Housing Preference in the Peri-urban Zone: The Prospects for Urban Containment and Smart Growth in North Cowichan

by

Eric Gavin Brown

B.A. (Hons.), Carleton University, 2007

Research Project Submitted in Partial Fulfillment of the
Requirements for the Degree of
Master of Urban Studies

in the
Urban Studies Program
Faculty of Arts and Social Sciences

© Eric Gavin Brown 2015

SIMON FRASER UNIVERSITY

Summer 2015

All rights reserved.
However, in accordance with the *Copyright Act of Canada*, this work may be reproduced, without authorization, under the conditions for "Fair Dealing." Therefore, limited reproduction of this work for the purposes of private study, research, criticism, review and news reporting is likely to be in accordance with the law, particularly if cited appropriately.

Approval

Name: **Eric Gavin Brown**

Degree: **Master of Urban Studies**

Title: ***Housing Preference in the Peri-urban Zone: The Prospects for Urban Containment and Smart Growth in North Cowichan***

Examining Committee: **Chair:** Sean Markey, Associate Professor, Resource and Environmental Management

Meg Holden
Senior Supervisor
Associate Professor
Urban Studies Program and
Department of Geography

Karen Ferguson
Supervisor
Professor
Urban Studies Program and
Department of History

Robert Liberty
External Examiner
Director
Urban Sustainability Accelerator
Nahad A. Toulan School of Urban
Studies & Planning
Portland State University

Date Defended/Approved: June 29, 2015

Partial Copyright Licence

The author, whose copyright is declared on the title page of this work, has granted to Simon Fraser University the non-exclusive, royalty-free right to include a digital copy of this thesis, project or extended essay[s] and associated supplemental files ("Work") (title[s] below) in Summit, the Institutional Research Repository at SFU. SFU may also make copies of the Work for purposes of a scholarly or research nature; for users of the SFU Library; or in response to a request from another library, or educational institution, on SFU's own behalf or for one of its users. Distribution may be in any form.

The author has further agreed that SFU may keep more than one copy of the Work for purposes of back-up and security; and that SFU may, without changing the content, translate, if technically possible, the Work to any medium or format for the purpose of preserving the Work and facilitating the exercise of SFU's rights under this licence.

It is understood that copying, publication, or public performance of the Work for commercial purposes shall not be allowed without the author's written permission.

While granting the above uses to SFU, the author retains copyright ownership and moral rights in the Work, and may deal with the copyright in the Work in any way consistent with the terms of this licence, including the right to change the Work for subsequent purposes, including editing and publishing the Work in whole or in part, and licensing the content to other parties as the author may desire.

The author represents and warrants that he/she has the right to grant the rights contained in this licence and that the Work does not, to the best of the author's knowledge, infringe upon anyone's copyright. The author has obtained written copyright permission, where required, for the use of any third-party copyrighted material contained in the Work. The author represents and warrants that the Work is his/her own original work and that he/she has not previously assigned or relinquished the rights conferred in this licence.

Simon Fraser University Library
Burnaby, British Columbia, Canada

revised Fall 2013

Abstract

This paper investigates the housing form and neighbourhood design preferences of residents of North Cowichan, a small community in the peri-urban zone between Victoria and Nanaimo, BC, Canada. Using a mixed methods approach, residential preferences among residents are documented in order to establish the degree to which they are consistent with the principles of smart growth and, thus, supportive of urban containment.

The research finds that in general residents value privacy, separation from neighbours and independence above other residential characteristics, characteristics that are not consistent with traditional smart growth residential forms. However, there is a subset of the population, particularly among residents over fifty years of age, who want to live in more urbanized environments. This paper concludes that residential forms need to reflect the values of privacy and independence in order draw more people into denser forms of housing and toward urban cores.

Keywords: Smart growth; peri-urban; housing form; neighbourhood design; North Cowichan

Acknowledgements

I would like to thank the faculty and staff in the Urban Studies Program at Simon Fraser University for their support throughout my degree. In particular, I would like to thank Prof. Meg Holden and Prof. Karen Ferguson for their rigour and exceptional teaching ability. Thanks also to Terri Evans for keeping us on track. I am grateful for the financial support from the Local Government Management Association, the Office of Graduate Studies and the Bank of M&D during this past year. Additionally, I owe thanks to friends and family who edited various versions of this paper. Finally, I would like to thank my husband, Clay Neal, who helped me prioritize my research and writing, even on our wedding weekend.

Table of Contents

List of Tables

List of Figures

Chapter 1. Introduction

1.1. Research Question

This research addresses the intersection between smart growth policy and residential preference in the peri-urban zone. Specifically, it seeks to understand the tension between resistance to density and the urban containment policy delineated in North Cowichan's Official Community Plan (OCP). Accordingly, the research investigates this question: *What housing form and neighbourhood design characteristics appeal to residents of North Cowichan and to what extent are these preferences consistent with North Cowichan's urban containment policy?*

In this research, I seek to identify the neighbourhood design and building form characteristics that are preferred by residents of North Cowichan in order to ascertain the extent to which these preferences are consistent with smart growth urban form. Moreover, I postulate the implications of these preferences on implementation of smart growth in North Cowichan as expressed in the OCP, with particular concern for the urban containment boundary.

1.2. Background

This section provides an overview of the peri-urban planning context in North Cowichan. It describes a rural resource economy in transition and the demographic make-up of the community. It also highlights some of the smart growth policies that North Cowichan has adopted, including the urban containment policy.

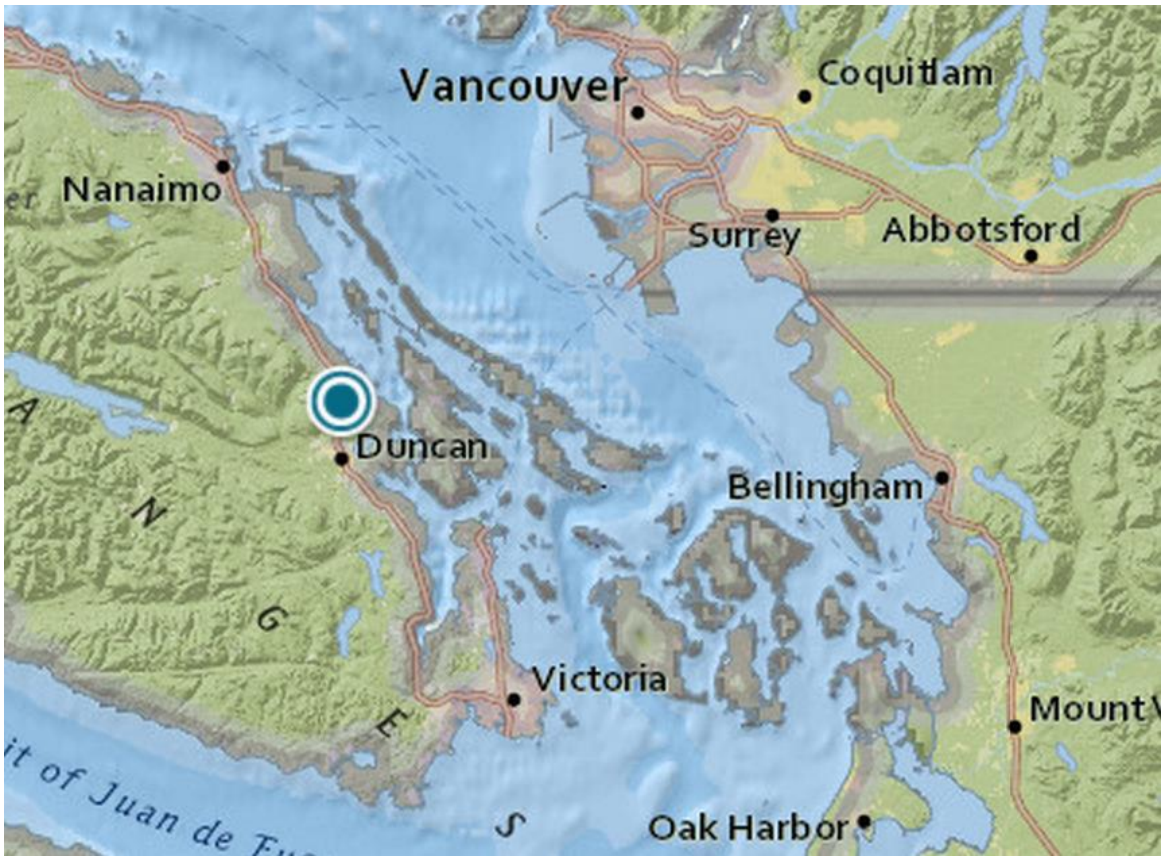
1.2.1. North Cowichan Geography, Economy, and Demographics

North Cowichan is a small community of approximately 28,000 residents. It is located on the east coast of Vancouver Island, in the peri-urban area[1] between Victoria and Nanaimo, British Columbia, Canada (see **Figure 1. North Cowichan Regional Map**). It is not considered a suburb of either city; however, residents do commute to Victoria and Nanaimo for work and to access services. There is commuter bus service to Victoria.

The median age in North Cowichan is 47, six years older than the median age in Canada and five years older than the median age in BC (Statistics Canada, Province of British Columbia, 2015). The median age is increasing at a faster rate than anticipated due to an aging baby boomer population and the lack of job opportunities for young people, compelling them to go elsewhere to find employment (North Cowichan 2008). North Cowichan's population is growing at a rate of approximately 1% per year, adding approximately 405 residents annually (North Cowichan 2008). This growth rate is slightly below the provincial average and well below fast growing communities like Surrey and Langford (Statistics Canada, Province of British Columbia, 2015). Like many small communities on Vancouver Island, North Cowichan's economy is in transition; resource extraction and processing industries (forestry, mining, and fishing) are in decline and service-based industries, including tourism, are growing in importance but not yet filling the void. Agriculture remains an important economic activity, with annual farm gate sales increasing and a burgeoning agri-tourism sector (Westland Resources Group 2001).

[1] The peri-urban zone is an area of fragmented landscape between urban and rural environments. It is characterized by conflict over land-use resulting from its location in the urban-rural fringe.

Figure 1. North Cowichan Regional Map



Map from National Geographic's MapMaker Interactive (National Geographic 2014)

North Cowichan is typical of peri-urban environments in terms of the heterogeneity of land-use, including rural and urban activities (Vallance 2014, Ford 1999). It is a district municipality, a classification of local government in British Columbia assigned to jurisdictions with a large land-base and a low population density. Although North Cowichan's land-base is expansive, spanning 19,366ha, approximately 70% of the population is concentrated in three small communities: Crofton, Chemainus, and the South End (the northern part of Duncan) and much of the land-base remains rural (Statistics Canada, 2013). Nearly three quarters (74.26%) of North Cowichan's land-base is zoned for agriculture and falls within the Agricultural Land Reserve. Twenty-seven percent of the land-base is forested and part of the Municipal Forest Reserve.[2,3]

[2] The Municipal Forest Reserve is comprised of forested lands actively managed by the Municipality.

North Cowichan is a bucolic setting punctuated by a few small town centres, a landscape that is typical of the peri-urban environment. Moreover, North Cowichan's village centres and surrounding 'ruralness' have been identified as important community assets through public consultation and in various planning documents, including local area plans and the Official Community Plan.

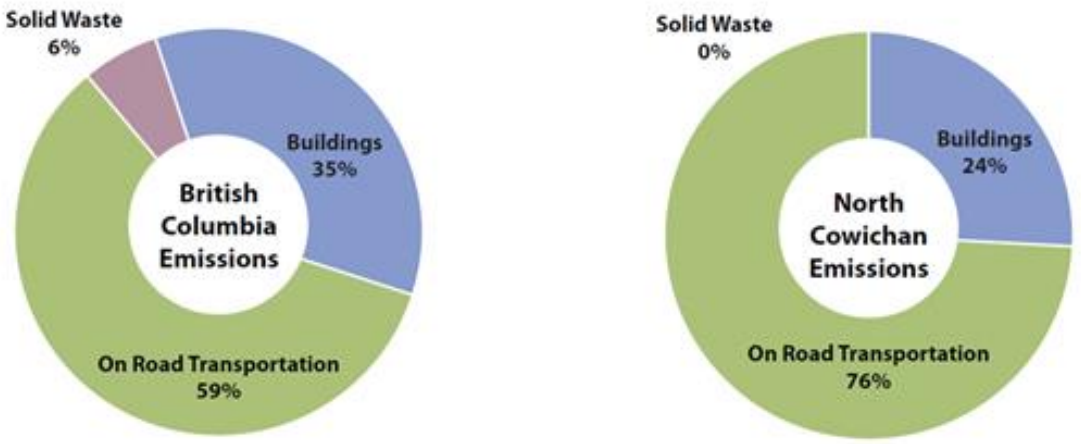
1.2.2. North Cowichan Transportation and Housing Profile

This study is focused on urban containment in the context of smart growth. A key component of smart growth is reducing energy and resource consumption related to transportation and buildings. As such, the following section provides an overview of transportation and building-related energy use, and greenhouse gas emissions in North Cowichan, including a description of the existing residential building stock.

According to the BC Community Energy and Emissions Inventory, 76% of North Cowichan's greenhouse gas emissions come from vehicle transportation, significantly higher than the BC average of 59%. On the other hand, emissions emanating from buildings are well below the BC average at 24% (compared to 35% in BC). **Figure 2. North Cowichan Greenhouse Gas Emissions with Provincial Comparison** below represents these numbers. Note that since North Cowichan disposes of its solid waste out of province, its landfill emissions are calculated to be 0% (Province of BC 2010).

[3] Note that overlap exists between rural lands zoned for agriculture and contained within the Municipal Forest Reserve.

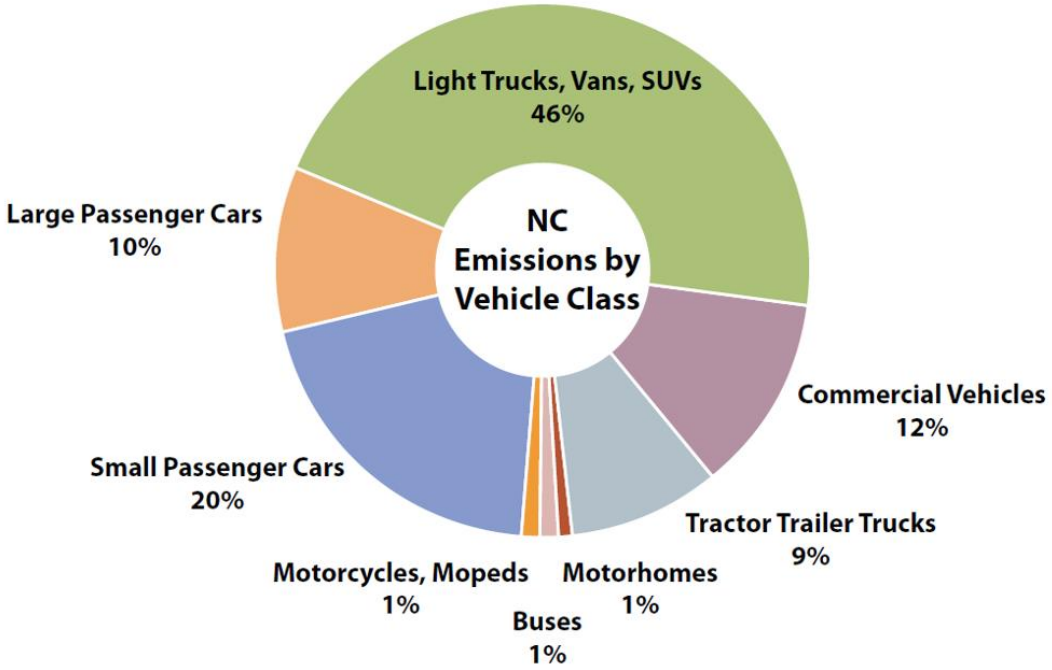
Figure 2. North Cowichan Greenhouse Gas Emissions with Provincial Comparison



Source: North Cowichan 2014. Calculated using the Province of British Columbia's Community Energy and Emissions Inventory.

According to one study, compared to 15 other municipalities in BC, North Cowichan has the highest percentage of trips taken by private vehicle (North Cowichan 2014). Light trucks, vans, and sport utility vehicles (SUVs) produce a large share (46%) of the total vehicle emissions while travel by other personal vehicles accounts for another 31% of vehicle emissions (Province of BC 2010). Emissions from this sector emanate primarily from the burning of diesel and gasoline. The vehicle emissions profile by type of vehicle is shown below in **Figure 3. Vehicle Emissions by Class of Vehicle**.

Figure 3. Vehicle Emissions by Class of Vehicle

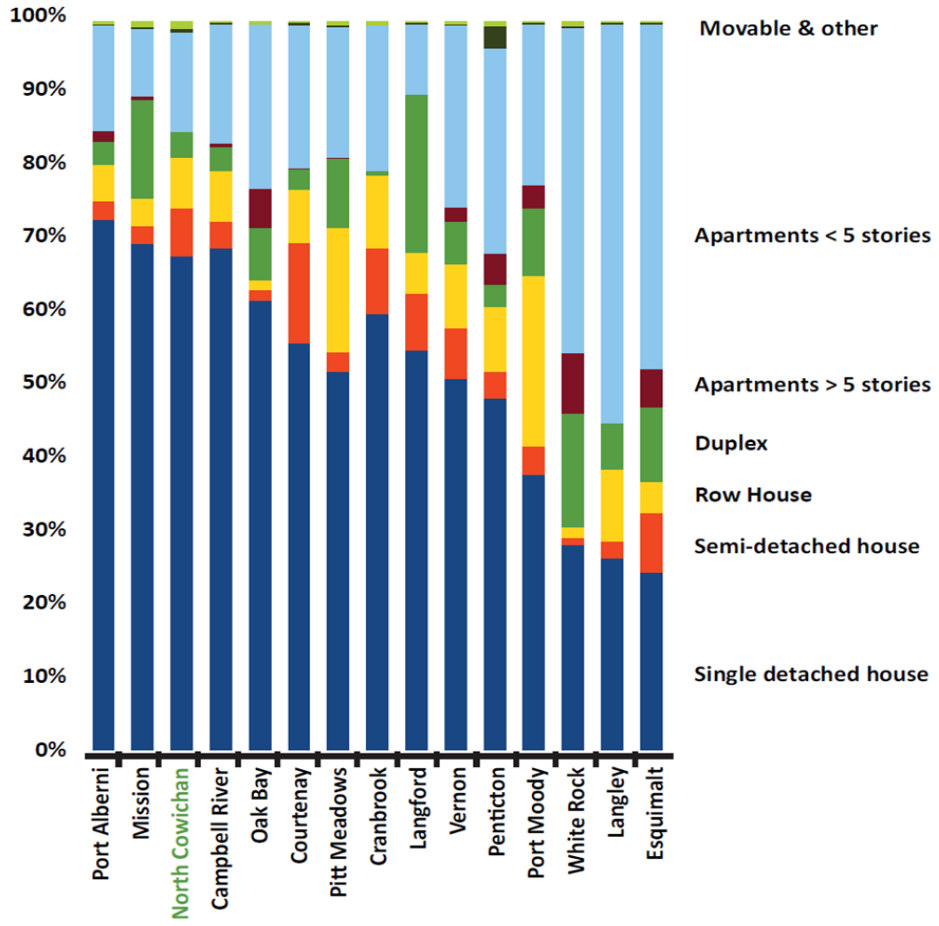


Source: North Cowichan 2014

The relatively high proportion of community emissions emanating from private vehicles can be attributed to the distributed population in North Cowichan. It can be said that North Cowichan is a relatively car-dependent community compared to other communities in BC. Urban containment and smart growth are meant to address this issue.

The predominance of single family homes is another important characteristic of North Cowichan's community energy and emissions profile with relevance to smart growth. According to Statistics Canada, 67% of the dwelling units in North Cowichan are single family dwellings, 12% are semi-detached townhomes, duplexes and row houses, and 8% are apartment-style units, with other forms of housing individually accounting for less than 5% of the total building stock (Statistics Canada, 2015). Compared to other BC communities, even communities of a similar population, the proportion of single family homes is relatively high, as shown in **Figure 4. Housing Form in North Cowichan with BC Comparisons**.

Figure 4. Housing Form in North Cowichan with BC Comparisons



Source: North Cowichan 2014

While greenhouse gasses from this sector are relatively low compared to other communities in BC,[4] energy consumption, and resource consumption more generally, is still a concern associated with the predominance of single family homes. Diversifying North Cowichan's housing stock and encouraging semi-detached and apartment style development would reduce energy, land, and materials consumption on a per capita basis while achieving some of the other economic and social benefits of smart growth.

[4] Low GHG emissions from electricity in BC result from a heavy reliance on electrical heating, which in BC is 93% free of carbon emission (Province of British Columbia 2010)

1.2.3. Planning for Smart Growth in North Cowichan

North Cowichan's community planning documents embrace the principles of s*mart growth,* seeking to build compact complete communities in existing urban areas in order to protect and enhance both urban and rural assets. Local area plans, the Climate Action and Energy Plan, and the two most recent Official Community Plans identify density, urban containment, and housing diversity as key strategies towards achieving economic, social, and environmental objectives. As I explore further in this paper, smart growth and urban containment are intended to reverse the dominant patterns of low density sprawl in North American communities. The policy orientation in North Cowichan is typical of other municipalities in BC, but the use of an urban containment boundary demonstrates a stronger commitment to the principals of smart growth than is found in other rural BC towns. This section begins with a brief overview of smart growth in order to situate North Cowichan's plans within the broader smart growth movement before delving into the specifics of North Cowichan's smart growth policy.

What is Smart Growth?

Across North America, the smart growth movement has emerged in reaction to the predominant human settlement pattern of low density sprawl (Downs 2003). Sprawl is held responsible for inefficient consumption of land, car dependence, social isolation, expensive infrastructure, and a host of other societal ills (Grant 2013, Gurin 2003, and Wassmer 2006). Broadly speaking, smart growth aims to combat low density green-field development by creating dense, mixed-use neighbourhoods with an emphasis on smaller, semi-detached and apartment style dwellings. Compact, complete communities[5] are less consumptive of resources, including land and energy (Chapin 2012, Gurin 2013). There are also economic arguments for this form of development, including efficient use of public infrastructure and supporting local economic development (Daniels 2001). Simultaneous to densifying and invigorating commercial cores, smart growth aims to preserve rural and natural settings on the outskirts of the urban area (Downs 2001), minimizing the loss of forested and productive agricultural lands. Rooted in

[5] 'Compact, complete communities' is used repeatedly in this paper to refer to communities that are reflective of smart growth. Compactness is defined by density of dwelling units, while completeness is defined by the availability of necessary shops and services.

environmental sustainability and prudent fiscal management, smart growth has gathered a following among environmentalists, community activists, and policy makers. North Cowichan's planning policy reflects this body of thought.

North Cowichan's Smart Growth Policies

North Cowichan's Official Community Plan (OCP) is the Municipality's highest level policy document and both the 2002 and 2011 OCPs broadly promote development patterns that are consistent with smart growth; both documents support dense mixed-use development in existing urban areas that are accessible via a variety of transportation modes, including public transit, bicycle, and foot. Smart growth is promoted in these plans in order to combat sprawl, reduce conversion of rural lands to urban uses, reduce costs associated with the extension of municipal infrastructure, build strong, socially and physically connected communities and encourage local economic development.

Contained in the OCP, the growth centre policy is North Cowichan's most prominent smart growth policy tool and is thus the focus of this project. The policy draws a boundary around three communities (Crofton, Chemainus, and the South End) and seeks to limit the spatial extent of the urban environment, concentrating new residential and commercial development within these areas. The urban containment boundary (UCB) has been policy since 2002 when the OCP of the same year identified growth centres and articulated a vision of compact complete community development within these designated areas. The current, 2011, OCP reaffirms this commitment and aims to achieve densities of 15 dwelling units per hectare within the growth centres and higher densities within the identified mixed-use commercial cores (up to 100 units per hectare). Appendix A contains maps of both the growth centres and the mixed-use commercial cores.

As with growth management policies in other jurisdictions, North Cowichan's urban containment policy is a smart growth policy tool that seeks to foster community connection, sustainable transportation and a vibrant local economy, while preserving North Cowichan's rural landscapes. Furthermore, it seeks to make efficient use of public services by concentrating development around existing infrastructure and institutions.

The objectives of the UCB are clearly articulated in the following excerpts from North Cowichan's OCPs. The 2002 OCP states:

> While the land base is predominantly rural in both size and character, the majority of the population lives in small towns and communities that are urban. A failure to recognize the difference between the two areas will result in a diminishing of North Cowichan's *ruralness*. Left unaddressed, low density urban and suburban development may continue to blur the lines between the two (North Cowichan 2002, 7).

The 2002 OCP goes on to say:

> By focussing growth in areas that have the capability to absorb the growth efficiently and smoothly, we have the added benefit of minimizing cost, concentrating service delivery and taking maximum advantage of the facilities we have in place (ibid, 49).

North Cowichan's 2011 OCP states:

> By managing North Cowichan's growth to ensure vibrant, safe and healthy communities, we can also preserve our rural character, be sensitive to our impact on the environment and support our local businesses. Our communities should reflect "human-scale" development and mixed-use to the greatest degree possible (North Cowichan 2011, 63).

North Cowichan's growth centre approach is part and parcel of the Municipality's overall smart growth orientation and works in tandem with other policies and plans that seek to limit sprawl and support the vitality of urban centres.

In 2014, North Cowichan adopted the Climate Action and Energy Plan (CAEP) in order to identify opportunities to reduce energy consumption and greenhouse gas emissions. The CAEP recommends increasing housing density through strict enforcement of the UCB and identifies land-use planning as "the most critical element of community energy and emissions planning." The Plan argues that "[land-use planning] determines the long-term characteristics of a community, such as the way people move around and the types of dwellings built," reiterating the Municipality's commitment to these tenets of smart growth (North Cowichan 2014).

In addition to the OCP and the CAEP, North Cowichan recently completed two local area planning processes, one in the South End growth centre (University Village) and one in Crofton. Both local area plans (LAPs) support principles of smart growth, seeking to encourage density within existing urban areas and foster vitality within the commercial cores. North Cowichan has also adopted a Revitalization Tax Exemption program available to mixed-use developments that achieve a minimum housing density within the OCP-established mixed-use commercial cores.

Despite the strong commitment to smart growth and urban containment found in North Cowichan's CAEP, OCP, LAPs, and other policies, successful implementation is tenuous. Despite the legal standing of an OCP, the UCB is constantly under threat from politicians and developers who propose residential development outside of the UCB, push for an expansion of the growth centres or propose relatively low density housing within the UCB. The tenuous nature of implementation is no surprise, given that it was highly contentious during the development of the 2011 OCP (key informant interview) and that residential development has tended toward sprawl in most of North America due to a complex system of contributing factors.

That said, the urban containment policy emerged from a public consultation process where residents expressed the desire to preserve rural and natural landscapes while building vibrant town centres. Furthermore, across North America a resurgence in urban living is seeing more and more people choose to live in dense urban environments. Demographic change, including an aging population that sees value in living close to shops and services in homes that require less maintenance, coupled with the general demand for more affordable housing, may lend support to the implementation of urban containment and smart growth policy in North Cowichan. This research investigates the tension between noble policy aspirations and the residential preferences of residents in the peri-urban zone.

1.3. Research Significance

Given the expressed community desire to protect both urban and rural environments in North Cowichan and the overarching concerns of climate change and

environmental degradation, coupled with social and economic sustainability concerns, this research investigates how well the policy of urban containment fits the peri-urban context of North Cowichan. This research is significant because it fills a gap in the literature, assessing housing and neighbourhood preference in the peri-urban zone and the implications of these preferences for urban containment and smart growth. This research will be of interest to urban planners, members of the development community, and policy makers working in other small communities across North America. Implementing smart growth requires a better understanding of its appropriateness across rural-urban transects and of the ways in which it can be adapted to suit local residential preference in order to facilitate market transformation.

The concept of smart growth is a distinctly urban concept. It emerges from and has been most successfully implemented in large urban centres where residents expect to be in close proximity to their neighbours and within walking distance of shops and services (Grant 2009). It is reflective of an urban ideal and the re-establishment of downtown as a desirable location to live, work, and play (Erhenhalt 2008, Newall 2008). Additionally, it is argued that housing and retail density, accessed by public transit, bike or foot, succeed in the presence of a creative class, in places where residents prefer the spontaneity of urban life over the space and privacy offered by suburban living; for urbanites, density itself is an amenity (Florida 2005; Storper and Manville 2005).

The literature on suburban environments reveals that while progress is being made towards densification and mixed-use, bolstered by demographic change and the cultural re-evaluation of downtown, structural and cultural barriers remain a strong force of opposition to densification and mixed-use. Furthermore, there is evidence that residential preferences remain in favour of conventional suburban development among residents of sub-urban areas. My research investigates the extent to which these opposing forces are replicated in the peri-urban zone and the implications of this tension for implementation of urban containment and other smart growth policies.

There is a gap in the literature on residential preference in peri-urban environments; however, research into the motivations among peri-urban residents to reside in the urban-rural fringe reveals heterogeneity in the social, economic, and aesthetic qualities that draw people to the fringe; where some are drawn to the village

setting, imbued with meaning by existing residents, others are drawn to the open space and rural landscapes offered in the peri-urban environment. Still others are in search of community, viewing the peri-urban village as the last remaining place where community can be found and created. Finally, some are motivated by housing prices in the fringe relative to more central parts of the urban area (Vallance 2014). How do these social, aesthetic and economic motivations to locate in the peri-urban environment translate into housing preference and to what extent are resident expectations consistent with smart growth? This research addresses these questions.

This research is important because small municipalities like North Cowichan are engaged in building compact complete communities in order to achieve fiscal efficiencies and environmental sustainability objectives, including climate change mitigation. The latter is particularly true in British Columbia where provincial climate change policy requires local governments to set greenhouse gas reduction targets within their OCPs and establish policy towards achieving those targets (British Columbia 2008). Signatories of the Climate Action Charter (96% of local governments in BC) have agreed to "[create] complete, compact, more energy efficient rural and urban communities" (British Columbia, 2011). In the context of BC's climate change policy, and that of other jurisdictions, smart growth policies, including urban containment, are often understood as key strategies towards curbing community wide emissions. Moreover, just like in cities and suburbs, an aging population, smaller households, economic uncertainty, and the resurgence of urbanity, may cause consumers in the urban-rural fringe to demand neighbourhoods that are increasingly reflective of smart growth.

Central to this research is the question of whether residents of the peri-urban zone value the amenities of an urban environment, such as proximity to shops and services, spontaneous interaction with neighbours, and the ability to choose active transportation or public transit over a private vehicle. Accordingly, this research seeks to address the question of how they rank these characteristics against other amenities, such as space, privacy, and auto-oriented community design offered in conventional suburban and rural environments. While density has been successfully marketed in many North American urban centres, including Vancouver, Canada (Erhenhalt 2008 and Newall 2008), resistance to density persists in Canadian suburban environments (Grant 2009) and the literature is inconclusive as to whether the emerging urban ideal and

demographic change will undermine resistance to density or vice versa (Grant, Nelson, and Blais 2013). Moreover, this tension has been under researched in the peri-urban environment.

By analysing how residential preference has impacted establishment of the UCB and continues to impact enforcement of urban containment policy in North Cowichan, and by understanding how developers and realtors view the local market for compact complete communities, this research will provide strategic recommendations to the municipality as to how they can communicate the policy to the public and enable community design that will be attractive to residents. This aspect of the research will be transferable to other peri-urban communities in North America where local governments are attempting to implement smart growth, particularly in BC where the legislative framework promotes smart growth planning.

Chapter 2. Literature Review

Urban containment in North Cowichan is a policy tool used to combat sprawl and promote smart growth. The tool aims to concentrate development around existing commercial cores and within existing neighbourhoods. This development pattern is credited with a range of environmental, social, and economic benefits. Furthermore, current demographic trends in North America and a resurgence in the valuation of urban living provides reasonable hope that smart growth policy may coincide with emerging housing preference. However, the high density development that smart growth and urban containment call for is often resisted by existing residents and developers who cite a variety of reasons for perpetuating the status quo, low density sprawl. Therefore, this research seeks to identify the housing form and neighbourhood design preferences expressed by the residents of North Cowichan and key stakeholders who shape development in the community, in order to ascertain the extent to which urban containment is consistent with the preferences and expectations of residents.

I begin by making the case for urban containment in small towns and semi-rural environments like North Cowichan. This section begins with the economic, environmental, and social arguments for smart growth, establishing my normative stance. I then describe the urban form (neighbourhood design and housing characteristics) that are exemplary of smart growth. I conclude this section by demonstrating how urban containment aims to achieve a smart growth urban form and characterise urban containment as a smart growth policy tool.

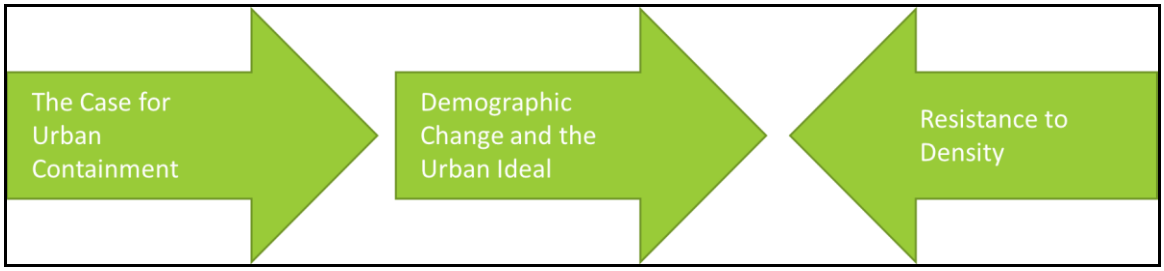
The subsequent section describes the demographic changes that are taking place in North America that may prove supportive of policy to build compact complete communities. The changing expectations of young, first-time home buyers and the passage of the baby boom generation into retirement age, coupled with a resurgence of urban living, is already changing patterns of urban and sub-urban development. These

environments are becoming more reflective of smart growth, but will this pattern of development extend beyond the urban fringe?

The third body of literature in this conceptual framework, resistance to density, exposes the tension that is at play between the need for smart growth coupled with emerging residential preferences and the conventional housing expectations in North America. Density is contested across the spectrum of rural-urban transects, but there is particularly pronounced resistance in low density sub-urban environments. For the purposes of this study, I focus on resistance to density in these low density suburban environments as an indication of what processes may be at play in the peri-urban context of North Cowichan.

Figure 5. Conceptual Framework displays my conceptual framework graphically and underscores the tension that is at the heart of this inquiry: urban containment addresses a number of pressing social, environmental, and economic concerns and demographic change and the resurgence of urban living may support smart growth policy directions *but* it requires a fundamental shift in policy, values, and societal expectations to overcome resistance**.**

Figure 5. Conceptual Framework



The following three sections outline this conceptual framework in more detail, reviewing the bodies of literature I draw on in framing my research question and conducting my data analysis. I begin with the case for urban containment in the peri-urban zone.

2.1. The Case for Urban Containment

Urban sprawl poses a threat to rural lands and open space around the world and across Canada, including in the Cowichan Valley. Globally, urban areas have been forecasted to triple in area by 2030 (Seto et al. 2012). The same study forecasted that urban environments in North America will double in the same time frame (ibid.). Since 1971, 12,000 square kilometres of Canadian farmland (1,200,000 hectares) have been converted to urban uses, an area that is roughly twice the size of Prince Edward Island (Hume 2013). According to the Agricultural Land Commission (ALC) in British Columbia, nearly 3,000 hectares of agricultural land in the Cowichan Valley have been converted to urban uses between 1974 and 2014 (2014). While establishment of the ALC has curbed sprawl from roughly 6,000Ha per year provincially (prior to 1972), to only 300 hectares per year by 2013 (Alexander and Tomalty 2001), these province-wide totals mask a process of insidious decline in the quality of protected farmland; gains made to the ALR have disproportionately consisted of subprime farmland in Northern BC, compared to the losses seen in southern BC, where sprawl into prime agricultural land is of critical concern (Curran 2007). The ALC receives approximately 500 requests for withdrawals of farmland per year, a number that has remained relatively stable from 2009-2014 (ALC 2014). Thus, it can be said that the conversion of rural lands to urban uses is a serious concern globally, including the Cowichan Valley.

In Canada and the United States, the rapid conversion of farmland to residential and commercial uses started in the 20th century when "North Americans began to abandon traditional forms of city building in favour of suburban sprawl" (Alexander and Tomalty 2001). The process of suburbanization was, and continues to be, driven by a complex set of factors, including land affordability, perceived safety in the suburbs, the emergence of the automobile as the predominant mode of transportation, and subsidies offered by senior levels of government for suburban development. Alexander and Tomalty write:

> Throughout the postwar period, senior governments helped to subsidize suburban sprawl by building freeways, by underwriting mortgages on suburban homes, and by not charging developers for the full costs of developing infrastructure to service new subdivisions. (2001)

The conversion of farmland to urban uses has impacts on food security and the socio-economic make-up of a region (Curran 2007), but urban sprawl is also a process that has been blamed for social isolation, divestment in existing town-centres, expensive infrastructure requirements, loss of biodiversity, and the exacerbation of climate change (Duany and Plater-Zyberk 1992, Nelson et al. 2004, Daniels 2001, Seto et al. 2012, and Chapin 2012).

In order to curb sprawl and address the social, environmental, and economic issues associated with conventional suburban development, smart growth has been proposed as an alternative development pattern. Smart Growth BC describes the approach as follows:

> Smart growth is a collection of land use and development principles that aim to enhance our quality of life, preserve the natural environment, and save money over time. Smart growth principles ensure that growth is fiscally, environmentally and socially responsible and recognizes the connections between development and quality of life. Smart growth enhances and completes communities by placing priority on infill, redevelopment, and densification strategies. (Smart Growth BC)

In North Cowichan, the UCB is explicitly intended to limit sprawl and encourage development that is consistent with smart growth principles; it is intended to limit the conversion of rural land to urban and suburban uses and promote residential development within proximity to vibrant town-centres, fostering healthy neighbourhoods that are connected both physically and socially. Urban containment is part of North Cowichan's general policy orientation toward smart growth.

In this section I summarize the economic, social, and environmental arguments for smart growth in the urban-rural fringe. Following this, I describe smart growth urban form and the characteristics that typify this development pattern. I then turn to urban containment, conceptualizing it as a smart growth policy tool. As discussed above, the conversion of rural lands to urban uses is a serious concern globally and it is not reasonable to expect that successful implementation of the urban containment boundary in North Cowichan will reverse this process. Even if residents of North Cowichan embrace smart growth, social, environmental and economic constraints may lead to discernable declines in quality of life. While these constraints lie beyond the scope of this research, they frame the discussion.

2.1.1. Economic, Social, and Environmental Arguments

According to Don Alexander and Ray Tomalty "achieving higher densities… and preventing very low-density, estate-type development on the urban–rural fringe [is] thought to entail a range of ecological, social, and economic benefits" (2002, 398). These arguments for smart growth are summarized below.

Environmentalists advocate for containing the extent of the urban environment in order to preserve farmland, forests, and other natural ecosystems on the urban fringe. They argue that limiting sprawl protects the environmental services offered by open space and that preserving our rural resources is an important part of maintaining a healthy environment and sustaining human well-being (ibid.). The extension of impervious surfaces associated with urbanization (roads, parking lots, and buildings made from concrete, brick, and pavement) "has major impacts on hydrology, recreation, tourism, culture, and the environment in general" (Gurin 2003, 12). The Victoria Transportation Policy Institute has quantified the annualized, per hectare cost of paving wetlands to be $30,000; for urban green-space, $24,000; second growth forest, $18,000; and for farmland, $12,000. These figures reflect direct costs resulting from the loss of productivity, declines in environmental services, and reductions in adjacent land values and are in addition to the costs of servicing sprawling development and maintaining roads subject to increased traffic (Litman 1997).

Mixing uses and curbing sprawl is also viewed as a climate change mitigation strategy; smart growth reduces the length and number of trips made in private automobiles, allowing people to move around the urban environment by bike and foot, while increasing the viability of public transportation (Alexander and Tomalty 2004 and Chapin 2012). Seto et al. have highlighted the threat that rapid urbanization globally and low density sprawl in North America pose for forests, not just in terms of the biodiversity they support, but in terms of their role in sequestering carbon and mitigating climate change (2012). In his 'citizen's guide to understanding sprawl,' Gurin states that:

> Sprawling communities are a major contributor to climate change and air pollution, in part because they require so much automotive transportation, which is heavily dependent on energy consumption from fossil fuels, the biggest source of greenhouse gases. In addition to burning gasoline, sprawling communities have to pump water in and waste out over long

> distances, deliver natural gas and electricity over long distribution networks, and provide solid waste, recycling pick-up and other services over a much wider area. Each of these services uses more energy and therefore produces more greenhouse gases than providing similar services to denser communities (Gurin 2003, 1).

Indeed, compact development has been shown to reduce per capita GHGs in large urban centres like Toronto (Norman et al. 2006) and in small towns located in British Columbia's peri-urban zone (Senbel 2013).

Smart growth also finds support among people concerned by a loss of community and social connections in sprawling urban environments. Smart growth is understood as a means of re-establishing some of the social connections that were lost with the proliferation of sub-urbanization and Euclidian zoning[6] in North America. By providing a mix of land-uses and housing types within walking distance of shops and services, smart growth fosters community connections and breaks down social isolation (Duany and Plater-Zyberk 1992). Smart growth is also attributed with improved health outcomes as people opt for active modes of transportation and spend less time in their vehicles (Litman 1997).

In addition to the environmental and social arguments for smart growth, there are economic benefits of compact development; by concentrating development around existing service nodes, smart growth encourages the efficient use of public infrastructure. Expenses associated with building roads, sewers, and public services, such as libraries and schools, are minimized (Daniels 2001). It is also noted that residents of compact complete communities have reduced household transportation costs resulting from the ability to choose viable alternatives to the automobile (Litman 1997) leaving more household income for local consumption. Further rationale for implementing smart growth through an urban containment boundary and concentrating development around existing commercial cores is the promise of downtown revitalization and local economic development. Urban containment forces the development industry to

[6] Euclidean zoning is characterized by the segregation of land uses (residential, commercial, industrial, etc.) into specified geographic districts (zones) and building form standards stipulating limitations on construction within each zone.

look inwards towards established neighbourhoods, resources, and communities causing a revaluation of properties that were once overlooked (Nelson et al. 2004).

Together, these environmental, social, and economic arguments make a compelling case for smart growth in peri-urban environments.

2.1.2. Smart Growth Urban Form

This research is focused on the built environment associated with smart growth, including neighbourhood design and housing form. Specifically, it seeks to unpack the neighbourhood design and housing form characteristics that are appealing to residents of North Cowichan in order to assess the extent to which these preferences are consistent with a smart growth urban form. As such, the inquiry depends on a concise description of the neighbourhood design and housing form characteristics that are representative of smart growth. This description is operationalised in the data collection tools and data analysis for this research.

Smart growth and new urbanism share the same orientation toward mixed-use, compact, and complete development that is accessible by a variety of transportation modes, including walking and cycling. However, it should be noted that smart growth does not focus on the architectural design elements of the built form to the same extent as new urbanism. New urbanism finds its roots in the architectural profession and thus provides guidance on architectural detail and building design elements, whereas smart growth originates in the environmentalist and planning circles and is thus only concerned with housing form and neighbourhood design in so far as they relate to land use.

One of the defining features of the smart growth urban form is higher density residential design. In their analysis of the degree to which municipalities are achieving smart growth standards, Alexander and Tomalty use a variety of indicators, including population density, density of housing units (positively correlated with smart growth), and percentage of units that are single-detached (inversely correlated with smart growth) (2004). These indicators point to the importance of housing form and residential density in achieving smart growth. The housing forms that provide this density include single family dwellings on small lots, townhouses, high-rise, and low-rise apartments,

secondary suites, and coach house developments. Communities are viewed to be better implementing smart growth when they contain a relatively high percentage of these denser housing forms, compared to the share of housing stock represented by single family detached homes on large lots.

Smart growth urban form is also characterized by mixed-use developments and a fine-grain mix of land uses (Alexander and Tomalty 2001). Whereas urban sprawl is associated with a segregation of land uses, resulting in dependence on the private automobile for transportation, smart growth exhibits “a greater integration of land uses—often around higher-density transit nodes—and with more opportunities for people to get around without relying on their cars” (Alexander and Tomalty 2004, 10). Consequently, smart growth urban form includes transit oriented development in addition to pedestrian and bike-friendly neighborhoods (Song 2005). These features of neighbourhood design and housing form constitute the physical description of smart growth that is used for data collection and analytical purposes in this research.

2.1.3. Urban Containment as a Smart Growth Policy Tool

North Cowichan’s urban containment policy is a smart growth policy tool insofar as it aims to restrict development to a more compact geographic footprint than it would otherwise occupy. There is ample room for growth within the UCB, but the boundary between what is zoned for residential and commercial uses, versus what is zoned for agriculture, has the primary objective of limiting sprawl. Seen in the broader context of North Cowichan’s OCP, urban containment supports other smart growth policy objectives, including building denser neighbourhoods, fostering vibrant commercial cores, and encouraging a wider mix of land uses in order to achieve the environmental, economic, and social objectives.

The literature supports this understanding of urban containment as a smart growth policy tool. Gurin lists urban containment as one of ten approaches to curbing urban sprawl (2003) and Smart Growth BC identifies growth management as a tool for building compact complete communities. Arthur et al. contend that urban containment promotes infill development and central city revitalization stating that “the underlying assumption of this approach is that if new territory is no longer available to the

development market [outside of the UCB], the market will look inward and seize bypassed opportunities" (2005).

In addition to economic revitalization of existing urban areas, the ultimate objective of both urban containment and smart growth is to increase urban density, both residential and commercial, accommodating population growth within the current urban area. The effectiveness of state growth management policies (in the United States) has been framed in terms of whether they curb sprawl and achieve dense urban environments (Anthony 2004) and Moore and Nelson (1994) contend that Oregon's growth management act has been effective in increasing urban densities within the Portland area. Further, Wassmer (2006) finds that the various forms of urban containment policy achieve their desired goal of shrinking the urban area.

In tandem with the objective of densification, urban containment pursues the preservation of open space outside of the urban area. Commenting on Oregon's Land-use Program, Kasowski writes, "Make no mistake about it: the fact that much of the countryside is still largely rural can be attributed to Oregon's statewide land use planning program, which restricts development to areas within urban growth boundaries" (1991,126). Anthony summarizes the consistencies between urban containment and smart growth when he writes:

> Even though there are variations among the growth management regulations of various states, they have common objectives that include controlling urban sprawl, preserving farmland, protecting environmentally sensitive areas, increasing density to make public transit viable, and reducing urban energy consumption (2004).

These objectives are consistent with the objectives of smart growth as outlined in the previous sections (2.1.1 and 2.1.2) and justify the position that urban containment is a smart growth policy tool.

Although urbanization is often considered a local issue, Seto et al argue that "the aggregate global impacts of projected urban expansion will require significant policy changes to affect future growth trajectories and to minimize global biodiversity and vegetation carbon losses" (2012). North Cowichan's UCB policy is an example of local action on this global issue. The following section explores certain social and cultural

phenomena that may support implementation of this policy, but it should be recognized that however supportive of the UCB policy residential preference is, degradation of the natural environment may still occur locally, both as a result of incremental incursions into North Cowichan's rural environment and as a result of the global environmental crisis that is climate change. While this issue is beyond the scope of my research, it is offered here as a caveat so as to avoid the misunderstanding of UCB policy as a panacea for global climate change and rural sprawl.

2.2. Demographic Change and the Emerging Urban Ideal

A review of the literature reveals optimism among some academics that residential preferences are changing in North America and becoming more consistent with the smart growth urban form. Grant, Nelson, Erhenhalt, Myers, and Gearin are among the authors who see encouraging trends in changing demographics and the revaluation of urban living. Grant writes:

> After generations of low density suburban growth stimulated by government subsidies, economic prosperity and demographic shifts, contemporary conditions in the USA are likely to reshape development practices to favor less expensive, denser, and better connected communities (2013).

In Canada too, Grant sees signs of change in neighbourhood design and housing form in suburban Toronto, Calgary, and Vancouver (2009 and 2012). Her observations of smarter growth in the suburbs are supported by data that reveal multi-unit residential buildings make up the lion's share of housing starts in Metro Vancouver as a whole and the majority of housing starts in all but three of its suburbs (2010-2014 five year averages, Metro Vancouver 2015). Development practices are changing in the suburbs (albeit slowly), driven by multiple forces, including expressed preferences and housing demand, and planning policy and developer interests. In this section I explore the demographic changes and shifting cultural values that have shaped demand for smart growth communities, allowing me to investigate the extent to which these same changes are shaping residential preference in North Cowichan. I begin this section by reviewing the literature on demographic change that supports compact complete communities before exploring the notion of an emerging urban ideal.

2.2.1. Demographic Change

Nelson describes current settlement patterns in relation to previous demographic theory by R.A. Beauregard, which identified four waves of human settlement. Nelson posits that the wave of settlement currently underway constitutes a fifth wave, characterized by downsizing boomers and first-time home buyers. Nelson suggests that this fifth wave stands in stark contrast to the fourth wave in the post war era as identified by Beauregard. During Beauregard's fourth wave of settlement, demographic trends and government subsidies drove what he termed *parasitic suburbanization (2006).* Where the fourth wave was characterized by growing household incomes and expanding nuclear families, the fifth wave is characterized by economic instability and smaller households. According to Nelson, the fifth wave is well underway and he predicts it will see young first-time homebuyers and baby boomers inundate cities and inner suburbs "with a recommitment to urban and urbane living" (Nelson 2013). Young singles, relatively small families, and active seniors are reshaping demand for housing and repopulating downtowns and inner suburbs across North America. Erenhalt summarizes the demographic processes that are shaping this settlement pattern:

> The increased propensity to remain single, the rise of cohabitation, the much later age at first marriage for those who do marry, the smaller size of families for those who have children, and, at the other end, the rapidly growing number of healthy and active adults in their sixties, seventies, and eighties—have combined virtually all of the significant elements that make a demographic inversion not only possible but likely *(2008).*

Nelson forecasts that this process will be "driven mostly by seniors seeking mature suburban communities that meet their needs better than newer suburbs but at prices they cannot find in many central cities" (2013, 397). Indeed, analysis of housing preference surveys reveals that consumers in the baby boom generation show particular interest in more densely configured homes in more central locations (Myers and Gearin 2001) and the American Association of Retired Persons is actively advocating for dense, walkable neighbourhoods to accommodate an aging population (AARP 2014). Coupled with these demographic trends that favour compact, complete communities is the resurgence of downtown and the changing values and attitudes related to cities.

2.2.2. An Emerging Urban Ideal

The current resettlement of inner cities and inner suburbs has been described as the great inversion, as marginalized inner-city communities are supplanted by middle-class residents who choose urban lifestyles and amenities over suburbia. De-industrialisation along with an increased sense of safety in North America's city centres have precipitated the observation that "downtown is back!" (Ehrenhalt 2008) and a process that can be described as an emerging urban ideal (Newall 2008). While this process raises concerns about gentrification and displacement, the revaluation of urban living and the desire of consumers to live close to shops and services may serve to advance the objectives of smart growth. This increased appreciation for urban living extends beyond the central city into suburban developments (Grant 2012 and Nelson 2013) where new developments are marketed as offering urban amenities at suburban prices and where land economics in some areas encourage developers to squeeze in as many units as possible on a given parcel. My research investigates the extent to which the emerging urban ideal extends to the peri-urban environment, where little research has been done.

In their review of existing data on housing preference, Meyers and Gearin (2001) found that a "small but consistent" share of consumers prefers "alternative residential styles" (townhomes, duplexes, and apartments) and "denser, more walkable neighbourhoods." Likewise, it has been found that home buyers are willing to pay a premium of $5,000 to $30,000 for residences in mixed-use, higher-density, pedestrian-oriented developments (Tu and Epplie 1999). Describing Vancouver, Erhenhalt writes: "A large proportion of the city's 600,000 residents, especially those with money, want to live downtown" (2008, 19). Even Houston, Texas has seen increases in the number of people who say they would choose to live in "a smaller home within walking distance of shops and workplaces" over a conventional suburban development (Klineberg 2013). Trends like those in Houston and the statistics from other jurisdictions prove that the market for dense urban forms exists in urban and suburban environments. Erenhalt has this to say about this demographic and cultural trend:

> We are living at a moment in which the massive outward migration of the affluent that characterized the second half of the twentieth century is coming to an end. That's starting to happen, fueled by the changing mores of the young and by gasoline prices fast approaching $5-per-

> gallon. In many of its urbanized regions, an America that seemed destined for ever increasing individualization and sprawl is experimenting with new versions of community and sociability (2008, 19).

This body of literature tells us about a relatively recent trend in urban and suburban environments that is reshaping settlement patterns both in terms of form and culture, but it doesn't tell us about the extent to which peri-urban residents gravitate towards urban forms of housing, neighbourhood design, and the associated lifestyles. Will these demographic and cultural process extend to the peri-urban environment or is there something different about people who choose to live in the urban-rural fringe? This research attempts to address this perceived gap by investigating residential preference in North Cowichan. Furthermore, this research explores the extent to which resistance to density, my third body of literature, characterizes housing preference in North Cowichan.

2.3. Resistance to Density

Despite the hopeful literature on demographic change, evolving residential preference, and the emerging urban ideal, density continues to meet resistance and conventional suburban development dominates North American landscapes outside of our urban cores. David Gordon has challenged the common assertion that 'Canada is an urban nation,' arguing that it is in fact a suburban nation with roughly 80% of the population growth between 1996 and 2006 accommodated in suburbs (Gordon and Janzen 2013). Conventional suburban neighbourhoods are typically green-field developments, characterized by relatively low density, with single family dwellings on large lots and where transportation by private vehicle is prioritized over other modes. This form of development makes cycling, walking, and transit use impractical for commuting and running errands. Conventional suburban development is the much maligned sprawl that smart growth attempts to combat. There are cultural and economic factors that promulgate the status quo and impede building denser green-field developments or densifying existing neighbourhoods. Likewise, resistance to density hampers the mixing of commercial and residential uses that is so fervently pursued by planners and smart growth advocates. This research investigates the tension between *the case for smart growth* and *demographic change, and the emerging urban ideal* on the one hand, and *resistance to density* on the other. This tension is particularly

interesting in the peri-urban context, an environment that is characterized by the transition between urban and rural activities, and conflict over land-use.

While smart growth advocates promote an optimistic vision of dense, mixed-use communities, the density they endorse challenges the prevailing approach to development in North America and it is met with a certain degree of cynicism among developers and existing residents. Alexander and Tomalty summarize this tension:

> On the one hand, [density] is supported by environmentalists, transit operators and user-groups, open space advocates and some farm advocacy groups. On the other hand, it is opposed by many property developers and home-owners who fear that it will introduce undesirable changes into their neighbourhoods, increase congestion or unleash gentrification (2002, 398).

The Neptis Foundation (2012) has found that Metro Vancouver added 50,000 residents to its "active cores" between 2006 and 2011. While this is an encouraging statistic, it masks the fact that three times the number of residents (150,000) were accommodated in Metro Vancouver's suburbs. Furthermore, citing United States Census Bureau data from 2004, Storper and Manville (2006) assert that "in the aggregate, American centre cities lost population in every year between 1985 and 2000, while American suburbs grew in all of those years and American rural areas grew in all but one." Storper and Manville document an intensification of "old and cold" cities in the north-eastern United States that is overshadowed by conventional suburban development in the south and south-west. In addition, Grant (2009) asserts that despite the commitment to smart growth expressed in Official Community Plans, Neighbourhood Master Plans, Community Energy and Emissions Plans, and the plethora of other community planning documents, sub-urban environments across Canada remain reflective of "conventional development practices." The following sections elaborate on the cultural, economic, and policy barriers to densifying communities and promoting mixed-use development.

2.3.1. Cultural Barriers to Density

Contrary to the literature on demographic change and the emerging urban ideal, there is a body of literature that captures the continued aspirations of North Americans to

live in conventional suburban environments. This body of literature posits that the suburban form continues to capture the hearts, minds, and wallets of Canadian consumers. Grant and Scott contend that while suburban environments increasingly reflect urban environments, both in terms of their form and the way these neighbourhoods are marketed, the detached single family dwelling continues to embody the “Canadian Dream” and is the ideal(ized) form of housing for many consumers (2012). Denser housing forms, such as apartments, townhomes, and duplexes, are understood and marketed merely as a step on the housing ladder towards the single family detached home, the ultimate object of home buyer desire. Myers and Gearin (2001) have also documented consumer preference for less dense environments. Looking at a number of housing preference surveys in the US, they found that consumers prefer lower density environments, as well as neighbourhoods that facilitate ease of private vehicle use and storage. Filion emphasises the role that automobile dependence plays in conventional suburban development and the barriers to curbing reliance on this mode of transportation (2013). Myers and Gearin found that consumers are often willing to commute longer distances to gain larger homes in lower-density areas. What is more, they found that people living in single family detached homes want to live in neighbourhoods mostly comprised of other single family detached homes without multi-unit residential forms. The literature on the issue of uniformity says that this neighbourhood characteristic is equally important to home buyers as established residents. Residents resist infill development consisting of townhomes and apartments because they fear an invasion of privacy, fluctuations in property value, increased traffic congestion, and increased crime. In addition, resistance to density can be fuelled by classist and/or racist prejudice. Similarly, mixed-use projects may be opposed by local residents because they believe they will generate noise, parking difficulties or other nuisances. Projects that introduce density and mixed-use into a neighbourhood are often the target of NIMBYism (Myers and Gearin 2001, Downs 2005, Alexander and Tamalty 2002).

2.3.2. Entrenched Economic Interests and Perverse Price Signals

In addition to the cultural barriers to density, there are certain economic barriers that act against urban containment and smart growth. These barriers include entrenched

economic interests and perverse price signals that facilitate conventional suburban development, reinforcing the status quo and impeding smarter growth.

The economic interests of developers pose a major barrier to densification in that the real estate and development sectors have traditionally profited from green-field development. Developers who have expertise in conventional suburban development practices often oppose growth management, seeing it as a threat to their economic interests (Downs, 2005). In the fastest growing parts of North America, the market for dense urban forms remains elusive and consumer preferences favour single family detached homes on large lots (Storper and Manville 2006, Grant 2009). Grant argues that the market demands car-oriented, low density development and real estate developers, "[seeing] themselves as investors, trying to make a reasonable income" exude pressure on local councils to soften enforcement of sustainability legislation (2009, 18). She goes on to say that "consumer preferences loom large in the rationale that developers use for their decisions;" developers look to produce housing and neighbourhoods that appeal to consumers and which they know how to build efficiently in order to secure a profit. At the same time, the dominance of single family homes is promoted through marketing that reaffirms this form as the most desirable housing option and reinforces demand for low density housing. For these reasons developers maintain their focus on conventional suburban development and resist regulation that would produce denser urban forms.

Land owners in the urban fringe are often complicit in the process of sprawl, courting the economic boon from residential development on lands previously zoned for agriculture. Downs explains that the compact growth pattern dictated by smart growth limits the ability of farmers and other land owners in the urban fringe to benefit from the higher land prices they could obtain from sprawling residential development. He further explains that:

> Most people resist major changes in the established status quo, unless it is clear that those changes will produce very specific benefits for them. Most Americans are accustomed to sprawl and its consequences, but they are not at all sure what would happen to them under Smart Growth. Faced with such uncertainty, they are reluctant to support such a major change, especially if they are among those groups who would lose existing benefits from sprawl (2005, 369).

In addition to the economic interests of developers and land owners, perverse price signals work against densification. For example, the prevailing property tax system that is based on the value of land drives developers and home buyers to the outskirts of the urban environment where land values are discounted and the tax burden is lower, despite the higher cost of servicing these areas (Downs 2005, Blais 2010). Furthermore, when developers and local governments ignore the 'sunk costs' of extending service to fringe developments, historical expenditures can be interpreted as hidden subsidies and it has been argued that they contribute to the perverse price signals that incentivise sprawl (Blais 2010). In addition, price signals to consumers and developers are not indicative of the externalities associated with sprawl, representing a market failure (Wu 2006, Wheaton 1998). Even NIMBYism has been attributed to market failure where existing residents bear the costs associated with increased density and only see a small portion of the benefit, incentivising their resistance (Cinyabuguma and McConnell 2013). Further testimony to the existence of perverse price signals is offered by Downs when he contends that "in order to protect the values of their homes from possibly declining, most homeowners (especially in the suburbs) are reluctant to permit into their existing neighborhoods any entry of additional housing units that would sell for lower prices than their own homes" (2005, 369).

This body of literature is in direct opposition to the previous body of literature that identifies trends in housing preference and land economics that may be supportive of smart growth. Instead, this body of literature identifies the cultural barriers to building compact complete communities and the entrenched economic interests and perverse price signals that reinforce conventional suburban development and urban sprawl. The literature is divided on whether demographic change and the emerging urban ideal will prevail over resistance to density. Indeed, many of the scholars cited here are of two minds when it comes to residential preferences and the prospects for smart growth. Storper and Manville argue that "the presence of… resurgent cities does not, however, reverse the overwhelming growth of less dense urban areas in warmer climates, nor suggest that people have suddenly abandoned the suburbs for a renewed love affair with downtown life" (2006). Further research is required in order to understand these opposing processes, particularly in the urban-rural fringe.

2.4. Literature Review – Concluding Remarks

Together these three bodies of literature, *the case for urban containment*, *demographic change and an emerging urban ideal,* and *resistance to density*, situate my research question within a broader urban discourse. The first body of literature, the case for urban containment, explains the compelling reasons for pursuing dense, mixed-use communities and reveals how urban containment policy is meant to achieve the development pattern associated with smart growth. Importantly, it characterizes urban containment as a smart growth policy tool within North Cowichan's broader smart growth policy orientation. The second body of literature posits that the North American housing market is beginning to evolve alongside changing demographics that favour compact complete communities consistent with smart growth; shrinking household size, an aging population, and the resurgence of downtown living culminate in support of urban containment and smart growth. However, there is a tension between these trends and entrenched development patterns; the final body of literature describes the resistant forces that have made smart growth so elusive.

Where *the case for urban containment* establishes my normative stance, *demographic change and the emerging urban ideal* and *resistance to density* expose the tension that is the crux of my research question: how are these two opposing bodies of literature manifesting in North Cowichan and what are the prospects for urban containment and smart growth considering this tension? What are the trade-offs that housing consumers consider and how do they rank various residential characteristics (e.g. pedestrian infrastructure vs. ease of car use, and privacy and space vs. access to shops and services). The following section describes the methodology used to explore these questions.

Chapter 3. Methodology

In this section I discuss the methods used to answer my research question. I used a mixed methods approach that included a household survey conducted with residents of North Cowichan, semi-structured interviews with key informants, and analysis of the public record through official consultation notes and local media surrounding key land use decisions. Each of these methods addresses a different dimension of my research question and together they form a robust approach that sheds light on the complex issue of residential preference and urban containment in North Cowichan.

3.1. Survey

In order to address my research question directly, I conducted a survey on residential preference with residents of North Cowichan. This survey asked residents why they chose to live where they do, what they like about their home and neighbourhood, and how they would improve it if they could.

In order to avoid selection bias, 150 homes were selected at random from a list of all developed residential properties (parcels zoned for residential use with an established dwelling unit) in North Cowichan. Proportionate samples were selected both inside and outside of the growth centres. The survey was initially administered in person, door to door. When there was no answer at a given property, or the resident refused to respond to the survey, the adjacent property was approached.

Due to a low response rate using the initial method, approximately 50% of the surveys were administered in public spaces around North Cowichan, such as soccer fields, dog parks, and sidewalks. This method was targeted at neighbourhoods that had a low response rate using the door to door method. Not only did the public space method result in a higher response rate (nearly 100%), this method also had the

advantage of capturing a broader range of household types. Notably, parents, who were generally too busy to respond on the door step, were willing to participate while watching their children play at the park or on the sports field.

The survey was short, comprised of 11 questions that asked residents about their reasons and motivations for living in their neighbourhood and the characteristics they like about their home. They were also asked about improvements they would make to their living environment and their general preference for rural versus urban environments. Participants were asked to rank characteristics like privacy, proximity to shops and services, and access to open space in order of importance. The responses reveal the housing and neighbourhood priorities of North Cowichan residents (see attached draft survey in Appendix C). The structure of the survey and the multiple choice response options draw on surveys that were previously developed and administered in the field of residential preference. These include the Urban Futures Survey (2012) and the Kinder Institutes Houston Area Survey (2013). Consequently data collected from this study can be compared to data collected in other jurisdictions. The survey also draws on the smart growth literature to shape the line of questioning and the exact neighbourhood and housing form characteristics that were evaluated. This enables the evaluation of residential preference in North Cowichan against an established understanding of smart growth urban form as described above (see 2.1.2 above).

In addition to neighbourhood design and housing form preference, this research is concerned with demographic change and the influence this could have on the demand for certain housing and neighbourhood forms. Accordingly, demographic information was collected as part of the survey in order to facilitate analysis of the residential preferences among different household types, such as young families, retirees, and working adults without children. These household types were constructed after the data was collected as part of the analysis. In addition, the survey differentiated between residents living within North Cowichan's growth centres, and those living in the rural areas, in order to compare the preferences of these two distinct groups.

In total, 100 households were surveyed, 32 in the rural areas of North Cowichan and 68 within the OCP designated growth centres. These proportions are roughly representative of the actual proportions in the community which are 29% rural and 61%

urban. Eighty-two percent of survey respondents lived in single family detached homes. This figure represents a higher proportion than actually exists in the community, which is only 67% according to Statistics Canada. Apartments and semi-detached homes (townhomes and duplexes) were correspondingly underrepresented in the sample frame; whereas 11% of the sampled respondents lived in semidetached homes, 18% of the community actually lives in this form of housing. Likewise, the sample frame only included 7% apartment dwellers, whereas 12% of the community actually lives in apartments (Statistics Canada 2015). The skewed sample was the result of lower response rates from residents of semi-detached and apartment style housing. Where possible I have adjusted my results to represent percentages of respondents by housing form to mitigate distortions, however data provided on North Cowichan residents as a whole must be understood to include this limitation. Furthermore, results specific to apartments and semi-detached homes reflect a small effective sample.

3.2. Semi-structured Interviews with Key Informants

In a similar study related to housing preference, Grant and Scott (2012) identify planners and developers as “housing producers,” focussing on their role in shaping the legal framework that produces homes and neighbourhoods (in the case of planners) and in marketing properties and shaping housing expectations (in the case of developers). Additionally, in Grant’s 2009 study of development practices in suburban Vancouver, Calgary, and Toronto, her team of researchers investigated perceptions of residential preference among planners and developers. Their responses provided rich insight into the perceived housing and neighbourhood preferences of residents of three Canadian suburbs. Taking cue from Grant and Scott, this research uses semi-structured interviews with housing producers and marketers; however, in addition to planners and developers, realtors are included among the key informants for this study given their direct involvement in housing choice and real estate marketing. The semi-structured interviews with professionals in the realm of community design and real-estate marketing provide insight into how interviewees characterise housing demand in North Cowichan and the ways in which they shape what is bought and sold; their perspectives enrich my analysis of housing preference in North Cowichan and the prospects for UCB enforcement.

Eight semi-structured interviews in North Cowichan were conducted with a purposive sample of key informants. I interviewed two local developers, four realtors, and two city staff in the Municipality of North Cowichan's Planning and Sustainability Department. These interviews sought to uncover how housing producers perceived housing preferences of North Cowichan residents as they relate to housing form and neighbourhood design. The interview script is included as an appendix (see Appendix B). The interviews were used to corroborate results from the survey and to develop a narrative around some of the trends I observed in the survey data.

Planners at the Municipality were contacted through personal connections in North Cowichan. Developers and realtors were identified through these connections at the Municipality initially as well as from my own knowledge of the development industry in the Cowichan Valley. When participants were identified by municipal staff, I contacted them directly, so as to avoid the misunderstanding that this study was a Municipality-led initiative. A snowballing technique was also used to identify further participants. Participation in the interviews was voluntary and anonymity was not guaranteed.

3.3. Analysis of the Public Record

North Cowichan's urban containment policy is contained within the 2011 OCP. This document establishes the three growth centres (Chemainus, Crofton, and the South End) and the UCB that encircles each of these communities. In developing the OCP, the Municipality consulted the public on issues of built form and neighbourhood design. Urban containment and smart growth were also discussed during this consultation process, resulting in a smart growth policy orientation in the OCP that includes mixed-use development, housing diversity, density, and accessibility by alternative transportation modes. In addition to a review of the formal consultation notes, local media was analysed. Labour negotiations precluded access to the Cowichan Valley News Leader Pictorial (the preeminent newspaper for North Cowichan news), however archived articles from the Cowichan Valley Citizen were available. I looked at newspaper articles related to the OCP, urban containment, neighbourhood design, and housing form from January 2007 to April 2015, in order to analyse the public discourse related to these topics leading up to and after adoption of the 2011 OCP.

In addition to analysing the public discourse that preceded the 2011 OCP, I also investigated the discourse that has surrounded key land-use decisions in the municipality since adoption of the OCP and the reaffirmation of urban containment as policy. Since 2011, there have been two mixed-use, multi-unit residential buildings constructed within North Cowichan's growth centres. In addition, a decision was made to develop forested land within the UCB for residential purposes. While the mixed-use developments sparked limited debate, the greenfield residential development decision was very controversial among residents. A great deal of public debate took place both in council chambers and in the news-media.

Content analysis of the public discourse related to urban containment, neighbourhood design, and housing form leading up to adoption of the OCP sheds light on the housing and neighbourhood preferences that were expressed during creation of the policy and since its implementation. Similarly, analysis of the media surrounding key land-use decisions exposes the values, ideas, and opinions that residents articulate as they relate to land-use, density, and urban form post-adoption of the OCP and the urban containment policy. These observations support and reinforce my analysis of the data collected through the residential survey and key informant interviews.

3.4. Overall Research Design

The three research methods (surveys, semi-structured interviews, and public record analysis) were selected because the quantitative and qualitative data they produced was richer and more nuanced than the data any one of these methods would have produced individually. Analysis of the public record highlights the values espoused by residents of North Cowichan related to sprawl, density, and neighbourhood design before the OCP was adopted and since. The ideas, values, and convictions that citizens espouse as part of public processes can be quite different from how they act and the opinions they express when faced with neighbourhood change and housing selection. This relationship was documented through analysis of the public record surrounding major developments since adoption of the 2011 OCP and data collected through the residential survey. In addition, the key informant interviews provide qualitative data on how the market for compact, complete communities is perceived by housing producers

and marketers, shedding light on market trends and the prospects for smart growth and enforcement of the UCB. Moreover, the survey provides quantitative data on the actual preferences of North Cowichan residents as they relate to the smart growth urban form. This data is useful on its own in answering the research question, but it is also significant in comparison to the data collected through the key informant interviews. Where the survey data corroborates and contradicts the perspectives of the key informants reveals information that is relevant to the implications of this study.

Chapter 4. Study Results

4.1. Survey Results

Results from the survey conducted with residents of North Cowichan indicate that a gap exists between residential preferences and the principles of smart growth. Residents generally prefer to live in single family detached homes where they enjoy privacy, separation from neighbours, and the sense of independence that comes from owning their own plot of land and not participating in a strata council. That said, there does appear to be a subset of residents that are interested in living in compact, complete communities. This is particularly true among retirees. Results from the survey also uncover the reasons why people prefer certain living environments and housing forms, providing an indication of the cultural values that inform neighbourhood and housing selection and pointing to the design characteristics that should be integrated into smart growth developments in order to capture a broader section of the market and encourage market transformation. The following sections summarize these survey results.

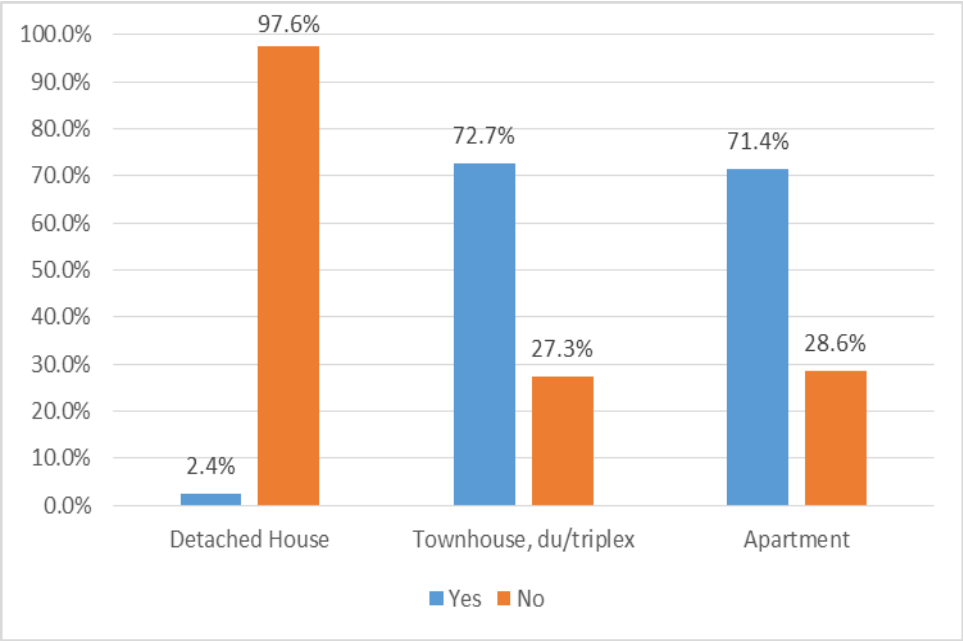
4.1.1. Survey Results: Housing Form

Results from the residential survey indicate a strong preference among residents of North Cowichan for single family detached homes across all demographics. They also indicate the value placed on privacy and separation from neighbours, as well as having a private outdoor area for personal use. Furthermore, residents identified “independence” as an important characteristic of housing, citing an aversion to membership in a strata council.

Figure 6. Preference for a Different Form of Housing (by housing type) shows survey responses to the question “would you prefer to live in a different form of housing?” The results show that an overwhelming majority of residents living in detached homes would not prefer living in a different form of housing (98%). In other words, the

majority of residents living in detached homes are satisfied with their housing form and would not prefer to live in an apartment or semi-detached home (townhome, duplex or triplex). Conversely, only 2.4% of residents living in detached houses would prefer one of these other housing forms. Furthermore, 73% of residents living in townhomes, duplexes, or triplexes would prefer a different form of housing. That number is 71% among apartment dwellers. The percentages of respondents living in semi-detached homes and apartments who are satisfied with their housing choice and would not prefer a different form of housing are 27% and 29% respectively.

Figure 6. Preference for a Different Form of Housing (by housing type)



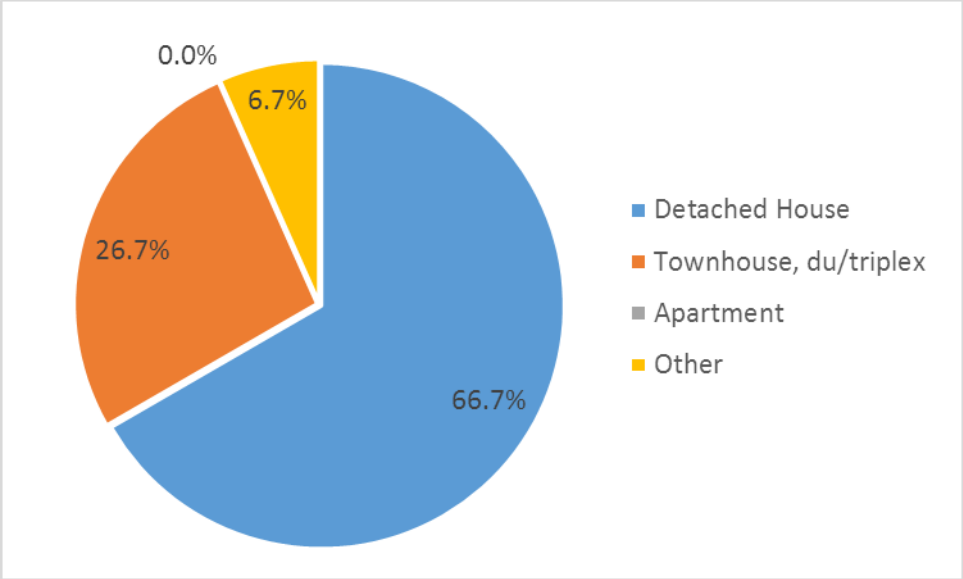
N=100

Among those residents who said they would prefer a different form of housing, 67% said they would prefer to live in a single family home. Only 26% said they would prefer a semi-detached home and 0% of respondents indicated a preference for an apartment. One respondent (6.7%) indicated a preference for a tiny home.[7] Notably, four respondents who indicated a preference for a semi-detached home, three were living in apartments at the time of the survey. Consequently, their preference represents an

[7] Although this would also constitute a detached home, it represents a slightly different orientation toward housing than a conventional detached home.

orientation toward a larger and less dense housing form. Only one respondent (1% of the total population surveyed) indicated a desire to "downsize" from a detached home to a semi-detached dwelling. These results are summarized in **Figure 7. Preferred Form of Housing among Residents Who Were Dissatisfied with their Current Housing Form** below.

Figure 7. Preferred Form of Housing among Residents Who Were Dissatisfied with their Current Housing Form



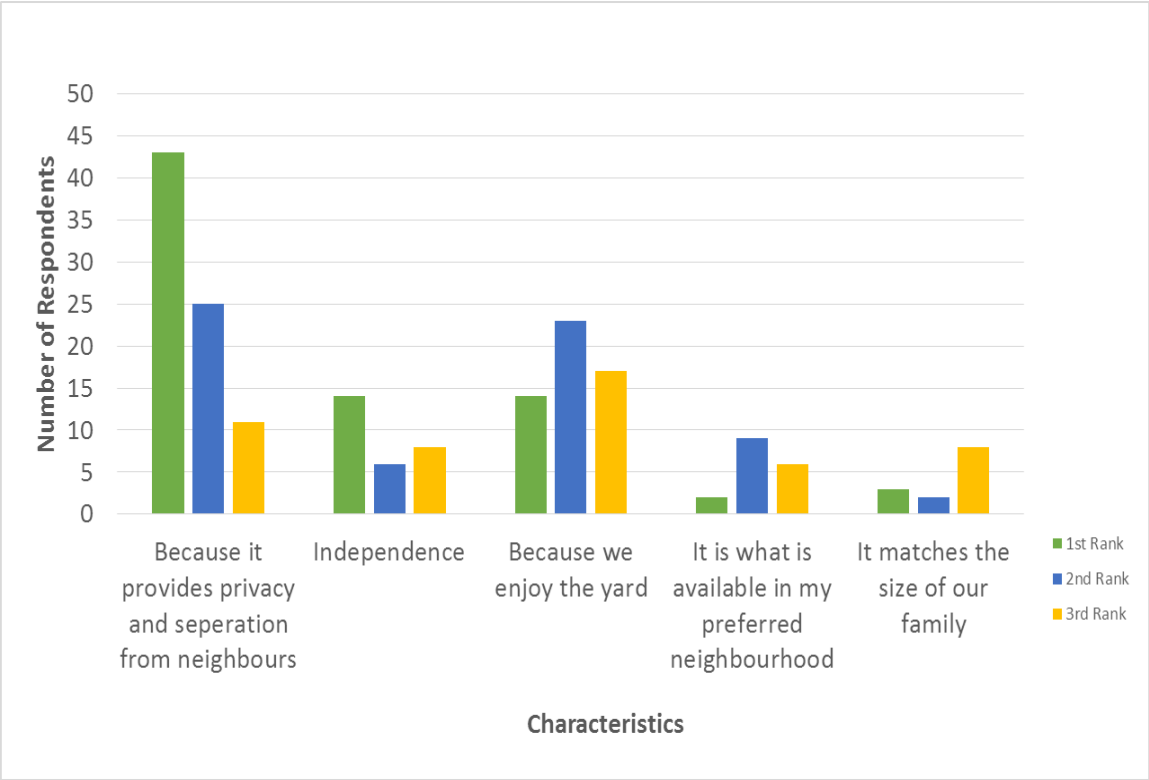
N=15

Question 4.3 asked participants to rank their top three reasons for favouring their preferred housing form. 100% of respondents provided their highest ranked characteristic, while 65% and 50% provided their 2nd and 3rd ranked characteristics respectively. The survey provided nine potential answers in addition to the option to respond "other" and provide a self-determined response. Thus, characteristics ranking within a respondent's top three characteristics were all relatively important to that respondent. It should be noted that given that the vast majority of respondents (90%) preferred a detached home, the results of this question generally indicate why residents of North Cowichan, on the whole, prefer this form of housing.

Figure 8 Ranked Reasons for Housing Form Preference below summarizes the five most important housing form characteristics among residents of North Cowichan according to the responses provided to question 4.3. Forty-three per

cent of respondents ranked “because it provides privacy and separation from neighbours” as the most important reason they favour their preferred housing form. “Independence” was the most important characteristic for 14% of respondents and an equal percentage ranked “because we enjoy the yard” as their most important preferred housing form characteristic. While “because it was available in my preferred neighbourhood” and “because it matches the size of our family” received low 1st rank numbers, they are included in this summary table because they received relatively high 2nd and 3rd rankings.

Figure 8 Ranked Reasons for Housing Form Preference

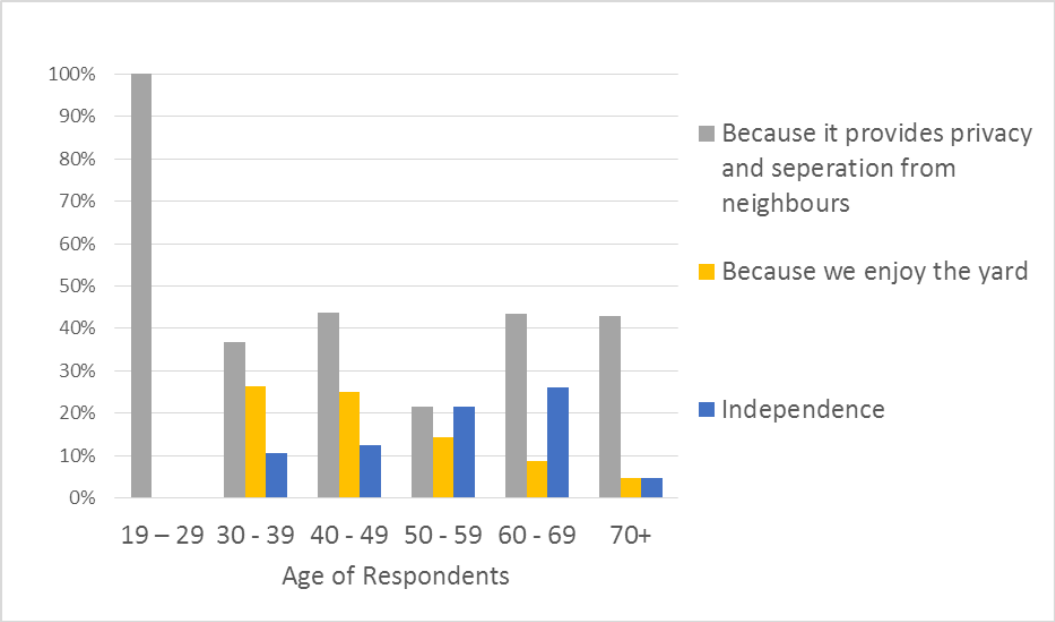


1st Rank N=100, 2nd Rank N=96, 3rd Rank N=73

The following chart (**Figure 9. Relative Importance of Housing Form Characteristics across Age Groups**) depicts the relative importance of three housing form characteristics, cross tabulated with the age of the respondent. It shows the percentage of respondents in each age cohort who chose either “because we enjoy the yard,” “independence,” or “because it provides privacy and separation from neighbours” as their number one reason for favouring their preferred housing form.

The relative importance that respondents placed on having a yard declined with age. The importance of having a yard peaks among respondents in their 30s with 26% of that cohort selecting it as their first ranked characteristic. The importance of having a yard tapers to less than 5% of respondents in the over 70 cohort. While 100% of respondents in their 20's identified privacy and separation from neighbours as their number one reason for favouring their preferred form of housing, that number sinks to 37% for people in their thirties and maintains a range between 21% and 44% across the rest of the age cohorts. The desire for independence trends upwards across the age demographics, before tapering off among respondents over 70. Respondents in their sixties are the most likely to rank independence as their most important reason for favouring their preferred housing form (26% of respondents).

Figure 9. Relative Importance of Housing Form Characteristics across Age Groups



N=100

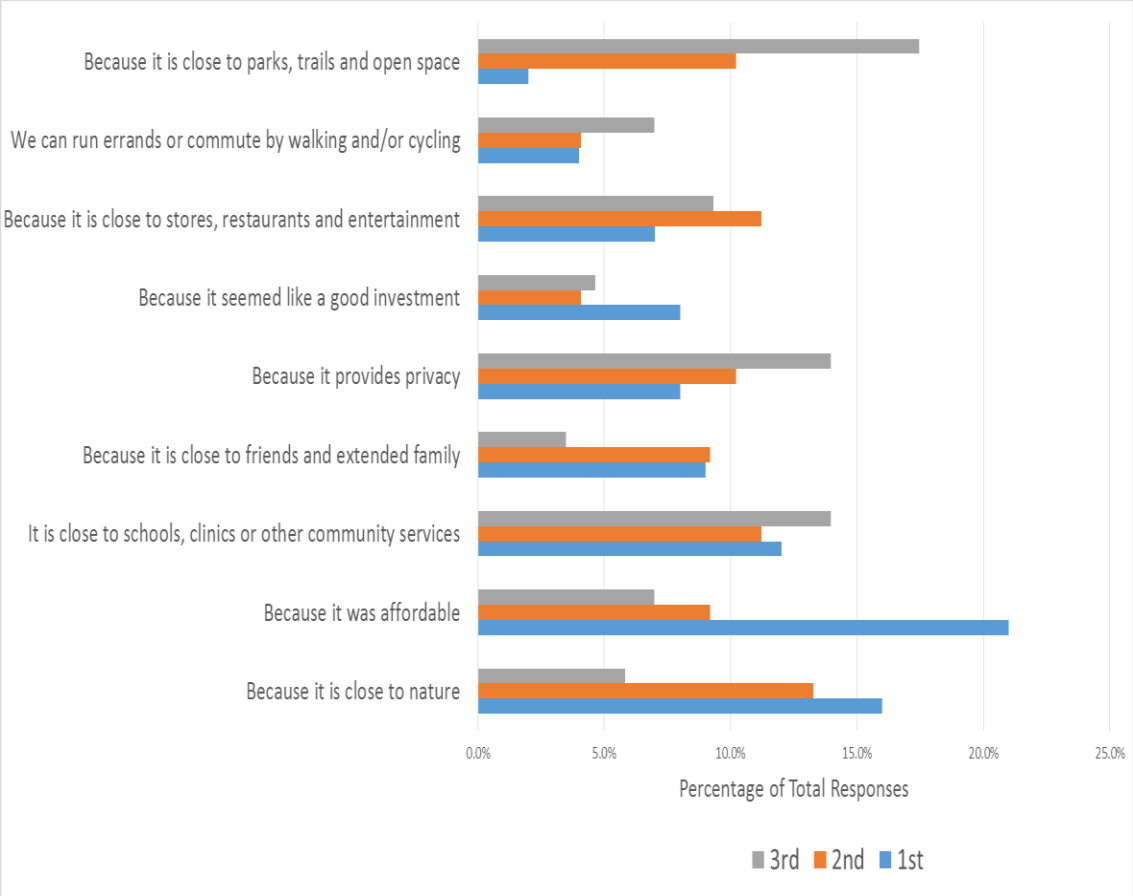
4.1.2. Survey Results: Neighbourhood Design

Results of the residential survey indicate the overarching importance of privacy to residents of North Cowichan. Proximity to nature also ranks highly among residents, in addition to proximity to parks, trails, and open space, and proximity to community services. Results in this section also indicate a general aversion to urban living and a

preference for conventional sub-division and rural environments, although amenability to urban living improves among older respondents and there is a portion of the population in all age cohorts that states a preference for a smaller home in an urban environment.

Figure 10. Ranked Reasons for Neighbourhood Choice displays the ranked reasons all respondents chose to live in their current neighbourhood at the time of questioning. Affordability was the most important reason for 21% of the respondents. “Because it is close to nature” was the most important reason for living in their neighbourhood for 16% of respondents and 12% chose “because it is close to schools, clinics or other community services” as their top reason. Responses to this question highlight the overarching importance of privacy to residents, with 8% of respondents identifying it as their number one reason for choosing their neighbourhood and 10% and 14% of respondents citing privacy as the their 2nd and 3rd reasons for choosing their neighbourhood. Proximity to parks, trails, and open space was also relatively important to residents, with 17% of respondents indicating that this was their third ranked neighbourhood characteristic, the highest third ranking of all of the responses.

Figure 10. Ranked Reasons for Neighbourhood Choice

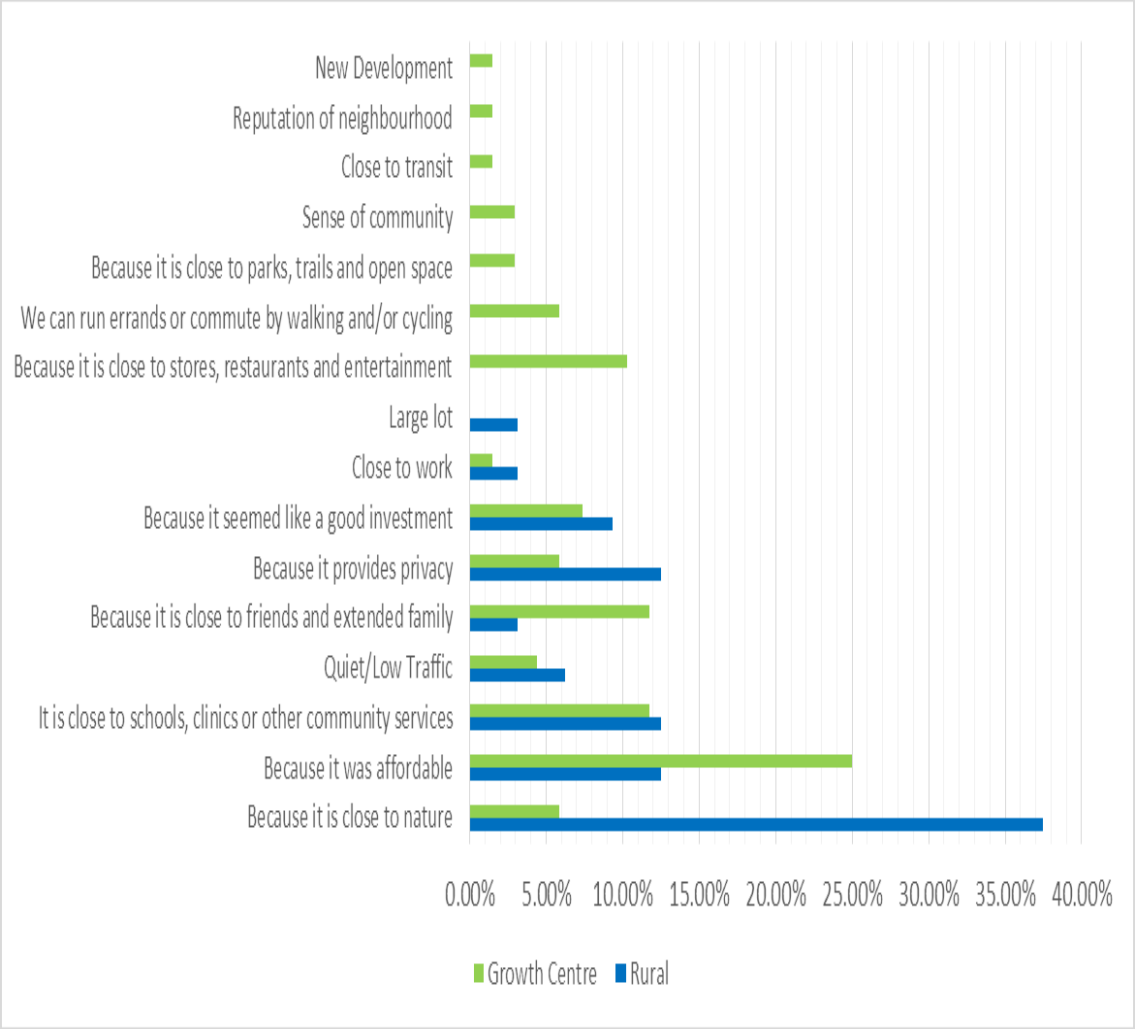


1st Rank N=100, 2nd Rank N=98, 3rd Rank N=86

Filtering these results based on rural and growth centre residents provides further insight into the motivations behind neighbourhood choice. For 38% of rural respondents, being close to nature was the most important reason motivating their locational choice, compared to 6% of growth centre respondents. Affordability attracted the highest percentage of growth centre respondents, with 25% citing this as the number one reason for choosing to live in their neighbourhood, whereas only 13% said that affordability motivated their choice to live rurally. This reflects real estate prices in North Cowichan that tend to be more expensive in rural areas where views, recreational opportunities, and large properties tend to drive up price. Interestingly, a roughly equal percentage of rural and growth centre respondents selected being close to schools, clinics and other community services as their first ranked reason for living where they do. No rural respondents (0%) selected being close to stores, restaurants, and entertainment, potentially highlighting the consumption patterns that inform residential

choice. Respondents who lived in the rural areas of North Cowichan were roughly twice as likely as growth centre residents to say that they chose to live where they do because it provides privacy. Complete results of this analysis follow in **Figure 11. First Ranked Reasons for Neighbourhood Choice: Rural vs. Growth Centre Residents.**

Figure 11. First Ranked Reasons for Neighbourhood Choice: Rural vs. Growth Centre Residents

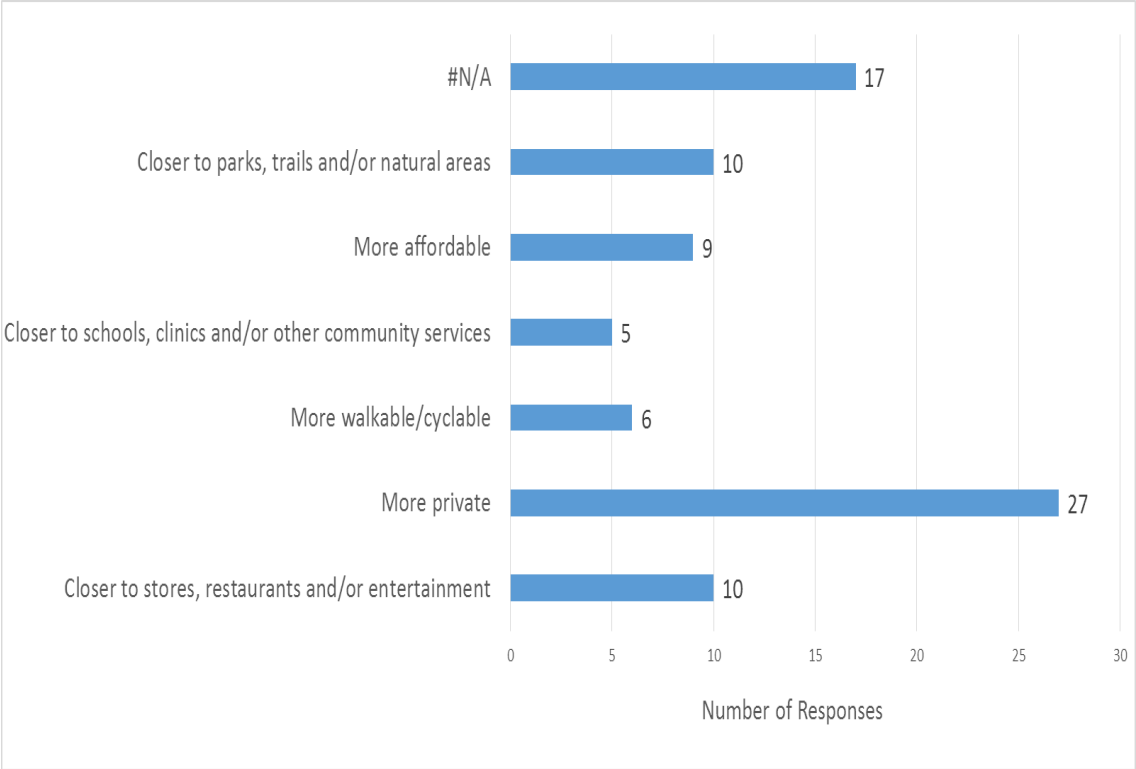


N=100 (Growth Centre N=68, Rural N=32)

Question 6.0 asked residents to imagine moving to a different neighbourhood and to rank their three most desired characteristics in a new neighbourhood. As with previous questions, respondents were provided with nine potential characteristics in addition to the option to provide a unique response. Again, the importance of privacy surfaced as the predominant characteristic desired by residents; increased privacy was

the first ranked preference among 27% of respondents. Interestingly, 17% of respondents answered that they were completely satisfied with their neighbourhood and did not see any way to improve their living situation (represented below by N/A). The desire to be closer to urban amenities was identified as a first ranked priority by 15% of respondents (10% wanted to be closer to stores, restaurants, and/or entertainment and 5% wanted to be closer to schools, clinics, and community services). For 10% of respondents the desire to be closer to parks, trails, and/or natural areas was their first ranked characteristic. Only 6% identified improved walkability as a desirable attribute. **Figure 12. Preferred Characteristics in a New Neighbourhood** summarizes these results.

Figure 12. Preferred Characteristics in a New Neighbourhood

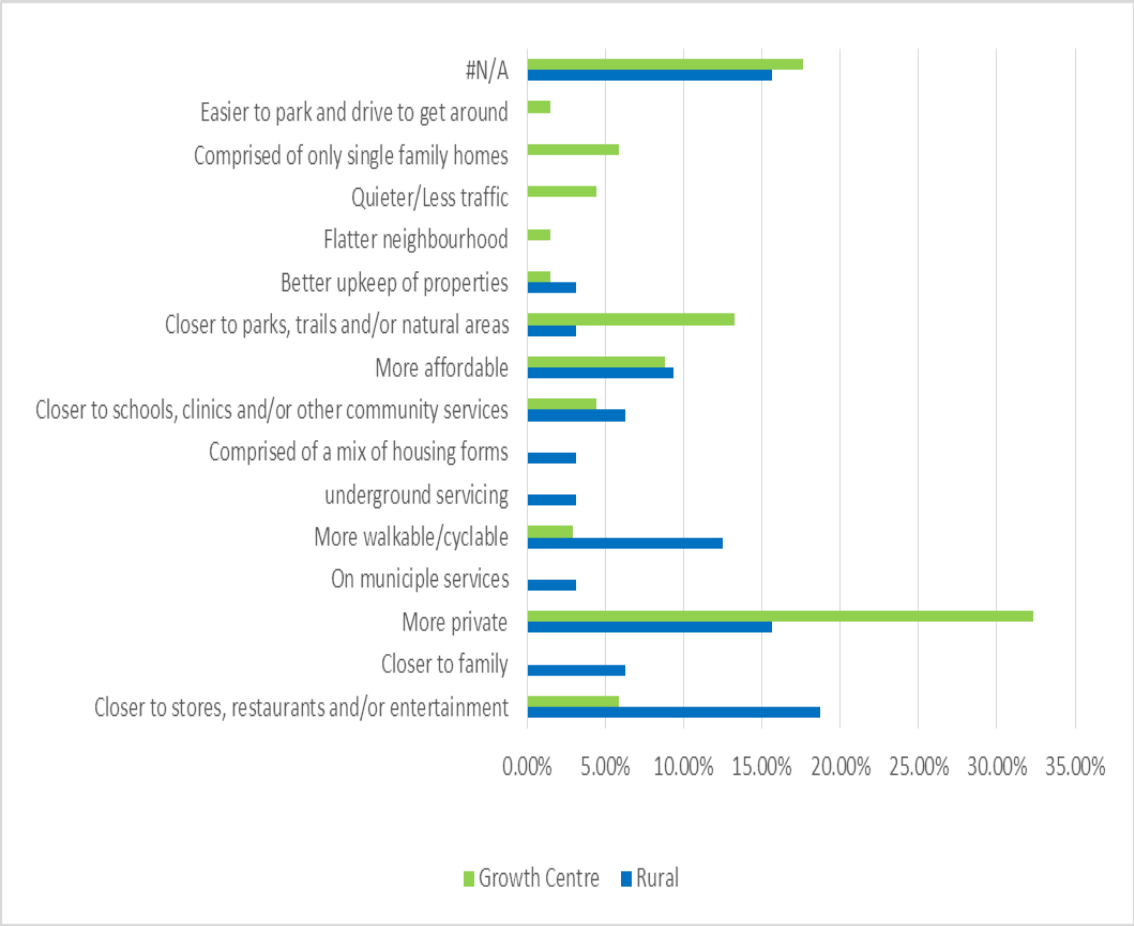


N=100

Looking at responses to this question from rural residents compared to growth centre residents provides additional insight and underscores the importance of privacy in locational choice. Residents living in one of the three growth centres ranked privacy as the number one characteristic they would look for in a new neighbour twice as often as

rural residents and nearly twice as often as any other characteristic. They were also far more likely than their rural counterparts to say that they would want to be closer to parks, trails, and/or natural areas, pointing to a characteristic that is lacking in North Cowichan's growth centres. As might be expected, rural respondents were more likely than growth centre residents to prioritize proximity to urban amenities (community services and private businesses) and walkability/cyclability. Rural and growth centre residents reported complete satisfaction with their locational choice at roughly equal rates, at 16% and 18% respectively.

Figure 13. First Ranked Characteristics in New Neighbourhood: Rural vs. Growth Centre



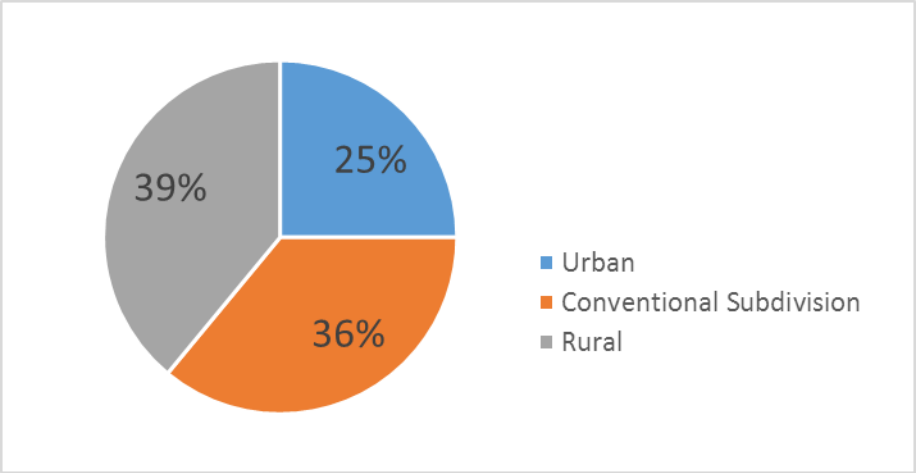
N=100 (Growth Centre N=68, Rural N=32)

Question 7.0 asked respondents to rank three living situations according to their preference. These three living situations represent a rural environment, a conventional subdivision, and an urban environment. They were described as follows:

1. A rural property with lots of privacy, where you would drive 20 minutes or more to access shops and services.
2. A single-family home with a big yard in a neighbourhood with other single family homes, where you would drive almost everywhere.
3. A smaller home in a more urbanized area, within walking distance of shops and workplaces.

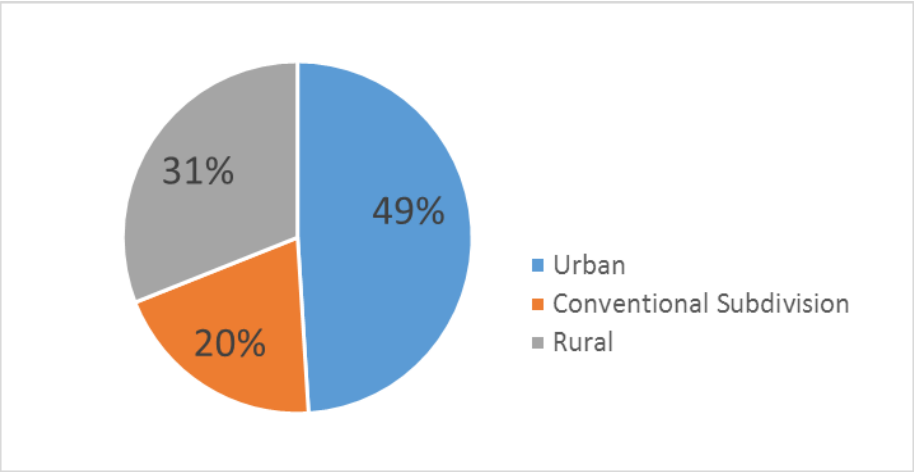
Of the total sample, 39% stated a preference for living in the rural environment and 36% preferred a conventional subdivision. Only 25% preferred a smaller home in an urban environment. With regards to least preferred living situations, 49% of respondents indicated that they would chose to live in an urban environment last among the three options. Living rurally was ranked last by 31% of respondents and a conventional subdivision was ranked last by 20%. These numbers indicate a general preference for less dense living environments (rural and subdivision) among North Cowichan residents as a whole, although results indicate a subgroup that is amenable to denser forms of housing, if it is designed to meet their other preferences. **Figures 14** and **15** depict these results.

Figure 14. Preferred Living Environment among All Residents



N=100

Figure 15. Least Preferred Living Environment among All Residents

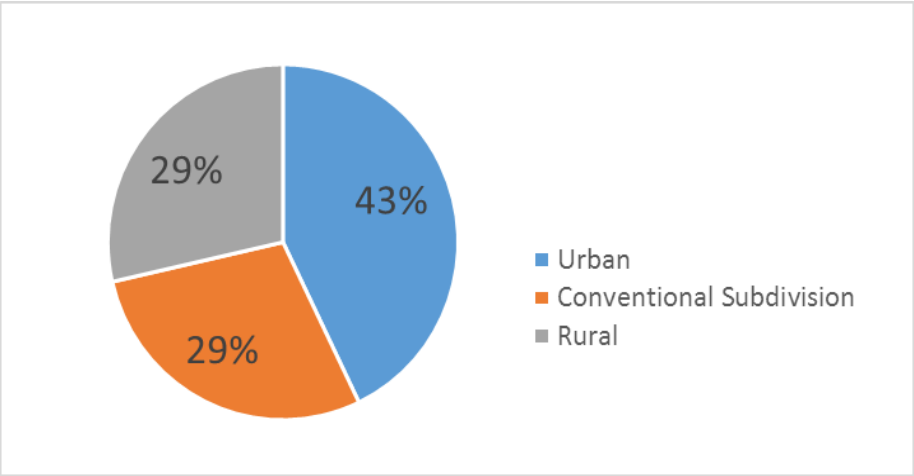


N=100

Figures 16 through **21** below show how different demographic groups ranked these urban, rural, and conventional subdivision living environments. Information is provided for retirees (households comprised only of adults who are not working) young families (households with children under 18), and adults without children (households comprised of people over 18 only where one or more of the household members is working).

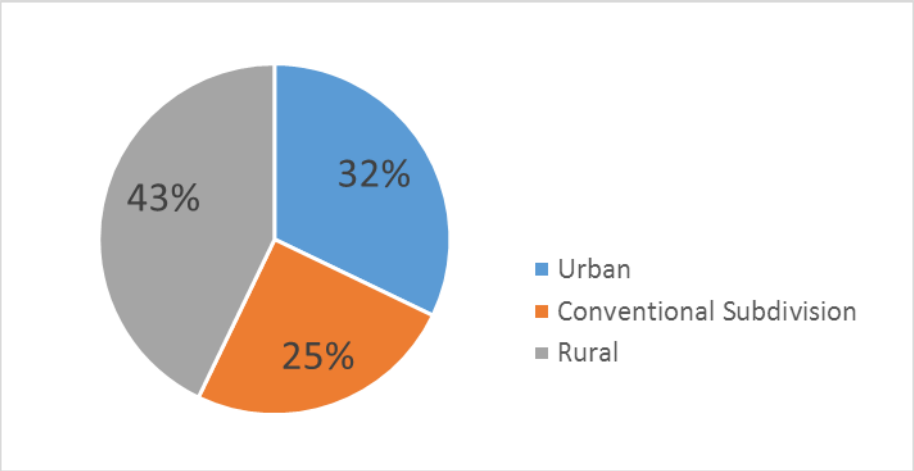
Retirees demonstrated the strongest preference of any household type for urban living. Forty-three per cent of respondents selected a smaller home in an urban environment as their preferred living situation. Rural living was the least popular living situation within this demographic group.

Figure 16. Preferred Living Environment among Retirees



N=28

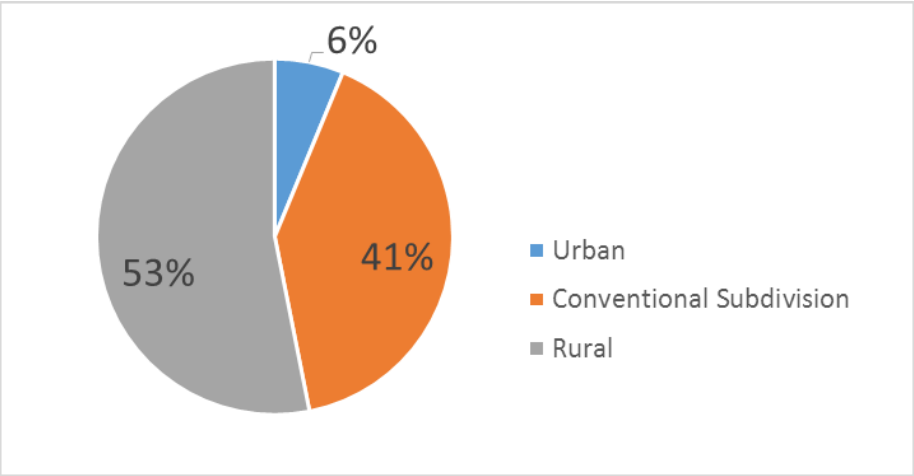
Figure 17. Least Preferred Living Environment among Retirees



N=28

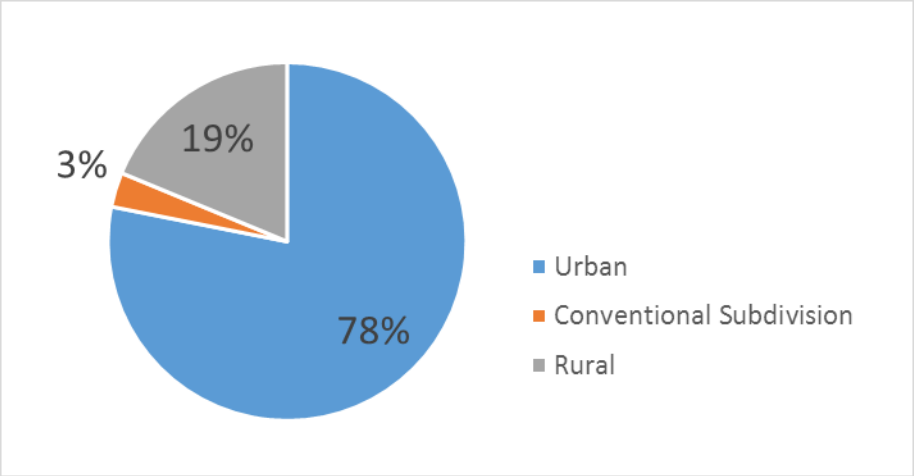
Young families overwhelmingly preferred rural (53%) and conventional subdivision environments (43%) with only 6% of respondents indicating that they would prefer a smaller, urban home (**Figure 18. Preferred Living Environment among Young Families**). Seventy-eight per cent ranked urban living as their least preferred living situation and 19% listed rural living last. Only 3% (1 respondent) indicated that their least preferred living situation was a conventional subdivision (**Figure 19. Least Preferred Living Environment among Young Families**).

Figure 18. Preferred Living Environment among Young Families



N=32

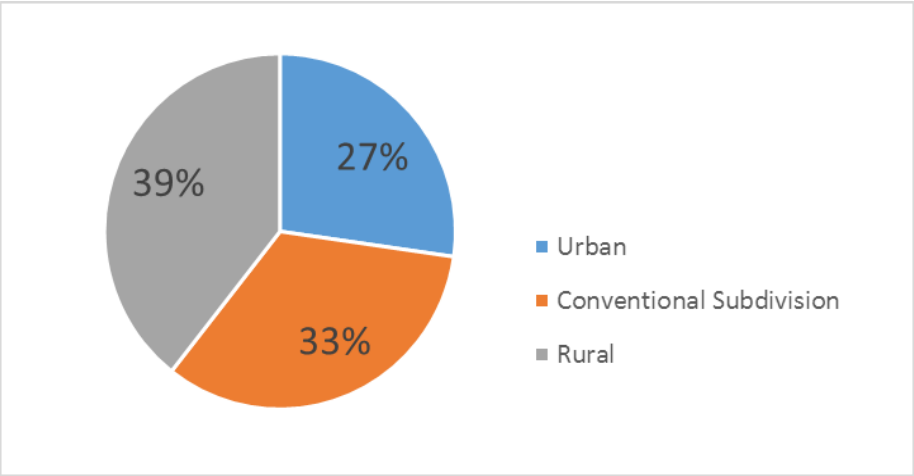
Figure 19. Least Preferred Living Environment among Young Families



N=32

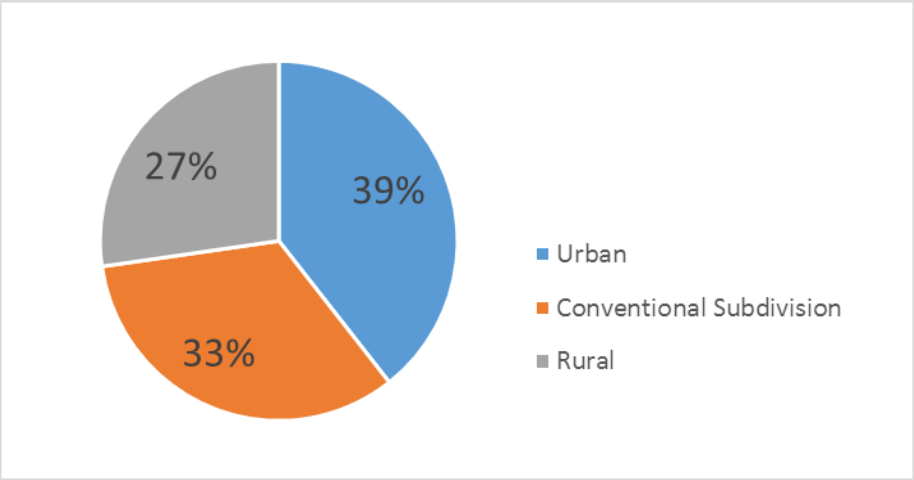
Among working adults without children there is a slight preference indicated for rural living over urban living but it is less pronounced than it is among young families. Within this cohort, 39% said they preferred a rural setting while 27% said that they preferred an urban environment (**Figure 20. Preferred Living Environment among Working Adults**). In terms of the living situation that these respondents least preferred, 39% said that an urban environment was their last choice and 27% said that a rural environment was their last choice (**Figure 21. Least Preferred Living Environment among Working Adults**).

Figure 20. Preferred Living Environment among Working Adults



N=33

Figure 21. Least Preferred Living Environment among Working Adults



N=33

In order to better understand what draws people towards particular living environments, I looked at respondents' first ranked living situation, according to question 7.0, and grouped respondents according to whether they prefer rural, conventional subdivision or urban environments. This data was then cross tabulated with first ranked

preferences from question 6.0: “if you could live in a different neighbourhood, that neighbourhood would be… (rank the most important characteristics from 1 to 3).”[8]

The data that emerges from this analysis uncovers the characteristics that draw residents toward their preferred living environment, an indication of the cultural values that inform these hypothetical decisions. For example, 44% of respondents who said they would prefer to live on a “large property with lots of privacy” (the rural category) also ranked privacy as their number one characteristic that they would look for in a new neighbourhood. Privacy was also an important characteristic for respondents who said they prefer living in a conventional subdivision, however these respondents were only half as likely to rank privacy as the number one characteristic they would look for in a new neighbourhood. Being *closer to parks, trails, and natural areas* was a nearly equal consideration. Furthermore, *being close to stores, restaurants, and entertainment* was an important neighbourhood attribute for people who indicated a preference for conventional subdivisions. For the urbanites in this study, being *closer to schools, clinics, and other community services*, and being *closer to parks, trails, and open* space were of primary concern. **Table 1. Desired Neighbourhood Characteristics by Preferred Living Environment** summarizes these relationships**.**

[8] Cross tabulation of these two questions is appropriate because they are both hypothetical in nature. Cross tabulation of preferred living environment with data from questions on current living situation does not provide the same insights.

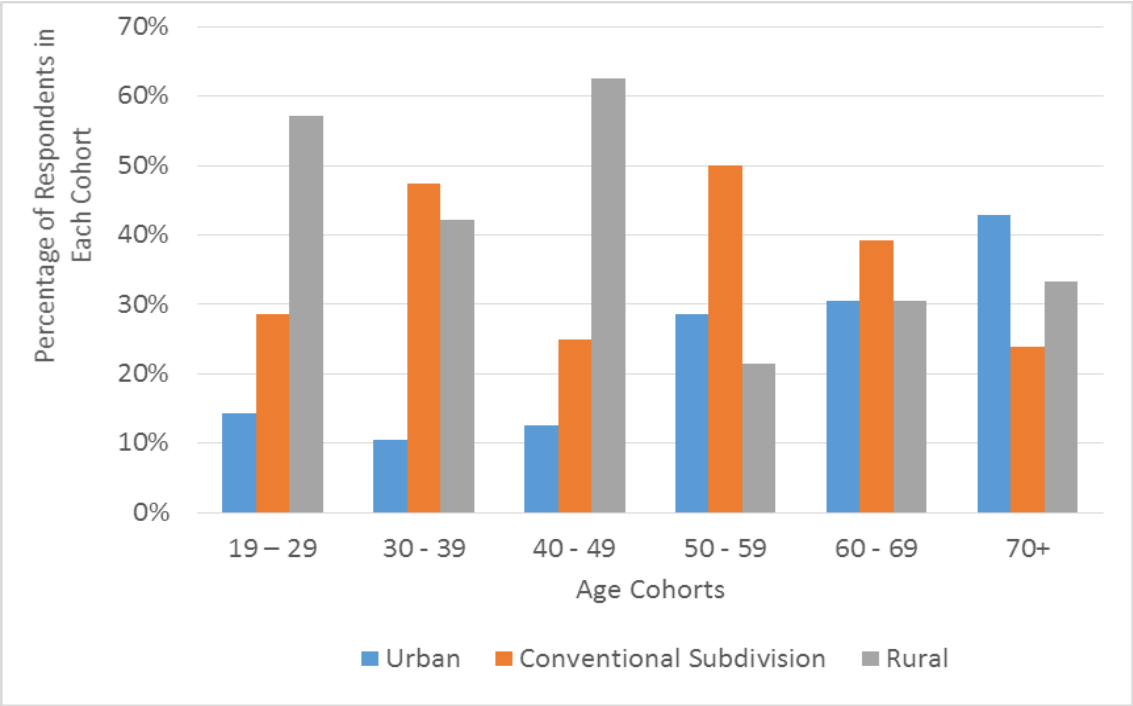
Table 1. Desired Neighbourhood Characteristics by Preferred Living Environment

Desired Characteristics in New Neighbourhood	Rural		Conventional Subdivision		Urban		All Responses	
	Count	%	Count	%	Count	%	Count	%
More private	17	44%	8	22%	2	8%	27	27%
Closer to stores, restaurants or entertainment	2	5%	4	11%	4	16%	10	10%
Closer to parks, trails, and/or natural areas	2	5%	7	19%	1	4%	10	10%
More affordable	4	10%	3	8%	2	8%	9	9%
Closer to schools, clinics, or other community services	0	0%	1	3%	4	16%	5	5%
More walkable/cyclable	3	8%	2	6%	1	4%	6	6%
Comprised of only single family homes	0	0%	3	8%	1	4%	4	4%
Quieter/Less traffic	0	0%	2	6%	1	4%	3	3%
Better upkeep of properties	2	5%	0	0%	0	0%	2	2%
Closer to family	2	5%	0	0%	0	0%	2	2%
Easier to park and drive to get around	1	3%	0	0%	0	0%	1	1%
Flatter neighbourhood	0	0%	0	0%	1	4%	1	1%
Comprised of a mix of housing forms	0	0%	1	3%	0	0%	1	1%
On municipal services	0	0%	0	0%	1	4%	1	1%
Underground servicing	0	0%	1	3%	0	0%	1	1%
#N/A	6	15%	4	11%	7	28%	17	17%
Grand Total	39	100%	36	100%	25	100%	100	100%

N=100

Figure 22. Preferred Living Environment by Age Cohort below depicts the transition in living environment preference across age cohorts. The popularity of urban living correlates with age, becoming more prevalent as respondents get older (blue dataset). Respondents under 50 were least likely to indicate a preference for living in a smaller home within walking distance of shops and services. Whereas respondents over 70 were the most likely to prefer this option. Similarly, rural living is most popular among respondents under 50 and least popular among respondents over 50.

Figure 22. Preferred Living Environment by Age Cohort



N=100

4.1.3. Summary of Survey Results

The results from the residential survey are the backbone of this project. They indicate the cultural values that inform residential choice in North Cowichan and highlight the characteristics that ought to be integrated into the implementation of smart growth for it to find broad market appeal in the community. While the overarching orientation towards less-dense forms of residential development pose a challenge for urban containment, the data shows that sub-sections of the population are looking for denser forms of housing with better access to shops and service compared to what has conventionally been made available in North Cowichan. Moreover, if smart growth development can respond to the importance of privacy and independence indicated by these results, it is more likely to satisfy the stated preference of residents and potential entice them into denser residential forms. This position is supported by analysis of the key informant interviews that follows in section 4.2.

4.2. Key Informant Interviews

Semi-structured interviews were conducted with key informants involved in producing and marketing housing in North Cowichan. The realtors, developers, and municipal staff echoed some of the same trends that were observed in the survey results, In particular, key informants confirmed the dominance of detached homes as the preferred housing form among residents. They also confirmed the relative importance of privacy and separation from neighbours as well as access to parks, trails, and open space, and proximity to nature compared to other neighbourhood design characteristics. Finally, interview results were also consistent with survey results in so far as the key informants observed a distinct difference in the residential preferences of seniors, compared to the general population in North Cowichan.

4.2.1. Interview Analysis: Housing Form

Interviews with key informants for this study confirm survey results that indicate the single family home is the most widely desired form of housing in North Cowichan. Interviewees cited a number of systemic factors that contribute to the preeminence of single family homes, including land economics and a policy environment that until recently precluded fee simple row housing.[9] Layered on top of these systemic obstacles, key informants cited cultural barriers to broader uptake of denser forms of housing; interviewees confirmed that privacy and separation from neighbours, as well as a resistance to living in a strata, were important factors in housing choice and both contribute to the dominance of single family homes among consumers.

In the opinion of a prominent developer in the Chemainus growth centre, fee simple, single family homes in the 1400 to 1600 square foot range, on a 5,500 to 7,000 square foot lot are the most popular style of home. An independent realtor validated this, saying that buyers are looking for single family ranchers in the 1500 to 1800 square foot range on relatively small lots. He also noted residential biases against strata councils,

[9] In 2012 the Land Title Act was updated to allow party walls between units in a row home developments, enabling non-strata or fee simple row houses.

highlighting cultural difference between the baby-boom generation and the war era generation that preceded them:

> "People in their seventies come from a war era and are therefore more comfortable with rules. They are now going into retirement homes from strata properties where they were comfortable with some regulation. Baby boomers despise control and regulation. They're ex-hippies."

While interviewees stressed that most residents of North Cowichan and newcomers to the valley are looking for single family detached homes, they observed a gradual shift towards housing forms that are more consistent with smart growth. According to the key informants, this shift is the result of the rising cost of housing, which is pushing new home buyers into semi-detached forms or single family homes with a rental suite. Key informants also observed a trend among aging residents who are downsizing into semi-detached and apartment style developments. These observations are consistent with survey results, particularly as they relate to housing preference among seniors. According to the planners that were interviewed, during public consolation processes older residents indicated a desire for smaller homes that require less maintenance and that are more affordable. Realtors and developers identified a market among older buyers for well-designed patio-homes, town-homes, and other forms of semi-detached residences that provide privacy and a bit of outdoor space. Although they still noted a bias against apartment style dwellings. One realtor had this to say:

> "A well-planned townhouse development that can offer a bit of privacy is a home run. [However], it has been a struggle to sell apartments in this market even with underground parking and nice ocean views. The buyer in this markets seems to still want a piece of dirt"

The realtor went on to explain that condos in North Cowichan are not affordable on a price per square foot basis because they are expensive to build, particularly developments using concrete construction methods, which produce the more desirable and interesting developments. Generally, there was consensus among developers and realtors that the new condominium developments near commercial cores would capture a narrow, wealthy segment of the senior population. It was agreed that the price per square foot of these condos would deter middle-income seniors and younger, first time

buyers. This market segment would gravitate toward single family homes, particularly those with children or those considering a family. According to one key informant, young buyers view condos and semi-detached homes as stepping stones on the path towards ownership of a detached house which is consistent with the literature on the way these forms are marketed by developers and realtor and understood by consumers (Grant and Scott 2012).

4.2.2. Interview Analysis: Neighbourhood Design

Interviewees emphasized the importance of access to nature, walking trails, parks, and open space in determining the desirability of a neighbourhood. One of the planners interviewed said that access to nature is particularly important to residents of North Cowichan, more so than in other communities where the interviewee had worked, even compared to other small communities on Vancouver Island. In describing a desirable neighbourhood in North Cowichan, Maple Bay, one realtor emphasized the recreation opportunities – "hiking, boating, mountain biking, a natural wonderland." He went on to say that "parks and recreation, access to nature, are hugely important in this neck of the woods." One of the developers' comments supported this position. He stated that "people want to live in neighbourhoods with trails and nature." Conversations with residents who participated in the survey confirm this position and it is clear from this study that having access to beautiful outdoor settings is an important consideration in neighbourhood choice for residents of North Cowichan.

Secondarily, interviewees said that residents wanted to be close to shops and services, but not necessarily within walking distance. Planners, developers, and realtors alike said that while people enjoy walking as a form of recreation, they are not necessarily interested in walking to work, the store or the clinic. They are even less interested in cycling as a means of transportation. One realtor asserted that:

> "Walkability is great to have, but it just doesn't seem to fit the way we're designed here… Walkability scales mean a hell of a lot less in places like North Cowichan than they do in places like Kerrisdale or Kits [neighbourhoods in Vancouver, BC]."

He went on to express the feeling that there is an attempt to apply a universal model of urban planning (smart growth) that doesn't fit North Cowichan as well as it does Vancouver. A planner asserted that participants in 2010-2011 OCP process indicated a desire for walkability, but admitted that people who were not involved in the process probably rely on their vehicles and are happy with that form of transportation. Better public transit was mentioned by about half of the interviewees as a desirable neighbourhood amenity, but it registered far below other considerations.

Again, older residents, seniors and retirees, were differentiated from the general population in terms of their perceived desire to be within walking distance of shops and services. There was consensus among the key informants that seniors were more likely to prioritize walkability in neighbourhood selection. Indeed, one of the key informants had done a lot of work in Chemainus, where the developments are predicated on the desire among retirees to walk to and from town every day, both as a form of recreation and as a form of transportation to run errands. A realtor echoed this position, indicating that there is a demand for senior oriented housing close to groceries and recreation opportunities. The same realtor pointed to the Rossco, a condo development near downtown Duncan, as an example of the type of housing that would be popular with this demographic. Young families were also identified by key informants as a population for whom walkability of a neighbourhood is more of a concern than the average household in North Cowichan. Key informants said that residents with elementary school aged children want to be close to a school with safe sidewalk connections.

Key informants also pointed to a need for downtown revitalization and an improvement of North Cowichan's urban cores, particularly the Duncan town centre. While it was noted that a broad spectrum of people enjoy events downtown, such as the weekly farmers market, there was general agreement that the urban core is not vibrant enough to attract residents and exude any kind of meaningful gravitational pull on prospective home buyers. One developer in particular was emphatic on this issue:

> "I feel we need a stronger urban core with density. Unfortunately we lack a sizable, unique downtown. It lacks historic character and an economically vibrant core. The people that would like to move to a "core" have a poor core to go to… If we had that, demand for [urban] living may start here."

4.2.3. Summary of Key Informant Interviews

These key informant interviews provide a second perspective on residential choice in North Cowichan and underscore some of the key considerations that need to be made in implementing smart growth. The demand for compact complete communities in North Cowichan will come largely from the aging population of baby boomers and these consumers are likely to prefer smart growth developments that are designed in response to their desires for independence and privacy. Housing forms that are easy to maintain, close to shops and services, provide access to walking trails and natural areas, but do not require membership in a strata corporation, are likely to satisfy that market segment. This is encouraging because, as the following section suggests, there is a strong voice advocating for smart growth in North Cowichan.

4.3. Analysis of the Public Record

The public consultation notes available as part of the public record were generally supportive of smart growth and did not provide much additional insight into what was said during development of the 2011 OCP. This analysis instead focusses on the public record contained in local media. Analysis of local media was limited due to a labour dispute at the primary print news source in North Cowichan, the Cowichan Valley News Leader Pictorial. During the dispute, the news paper's archival material was not available and my research had to rely on a second source with a more limited emphasis on North Cowichan. Despite this limitation, the public record that was available and analysed for this project reveals, at a very high level, public support for mixed-use developments and limiting urban sprawl, in addition to highlighting importance placed on living close to nature by residents of North Cowichan. These elements are summarized in below.

4.3.1. Mixed-Use Developments

Residents of North Cowichan expressed a desire to be involved in the design and approval processes associated with mixed use developments in North Cowichan's commercial cores. For example, there were two articles about a mixed-use development in Crofton that required height and parking variances to proceed. The developer wanted

to build slightly higher than was allowed under the existing zoning and to reduce the parking required. At the time, North Cowichan Deputy Administrator, Mark Ruttan, said he received a "very strong" response to the [four storey, mixed-use] development, both for and against (Simpson 2008). Concerns about the proposed development centred on obscuring views to the ocean, increased traffic in the quiet downtown, and the architectural design (Simpson 2008 and Rothbaur 2008). Simpson writes that a resident opposed to both the height variance and the reduced parking variance said "I think it's going to improve the area. But it will block the view of housing behind it as well as anyone walking down Joan Avenue"" (Simpson 2008). There were also enthusiastic proponents of the project in attendance at the public hearing. One resident said that he thought the proposal was “excellent” and another said, "I have absolutely nothing against that project. If you people have the nerve and the guts to put the money in Crofton, hey you're welcome to it and I don't care what height it is” (Simpson 2008). It was noted that most of those in attendance at the meeting were neither completely opposed to nor completely in favour of development, but merely wanted to have input in the process. One resident had this to say:

> If we support change, and we support viable communities and we support sustainable growth for our children to have communities to live in, I guess that we need think and rethink what's going on there in our city” (Simpson 2008).

4.3.2. Limiting Urban Sprawl

Four articles addressed the issue of urban sprawl, three related to residential development of an area known as Echo Heights and one related to expansion of the South End Growth Centre. All four were supportive of urban containment and smart growth.

Echo Heights falls within the Chemainus growth centre but it is a forested parcel, owned by the municipality on the outskirts of town. Echo Heights has been commonly understood as a park, a place to walk dogs, mountain bike, and hike. The municipality’s intention to sell it to a developer for housing created controversy in the community. All three articles related to Echo Heights spoke to the value of maintaining the land as a forested buffer, which begs the question of whether it should have ever been included

within the growth centre boundaries. In any case, the public discourse on this issue highlights community support for urban containment and smart growth.

Robert Douglas' letter, published July 22nd 2011, is extremely supportive of the growth centre policy in North Cowichan's OCP. He writes:

> Many of us are quite pleased with North Cowichan's Official Community Plan (OCP). It offers a long-term vision for land use planning that in many ways reflects the concerns of the community, with its acknowledgment of the realities of climate change, environmental degradation and suburban sprawl… For many of us who grew up in North Cowichan, preserving the rural character of our community is extremely important. We don't want to sacrifice our way of life to make way for sprawling subdivisions, strip malls and fast food chains. That's why many of us have been very supportive of the latest OCP.

Similarly, Kathy Wachs writes about the importance of maintaining Echo Heights as a wilderness park and buffer between a suburb and farmland. She highlights that the new residential neighbourhood would not be within walking distance of any services and would "certainly be an example of urban sprawl." She calls on North Cowichan to "do more than just talk about containing sprawl, increasing density, and reducing greenhouse gas emissions" (2008). Peter Nix, an active climate change activist in the community and member of the municipality's Climate Change Advisory Committee draws the link between greenhouse gas emissions and sprawl, calling on the Municipality not to develop the land (2013).

A second event that caused controversy in the community was Council's decision to move the South End UCB northwards, in order to align the boundary with a newly constructed dike. The decision added four hectares to the South End Growth Centre. Gary Fitzgibbon expresses "Dismay at North Cowichan council's decision… to move the University Village Urban Containment Boundary from Beverly Street north to the dike." He goes on to say that he "moved back to the Cowichan Valley from the Lower Mainland specifically to get away from urban sprawl." Council was divided on this issue at first but in the end they voted to move the boundary.

4.3.3. Value of Living within Proximity to Nature

In addition to the articles covering opposition to the development of Echo Heights, another article revealed the value placed by citizens on the natural environment and on living within proximity wild spaces and rural landscapes.

In 2008, residents of Chemainus conducted a survey with community members in order to gauge the importance of different neighbourhood and community characteristics. This was done in parallel to the OCP engagement process led by the Municipality. Community member, Jeff Ratcliff, who is quoted in the article saying that, "Ninety-six per cent of respondents rated trees, water, and the natural environment… as important or very important." He goes on to say:

> It is an issue that resonates with more people today, particularly with new residents. The new people moving in have moved from big cities with smoke and smog and they're moving here because they love the environment. Green space, trails and access to local food also rated important by 80 per cent of respondents (Simpson 2008).

This material is consistent with results from the residential survey conducted for this project and is further corroborated by data collected through key informant interviews. Residents of North Cowichan value the natural environment and one of the reasons they choose to live there is to be within close proximity of the ocean, forests, and beautiful rural landscapes.

4.3.4. Summary of Public Record Analysis

This media analysis reveals that smart growth and urban containment have supporters in the community who use local media channels and attend public hearings in order to shape the public discourse on topics such as mixed-use development, urban sprawl, and preserving the natural environment. This is not surprising, given that the UCB and general smart growth policy orientation in North Cowichan are the result of successive public consultation processes that led to the development of policies and plans. This media analysis does not show that smart growth has no detractors in the community, but it is interesting that my search through the Citizen archives did not turn

up any letters or articles that pushed for reduced density, expansion of the UCB, or other forms of conventional growth.

4.4. Summary Discussion of Results

Together, data from the residential survey, the key informant interviews, and the media analysis, paint a nuanced picture of residential preference in North Cowichan and the cultural values and systemic barriers that may shape enforcement of the UCB. Results from the residential survey and the semi-structured interviews confirm that residents of North Cowichan generally gravitate towards housing forms and neighbourhood designs that are not consistent with smart growth and that threaten successful enforcement of the UCB. Overall, residents prefer single family homes that provide privacy and separation from neighbours within proximity to natural areas where they enjoy what they perceive as the assets of North Cowichan (access to outdoor recreation, natural beauty and privacy). Furthermore, they are willing to drive in order to access shops and services and reside within these neighbourhoods. These preferences are most prominent among young families, but retirees and working adult households also show a general preference for more dispersed neighbourhood and housing forms. The market demand for these residential typologies threatens the implementation of smart growth and may eventually threaten enforcement of the UCB as land within the growth centres is converted to residential uses and subdivisions push up against the established boundary. The value placed on privacy and independence underpins this process.

That said, the environmental ethic in the community and strong public discourse of curbing sprawl to protect rural environments, coupled with a subset of the population that would prefer to live in a “smaller home within walking distance of shops and workplaces” provides some indication that smart growth developments are both supported by the public politically and marketable to housing consumers. The residential preferences among a growing senior population in the valley provides reasonable optimism that denser forms of neighbourhood development will meet market appeal. Implementing smart growth in North Cowichan requires taking stock of these dynamics and ensuring that the neighbourhoods and homes that are developed reflect not only the

changing demographics and the particular preferences of different household types, but the underlying values that inform housing choice. More specifically, smart growth development ought to reflect the importance residents place on privacy and independence. Balancing these concerns with social, environmental and economic objectives will increase the likelihood of successful UCB enforcement, thereby supporting the smart growth objectives articulated in North Cowichan's planning documents.

Chapter 5. Research Implications

This research began with the question: *What housing form and neighbourhood design characteristics appeal to residents of North Cowichan and to what extent are these preferences consistent with North Cowichan's urban containment policy?* Urban containment was contextualised as part of a general policy orientation in North Cowichan toward smart growth, as articulated in the OCP, the Climate Action and Energy Plan, recent local areas plans, and other policy documents. As such, urban containment in North Cowichan was evaluated as a smart growth policy tool.

The literature review framed the research question as one investigating the tension between demographic change and the emerging urban ideal on the one hand, and resistance to density on the other. The question stems from the normative stance that compact complete development is required to address social, environmental, and economic concerns while recognizing that there are competing forces that help and hinder implementation of smart growth; demographic change and the emerging urban ideal support a transition towards denser forms of housing and increased mixing of uses while systemic and social resistance to density impede this transition. These competing dynamics have been well established in urban and sub-urban environments, but little research exists in the peri-urban zone. This research contributes to a better understanding in that area.

While many residents identified having good neighbours as a benefit of living where they do, the data shows that residents of North Cowichan value privacy and separation from neighbours above other residential characteristics. They also prefer to live in fee-simple dwellings where they do not need to abide by the rules of a strata council or engage in the associated politics. The urban ideal does not resonate with the peri-urban residents of North Cowichan. Instead, the ideals of living close to nature and enjoying recreational opportunities in the natural environment have greater cultural significance. That said, there is a subsection of the population that demonstrates an

interest in living in a compact complete community and would prefer a smaller, urban home. I would further assume that there is a portion of the population that would entertain denser forms of housing, were they designed with concerns for privacy and independence in mind. My conclusions and recommendations in this section assume that denser, more urban residential environments will be more readily marketed in North Cowichan if their design respects these values. I also argue that in order to *sell density*, public education will be required to engage residents in an understanding of compact complete communities as a conservation and stewardship strategy and that perhaps smart growth as articulated here needs to be adapted to the community in which it is being implemented.

5.1. The Prospect of Smart Growth in North Cowichan

According to the survey results, older residents of North Cowichan were more likely than the general population to express a desire to live in neighbourhoods and housing consistent with smart growth principles. Forty-three per cent of the retirees surveyed said that they would prefer to live in a "smaller home in an urban area within walking distance of shops and service" compared to the conventional subdivision and rural alternatives. During administration of the survey, respondents in retirement often said things like '*we are just nearing the age where it is time to think about something smaller and closer to town*.' These survey results were corroborated by key informant observations related to the demand for compact complete communities among baby boomers. Key informants highlighted the various forms of small-lot, semi-detached, and apartment style housing forms that are popular among retirees. Walkability, both for recreation and active-transit purposes, also emerged from the survey data and semi-structured interviews as an important characteristic for this demographic. Moreover, the literature reviewed for this study indicates that seniors gravitate towards smaller homes in urban areas where they have better access to shops and services by foot, suggesting that the results of this study are part of a broader demographic trend. Given the above average median age in North Cowichan and its rapidly growing senior population, there is an opportunity to design and build neighbourhoods and housing forms specifically for this demographic that are consistent with smart growth.

Although the data supports an optimistic view of the potential to serve seniors' interests through smart growth in North Cowichan, this study also points to certain cultural values that need to be considered. Many survey respondents approaching, or in retirement, expressed a desire to maintain their single family detached home for as long as they could before downsizing to something smaller and easier to maintain. Retirees living in single family detached homes recognized the ability to drive and the maintenance of good health as a prerequisite for maintaining current housing form, but stated a preference to stay in their current single family detached house until they were no longer able to drive or perform the upkeep required. Furthermore, the increasing importance of "independence" among older age cohorts suggests that baby boomers are adverse to living arrangements that are governed by a strata and that perhaps they are less likely than the preceding generation to accept this model of ownership. The desire to live in compact complete communities combined with a resistance to strata councils will require innovative housing and neighbourhood design solutions.

Furthermore, a percentage of residents across all age cohorts expressed an interest in living in smaller homes in an urban environment. Privacy, separation from neighbours, and independence were important considerations for these respondents as much as they were for seniors. Consequently, the recommendations that follow represent housing and neighbourhood design solutions that may be equally relevant to the general population as to retirees in North Cowichan and other peri-urban environments.

5.1.1. Wedge Housing Forms

Residents of North Cowichan in all demographic groups place a high degree of importance on privacy and separation from neighbours and overwhelmingly prefer single family detached homes. During survey data collection many respondents were quick to express their desire for privacy above all other housing characteristics and key informants confirmed market demand for this housing quality. Similarly, many respondents expressed a resistance to strata councils, coded as independence in the survey responses. They characterized strata councils as another level of government and expressed a desire to live and act as they please without the encumbrance of or interference from their neighbours. In order to respond to these two concerns,

independence and privacy, I propose two housing forms that simultaneously address the objectives of smart growth.

Small Houses on Small Lots

North Cowichan's zoning by-law already provides a small lot residential zone (R3-S). This zone allows for single family homes on a minimum lot size of 325 m^2 (3,498 sq. ft.) with a maximum permitted floor space ratio of 0.5:1, allowing for a maximum 1744 sq. ft. house (North Cowichan 1997), although actual square footage on build out tends to be less. In practice, this zone produces homes that are well suited to households looking for a small home on a small lot however, when setbacks are taken into consideration, developers are limited in their ability to provide the privacy and separation from neighbours desired by residents.

Relaxing the R3-S setback requirements and providing developers with latitude to take advantage of orientation, landscaping, and topography in order to provide visual separation and a sense of privacy, may result in housing forms that reflect the stated preferences of residents while at the same time providing smaller, denser housing in North Cowichan. Beyond the R3-S zone, North Cowichan may consider developing an additional small lot/small home zone that further reduces the floor space ratio and/or minimum lot size. This could be done as part of a comprehensive development plan in brown- and green-field sites slated for development. In order to best serve the principles of smart growth and the stated preferences of residents, these zones should be located within walking distance of shops and services.

Fee-Simple Row Houses

In 2012 the Land Title Act was updated to allow party walls between units in row house developments, enabling non-strata or fee simple row houses. This form of housing address the need for smart growth in North Cowichan while responding to the aversion among residents to living in a strata governed development.

Many of the developers and realtors interviewed for this study suggested that well-design semi-detached forms of housing were popular in North Cowichan. However, as this study has established, residents of North Cowichan resist living in strata developments. Fee simple row homes, designed to provide privacy and access to

private green space would address the need for smaller, land efficient homes while responding to the stated preferences of residents. Again, these homes should be located within walking distance of shops and services in consideration of the objectives of smart growth.

5.1.2. Wedge Neighbourhood Designs

In addition to wedge housing forms, this study has revealed certain neighbourhood design characteristics that are popular with the public and advance the objectives of smart growth. These wedge neighbourhood designs follow.

Traffic Calming and Active Transportation Infrastructure

Survey results and key informant interviews reveal a desire for traffic calming and active transportation infrastructure in North Cowichan. When asked what could be improved about their neighbourhood, residents of both growth centre and rural environments noted that fast moving vehicles pose a threat to human safety and are a disruption in the neighbourhood. They suggested that roads should be deigned to curtail speeding and improve pedestrian and cyclist safety, including the use of speed bumps, round-abouts and chicanes. Accordingly, residents also wanted to see improved active transportation infrastructure, including bike lanes and sidewalks. Residents generally spoke of walking and cycling in terms of recreational activity, as opposed to a mode of transportation; however, providing this infrastructure increases the likelihood that residents will choose active forms of transportation over vehicular travel for their day-to-day needs, a key objective of smart growth.

Improve Core Vitality

As the data from the residential survey reveals, the ideal of living in nature and the recreational opportunities it provides outweighs, to large extent, the urban ideal in North Cowichan. That said, there is a subset of the population that wants to live in a more urban environment, perhaps this cultural hallmark needs to be reframed as something closer to a “village ideal.” In addition to serving this subset of the population, improving core vitality could have beneficial economic spin offs for the tourism industry and local businesses. In order to improve core vitality, public private partnerships should

be fostered with the objective of creating a gravitational pull towards the mixed-use commercial cores, as these cores get more vibrant, more people will be attracted to living there, supporting further vibrancy. Investments in core vitality could lead to a virtuous circle.

North Cowichan already has a Revitalization Tax Exemption Program, but this program needs to be promoted more broadly and made more enticing to developers so as to increase participation. Furthermore, this program only pertains to new, mixed-use multi-unit residential developments, and does not support revitalization of existing buildings. Similar incentive programs for existing buildings and business could be considered to improve building facades, public realm, and accessibility. Municipal investment in the public realm and support for festivals and events in the mixed-use commercial cores could lead to improved vibrancy, resulting in a more desirable urban core experience.

5.1.3. Public Engagement and Locally Adapted Smart Growth

As outlined in this paper, residential preference in North Cowichan may be shifting toward housing forms and neighbourhoods that are increasingly consistent with smart growth. However, this research also shows that in order to encourage market transformation, a majority of residents will need to be sold on new housing forms and the merits of living densely, close to shops and services. As articulated above, the urban ideal resonates poorly with North Cowichans and the ideal of living close to nature with privacy, quiet and space to engage in outdoor activities holds greater cultural significance. Consequently, public engagement is required to convey the merits of living more densely in addition to an exercise in adapting smart growth to the local context. Together public engagement and adaptation may support more rapid market transformation.

There is a strong public voice in support of urban containment and smart growth in North Cowichan. It may be useful to build on this asset and engage a broader cross section of the community in thinking about and advocating for smart growth policies. The broad swath of the population that resides in the Cowichan Valley because they enjoy the rural and natural landscapes may support urban containment policy in principal *and*

in practice if they have a better understanding of the environmental objectives of this policy (protection of rural and natural landscapes). A communications effort to convey the social and economic objectives of smart growth may also result in broader public understanding and support of the variety of benefits resulting from growth management. Workshops, public presentations, informational materials and school programing that explain the value of urban containment would help build public support for the Municipalities land-use plans.

The public should also be engaged in designing smart growth forms that suit their preferences, adapting smart growth form to local sensitivities. Through a charrette process, community members could be involved in creating prototype neighbourhoods and dwelling units that respond to local concerns at densities that balance the objectives of smart growth with residential preferences. The design charrette would be educational for the public and it would generate residential designs with market appeal. Through this process, smart growth would be adapted to the local context, increasing the likelihood of market transformation.

5.2. Limitations of the Study

There are certain limitations associated with the methods used in this study and the socio-economic context of North Cowichan. These limitations impact what can be inferred from the data and the impact of my recommendations. These limitations are noted below as a proviso to my conclusions and recommendations.

First, this study does not account for the tendency of people to justify their decisions. For example, if you ask someone living in downtown Vancouver why they live where they do, they are likely to cite proximity to entertainment, restaurants, diverse social environments, and/or other urban amenities. If that same person lived in a rural part of North Cowichan and you asked them the same question, they would likely provide a completely different list of reasons for living where they do. In both cases the respondent is being truthful about their reasoning, but their justification for living where they do has changed simply because their living situation is different. This research attempts to mitigate this limitation by asking hypothetical questions about where people

would choose to live and why, but data acquired from hypothetical questions comes with its own limitations. Consequently, the results of this study merely scratch the surface of the cultural significance of housing choice and preference.

Second, the survey methods used resulted in an imperfect sample. As noted in the results section (4.1), there was an over representation of households living in single family detached homes and apartments and semi-detached homes were correspondingly under represented. Where possible, results have been reported in a way that mitigates for this limitation (providing percentages of people living in certain housing forms, for example); however, results related to North Cowichan as a whole, inclusive of all housing types, are not strictly representative of the actual housing mix and results related to households in apartments and semi-detached homes reflect a small sample.

Finally, residential preference is not the only factor that will influence the effectiveness of urban containment policy in North Cowichan. The low population growth rate means that a limited number of new dwelling units are required in the community on an annual basis. The opportunity to densify would be much greater were the growth rate more substantial. As it is, build out of the community is relatively slow. Furthermore, the growth centres as outlined in the OCP are relatively large, geographically speaking, which means that density may not be achieved in the near future even if the urban containment boundary is strictly enforced. Slow growth and large urban containment areas combine to influence both the impact of the policy itself as well as the applicability of my recommendations. Despite these limitations, the preceding conclusions may inform planning and building practices in North Cowichan and other communities in North America's peri-urban zone.

5.3. Areas for Further Research

The limitations and outcomes of this project point toward a number of areas for further research. For example, it is unclear from this research whether residents' stated preferences are the result of independent thought or because of a dominant cultural narrative and demand-driven marketing strategies that reinforce the status quo. The

theory that it is the result of a dominant cultural narrative would explain the paradox in residents stating that they value privacy and separation from neighbours while at the same time stating that their neighbours and community are what make living where they do great. To what extent does a dominant cultural narrative shape individuals' stated preference? Discursive analysis could be used to investigate this issue. It would also be interesting to look at the receptiveness of residents to alternative housing forms, such as fee simple row housing or tiny homes. To what extent do residents respond favourably to these recommended forms? Additionally, a robust build-out analysis using current growth rates would indicate the residential land supply available within North Cowichan's growth centres. This is an ongoing piece of work at the Municipality that will strengthen the UCB policy.

5.4. Final Remarks

North Cowichan's urban containment policy is part of a general policy orientation toward smart growth. Housing preferences in the community suggest that while residents prefer single family detached homes that provide privacy and separation from neighbours, there is a growing subset of the population, particularly seniors, who prefer housing forms and neighbourhood designs that are consistent with smart growth. Moreover, there is vocal public support for maintaining the urban containment boundary, limiting sprawl, and building compact complete communities. If residential forms are designed to provide some of the characteristics that have emerged through this study as important to residents, and if the merits of denser housing forms and mixed-use developments are communicated to the public, there is a stronger likelihood that the urban containment boundary will be respected, resulting in more compact and complete development in North Cowichan over the long term.

References

Agricultural Land Commission. 2014. Annual Report 2013/14. http://www.alc.gov.bc.ca/ (accessed electronically November 14, 2014)

Alexander, D. and Tomalty, R. 2002. Smart Growth and Sustainable Development: Challenges, solutions and policy directions. Local Environment: The International Journal of Justice and Sustainability, (7)4, 397-409.

Alexander, D. and Tomalty, R. 2001. BC Sprawl Report 2001. Smart Growth BC. http://www.smartgrowth.bc.ca/publications/ResearchReports/tabid/155/Default.aspx (accessed November 14, 2014).

Alexander, D. and Tomalty, R. 2004. BC Sprawl Report 2004. Smart Growth BC. http://www.smartgrowth.bc.ca/publications/ResearchReports/tabid/155/Default.aspx (accessed November 14, 2014).

Anthony, Jeremy. 2004. Do State Growth Management Regulations Reduce Sprawl? Urban Affairs Review, (39)376

Beauregard, R. A. 2006. When America became suburban. Minneapolis, MN: University of Minnesota Press.

Blais, Pamela. 2010. Perverse cities; Hidden subsidies, wonky policy, and urban sprawl. Vancouver, BC, Canada: University of British Columbia Press.

British Columbia, Province of. Bill 27 Local Governments (Green Communities) Statutes Amendment Act (the Green Communities Act), 2014 http://www.leg.bc.ca/38th4th/1st_read/gov27-1.htm. (Retrieved electronically on November 12)

Chapin, Timothy, S. 2012. Introduction, Journal of the American Planning Association, (78)1, 5-15.

Cinyabuguma, Matthias and Virginia McConnell. 2013. Urban Growth Externalities and Neighborhood Incentives: Another Cause of Urban Sprawl? Journal of Regional Science. 53(2) 332–348

Curran, Deborah. (2007) British Columbia's Agricultural Land Reserve: A Legal Review of the Question of "Community Need."

Daniels, Tom. 2001. Smart Growth: A New American Approach to Regional Planning. Planning Practice & Research, (163)4, 271-279.

Douglas, Robert. “Echo Heights contrary to 'smart growth' principles.” The Citizen, July 22nd 2011

Dowell, Myers & Elizabeth Gearin. 2001. Current preferences and future demand for denser residential environments. Housing Policy Debate, 12:4, 633-659.

Downs, Anthony. 2005. Smart Growth: Why we discuss it more than we do it. Journal of the American Planning Association, 71(4) 367-378.

Downs, Anthony. 2003. Growth Management, Smart Growth, And Affordable Housing http://www.brookings.edu/research/speeches/2003/05/29metropolitanpolicy-downs (accessed electronically on September 14, 2014).

Downs, Anthony. 2001. What does smart growth really mean? Planning Magazine.

Duany, Andres and Elizabeth Plater-Zyberk. 1992. The Second Coming of the American Small Town. The Wilson Quarterly (16)1 19-48.

Eppli, Mark J., and Charles Tu. 1999. Valuing the New Urbanism: The Impact of New Urbanism on Prices of Single Family Homes. Washington, DC: Urban Land Institute.

Ehrenhalt, Alan. 2012. The great inversion and the future of the American city. New York, NY: Knopf.

Ehrenhalt, Allan. 2008. Trading Places: The Demographic Inversion of American Cities. The New Republic.

Filion, Pierre. 2013. Optimistic and pessimistic perspectives on the evolution of the North American suburb. Planning Theory & Practice, (14)3, 391-415.

Fitzgibbon, Gary. “N. Cowichan council votes for urban sprawl.” The Citizen, July 11th 2014

Florida, R. 2005. Cities and the Creative Class. New York: Rutledge.

Ford, Tania. 1999. Understanding Population Growth in the Peri-Urban Region. International Journal of Population Geography. 5, 297-311.

Gordon, David L. A. and Mark Janzen. 2013. Suburban Nation? Estimating the Size of Canada’s Suburban Population. Journal of Architectural and Planning Research. 30(3) 197-220

Grant, Jill L. 2009. Theory and Practice in Planning the Suburbs: Challenges to Implementing New Urbanism, Smart Growth, and Sustainability Principles, Planning Theory & Practice. (10)1, 11-33.

Grant, Jill L. 2013. The future of the suburbs: Suburbs in transition. Planning Theory & Practice, (14)3, 391-415.

Grant, J. L., & Scott, D. E. 2012. Complete communities versus the Canadian dream: Representations of suburban aspirations. Canadian Journal of Urban Research, 21(1), 132-157

Gurin, David. 2003. Understanding Sprawl. David Suzuki Foundation

Hume, Mark. 2013. Developers winning out over farmland preservation, B.C. planner says. *The Globe and Mail.* November 13th 2013. http://www.theglobeandmail.com/ (Accessed October 20th 2014).

Kasowski, K. 1991. Oregon: Fifteen years of land use planning. In Balanced growth: A planning guide for local government, edited by J. DeGrove, 125–29.Washington, DC: International City Management Association.

Klineberg, Steven. 2013. Kinder Institute Houston Area Survey. http://kinder.rice.edu/has/ (retrieved electronically November 22, 2014).

Litman, Todd. 1997. *Evaluating Transportation Land Use Impacts,* Victoria Policy Institute.

Metro Vancouver. 2015. Housing Data Book. Accessed electronically July 25, 2015 at http://www.metrovancouver.org/services/regional-planning/PlanningPublications/MV_Housing_Data_Book.pdf

Moore, T., and A. C. Nelson. 1994. Lessons for effective urban-containment and resource-land preservation policy. Journal of Urban Planning and Development 12:157-71.

National Geographic. 2014. Map Maker Interactive. http://mapmaker.education.nationalgeographic.com/ (accessed electronically November 2014).

Nelson, Arthur C. 2013. The Resettlement of America's Suburbs. Planning Theory & Practice, (14)3, 391-415.

Nelson, Arthur C., Raymond J. Burby, Edward Feser, Casey J. Dawkins, Emil E. Malizia & Roberto Quercia. 2004. Urban Containment and Central-City Revitalization. Journal of the American Planning Association. (70)4, 411-425.

Neptis Foundation. 2012. Growing Cities Report. http://www.neptis.org/publications/growing-cities (retrieved electronically November 24, 2014)

Newall, Michael. 2008. From Downtown to Town Centre: Selling the Urban Ideal in Burnaby, BC. M.Urb Thesis, Simon Fraser University.

Nix, Peter. “The cost of climate change.” The Citizen, November 6th 2013

North Cowichan, District of. 1997. Bylaw No. 2950

North Cowichan, District of. 2008. Population and Housing Forecasts

North Cowichan, Municipality of. 2014. Climate Action and Energy Plan.

North Cowichan, Municipality of. 2002. Official Community Plan.

North Cowichan, Municipality of. 2011. Official Community Plan.

Norman, Jonathan, Heather L. MacLean, and Christopher A. Kennedy. 2006. "Comparing High and Low Residential Density: Life-Cycle Analysis of Energy Use and Greenhouse Gas Emissions." Journal Of Urban Planning & Development 132, no. 1: 10-21. Environment Complete, EBSCOhost (accessed July 14, 2015).

Nowlan, Linda et al. (2001). The Smart Growth Guide to Local Government Law and Advocacy. http://wcel.org/resources/publication/smart-growth-guide-local-government-law-and-advocacy (retrieved November 14, 2014).

Place Speak. 2013. Greater Vancouver Urban Futures Survey: Technical Report. http://www.urbanfuturessurvey.com/ (retrieved electronically on November 22, 2014).

Province of British Columbia. British Columbia Climate Action Charter http://www.cscd.gov.bc.ca/lgd/library/BC_CLIMATE_ACTION_CHARTER.pdf (retrieved electronically April 29, 2015)

Rothbauer, Kevin. “Residents want say in Crofton’s development.” The Citizen, April 9th 2008

Senbel, M. et al. 2013. Can form based code help reduce greenhouse gas emissions in small towns? The Case of Revelstoke, BC. Canadian Journal of Urban Research, (22)1 72-92.

Seto, Karen C. Burak Güneralp, and Lucy R. 2012. Hutyra. Global forecasts of urban expansion to 2030 and direct impacts on biodiversity and carbon pools. PNAS 109 (40) 16083-16088

Simpson, Sarah. “Crofton project makes stir.” The Citizen, April 18th 2008

Simpson, Sarah. “Environmental concerns top survey.” The Citizen, March 19th 2008

Smart Growth BC. http://www.smartgrowth.bc.ca (retrieved electronically on October 19, 2014)

Statistics Canada. 2013. Special tabulation, based on 2011 Census

Statistics Canada. Province of British Columbia. http://www12.statcan.gc.ca/census-recensement/2011/as-sa/fogs-spg/Facts-pr-eng.cfm?Lang=Eng&GC=59#FN-AM (retrieved electronically on April 26, 2015)

Statistics Canada. Census subdivision of North Cowichan, DM - British Columbia. http://www12.statcan.gc.ca/census-recensement/2011/as-sa/fogs-spg/Facts-csd-eng.cfm?LANG=Eng&GK=CSD&GC=5919008, retrieved electronically March 25, 2015

Storper, Michael and Manville, Michael. 2006. Behaviour, Preferences and Cities: Urban Theory and Urban Resurgence. Urban Studies (43)8 1247–1274.

Song, Yan. 2005. Smart Growth and Urban Development Pattern: A Comparative Study. International Regional Science Review (28)2 239–265

Tu, Charles C., and Mark J. Eppli. 1999. Valuing New Urbanism: The Case of Kentlands. *Real Estate Economics* 27(3):453–73.

Vallance, Suzanne. 2014. Living on the Edge: Lessons from the Peri-urban Village. International Journal of Urban and Regional Research. 38(6) 1954–69.

Wassmer, Robert. 2006. The influence of local urban containment policies and statewide growth management on the size of United States urban areas. Journal of Regional Science 46(1) 25–65.

Wachs, Kathy. “Echo Heights is Green Space.” The Citizen, February 22nd 2008

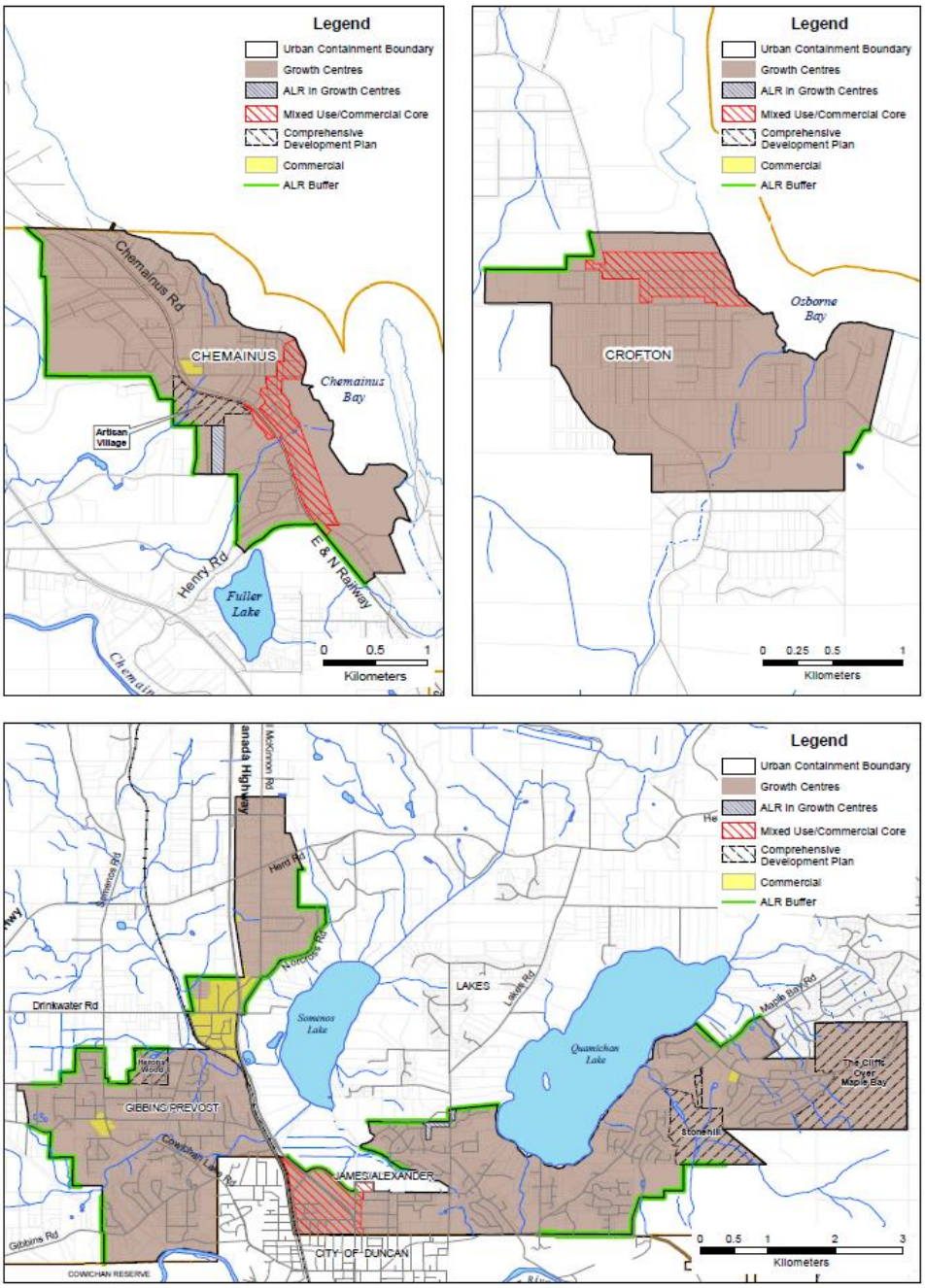
Westland Resources Group, Groundworks Strategic Marketing Solutions. 2001. Strategic Agricultural Plan. Prepared for the Municipality of North Cowichan.

Wheaton, William. C. 1998. Land Use and Density in Cities with Congestion” Journal of Urban Economics 43, 258–272.

Wu, Jun Jie. 2006. Environmental Amenities, Urban Sprawl and Community Characteristics. Journal of Environmental Economics and Management, 52, 527–547

Appendix A.

North Cowichan's Growth Centres and UCB



Map 12

Managing Growth

Source:
District of North Cowichan

north cowichan | PLAN > IN

NORTH

June 8, 2011

Appendix B.

Interview Script
NORTH COWICHAN KEY INFORMANT INTERVIEW – HOUSING PREFERENCE

The following interview is meant to gain an understanding of how key informants view residential preference in North Cowichan and the extent to which they see correlation between market demand and "smart growth."

Introduction

1. How long have you been working in this field?
2. What portion of your career has been in North Cowichan?
3. [Optional] Where did you work previously?

General Real Estate Preference

4. What are the 3 most important things that home buyers in North Cowichan are looking for in real estate?
5. How do these residential preferences differ from other "markets" you have worked in?
6. What are some of the features that are lacking in North Cowichan's real estate, according to buyers in the community?

Housing Preference

7. What is the market like for apartment/townhome style properties in North Cowichan? Why do you think this is?
8. Would you say that most people in the community are looking for a single family home? Why/why not?
9. Do most buyers want a large piece of property? Why/Why not?
10. To what extent does affordability drive demand for apartments and townhomes versus other factors like lifestyle and maintenance requirements?

Neighbourhood Preference

11. Is there a popular neighbourhood in North Cowichan and how would you describe it? What makes it desirable?
12. Is there a demand for "downtown living" in North Cowichan? Do people want to be within walking distance of shops and services?
13. What neighbourhood amenities are buyers looking for in North Cowichan?
14. Do buyers want to live in neighbourhoods that are easy to get around by bike and foot?

Urban Containment/Smart Growth Feasibility

15. How do you think the housing preferences of North Cowichan residents will impact success of the urban containment boundary? [Description of UCB policy provided if required].
16. Have you noticed any changes in home-buyer preferences over the last 10 years? Can you think of any reasons for this?
17. Have you noticed any differences in the preferences of the local residents versus newcomers to the community?

18. Are there any distinct demographic groups that tend to buy in the growth centres? How does this differ from home buyers in other areas, and why do you think this is?

Reflection on preliminary survey results

I intend on sharing some of the preliminary survey results with interviewees and solicit their reaction. The exact questions will depend on the preliminary results and the interviewee, however these are examples of what I might ask:

19. Do these preliminary results confirm your understanding of residential preference in North Cowichan?
20. Is there anything about these results that surprise you?

Appendix C.

Survey Form

Area		Housing Form	
Oral consent		Date	

1.0 How long have you lived at this address? (Round to the nearest year)

Years

2.0 Do you rent or own?

3.0 Who regularily resides in this home?

	Sex	Age	Employed	Ocupation
Respondent				
Person 2				
Person 3				
Person 4				
Person 5				
Person 6				
Person 7				

4.0 Would you prefer to live in a different form of housing?

4.1 If yes, what form would you prefer?

If other, please describe.

4.3 Why do/would you prefer this housing form? (Rank the 3 most important reasons from 1-3, 1 being the most important and 3 being the least important)

Characteristic	
Because it is affordable	
Additonal rooms (home office, guest bedroom, studio, etc.)	
Because we enjoy maintaining the yard	
It matches the size of our family	
Because we need storage space (inside and outside)	
Because it is easy to maintain	
Because it is ground oriented	
Because it provides privacy and seperation from neighbours	
It is what is available in my preferred neighbourhood	
Other:	

6.0	**If you could live in a different neighbourhood, that neighbourhood would be (rank the 3 most important characteristics from 1 to 3, 1 being the most important and 3 being the least important):**	
	Characteristic	
	More affordable	
	Closer to stores, restaurants and/or entertainment	
	Closer to schools, clinics and/or other community services	
	More private	
	More walkable/cyclable	
	Comprised of only single family homes	
	Comprised of a mix of housing forms	
	Closer to parks, trails and/or natural areas	
	Easier to park and drive to get around	
	Other:	

7.0	**If you could purchase a home in any of these areas for the same price, rank the following options by order of preference:**	
	A rural property with lots of privacy, where you would drive 20 minutes or more to access shops and services	
	A single-family home with a big yard in a neighbourhood with other single family homes, where you would drive almost everywhere you want to go	
	A smaller home in a more urbanized area, within walking distance of shops and workplaces	

8.0	**What is your total annual household income before tax?**

9.0	**All in all, what do you think makes your neighbourhood great?**
9.1	**And, how could it be improved?**