to direct new growth have meant that these declining, or underutilized districts have not been the focus of redevelopment efforts. This research then, identifies that within the mid-sized city, and in particular the industrial district, a soft market demand is a barrier to intensification, which diverges from the experiences in Canada's largest municipalities.

In summary, this research has validated that a number of the barriers to intensification identified within previous literature, largely hold true to the context of a mid-sized Canadian city and a historically industrial neighbourhood. However, as outlined above, this research does make the case to suggest that these contexts offer slight variations with respect to what impedes intensification.

Overall this study has addressed the gap on intensification within the mid-sized Canadian city and within an industrial neighbourhood. More specifically, this research has explored intensification in Regina, Saskatchewan, a Canadian city that has been largely unexplored in academia.

It is anticipated that the findings of this research can contribute significantly to planning practice within Regina. By building off the barriers identified and following the recommendations put forth in this research, it is expected that positive and noticeable change can begin to take shape within Regina's Warehouse District. This research also offers assistance to other Canadian municipalities. Although the experiences found within the Regina context might not directly translate, it is plausible that cities looking to revitalize former industrial districts can use the findings of this research as a starting point.

More specifically, the challenges encountered in Regina's Warehouse District can offer additional insight in practice. Canadian municipalities who have yet to experience redevelopment of their industrialized lands can benefit from the experiences of Regina. The re-use of industrial buildings for residential purposes within Regina's Warehouse District has created a living environment exclusively for higher income earners. This has limited its appeal to the wider market as housing prices are beyond the scope of lower or even moderate-income earners. Municipalities who hope to encourage intensification should focus on facilitating an inclusive, and socially mixed neighbourhood, thus appealing to a wider market. As previously discussed in chapter 6, this can be achieved by enacting policies that facilitate housing development for a variety of income levels.

#### 7.4 Limitations and Future Research

Although it is believed that this research has made effective contributions to both planning practice and academia, it is important to recognize any associated limitations.

Moreover, these limitations can be applied as a starting point for future research opportunities.

This research focused only on understanding the impediments to intensification within Regina's Warehouse District. The 2002 and 2009 studies, in which this research expands upon identified a variety commercial, cultural and entertainment uses to be introduced to The District. This research has not explored potential barriers to these uses within the neighbourhood. This presents an opportunity for future research to explore how alternate land uses could be facilitated within The District.

Additionally, this study assessed whether or not the socio-economics of Regina have impeded gentrification. Although a review of the available data suggests that this has not impeded change in the inner city, further research on the matter should be completed. An additional study that focuses on the concept of gentrification within Regina would offer a more in-depth analysis and provide additional insight.

This research has analyzed how a declining industrial district might increase its residential uses through intensification. Although acknowledged within the literature review, it has not explored the impact that would occur by converting industrial employment lands to residential. Although this has become a common phenomenon across North America, there remains plenty of opportunity to purse this as an area of study to analyze its impact. Industrial business owners were not interviewed, as a part of this study. Further research might look to engage representatives of the industrial sector to obtain their perspective on The District's ongoing transformation.

This research has identified a number of recommendations that might be implemented to facilitate intensification within the Warehouse District. Should these

recommendations be appropriately implemented, future research could examine the effectiveness of these solutions with respect to facilitating intensification.

The nature of this study being case specific does draw limitations in its applicability. Further research should be conducted to assess whether the barriers found within Regina's Warehouse District as a case study for a mid-sized Canadian city and industrial district hold true to similar contexts. Through this a better account would emerge in respect to the barriers that impede intensification within both of these contexts.

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# Appendix A Introductory Email

#### Dear Mr/Ms/Dr (Name)

My name is Rylan Graham and I am a graduate student in the School of Planning at the University of Waterloo. I am pursuing my Master of Arts under the guidance of Dr. Luna Khirfan, Assistant Professor in the School of Planning (<a href="likhirfan@uwaterloo.ca"><u>likhirfan@uwaterloo.ca</u></a> or 1-519-888-4567 ext. 33906). Specifically my thesis research is investigating how residential intensification might be facilitated within Regina's Warehouse District.

I am currently conducting interviews with key stakeholders who are involved with neighbourhood revitalization, residential intensification and/or Regina's Warehouse District. This email serves as an inquiry as to whether or not you would be willing to assist as an interview participant.

I was made aware of your contact information through (project, website, or other publicly available data). It is my belief that your insight and expertise will provide valuable input into this research project.

Participation in this research project is completely voluntary. Furthermore, you may withdraw from the interview at any point without penalty by advising the researcher. If you are interested in participating in this study then I would like to arrange a(n) (in-person or telephone) interview. The interview will discuss questions that relate to neighbourhood revitalization and residential intensification within Regina's Warehouse District. The typical interview would last no more than an hour and you may respond only to those questions you wish to. Please see the attached document for the list of intended interview questions.

With your authorization, the interview will be audio recorded to assist with data collection and later transcribed for analysis. All information you provided will be kept completely confidential unless otherwise agreed to. Your name and/or the name of your organization will not appear in any thesis or publication resulting from the study unless you provided consent to be identified and have reviewed the thesis text and approved the use of any quotes. All collected data, both physical and electronic copies, will be retained for two years following the completion of this research. After two years, both physical and

electronic data will be destroyed. In the meantime, all data will be locked in a secure room that is only accessible by the principle researcher.

If you have any additional questions regarding this study, please contact me at (306) 531-6189 or by email at <a href="mailto:rylan.graham@uwaterloo.ca">rylan.graham@uwaterloo.ca</a>. You may also contact my supervisor, Professor Luna Khirfan at (519) 888-4567 ext. 33906 or email lkhirfan@uwaterloo.ca.

I would like to assure you that this study has been reviewed and received ethics clearance through the Office of Research Ethics at the University of Waterloo. Again, participation in this study is completely voluntary. If you have any comments or concerns resulting from your participation in this study, please contact Dr. Susan Sykes of this office at (519) 888-4567 Ext. 36005 or <a href="mailto:ssykes@uwaterloo.ca">ssykes@uwaterloo.ca</a>. Please let me know if you would be willing to participate and additionally when would be a convenient time for you to (discuss/meet).

Sincerely,

Rylan Graham, BA MA Candidate, Planning University of Waterloo rylan.graham@uwaterloo.ca 306-531-6189

# Appendix B

# **Semi-Structured Interview Questions**

### A: Relation to Regina's Warehouse District

- 1. What organization, group or company do you represent?
- 2. Can you give me a brief description of how you are or have been involved with Regina's Warehouse District?

## B. Redeveloping the District

- 3. In your opinion, what role does residential development play in revitalization efforts? Why is this important?
- 4. Do the goals for residential development outlined in the Warehouse District 2029 Vision coincide with your views? Why or why not?

# C. Encouraging Residential Development

- 5. How do citywide growth policies influence residential development within the Warehouse District?
- 6. How do policies and zoning specific to Regina's Warehouse District impact residential development within the area?
- 7. What factors do you think discourage people from choosing to live in the Warehouse District?
- 8. Why do you believe there has been no new residential construction (other than adaptive re-use) in Regina's Warehouse District?
- 9. Do you believe there are additional opportunities to convert industrial or commercial buildings to residential within the Warehouse District?
- 10. Do you believe there are additional barriers to residential development within Regina's Warehouse District? If so, what?

#### D. Solutions for Residential development

- 11. How do you feel the proposed "Regina Revitalization" project might impact residential development within Regina's Warehouse District?
- 12. Do you believe past initiatives, such as the residential tax incentive program, have been successful in encouraging residential development? Why or why not?
- 13. Who are the key stakeholders that can facilitate residential development within the Warehouse District? How?
- 14. Are you familiar with practices that have been successfully used in other jurisdictions to encourage residential development?
- 15. In your opinion, how can the barriers to residential development that you identified in question 10 be overcome?
- 16. Do you believe there are additional ways that residential development might be encouraged within the Warehouse District? If so, list them.

#### E. Additional Questions for Developers

- 17. Have you previously developed residential in the Warehouse District? Why or why not?
- 18. What policies or incentives would encourage you to develop residential in the Warehouse District in the future?

# WATERLO

200 University Avenue West, Waterloo, ON, Canada N2L 30 519-888-4567 | Invaterlooca

# Appendix C Consent Form

# WATERLOO | PLANNING

January 16, 2012

#### CONSENT FORM

By signing this consent form, you are not waiving your legal rights or releasing the investigator(s) or involved institution(s) from their legal and professional responsibilities.

I have read the information presented in the information letter about a study being conducted by Rylan Graham of the School of Planning at the University of Waterloo. I have had the opportunity to ask any questions related to this study, to receive satisfactory answers to my questions, and any additional details I wanted.

I am aware that I have the option of allowing my interview to be audio recorded to ensure an accurate recording of my responses.

I am also aware that I may choose to be identified in the thesis and publications and excerpts from the interview may be included in the thesis and/or publications, with the understanding that quotations will be either anonymous or attributed to me only with my review and approval.

I was informed that I may withdraw my consent at any time without penalty by advising the researcher.

This project has been reviewed by, and received ethics clearance through, the Office of Research Ethics at the University of Waterloo. I was informed that if I have any comments or concerns resulting from my participation in this study, I may contact the Director, Office of Research Ethics at (519) 888-4567 ext. 36005 or ssykes@uwaterloo.ca.

With full knowledge of all foregoing, I agree, of my own free will, to participate in this study.

I agree to have my interview audio recorded. YES NO

I agree to identification and the use of attributed quotations in any thesis or publication that comes of this research. YES NO

I wish to remain anonymous in this research and no direct or anonymous quotations used. YES  $\ensuremath{\mathsf{NO}}$ 

'articipant Name:	(Please print)
Participant Signature:	
Vitness Name:	(Please print
Vitness Signature:	
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# Appendix D

#### Feedback Email

Dear Mr/Ms/Dr (Name),

This email is in follow up to our recent interview in which we discussed the concepts of residential intensification and neighbourhood revitalization within Regina's Warehouse District.

I first want to thank you for involvement with this project and offering me your time to discuss this important topic. Your insight and expertise has been most valuable in formulating my findings in **(chapter name)**.

Please find attached a draft copy of **(chapter name).** I would appreciate if you could take a moment to review this draft to ensure that my findings accurately reflect the information you provided. If you believe there are any discrepancies, please provide me with your comments.

Again, thank you for your participation with this research project. If possible I would appreciate that any comments be provided within a weeks time. I look forward to hearing back from you.

Sincerely,

Rylan Graham, BA MA Candidate, Planning University of Waterloo rylan.graham@uwaterloo.ca 306-531-6189

This projection was reviewed and received ethics clearance through the University of Waterloo Office of Research Ethics. Should you have comments or concerns resulting from your participation in this study, please contact Dr. Susan Sykes in the Office of Research Ethics at 888-4567, Ext. 36005 or ssykes@uwaterloo.ca.