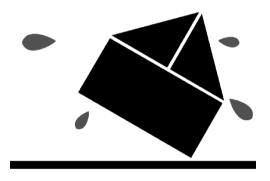
The Role of Housing and Services in Supporting Healthy Ageing-in-Place: Northern British Columbia. Canada



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Abstract: Rural ageing is a common process across Northern Europe, the Scandinavian countries, and across OECD states more generally. In rural Canada, this demographic process has been accelerated by the phenomena of resource frontier ageing; the result of a combination of youth out-migration, workforce ageing-in-place, and the long-term lack of new job growth to attract young working households. In this paper, we look at the critical issue of housing in northern British Columbia (BC), Canada, as a vital part of healthy ageing and quality-of-life for older residents. We start with an overview of the important policy shifts that have impacted housing investment, the processes which have accelerated population ageing, and the match/mismatch of the existing housing stock with new demographic realities. The findings highlight that the processes of economic upswings and downturns so common in resource-dependent rural and small town places has had a significant impact not only on patterns of demographic change, but also on the nature of the existing housing stock and on the capacity of that stock to meet the needs of the local population into the future. In our case study community, the housing stock is generally old, larger than required by current households, and in need of repair or updating. These findings mirror resource region housing studies elsewhere. Updating this stock needs focus specifically upon accessibility within the dwelling unit for the growing demographic of older residents and on energy efficiency to reduce house operating costs for retired people living on low or fixed incomes. There are also unmet housing needs in terms of smaller, accessible housing for people wishing to downsize and there is a lack of support services to help keep older people in their own homes longer. The research points to the need for both housing investment and revisions to public policy.

Keywords: British Columbia, rural, resource frontier communities, ageing, housing.

El papel de la vivienda y los servicios como soportes de envejecimiento saludable en el lugar: Norte de la Columbia Británica. Canada

Resumen: El envejecimiento rural es un proceso común en el norte de Europa, los países escandinavos y en todos los estados de la OCDE en general. En las zonas rurales de Canadá, este proceso demográfico se ha acelerado por el fenómeno del envejecimiento de la frontera de recursos; el resultado de una combinación de emigración de los jóvenes, envejecimiento de la fuerza laboral en el lugar y la falta a largo plazo de creación de nuevos empleos que atraigan a trabajadores jóvenes residentes. En este documento, analizamos el tema crítico de la vivienda en el norte de Columbia Británica, Canadá, como una parte vital del envejecimiento saludable y la calidad de vida de los residentes mayores. Comenzamos con una descripción general de los importantes cambios de política que han condicionado la inversión en vivienda, los procesos que han acelerado el envejecimiento de la población y la coincidencia/desajuste del stock de viviendas existente con las nuevas realidades demográficas. Las conclusiones destacan que los procesos de aumentos y recesiones económicas tan comunes en los lugares rurales y pequeños pueblos que dependen de los recursos han tenido un impacto significativo no solo en los patrones de cambio demográfico, sino también en la naturaleza del stock de viviendas existente y en la capacidad de ese stock para satisfacer las necesidades de la población local en el futuro. En nuestra comunidad de estudio de caso, el inventario de viviendas es habitualmente antiquo, mayor que el requerido por los hogares actuales y necesita reparación o actualización. Estas conclusiones reflejan los estudios de vivienda de la región de recursos en otros lugares. La actualización de este stock debe centrarse específicamente en la accesibilidad dentro de la unidad de vivienda para la creciente población de residentes mayores y en la eficiencia energética para reducir los costos operativos de la vivienda para las personas jubiladas que viven con ingresos bajos o fijos. También hay necesidades de vivienda insatisfechas en términos de viviendas más pequeñas y accesibles para las personas que desean reducir el tamaño y hay una falta de servicios de apoyo para ayudar a mantener a las personas mayores en sus propios hogares por más tiempo. La investigación señala la necesidad de inversión en vivienda y de revisión en las políticas públicas.

Palabras clave: Columbia Británica, rural, comunidades en frontera de recursos, envejecimiento, vivienda.

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Introduction

Rural ageing is a common process across Northern Europe, the Scandinavian countries, and across OECD (Organization for Economic Cooperation and Development) states more generally. In rural Canada, the phenomena of resource frontier ageing has accelerated such demographic processes through a combination of youth out-migration, workforce ageing-in-place, and a long-term lack of new job growth to attract young working households. In this paper, we look at the critical issue of housing in northern British Columbia (BC), Canada, as a vital part of healthy ageing and quality-of-life for older residents. The provision of housing that is accessible, suitable, and affordable for older residents is a challenge in many northern Canadian communities given that much of the existing stock is older and, therefore, designed and built for a younger demographic. Yet, for older residents, it is housing, whether they age-in-place in their existing home or choose to move to alternative, often smaller accommodation in their retirement years, that is both a facilitating and limiting factor in healthy ageing specifically and in community and economic development more generally.

The paper begins with an overview of the important policy shifts that have impacted housing investment – especially the shift from a Keynesian public policy framework to a Neoliberal public policy framework. We then review the processes that have impacted and accelerated population ageing in rural and resource-dependent

northern communities. From this foundation, we then examine the match/mismatch of the existing housing stock within such communities with new demographic realities by drawing upon data from a research project carried out in 2016. We finish by discussing how one community is responding to the housing needs of its ageing population.

Background

This section sets a context for the case study. The issues of demographic change and population ageing in resource-dependent rural and small town communities of developed economies are important and well described topics in various literatures. They also remain topics of interest and attention for policy makers and the communities experiencing the impacts of population change. Before describing how population change is acting out in the specific context of northern BC, we first review the shifting policy context within which the responses to population change, and specifically to population ageing, occur.

Policy Shift

The post-war development of resource-frontier regions in many developed countries was very much a state driven process as jurisdictions looked to rebuild warshattered economies and to take advantage of opportunities in the new industrial economy (Halseth, 2017). This state driven context followed a Keynesian public policy framework. While its central tenets support state intervention in the market to control excesses and thus smooth some of the dramatic fluctuations that can occur in an economy, a Keynesian public policy framework also recognized that government intervention through major investment and infrastructure projects, can stimulate wider economic activity and lead to job growth.

The case of BC's post-war industrial resource policy followed two key Keynesian public policy imperatives: to directly stimulate employment by supporting new economic activities, and to support that economic activity through investments in needed social and physical infrastructure. BC's Post-War Rehabilitation Council drew upon this inspiration to support its recommendation for government action:

It rejected a policy of 'laissez-faire for one of intelligent, positive action'.... Such intelligent and positive action required actions that are planned, coordinated, and conducted in cooperation with the other sectors of society and other government authorities (Markey, Halseth and Manson, 2012, p. 99).

Such purposeful government leadership, policy coordination, and direct investment is also found in other national settings. For example, Tykkyläinen, Vatanen, Halonen and Kotilainen (2017) write about the Finnish case where state investments in critical transportation and service infrastructure were needed to support industrial access to northern resources – especially the expansion of industrial forestry. In New South Wales, Australia, Argent (2017) writes about how development of the agricultural sector not only required direct state investment in infrastructure, but also required significant attention to employment and labour policy. In southern New Zealand, Connelly and Nel (2017) similarly highlight the role of state infrastructure investment and supportive public policy in the post-war expansion of the agricultural and coal mining sectors.

Collectively, a Keynesian public policy framework in the post-war period supported overt state guidance of rural resource development. In many states, this included aggressive northern expansion of development in resource-frontier regions; often with little regard for the Indigenous and Aboriginal peoples whose homes and lands these were (Harris, 2002; Mikaelson, 2015; Pedersen, 2015; Shadrin, 2015). The framework was extensive in that not only did state policy support or lead new development, but wrap-around state investments in infrastructure, services, housing, planning, and a host of other community and economic development supports were made. This was a purposeful deployment of government policy and resources to support a vision of industrial resource exploitation (Williston and Keller, 1997).

Beginning in the late 1970s and 1980s, and spurred by a global economic recession, a reactionary policy movement began to displace the Keynesian public policy framework. Today, a Neoliberal public policy framework focuses on a reduction of state intervention, a wider dismantling of the welfare state, the privatization of state activities, and a general deregulation of market processes and business oversight. As described by Tennberg *et al.* (2014, p. 42), advocates argue, "the role of the neoliberal state is to secure proper conditions for markets to function".

In terms of the delivery of public services or infrastructure investments, Neoliberalism generally "holds that the social good will be maximized by maximizing the reach and frequency of market transactions, and it seeks to bring all human action into the domain of the market" (Harvey, 2005, p. 3). The result of this deferral to

market decision-making for rural and small town places (Swarts, 2013) has been 30 years of declining infrastructure investments and reduced levels of service delivery compared to the earlier Keynesian public policy framework. These reductions have accrued to rural and small town places because market mechanisms dictate that urban centers show the greatest opportunity for private sector profit making and /or the lowest delivery costs per capita in comparison (Sullivan, Ryser, and Halseth, 2014). This geographic bias has impacted upon the capacity of rural and small town places in their efforts to respond to pressures and changes in the global economy and to transition to more sustainable and resilient communities adapted to the social, political, demographic, and economic realities of the early 21St Century (Dewees, Lobao and Swanson, 2003).

The recent (2008 +) global economic recession again highlighted a crisis in the dominant policy framework. The inherent contradictions of the Neoliberal public policy framework worked to create just the catastrophic economic collapse that a Keynesian approach had worked to avoid. The decade since the recession began has borne witness to a diverse range of policy responses in Canada and elsewhere. The dominant response remains a Neoliberal one - with advocates calling for even more freedom for markets, more privatization of state activities, less regulation of day-today activities of businesses and industries, etc. At the same time, regions that have suffered dramatically from industrial or economic collapse have been supported, through massive state investments aimed at stabilizing short-term employment, to ameliorate immediate concerns. Similarly, many private sector interests whose decision-making had led to the brink of collapse were bailed out and/or supported through massive infusions of public capital. In some states, these infusions of public capital have also included a 're-nationalization' of some economic actors. As yet, there is no clear direction as to what the 'next' policy framework will be; instead, there is a level of policy incoherence at any given moment, and in any given place.

Halseth and Ryser (2018) refer to this more recent period as one of 'reactionary incoherence', whereby there is a chaotic and often uncoordinated deployment of state policy and support. For resource-dependent rural and small town places, these policy actions remain reactive, targeted only to immediate needs, and fail to invest in ways that strategically re-position or re-equip places and regions for transformation and competitiveness. While communities may be working to re-position established economies or develop new economic opportunities, senior governments often are not providing the types of top-down supportive policy environments that are needed.

Population Ageing

People and households in resource-dependent rural and small town places are impacted by the long-term trends associated with economic, social, and policy restructuring. Together, these have influenced the demographic structure of these places – most especially the processes linked with demographic ageing.

Single industry and resource-dependent places in the hinterlands of developed economies have a rather distinct population story. While there are differences between states, the post-war expansion of resource development into rural and remote areas worked to create large numbers of new jobs. Workers took up these resource industry jobs, and buoyed by good paying jobs through the long-boom economic cycle, they settled in these small communities and raised their families. Under this model, resource town design and investments were all geared to a young demographic of families with large numbers of children. With few older residents, attention focused on infrastructure such as playgrounds and schools. As the post-war industrial resource model moved forward in time, investments and expansion slowed as the industries increased their efforts over time to be more efficient and profitable. Job growth gave way to either job stability, or job losses (either absolute or per unit of production).

As described by Hanlon and Halseth (2005) the impacts of economic restructuring supported a new process of 'resource frontier ageing'. This involves several reinforcing trends. First, the existing resource industry workforce begins to age-in-place. Union protections ensured that as job losses arose due to a substitution of capital for labour, it was the more recently hired younger workers who were let go. At the same time, the lack of new job creation meant that young people left the community to pursue outside educational or employment opportunities. Recent studies in Canada (Halseth, Ryser and Markey, 2017) and Finland (Kotilainen, Halonen, Vatanen and Tykkyläinen, 2017), for example, each highlight the hollowing out of the younger age groups in rural or remote resource industry towns that also show little or no in-migration.

Housing

The historical pattern of in-migration followed by resource frontier ageing creates a unique set of challenges for individuals and small communities. With our focus on population ageing and housing, several issues are critical. First, as older workers transition into their retirement years attention to housing is one of the critical issues in

helping them decide whether to stay in their resource town after retirement or to relocate. While strong social and friendship networks may help to hold retirees in these communities (Ryser and Halseth, 2011), a range of services to support healthy ageing (including health care, home care, home maintenance, and access to retail, recreation, and the like) both within and outside the dwelling will also be required.

Housing plays in important role in the support of healthy ageing-in-place. It does so by supporting many of the basic daily needs of households. These include providing shelter and supporting physical activity. Housing also provides a locational and personal framework for social inclusion and interaction. It can support and reinforce friendship and family networks – it is the site for many of these interactions. Housing also provides a very real and tangible connection to place and community; it can support a sense of belonging and a sense of place. Finally, home ownership provides households with one of the key aspects of their financial security by reducing long term housing costs and supporting the accumulation of capital that can be released if the property is sold.

As the typical mix of resource town housing was originally built for younger households, there are issues in the housing stock for older residents. Stairs at the entrances and within houses, and the need for considerable routine maintenance and upkeep of both the interior and exterior of the house, can become considerable burdens as people age. Older housing is not built to contemporary expectations around insulation and energy efficiency – making it expensive to operate on reduced retirement incomes. Retrofitting may be possible, but it can also be expensive depending on the original quality and design of the buildings. Finally, resource frontier towns also typically have a very limited supply of housing built and designed specifically for seniors – especially limited is housing that they may seek to move into as their mobility decreases or their need for care increases.

In addition to housing, there are questions connected with whether the community is generally 'age friendly'. Does the town design include attention to sidewalk and wheelchair accessibility? Are public buildings, shopping areas, and recreation facilities designed for older people and those with mobility constraints? Depending on past investments by state and local governments, resource-dependent rural and small town places may or may not be ready for population ageing (Skinner and Hanlon, 2016).

If all of the elements associated with housing and population ageing were not already complicated enough, a second issue is that the retirement of large numbers of first generation resource industry workers is now creating new job openings for younger workers. In this case, there are significant recruitment issues around whether

the jobs, community services and infrastructure, and especially the housing options, are attractive to the current generation of young workers and their families. As Markey *et al.* summarized, these next generation workforces are no longer:

bound by a primary concern over wages and jobs, young people are searching for quality of life, clean environments, and good places where they can raise children and achieve a balance between their work and life spheres. They want to live in places where they can make a difference, every day, on a human and community level, while at the same time remaining 'plugged into' the global communications world. (Markey *et al.*, 2012, p. 291)

Taken together, population ageing and shifting public policy approaches create opportunities and challenges for rural and small town places. As a Neoliberal public policy framework provides the opportunity for small places to be more entrepreneurial and innovative in their investments and actions, there are transitions in the housing stock, services, and other amenities that can be made to both hold retirees and attract the next generation workforce. That same public policy framework, however, has underinvested in basic infrastructure and services, and provides limited on-going top-down policy supports, which are needed to realize many of these local initiatives and innovations (Halseth and Ryser, 2018). How these act out in our case study community follows below.

Case Study

This section introduces and reviews our case study looking at the role of housing in supporting healthy ageing-in-place. The specific case study is from 100 Mile House, and it builds upon a larger Northern BC Housing Study completed in 2016 (Community Development Institute, 2016a).

The Northern BC Housing Study

In order to identify and better understand the trends, opportunities, and challenges influencing housing demand and supply in northern BC, in 2016 the Community Development Institute (CDI) at the University of Northern British Columbia (UNBC) undertook the Northern BC Housing Study. The study provided

information to raise awareness of housing needs and opportunities in northern BC communities. The study looked at 10 communities, and each was profiled across its current population, its past and future population trends, the existing housing stock, and local real estate market trends.

The communities selected for the study are all expected to experience a significant degree of demographic change, including population ageing, over the coming decade. The communities in the study were 100 Mile House (2016 population 1,980), Dawson Creek (2016 population 12,178), Fort St. John (2016 population 20,155), Kitimat (2016 population 8,131), Prince George (2016 population 74,003), Prince Rupert (2016 population 12,220), Quesnel (2016 population 9,879), Smithers (2016 population 5,401), Terrace (2016 population 11,643), and Williams Lake (2016 population 10,753). For each community, a range of population and housing data was collected (Table 1).

Table 1:
Northern BC Housing Study Data (Community Development Institute, 2016a)

Population data:

Age (1981, 2001, 2011, 2026, 2036)

Gender (1981, 2001, 2011, 2026, 2036)

Household size (2001 and 2011)

Household structure (2001 and 2011)

Income distribution (2011)

Prevalence of low income (2011)

Housing affordability (renters and homeowners)

Housing data:

Dwelling type (2001 and 2011)

Age of the housing stock (2011)

Condition of the housing stock (2011)

Housing tenure (2001 and 2011)

Tenure by dwelling type (2001 and 2011)

Number of subsidized housing units (2011)

Number of residential building permits issued by dwelling type (selected years)

Development costs for single-family and multi-family housing (selected years)

Average house sale price (past 5 years)

Number of houses sold (past 5 years)

Number of properties for sale (past 5 years)

This article highlights the community of 100 Mile House as a case study. While each of the profiled communities in the study showed similar trends and attributes with respect to demographic change and the housing stock/housing market profile, 100 Mile House was chosen as our focus because it is 'ahead of the curve' in rural and northern BC in terms of population ageing. It also has a number of local groups actively engaged with addressing the emerging mismatch between population and housing in the community.

Case Study: 100 Mile House, BC

100 Mile House is located in south-central BC, halfway between Vancouver and Prince George (Figure 1). Its origins date back to the Cariboo Gold Rush of the early 1860s, when the community, then known as Bridge Creek House, was a stop for travelers on the way to the gold rush community of Barkerville. Its distance of 100 miles along the gold rush trail from the original trailhead at the town of Lillooet spawned the name that the town still holds.

Today, 100 Mile House is the service centre for the South Cariboo region. Its economy is based primarily on forestry, agriculture (mainly cattle ranching and hay cropping), and highway commercial/tourism traffic. From the 1950s to the 1970s, these industries were strong and growing; however, forestry and agriculture have experienced an overall decline since the 1980s. For forestry, the decline has been due primarily to increasing competition in global markets, the softwood lumber tariff placed on Canadian forest products by the United States Government, and the increasing use of technology to replace workers in wood manufacturing. This has resulted in overall job losses in the sector. For agriculture, the issue has been primarily one of economies of scale. Smaller producers, finding it difficult to remain sustainable, have given way to large-scale agricultural production. This, too, has resulted in reduced employment in the sector.

The region around 100 Mile House is known for its many recreational lakes. The area has long been used as a summer retreat for people from the Greater Vancouver metropolitan area. Cottages, cabins, and second homes have been popular in the region since the 1950s. In recent years, the region has seen an influx of young retirees who are moving up from BC's metropolitan areas to occupy their vacation property on a full-time basis. Most of these new full-time residents sold their homes in higher-priced urban housing markets and are using the proceeds to finance their retirement.

Another group of recreational lakefront and rural property migrants are 'amenity migrants' – also tending to be older but tied into the economy and workforce by the internet and airline connectivity. The population of 100 Mile House in 2016 was 1,980 (Table 2). This is its highest level since 1981. The population of the daily work commuting area surrounding 100 Mile House was 11,313 in 2016.

Figure 1: Map of British Columbia Showing 100 Mile House (credit: Kyle Kusch)



Table 2: 100 Mile House - Population Change (Statistics Canada, 1981, 1986, 1991, 1996, 2001, 2006, 2011, 2016)

Year	1981	1986	1991	1996	2001	2006	2011	2016
Population	1920	1692	1865	1850	1740	1885	1885	1980
% change over previous 5 yrs.		-11.9	10.2	-0.8	-5.9	8.3	0.0	5.0

It is important to situate 100 Mile House in the context of rural and resource town restructuring. In BC, rural and resource-dependent towns developed their current form and economic orientation as a result of deliberate post-World War Two provincial government policy (Williston and Keller, 1997). This policy was aimed at exploiting the province's rich natural resource base and exporting minimally processed raw commodities to the industrial heart of the United States (and later other developed economies, especially Japan) (Markey *et al.*, 2012). Towns were either purposefully developed (the so-called 'instant towns') or they grew around existing small population nodes – 100 Mile House is the latter. In the case of 100 Mile House, the natural resource was the forest landscape and the town grew as new and large sawmills were built. This created a high wage and high employment economy that attracted workers and grew to dominate the region's economy.

As with other natural resource dependent rural and small town regions across OECD states that grew out of similar post-war policy initiatives, the 100 Mile House region enjoyed close to 30 years of growth and prosperity. But like those other regions, the global economic recession of the early 1980s forever changed the international trading landscape for natural resource commodities (Argent, 2017; Connelly and Nel, 2017; Nel, 2015; Reed, 2003; Tykkyläinen et al., 2017). Since that time, all such regions have experienced increasing fluctuation in the prices achieved and demands for their product and local resource industries have either closed, consolidated, or engaged in aggressive cost minimization through automation (Halseth and Ryser, 2018). The net result has been job losses and population declines. These processes have acted out in 100 Mile House such that the community has been working on economic diversification efforts for most of the past three decades.

The impact of these economic restructuring pressures on the 100 Mile House housing market has been significant. The development 'boom' of the 1960s and 1970s meant that large numbers of housing units were added to meet the needs of incoming workers. The timing of that growth meant the housing was tailored for the 'baby boom' household and modeled after the large-lot, single detached-family home suburban landscapes that were the norm for the period (Jackson, 1985). The end of that development boom, and the stagnation that followed, meant that little new housing was built. It also meant that the local population aged-in-place through the 'resource frontier ageing' process described above (Hanlon, Skinner, Joseph, Ryser, and Halseth, 2014; Skinner and Hanlon, 2016).

Today's housing market in 100 Mile House resembles that found across many small communities in northern BC. There is a high level of homeownership (over 75 %), and house prices have remained static. The average selling price for a single-detached

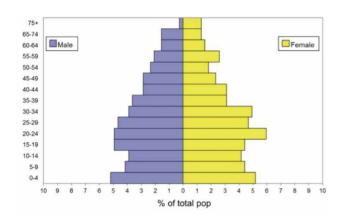
home has averaged between \$200,000 and \$250,000 (Canadian dollars) since 2011. These prices are on par with other communities through the central interior of the province. In terms of the stock itself, more than 55 % is at least 35 years old, and 1 in 10 homes was reported in the last national census as being in need of major repair. From 2016-2018, a total of 25 residential building permits were issued; 24 for single-detached dwellings and 1 for a multi-unit building comprised of 4 units. One difference from other communities in northern BC is that while single-detached dwellings are the most common form of housing, they account for just under half of the housing stock. Recent additions (described below) to address housing needs for seniors have played a role in diversifying the local housing stock. Looking forward, there has been an increase since 2016 in the number of residential property transactions in the community.

Population

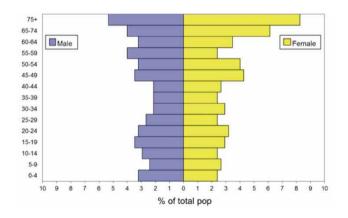
The structure of the population in 100 Mile House reflects the historical development and current state of the region's economy. From the 1950s to the 1980s, jobs in forestry and agriculture attracted young workers and their families. The population during this period was dominated by people in the family formation years. As reflected in the 1981 population pyramid (Figure 2a), many of these families were raising young children at the time. This population profile mirrors that found in the expanding resource frontier regions of the time in many OECD states.

By 2011, there had been a dramatic change in the structure of the population (Figure 2b). The majority of the population is now over 50 years of age, and the fastest growing segments of the population are in the 65+ age groups. This can be attributed to general population ageing and the dynamics of resource frontier ageing that here involved significant job losses in the forest industry and youth out-migration. As reflected in the 2011 population pyramid, the older age cohorts are strongly dominated by women. This gendered outcome is a reflection of the generally longer life expectancy of women in Canada. Whether they are recent amenity or retirement migrants to the community or have lived in 100 Mile House for decades, women in this community are outliving their spouses. Again, this demographic transition reflects the types of changes that are also experienced in the rural and small town resource-frontier regions of states such as Finland, Sweden, Norway, New Zealand, and Australia.

Figure 2: a) 100 Mile House Population Pyramid, 1981 (Statistics Canada, 1981)



b) 100 Mile House Population Pyramid, 2011 (Statistics Canada, 2011)



Population projections for the 100 Mile House Local Health Area predict that the population aged 65+ will grow by 72 % by 2026 and 59 % by 2036 (Community Development Institute, 2016b). In 100 Mile House itself, the population 75+ is forecast to increase 158 % by 2026, while the population 85+ is forecast to increase 525 % by 2026 (from 195 to 1,023). The large scale of these projected increases also reflect that

historically these older age cohort populations were very small – something that reinforces the point that these communities lack the experience and infrastructure for this older population. The increase in the older age cohorts raises critical issues with respect to the housing stock and its fit with the needs and capacities of the local population.

Not surprisingly, given local population ageing, there has been a major shift in household size (Table 3). In 1981, one and two-person households comprised 49 % of the population. By 2016, that had increased to 77 %. This can be attributed to the increase in older 'empty nest' households. At the same time, 100 Mile House experienced a decline in the number of four and more person households, from 32 % in 1981 to 11 % in 2016. That much of the housing stock in 100 Mile House was built for the large 4+ person baby boom household foreshadows a challenge around overbuilt housing.

Table 3: 100 Mile House - Household Size (Statistics Canada, 1991, 1996, 2001, 2006, 2011, 2016)

	1991	1996	2001	2006	2011	2016
# Total Households	740	795	770	810	830	890
1 person	220	250	295	300	300	350
2 persons	225	290	265	285	310	340
3 persons	120	105	80	115	105	105
4 or more persons	170	150	130	115	115	95
% Total Households	100.0	100.0	100.0	100.0	100.0	100.0
1 person	29.7	29.4	38.3	37.0	36.1	39.3
2 persons	30.4	34.1	34.4	35.2	37.3	38.2
3 persons	16.2	12.4	10.4	14.2	12.7	11.8
4 or more persons	23.0	17.6	16.9	14.2	13.9	10.7

Housing Stock

The Northern BC Housing Study profiled the housing stock in its 10 sample communities in order to provide insight into its suitability for the existing and projected population. As might be expected, the housing stock in 100 Mile House in 1991 consisted

mainly of single-family detached houses (48 %) – perfect for the town's young and growing families of the time (Table 4). Apartments comprised less than 30 % of the housing stock. When the discussion turns from type of dwelling to size of dwelling, we looked specifically at the average number of rooms per dwelling to better link to household sizes. In 1981, the average number of rooms per dwelling was 5.7 rooms.

While the increasing seniors' population might suggest that apartments or semi-detached dwellings might become more prevalent over time, the opposite has happened. By 2016, the proportion of single-family detached homes in 100 Mile House increased to close to 60 %, while the proportion of apartments decreased to below 20 % (Table 4). This was somewhat offset by an increase of approximately 5 % in semi-detached homes. Turning again from type of dwelling to size of dwelling, we find that in 2016 the average number of rooms per dwelling had actually increased to 5.9 rooms. In terms of number of bedrooms, in 2016 22 % of the housing stock consisted of four or more bedroom dwellings, while 48 % consisted of one or two-bedroom dwellings. A small number of newly constructed dwellings has supplemented the legacy of the past built environment in recent years; however, the new dwellings appear to have followed the old style of large single-detached houses rather than taking up the emergent opportunities to build smaller units better suited to smaller, older households.

Table 4:
Occupied private dwellings, by type
(Statistics Canada, 1991, 1996, 2001, 2006, 2011, 2016)

							% Change	% Change
	1991	1996	2001	2006	2011	2016	2011-2016	1991-2016
Total	735	800	770	810	830	890	7.2	21.1
Single-detached	350	395	375	365	380	420	10.5	20.0
Semi-detached	45	40	60	60	70	65	-7.1	44.4
Row	45	50	90	105	100	110	10.0	144.4
Apt, detached duplex	15	10	5	20	5	15	200.0	0.0
Apt, less than 5 storeys	185	180	140	165	165	170	3.0	-8.1
Other single attached	20	15	5	-	5	5	0.0	-75.0
Movable dwelling	70	105	105	95	110	105	-4.5	50.0

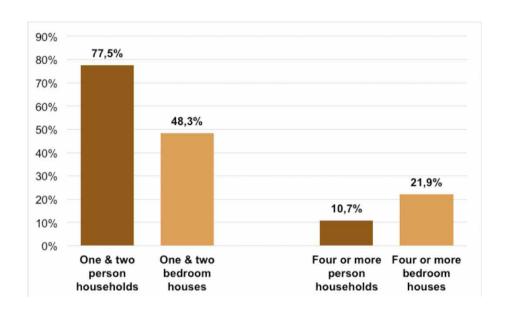
The Northern BC Housing Study also looked at the age of the housing stock. Age is an important consideration given the construction standards and housing designs that were prevalent in northern BC before 1980. In Canada, concerns about energy efficiency in housing only emerged after 1975. As a result, homes built before this time are generally costly to heat in winter, which has an impact on housing affordability for people with low incomes. Housing design is another important consideration. One of the most popular single-family home designs of the 1960s and 1970s was the 'split-level', where the main entry is a small landing with seven steps up and seven steps down to the main living areas. While this design may have been functional for a young family, it is problematic for people with mobility challenges. Finally, the age of the housing stock is also a consideration because the older that a home is, the more likely it is to be in need of major and expensive repairs.

In 100 Mile House, 62 % of the housing stock was built in 1980 or before, while only 38 % was built after 1980 (and only 9 % was built after 2001). In communities across northern BC, it is not uncommon for the majority of their local housing stock to have been built in the late 1960s and early 1970s coincident with a period of rapid growth and expansion of the BC forestry sector. Because of this age profile in the 100 Mile House and surrounding region, about one in ten homes was reported as being in need of major repairs. As found in other rural and small town regions whose resource industries have struggled since the 1980s, the lack of demand in the housing market has meant little overall new investment and little experimentation by builders and developers with new housing that would target emerging market segments – such as smaller sized units for young households with no children, or small and accessible-design units for older households relocating to the community or downsizing their housing within the community.

Housing and Population

When we bring population, specifically household size, information together with information on the housing stock, a mismatch is identified. In 2016, while 22 % of the local housing stock was comprised of four or more bedroom dwellings, under 11 % of the local population was comprised of four or more person households. In contrast, while 48 % of the housing stock was comprised of dwellings with one or two bedrooms, nearly 78 % of the local population was now comprised of one or two person households. While much of the housing stock has remained static, and targeted towards larger households, the demographic dynamic of population ageing has greatly reduced the numbers of large households.

Figure 3: 100 Mile House Housing/Household size mismatch (Statistics Canada, 2016)



In working with community groups in 100 Mile House and the surrounding area, we have heard from many that there is a need for additional independent seniors housing complexes in the community. At the same time, older residents who would like to downsize into a smaller home have also indicated that they face limited choices, and the age of the housing stock often means that any available smaller housing units are unsuited to older households or are in need of costly repairs. Further complicating the situation is the fact that there is limited in-migration of younger people in their family formation years, which has made it difficult for older residents to sell their current homes. Unable to find suitable housing in a seniors housing complex, or to downsize, many local residents report that they are forced to stay in their current homes, which they find to be too large, too difficult, and too expensive to maintain for older persons on the limited incomes available to retirees.

Taken together, the findings highlight how economic and policy restructuring in resource-dependent rural and small town places has had a significant impact not only on patterns of demographic change, but also on the nature of the existing housing stock and on the capacity of that stock to meet the needs of the local population into the

future. Demographic change is leading to overall population ageing, especially growth in the oldest age cohorts. In turn, there are shifts towards much smaller household sizes amongst both old and young households. A lack of housing market activity, development, and reinvestment (public or private) means that today's housing stock is generally old, larger than required, focussed almost exclusively on single-detached units on large properties, and in need of repair or updating. These findings mirror resource regions elsewhere. Updating this stock needs to focus specifically upon accessibility within the dwelling unit for the growing demographic of older residents and on energy efficiency to reduce house operating costs for retired people living on low or fixed incomes. There is also an unmet housing demand for smaller, accessible housing for people wishing to downsize. In addition, there is a need for support services to help keep older people in their own homes longer. The research points to the need for both housing investment and policy renewal.

Community Response

Given the twin processes of dynamic transformation in local demography with relatively little change in the local housing stock, how are rural and small town communities responding? Drawing upon our case study of 100 Mile House, we identified two broad areas of local action. The first involves the action of investing in, and transforming, the local housing stock itself. The second involves various forms of 'preparation', including research, organization, planning, and advocacy.

Like many places familiar with community development activities, when 100 Mile House began to encounter issues associated with population aging, its first response was to apply to various funding organizations for the money to build needed units – people wanted action. Over time, this resulted in a small number, but otherwise solid foundation, of basic housing options and supports for older residents. A first initiative included "Carefree Manor", a one-storey facility with 36 assisted living units (19 of which are in private ownership and 17 of which are publicly subsidized). It includes one-bedroom and studio suite units (Age Friendly Society of the South Cariboo, 2017). The goal was to provide a small number of older households with local accommodation once they no longer wished to be in their large former houses.

Over the years as people aged in Carefree Manor, the health and care needs for some were increasing rapidly. The next applications were, therefore, to build housing that came with more medical and care supports. This resulted in the construction of Fischer Place and Mill Site Lodge. Built next to the hospital, this is a long-term / complex care facility with 79 residential care beds (all equipped with ceiling lifts), and five short-stay beds (inclusive of one palliative care suite). An additional 14 beds were announced in 2016 (Age Friendly Society of the South Cariboo, 2017).

Again, after several years of operation, the need for an intermediate level of accessible housing was identified and the community worked together with the provincial BC Housing agency and Canada Mortgage and Housing Corporation to create Pioneer Haven. This independent living facility, includes a total of 24 units of affordable (subsidized) seniors rental housing (Age Friendly Society of the South Cariboo, 2017).

Taken together, these actions have provided a continuum of seniors' housing, from independent living apartments to facilities that provide high levels of medical care services. In 2017, the community was successful in working with BC Housing and received approval for an 18-unit affordable rental housing complex for low-income adults. More recently, there is now nascent private sector interest with one developer in particular interested in constructing market housing for seniors. The proposed units are one-level ground-oriented in design and there appears to be a great deal of interest in them.

With regard to various forms of 'preparation', the experience of responding to housing needs only after they had already manifested themselves has highlighted for 100 Mile House the need for more attention to long term planning around demographic and housing change. To start, they have used the findings from the CDI's Northern BC Housing Study for 100 Mile House. This provided them with a detailed summary of demographic information together with data about the housing stock and the housing market. Responding to this new information, and hoping to get ahead of upcoming needs, people in the community have come together and established the Age-Friendly Society of the South Cariboo (AFSSC). Members come from 100 Mile House as well as the surrounding area. To enhance local participation, share research information, and bring people together for dialogue around opportunities and possibilities, the AFSSC sponsored a Housing Forum on January 24, 2017. They followed this in the Spring of 2017 by conducting a detailed seniors housing survey (Age Friendly Society of the South Cariboo, 2017). Again, the CDI at UNBC supported this project in its research and analysis components. The AFSSC also published a South Cariboo Seniors Resource Directory in June 2018 (Age Friendly Society of the South Cariboo, 2018). Then, in the Fall of 2018, the AFSSC hosted a workshop on emergency preparedness for seniors. As the community moves forward, not only have improvements been made to the physical infrastructure for housing older residents, but a great deal more information and awareness has been generated. It is this information and awareness that will inform better decision-making and support applications to partner organizations for future housing actions and investments.

Policy Discussion

In summary, 100 Mile House is illustrative of a small rural community experiencing resource frontier ageing. Its experience with significant post-war resource-industry development follows that found in many Western industrialized countries. The housing stock that accompanied this dramatic upswing in economic activity and population was built during the baby boom era and was designed, therefore, with the needs of young families in mind. The social and public services infrastructure that followed, were developed during the Keynesian public policy era and drew upon significant state spending and coordination.

While all of the signs suggesting an urgent need for renewed investments in both housing and service infrastructure to accommodate ageing-in-place have been emerging over the past decade, Neoliberal public policy has left most of those needs unattended in rural and small town communities. Now, in the face of advocacy from community groups, information and research from many groups and agencies, and even market signals on changing demands and needs, both senior and local governments are showing signs of recognizing the opportunities embodied by demographic ageing in older resource-dependent communities. In 100 Mile House, the local government and community advocacy groups have become very active in planning and implementing actions and activities to address some of the consequences of population aging and the needs of older residents. To accomplish these changes, however, they need assistance from senior levels of government in order to be effective.

Over the past decade, there has been growing BC provincial government policy attention to the twin issues of population aging and housing needs for older

households. One notable change has been to increase the connections between housing and support service provision. The introduction of new legislation in 2004 to permit 'Assisted Living Residences' filled the gap between independent living and residential / complex care. Assisted Living housing operators must offer five hospitality services, including meals (one to three meals per day depending upon the circumstances), light housekeeping to meet residents' health and safety needs, laundry, social and recreational opportunities to support social interaction and involvement, and a 24-hour emergency response system. In addition, they must provide basic care services including: regular assistance with activities of daily living (eating, mobility, dressing, grooming, bathing or personal hygiene); assistance with medication (central storage, distribution, monitoring the taking of, or administering, medication); maintenance or management of cash resources or other property of a resident; monitoring of food intake or of adherence to therapeutic diets; structured behavioural management and intervention; and psychosocial supports or intensive physical rehabilitative therapy. In 2016, the legislation was amended to allow for more flexibility, including being able to offer more services to individuals on a temporary basis (e.g. after surgery) or at a lower level.

The question of whether small rural communities are attractive to private sector developers wishing to build assisted living facilities comes down to a matter of scale (or lack thereof in small places) and its impact on profitability. To reduce the risk to private investment, the BC provincial government has developed two effective policy tools. The first involves the participation of BC Housing or the provincial health authorities as partners in the construction of these developments. This partnership involves the purchase by BC Housing or the health authority of a specific number of units in the facility. Through these transactions, the developer's overall risk is reduced and access to construction capital is realized. Upon completion, BC Housing or the health authority makes these units available to lower income households. Another form of partnership that has become common is for the health authority to take on the delivery of in-facility health services while leaving the hospitality services in the hands of the developer. This reduces the need for the developer to recruit and retain professional health staff.

Fitting with policy moves that link housing and support service provision, in 2012 the BC provincial government introduced the 'Better at Home' program. This program provides non-medical support services to seniors who wish to remain living in their own homes. 'Better at Home' includes services that help to support independence such as transportation, housekeeping, yard work, home repairs, and visiting. The program is still considered a 'pilot' and is being delivered in 56

communities. It is coordinated in partnership with a central non-profit agency – the United Way – and delivered locally by community-based non-profit agencies.

As in other small rural communities, capacity issues challenge the local ability to respond to population aging and its concomitant housing and service needs. One of the most challenging capacity issues is whether the local labour market can fill care sector jobs. Overall, health care is certainly an employment growth sector, and universities and colleges across Canada (including the regional universities and colleges that specifically service the 100 Mile House region) have seen growing enrolments in these programs. The need to recruit care sector workers further reinforces the value of senior's retention as an economic development and diversification strategy for smaller places, as public services delivered locally adds stable, well-paid jobs to the local economy. To attract and retain suitably qualified health and social care staff is an issue in rural BC as it is in many OECD rural regions. This means that communities must be attentive to the range of housing and community amenity investments described throughout this paper.

Perhaps the most important general BC provincial government policy initiative has been the introduction in 2005 of the 'Age-Friendly Communities' program. This program assists communities in developing and implementing local plans that support healthy ageing in place. Widely subscribed to by small rural and small town communities, as of 2018 more than 148 local governments have undertaken age-friendly planning projects. Many of these projects have fostered creative design that has made communities more accessible. Beyond simply addressing the needs of older residents, the initiative is aimed at making rural and small town communities more attractive and livable for people of all ages and stages of life.

But even with new policy attention, much needs to be done. So what are some of the policy and program opportunities and possibilities that arise not just from population ageing but from the specific needs and opportunities created by resource frontier ageing in smaller resource-dependent rural communities? Based on the findings of the Northern BC Housing Study, we would like to highlight four specific areas for policy attention. The first focusses upon new housing developments and is directed to encouraging housing design and construction that makes the housing unit more flexible and adaptable across a household lifespan. As noted in this study, the current housing stock is not adaptable and, even worse, much of the new housing is also not suited to older households. New housing should be more adaptable in accommodating singles, young couples, growing families, empty nest couples, and retirees. This needs attention from the outset - to accessibility standards around the design of bathrooms, the location of key services on the same level, the width of

doorways to accommodate mobility devices, and level entrances into the dwelling. In Canada, regulations around such features are found in the National Building Code, which sets minimum standards. The national code is then adapted with additional requirements or standards by each province. In 100 Mile House, the regulation of accessibility requirements is done through the BC Building Code and new units cannot be sold by the builder/developer until the unit receives an 'occupancy permit' certifying that it meets the requirements of the code. Thus, in Canada, there exists a very strong policy framework for directing and enforcing changes in the housing stock. However, universal accessibility requirements for all new construction are not yet in the national or provincial building codes because, while desirable, government has not followed through as many in the development community are lobbying against these additional requirements.

Second, we cannot ignore the existing housing stock. As noted in this study, a small community such has 100 Mile House has a significant built housing stock and this stock will continue as a legacy in the built environment. In 100 Mile House and many similar resource-dependent communities, the existing housing stock has many form and design challenges due to its period of construction. Furthermore, its age suggests ongoing concerns with the need for major, or even just routine, repair and rejuvenation. Public policy approaches must not only encourage owner renovations and upgrading, but policy and industry must come together to develop standard renovation responses to such critical issues as energy efficiency, ease of maintenance, and accessibility for those who may become increasingly mobility-challenged. One area of provincial policy action was the introduction in 2012 of the 'Home Renovation Tax Credit for Seniors and Persons with Disabilities. This tax credit assists eligible individuals 65 years of age and over, and persons with disabilities, with the cost of certain permanent home renovations to improve accessibility or be more functional or mobile at home. More recently, the provincial government introduced programs that will stimulate housing renovation by addressing energy efficiency issues. These programs include several grant and income tax-related supports for the installation of new energy efficient windows, doors, heating furnaces, and hot water heating appliances (British Columbia, 2019). The programs are part of the government's larger 'CleanBC' environmental plan to reduce overall provincial carbon emissions. One of the challenges with programs such as these is that it is very difficult to access data on program uptake and is therefore impossible to know how well the intended outcomes were achieved.

A third important public policy area focusses upon the concept of housing affordability. This goes beyond older debates about "affordable housing" – which has

become a euphemism for public housing. Instead, housing affordability must focus upon consideration of all of the costs and factors that have an impact on the affordability of the housing for the household. This means including calculations of utility costs, taxes, maintenance, transportation, energy costs, etc. A focus on affordability is about whether maintaining the house and paying its operating costs falls within the financial means of the household. This is not only important for seniors on fixed incomes, but has implications for singles and young couples who have not yet reached their prime income earning years. One provincial policy action around affordability is the 'Shelter Aid for Elderly Renters' (SAFER) program. SAFER provides monthly cash payments to subsidize rents for BC seniors (in this case referring to those age 60 or over) with low to moderate incomes. In 2018, BC Housing provided SAFER subsidies to more than 17,000 senior households. However, this program only speaks to absolute rental costs and not to the wider issues that impact housing affordability.

Looking at the broader policy perspective, government needs to be attentive to housing affordability for seniors generally, not just those on low incomes. One critical area for rural seniors concerns utilities costs for heating. Given the earlier descriptions of an older housing stock that does not meet energy efficiency standards, policies and programs that would help seniors finance energy upgrades could reduce overall housing costs. Current housing support policies such as those that allow low-income seniors to defer property tax payments (with payments to be settled with the estate) might be extended to funds loaned to renovate for energy efficiency. This approach could also be adopted for renovations that would support livability and accessibility, so that seniors could remain in their own homes. Similarly, budget management policy approaches that balance costs and savings across government departments, for example savings in health care spending when seniors able to remain longer in their own homes could be shifted to departments that would spend the money to actually help keep those seniors in their homes, need to be explored as they are zero-sum policies.

A fourth important public policy area builds from recognition of the scale of the challenge in addressing housing needs in small communities. This scale is exacerbated not just by the pace of resource frontier ageing, but also by the lack of policy attention and follow-up investments in services, supports, infrastructure, and housing for older residents through the last 30 plus years of Neoliberal public policy. Because of the scale and urgency of needs, public policy must be attentive to encouraging partnerships in the delivery of new housing, housing renovation, and the support services and infrastructure for that housing and the people who will live in it.

Partnerships within public policy efforts to address housing needs are especially critical in non-metropolitan and rural resource-dependent communities. As noted

above, some policy efforts in BC have allowed direct public participation in private sector housing investments in communities and regions where the need to reduce risk for capital had been identified as a barrier. There are also the more general polices that support, for example, homeowner participation in both general and targeted (ie: energy efficiency) renovations. This policy attention must also include the funding and programming supports needed for partnership development and continuance. Funding can come from various sectors such as direct state funding or encouragement through tax revision for private sector investments or donations. Only once policies are in place that support the widespread development of housing partnerships across public-private-and nonprofit sectors will creative local solutions be able to scale-up for wider impact. A flexible policy approach must also include attention to the value and role of small-scale partnerships that enhance housing, or housing supports, one project at a time. Flexibility in policy will be critical (OECD, 2019), as not all places will be similarly equipped to participate in housing programming of older residents. There may need to be options, for example, for exchanging housing for services at the community level. A critical part throughout the development of partnership policy will need to be attention to supporting mutual benefits through partnerships.

Conclusion

In this paper we have looked at the connected issues of population aging and housing needs within resource-dependent rural and small town communities. Using specific examples from one small community in BC, we linked past community and housing development with contemporary economic change to set the stage for resource frontier ageing – a demographic process that the current housing stock in such communities is not well suited to support. These trajectories link well with the theoretical literature on resource-dependent community change in Western developed economies. The expansion of such communities in the immediate post-World War Two era proceeded under a Keynesian public policy framework within national designs to exploit new natural resource development opportunities to rebuild war shattered economies. Demographic and housing pathways established during this era were disrupted by the global process of resource sector restructuring following the economic recession of the early 1980s. The emergence of a Neoliberal public policy

framework in the aftermath has meant economic restructuring and population decline has continued for many of these communities. Across Northern Europe, the Scandinavian countries, and across OECD states more generally, the consequence of this has been rural decline.

The findings are important for a number of reasons. To start, rural ageing is a common process across Western developed economies. We focused on the topic of housing because it is a critical part of supporting healthy ageing and quality-of-life for older residents. By helping to retain older residents in the community, housing is also an important part of the economic development strategy of small places – in this it can be a supporting or limiting factor, depending upon the state and quality of the stock. From this orientation, we explored the emerging mismatch between the current housing stock and the new demographic realities of the community. We used our case study to sketch out the ways that one small community is responding to the housing needs of its ageing population. In turn, this highlighted that there are important public policy questions that need attention if rural and small town places are to work through this period of community change. It seems clear from the pressure outlined in the case study that the need for new policy and programming directions is urgent.

Endnotes

- 1. A common or typical categorization of 'seniors' housing options in Canada would include:
 - Independent living units (private apartments)
 - Supportive living units (private apartments which may include some meals, housekeeping, and laundry services)
 - Assisted living units (similar to supporting living units, but with greater care in meals, grooming, medication, and home care)
 - Long-term care (i.e. facilities such as a nursing home)
 - Palliative care (i.e. facility designed to provide care for terminally ill residents)

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