



Seniors Profile: Mackenzie, BC

New Horizons for Seniors

Fall 2020

*Prepared by the Community Development Institute
University of Northern British Columbia*

Availability

Copies of this report have been provided to the Mackenzie New Horizons Stakeholder Committee. The final reports are also posted on the website of the Community Development Institute at UNBC: <https://www.unbc.ca/community-development-institute/research-projects>.

Contact Information

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Context

This seniors profile is part of the New Horizons project undertaken by the Mackenzie Campus of the College of New Caledonia in collaboration with community partners, including Kimta Transportation Society, Autumn Lodge Society, and the Community Development Institute at UNBC. The project aims to research, develop, and implement creative and collaborative approaches to increasing the social inclusion of seniors in the District of Mackenzie. As the project partner responsible for the research elements of New Horizons, the CDI has compiled this profile. The purpose of the profile is to collate information to create a snapshot of the senior population in the community, as well as some historical developments, to help the community understand seniors' situation and make informed decisions.

The Seniors Profile includes mainly data from Statistics Canada's census profiles. A census of the Canadian population is undertaken every five years to provide a statistical portrait of the country. The census consists of a mandatory short-form questionnaire sent to every household and a mandatory long-form questionnaire sent to a sample of 25% of households. For the 2011 census alone, the mandatory long-form questionnaire was replaced by the optional National Household Survey. While the mandatory short and long-form surveys in 2016 feature response rates of 94% and 90% respectively in Mackenzie, the optional survey in 2011 only had a response rate of 51% in Mackenzie, leading to a less representative data set for 2011. This should be kept in mind when interpreting developments over time that include 2011 census program data.

Introduction

The District Municipality of Mackenzie is located in the Fraser-Fort George Regional District in the northern interior of British Columbia (BC). It constitutes 155 square kilometres of land near Morfee and Williston Lakes, at the end of approximately 30 kilometres of Highway 39 connecting Mackenzie with Highway 97 North.

Neighbouring communities include McLeod Lake and McLeod Lake Indian Reserve 46 kilometres south of Mackenzie with a combined population of under 200. Bear Lake, 109 kilometres south of Mackenzie, has a 2016 population of 151. Highway 97 connects Mackenzie to Prince George, a northern service centre with a 2016 population of over 74,000 a little over 184 kilometres to the south. To the east, Chetwynd, a town of around 2,500, is located 177 kilometres from Mackenzie. Tumbler Ridge, with a population of under 2,000, and Dawson Creek, a small service centre with a 2016 population of 12,178 are located at a distance of just under 280 kilometres.¹ Another service centre for Mackenzie is Fort St. John, a city of 20,155 located 311 kilometres to the northeast. Mackenzie features a local airport for charter flights. The closest international airport is located in Prince George; Dawson Creek and Fort St. John offer domestic flight connections.

Situated in Treaty 8 territory, Mackenzie's neighbouring First Nations include McLeod Lake Indian Band, Kwadacha Nation, Tsay Keh Dene, West Moberly First Nation, Halfway River First Nation, and Saulteau First Nation. European influence in the area began in the 19th century with fur trading posts and gold miners moving north after the Cariboo Gold Rush. The town site of Mackenzie was developed by British Columbia Forest Products in 1965 as an instant town with a pulp mill and two sawmills.²

Heavily dependent on forestry and mining, Mackenzie has experienced economic volatility reflecting developments in those sectors, such as periods of growth and development in the 1970s and the 1990s

and downturns due to, among other things, the mountain pine beetle, fibre shortage, and wider lumber market developments in recent decades and years.

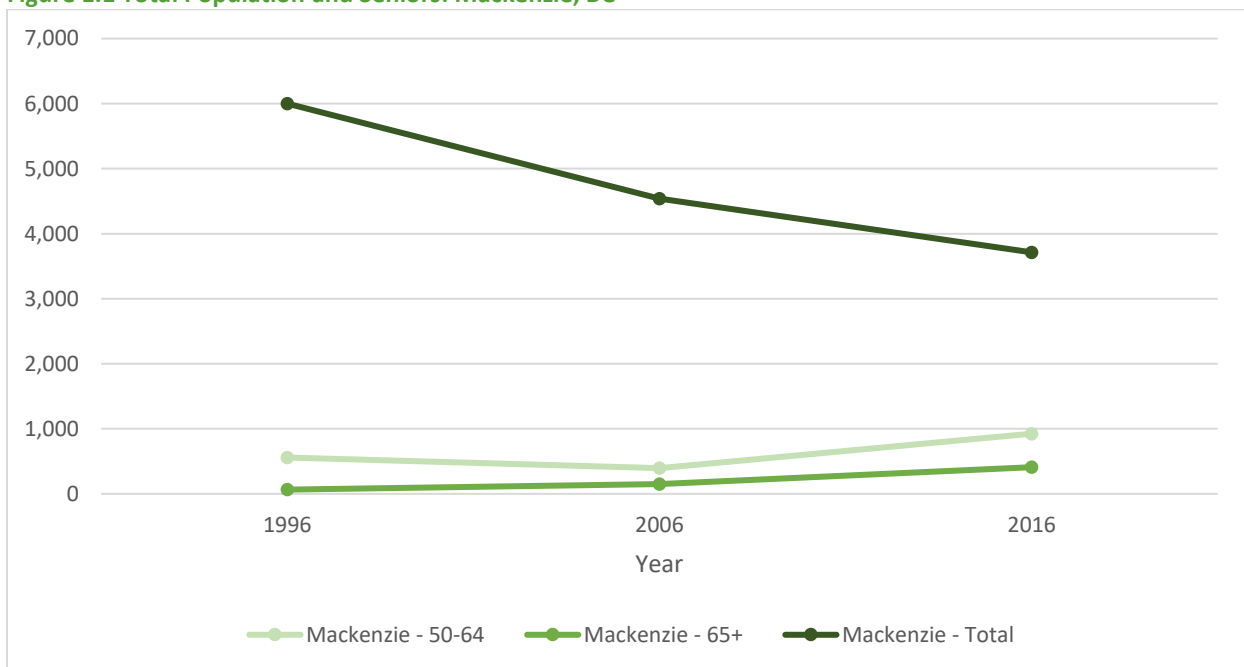
1.0 Population and Seniors

Population data provides information about the size of the community at a single point in time. In combination with other data, population information shows how events and regional trends influence the community.

Figure 1.1 indicates that 3,714 people lived in the District Municipality of Mackenzie as of 2016. In the last 20+ years, the population of Mackenzie has been declining from 6,000 in 1996. During the same time period, the total senior population aged 65 years and over, as well as the pre-seniors aged 50 years and over, have seen a slight but steady increase. As depicted in Figure 1.3, this has meant a considerable increase in the proportion of the community made up of seniors. In 1996, only one percent of the total population was aged 65 years and over. By 2016, seniors made up 11% of the total population, meaning more than one in ten people is of retirement age with an additional one in four people of pre-senior age ready to retire in the next decade.

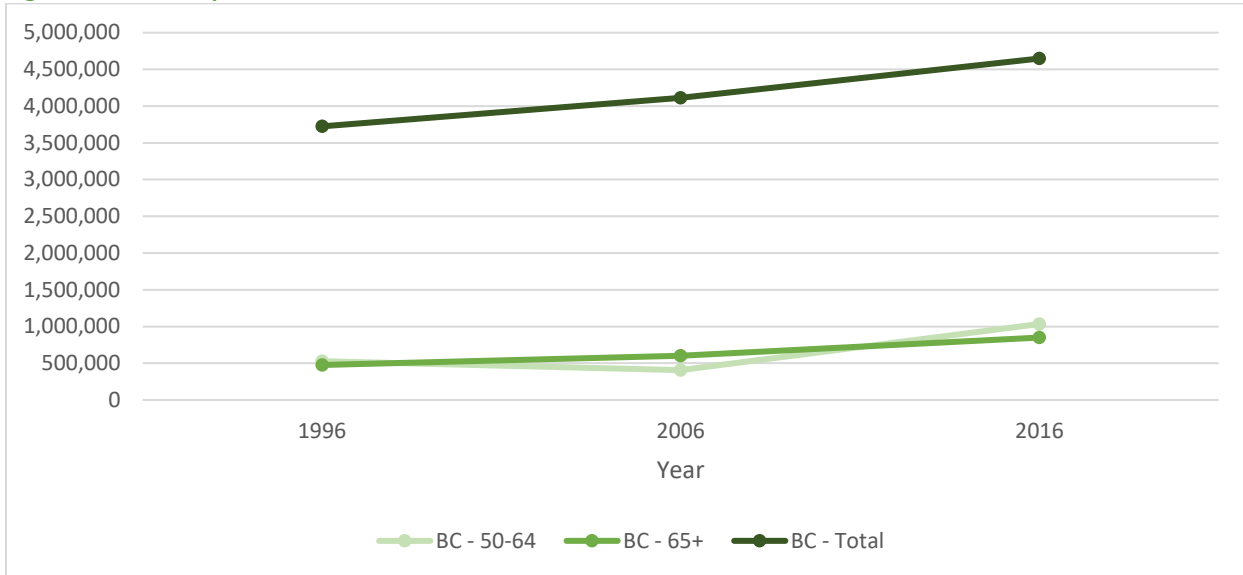
In comparison, BC has seen an increase in its overall population and an increase in seniors only slightly above total population growth (Figure 1.2). Consequently, while BC's senior population currently still makes up a larger proportion of the population than in Mackenzie, the percentage of seniors has increased at a much slower pace than in Mackenzie (Figure 1.3).

Figure 1.1 Total Population and Seniors: Mackenzie, BC



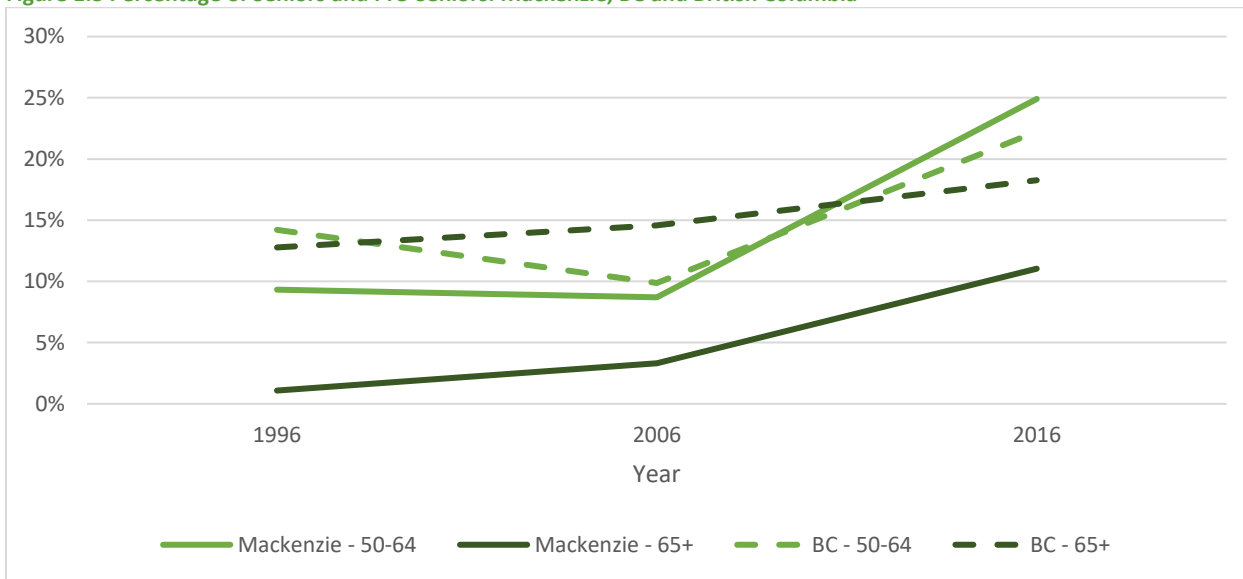
Source: Statistics Canada. 1981-2016. Census Program.

Figure 1.2 Total Population and Seniors: British Columbia



Source: Statistics Canada. 1981-2016. Census Program.

Figure 1.3 Percentage of Seniors and Pre-Seniors: Mackenzie, BC and British Columbia



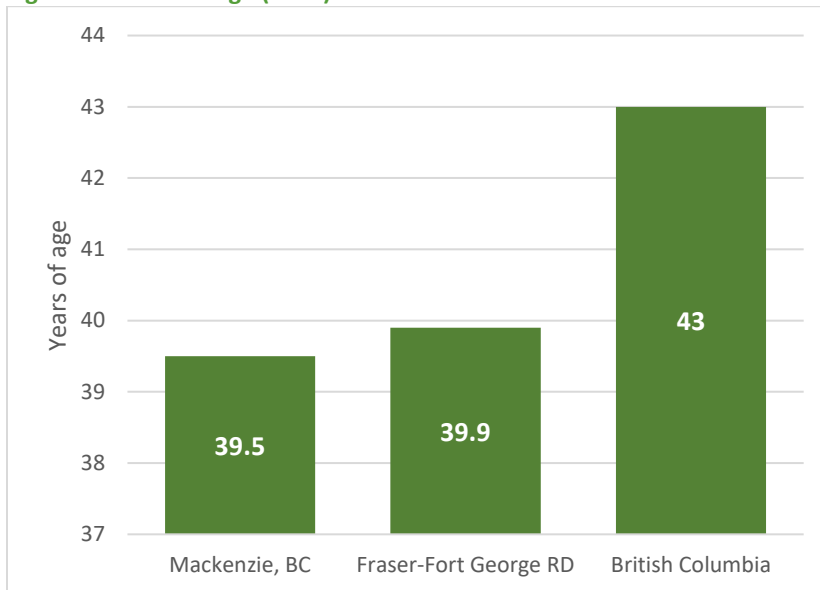
Source: Statistics Canada. 1996 and 2016. Census Program.

2.0 Age Profile

The age profile of a community provides information about the age composition of the population and shows how the population age structure has changed over time. This information is useful for the study of community structure and determining service, housing, and related infrastructure needs.

Median age is defined as the exact age where half the population is older and half is younger. In 2016, the median age in Mackenzie was 39.5 years. As depicted in Figure 2.1, this was slightly below the median age for the Regional District and below provincial levels.

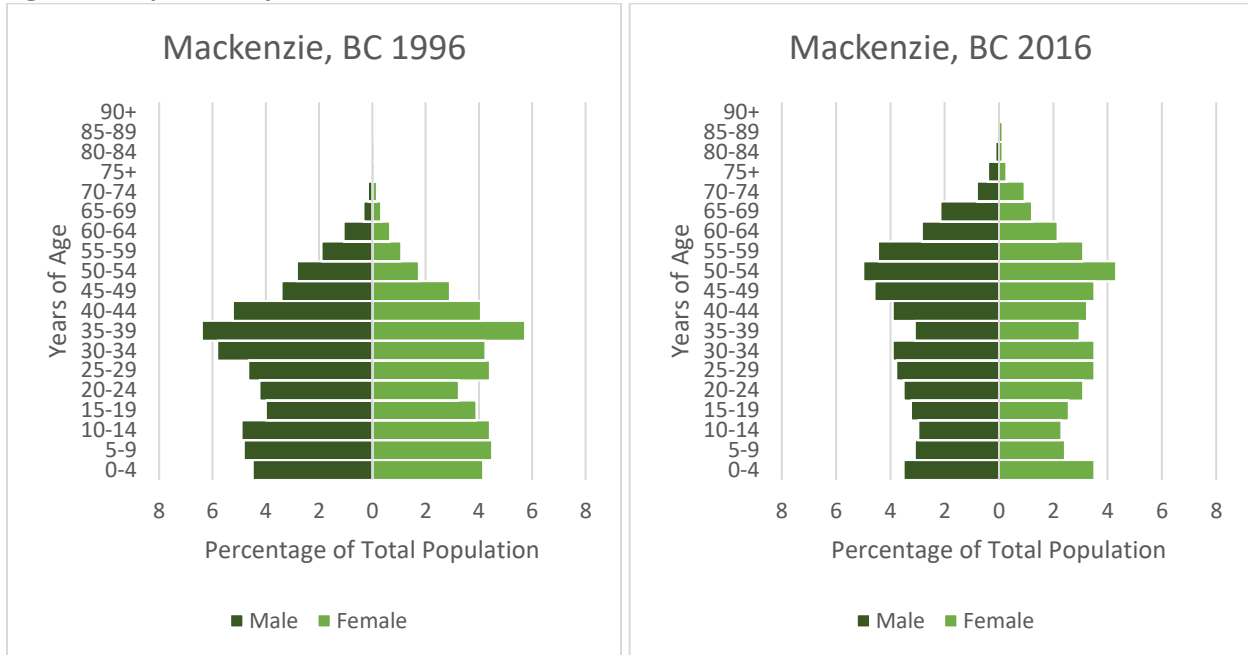
Figure 2.1 Median Age (2016)



Source: Statistics Canada. 2016. Census Program.

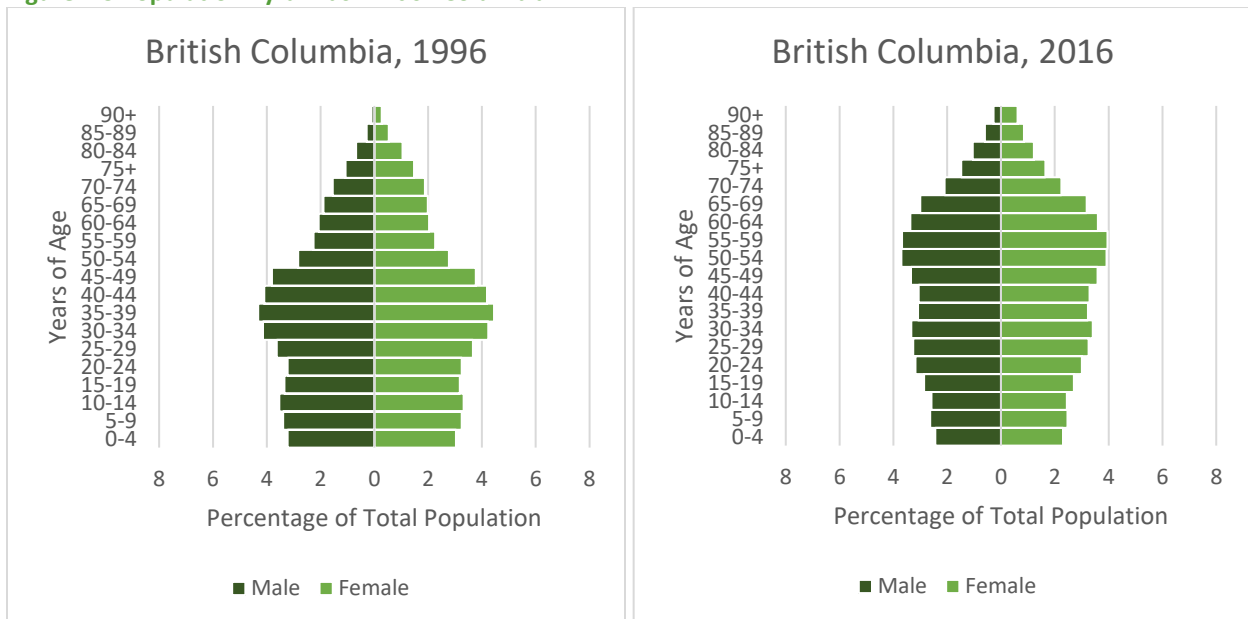
Like many resource communities, Mackenzie was designed and developed to attract young workers and their families to support a workforce for resource extraction industries. The workforce of the 1980s and 1990s resource booms is now aging in place. Population pyramids are a useful way of expressing population age at a given point in time and visualizing community aging over a longer period of time. Each bar represents an age group, starting with the youngest at the bottom of the graph and going up to the oldest age group at the top. The graph is vertically divided into male and female population. Figures 2.2 and 2.3 show that Mackenzie had virtually no older seniors and a generally younger population with higher percentages of children and adults in the family formation years than BC in 1996. By 2016, Mackenzie still shows a high percentage of children, but its population has aged significantly. Working age men and women in the family-formation years aged in their 30s and early 40s were the largest age group in 1996. By 2016, the workforce has aged with people in their late 40s and 50s making up the largest population age groups. Close to one in five of Mackenzie's working age population will have reached retirement age in the next 10 years, close to one-half will be of retirement age within the next 20 years.

Figure 2.2 Population Pyramids: Mackenzie, BC



Source: Statistics Canada. 1996 and 2016. Census Program.

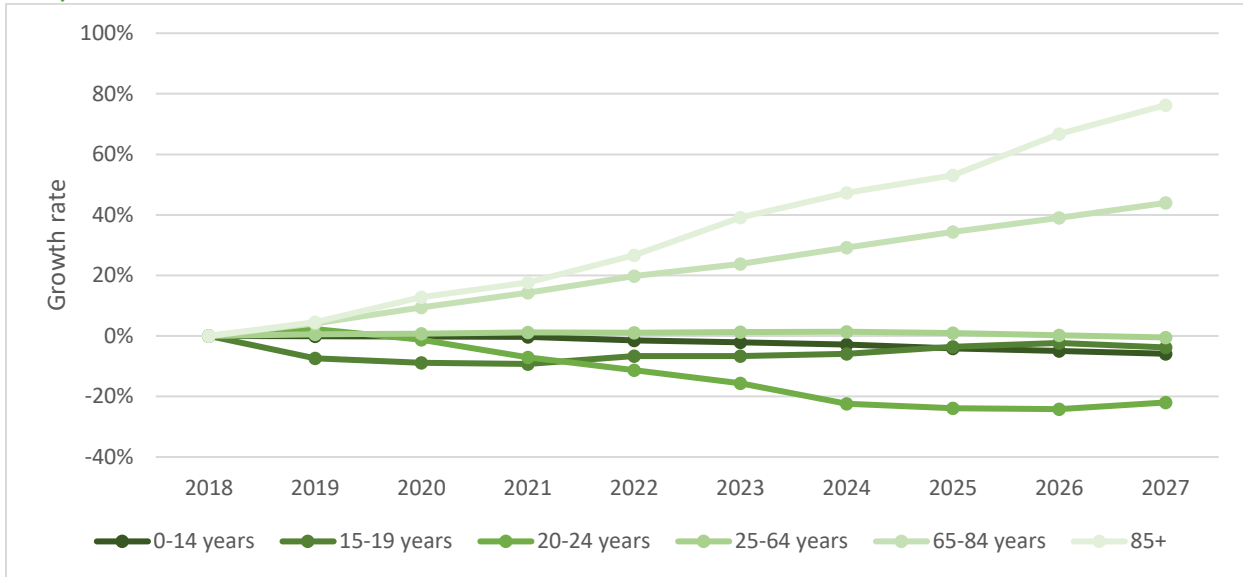
Figure 2.3 Population Pyramids: British Columbia



Source: Statistics Canada. 1996 and 2016. Census Program.

The government of British Columbia predicts population growth of 3.7% from 2018 to 2027 in the Fraser-Fort George Regional District. Figure 2.4 depicts the projected population growth broken down by age group. Seniors aged 65 and over are expected to increase at the fastest rate of 47% by 2027, while the workforce aged 15 to 64 years is expected to experience negative growth (-3%). In particular, the workforce entry population aged 15 to 24 is projected to see decline (-14%). These projections for the Regional District indicate a further increase in Mackenzie’s senior population, and consequently an urgent need to take seniors’ needs into consideration in community strategic planning processes.

Figure 2.4 Projections of Population Growth Rate by Age Group in Fraser-Fort George Regional District (2019-2029)



Source: BC Statistics. 2018. Population Projections.

3.0 Family Characteristics

Statistics Canada defines families as couples, married or unmarried, with or without children, as well as lone parents with children; all members of a family live in the same dwelling.³ Figure 3.1 shows the family characteristics of adults aged 50 years and over. Around one-quarter of residents aged 50 and over in Mackenzie live alone, a little over one-quarter of those are women (28%). Almost two-thirds (64%) of seniors aged 65 and older live with a partner and without children. A total of 87% of seniors are likely to live in one- and two person households.

Table 3.1 Family Characteristics of Adults Aged 50 Years and Over, Mackenzie, BC (2016)

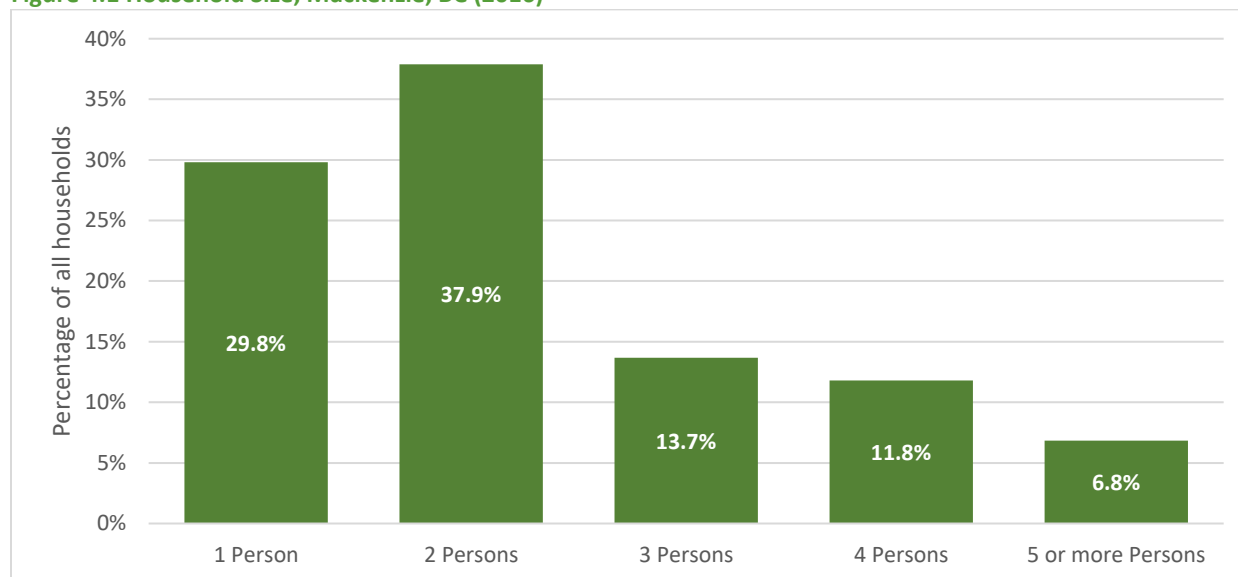
Years of Age	Total	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+
Total	1230	300	340	185	180	125	65	25	10
Living in Census Families	980	225	250	210	135	95	45	15	5
Married and Common-Law	925	205	245	205	130	90	40	10	0
Without Children	745	130	180	175	120	85	40	15	0
With Children	190	75	60	35	10	5	5	0	0
Lone Parents	35	15	10	5	5	0	0	0	0
Not Living in Census Families	350	75	90	75	45	30	15	10	10
Living with other Relatives	25	5	5	0	5	0	5	5	0
Living with Non-Relatives only	35	5	10	10	5	5	0	0	0
Living Alone	305	65	80	65	40	25	15	5	10

Source: Statistics Canada. 1981 and 2016. Census Program.

4.0 Household Characteristics

Statistics Canada defines private households as a person or group of persons occupying the same dwelling. Private households include family and non-family members.⁴ As shown in Figure 4.1, two-person households are the most common household size in Mackenzie in 2016, and one- and two-person households make up over two-thirds of all households. Table 4.1 confirms that the average household size in 2016 is 2.3 persons.

Figure 4.1 Household Size, Mackenzie, BC (2016)



Source: Statistics Canada. 2016. Census Program.

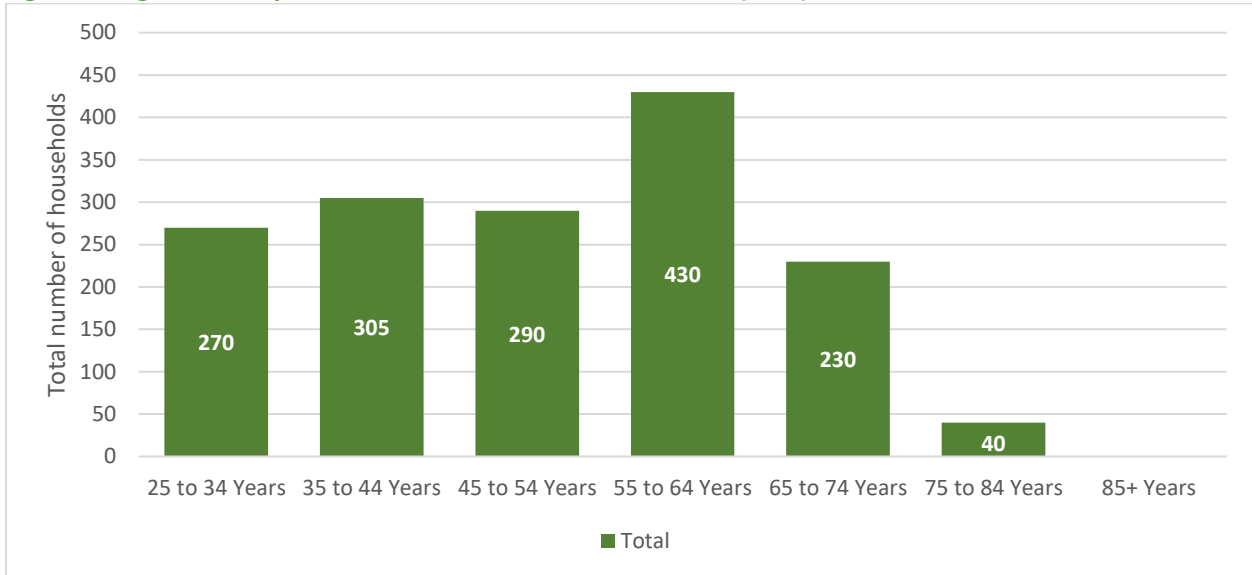
Table 4.1 Household Size, Mackenzie, BC (2016)

	Number of Households	Percentage of Households
Total	1610	100.0%
1 Person	480	29.8%
2 Persons	610	37.9%
3 Persons	220	13.7%
4 Persons	190	11.8%
5 or more Persons	110	6.8%
Average	2.3	

Source: Statistics Canada. 2016. Census Program.

The age of 55 to 64 is the largest group of household maintainers, while a total of 17% of all households are headed by a household maintainer aged 65 and over (Figure 4.2). Figure 4.3 depicts tenure and shows that home ownership is more common than renting a dwelling for all adult age groups. The age group most likely to rent is 25 to 34 years, a common age to start a household or a family, as well as a career (48% renting). As Mackenzie household maintainers age after that time, they are increasingly more likely to own a home; however, at age 75 and up, the likelihood of renting a dwelling begins to increase again. This could be explained with increasing difficulty of maintaining a home and property with increasing age. Financial vulnerability due to a fixed income and/or the loss of a partner might also play into a decrease in home ownership among older seniors.

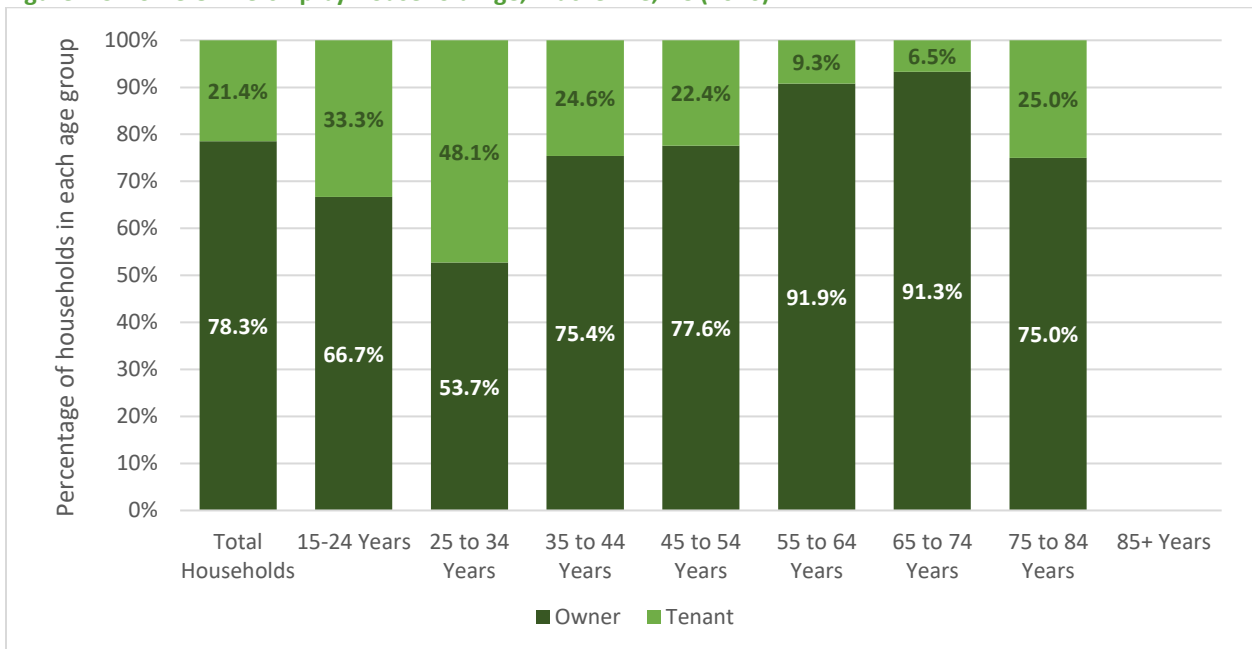
Figure 4.2 Age of Primary Household Maintainer in Mackenzie, BC (2016)



Source: Statistics Canada. 2016. Census Program.

Note: Due to small numbers, data for residents aged 85+ may be suppressed for confidentiality purposes.

Figure 4.3 Home Ownership by Household Age, Mackenzie, BC (2016)



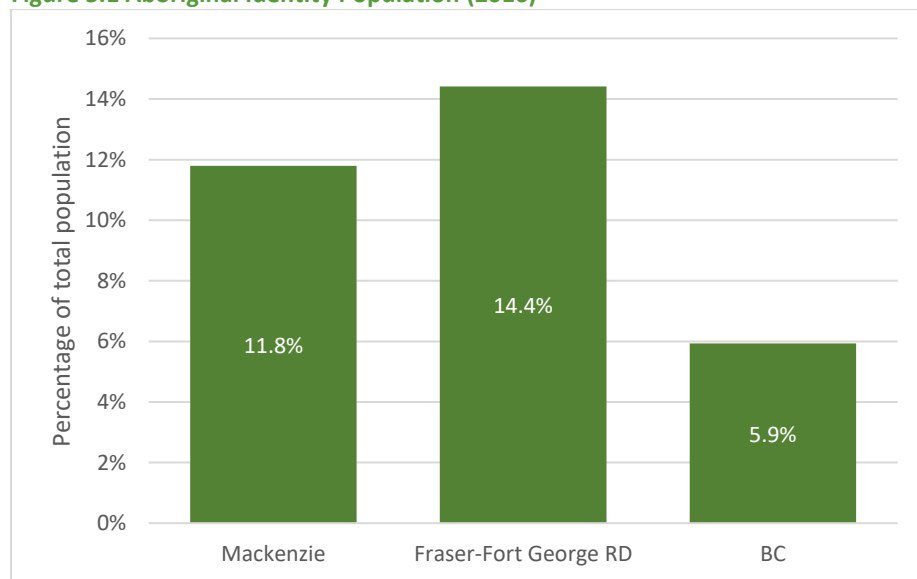
Source: Statistics Canada. 2016. Census Program.

5.0 Aboriginalⁱ Population

In northern BC regions, the population identifying as Aboriginal tends to make up a larger percentage of the total population than the Aboriginal population province- or Canada-wide. Figure 5.1 shows that 12% of the population of Mackenzie self-identify with Aboriginal identity, which is slightly lower than the Aboriginal identity population in the entire regional district (14%) but well above the Aboriginal population of BC (6%). The Aboriginal age profile for Mackenzie (Figure 5.2) demonstrates that the Aboriginal population in Mackenzie is younger than the total population (Figure 5.3). Over 35% of the Aboriginal identity population is aged zero to 14 years, compared to under 18% for the total population. On the other end of the spectrum, 11% of Mackenzie's total population are aged 65 and over, while only 3.4% of the Aboriginal community are in that age group. Notably, the pre-seniors aged 55 to 64 are the second largest age group (13.6%) in the Aboriginal community. In the total population of Mackenzie that age of pre-seniors group only makes up 12.5% of the population. Looking at Mackenzie's total senior population aged 65 and over, under 4% of that group are of Aboriginal identity.

In summary, Aboriginal seniors make up a small portion of Mackenzie's Aboriginal population and Mackenzie's seniors, but their proportional significance can be expected to grow over the next decade as the larger group of Aboriginal pre-seniors age. The Aboriginal seniors group is a valuable resource for the Aboriginal population, and the whole community; however, its relatively small numbers also makes them a group that is easily overlooked in their specific health, social, and cultural needs as they age.

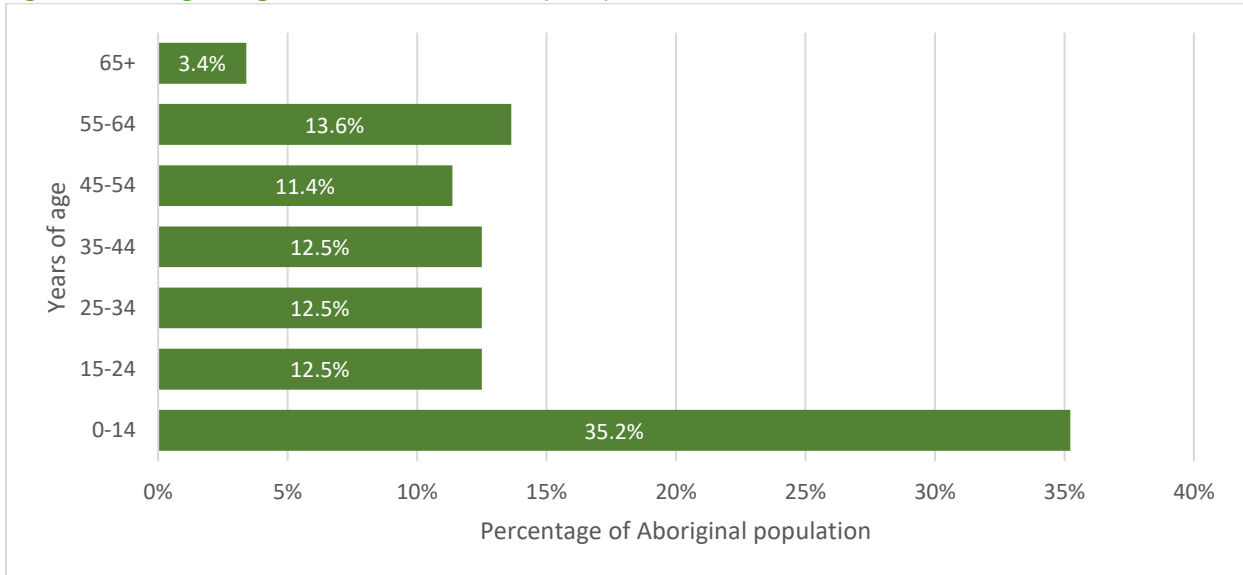
Figure 5.1 Aboriginal Identity Population (2016)



Source: Statistics Canada. 1996 and 2016. Census Program.

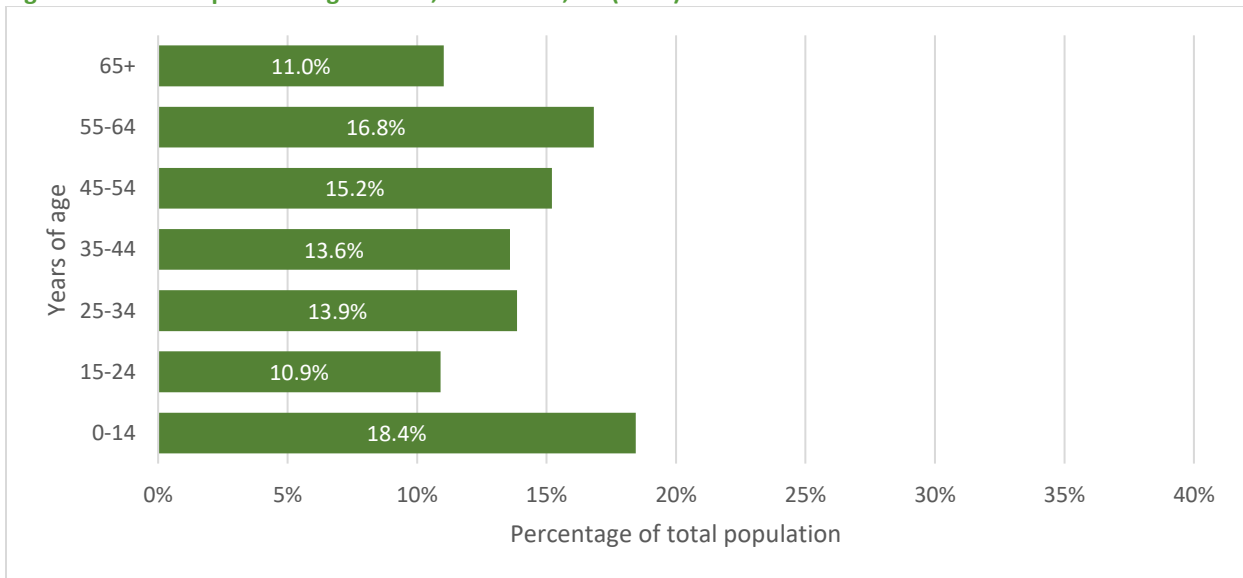
ⁱ The term 'Aboriginal' is used here because it is the terminology used in the Census Program in 2016 and earlier.

Figure 5.2 Aboriginal Age Profile, Mackenzie, BC (2016)



Source: Statistics Canada. 2016. Census Program: Aboriginal Population Profile.

Figure 5.3 Total Population Age Profile, Mackenzie, BC (2016)



Source: Statistics Canada. 2016. Census Program.

6.0 Visible Minority

The term ‘visible minority’ in the Canadian Census is adopted from the *Employment Equity Act* and refers to persons who are non-Aboriginal, and non-Caucasian or non-white.⁵ The visible minority population of Mackenzie makes up a total of 3.4% of the total 2016 population (Table 6.1). More than half of the visible minority is of South Asian origins; the Filipino community makes up one-quarter of Mackenzie’s visible minority. A break-down of the age groups represented in the visible minority population was not available at the Census Subdivisionⁱⁱ level. Immigration statistics introduced in the following section of this profile, however, indicate that approximately one-third of the visible minority of Asian origin is of pre-senior or senior age.

Table 6.1 Visible Minority Population, Mackenzie, BC (2016)

	Total Numbers	Percentage of Total Population	Percentage of Visible Minority
Total population	3,730	100.0%	n/a
Total visible minority	125	3.4%	100.0%
South Asian	70	1.9%	56.0%
Black	10	0.3%	8.0%
Filipino	30	0.8%	24.0%

Source: Statistics Canada. 1996 and 2016. Census Program.

Note: Discrepancies in percentages are due to rounding error in small communities.

ⁱⁱ According to the Census Dictionary, “Census subdivision (CSD) is the general term for municipalities (as determined by provincial/territorial legislation) [...]” (Statistics Canada. 2016. Dictionary, Census of Population, 2016. Available at <https://www12.statcan.gc.ca/census-recensement/2016/ref/dict/geo012-eng.cfm>.)

7.0 Immigration Characteristics

Immigrants are defined as persons who are or have been permanent residents (formerly called landed immigrants), including those who have obtained Canadian citizenship.⁶ Table 7.1 shows the number of immigrants in Mackenzie for the total population, as well as pre-seniors aged 55 to 64, and seniors aged 65 and over. In Mackenzie in 2016, 5.8% of the population are immigrants. This is below the Fraser-Fort George Regional District's immigrant population (9.7%) and well below the 23.3% of the provincial population who are immigrants. Over one-half of Mackenzie's immigrant population are pre-seniors and seniors.

Over 60% of Mackenzie's immigrants arrived before 1981. For pre-seniors and seniors, that percentage is even higher with over 80% of older immigrants having arrived before the 1980s. Creating a connection between the numbers and their context, it is notable that the pre-senior group almost exclusively immigrated before 1981, indicating that they likely arrived as young workers looking for opportunity. Among the seniors aged 65 and over, about one-quarter arrived later. While they might have arrived as older workers, it is likely that many of them accompanied their children and families in their search for job opportunities; the latter would have meant a different immigration and community integration experience.

Close to one-half of all Mackenzie immigrants originate from Europe, one-quarter from Asia, close to one in five from the Americas, and small percentages from Africa and Oceania. Looking at pre-seniors, European origins still make up almost one-half, followed by one-quarter each from the Americas and Asia. The origins of senior-aged immigrants are less diverse with two-thirds having immigrated from Europe and the remaining third from Asia. Coming from two general regions in the world, means that immigrant seniors in Mackenzie have the opportunity to socialize with peers of potentially similar cultural background. It also provides opportunity to introduce diverse cultural elements to seniors, and the community at large, of other cultural backgrounds.

Table 7.1 Immigration Status by Age Group, Mackenzie, BC (2016)

	Total Population	55-64 Years of Age	65+ Years of Age
Total	3,730	685	425
Immigrants	215	55	65
Time of Immigration:			
Before 1981	130	50	50
1981-1990	10	10	0
1991-2000	25	0	10
2001-2010	20	10	0
2011-2016	30	0	0
Immigration Status:			
Non-permanent Residents	20	0	0
Region of Origin:			
Americas	40	15	0
Europe	105	25	40
Africa	10	0	0
Asia	55	15	20
Oceania	10	0	0

Source: Statistics Canada. 2016. Census Program. Table 98-400-X2016185.

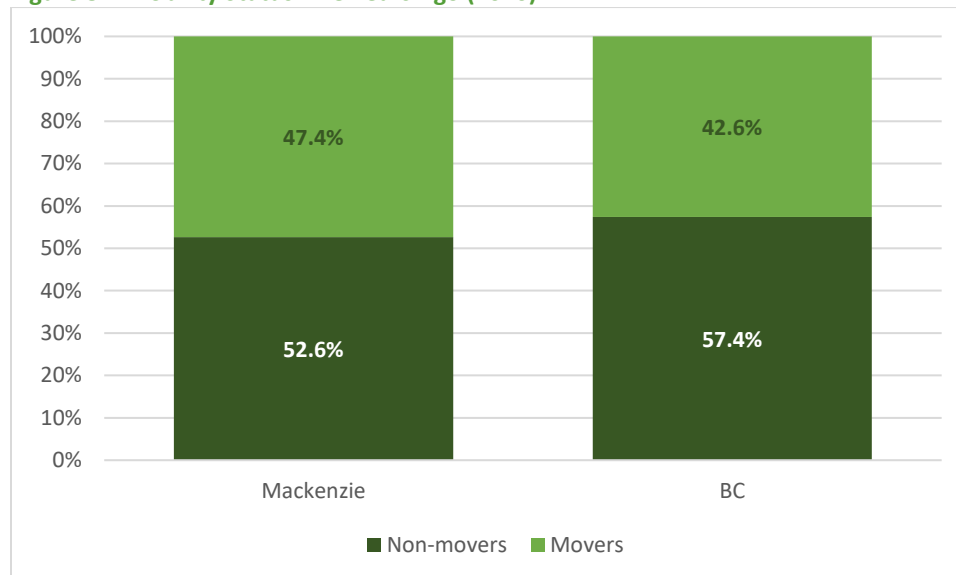
Note: Rounding can lead to slight but noticeable discrepancies in small communities.

8.0 Mobility and Migration

Mobility and migration provide insight into the movement of the population within the Census Subdivision and movement outside the community. Statistics Canada’s Census data indicates whether a person lives in the same residence as five years before. Those who have remained at the same address are classified as “non-movers”. Those who were living at a different address five years before are classified as “movers”. Movers are further broken down to reflect their movement within or outside the community. “Non-migrants” are movers who have moved to a new residence within the same Census Subdivision; “migrants” are movers who resided in a different Census Subdivision five years before. Migrants can be further broken down into “internal migrants”, who moved from within Canada, and “external migrants”, who moved from outside Canada. Finally, Census data breaks down internal migrants into “intra-provincial” migrants, who resided in the same province five years before, and “inter-provincial”, who resided in a different province five years before.

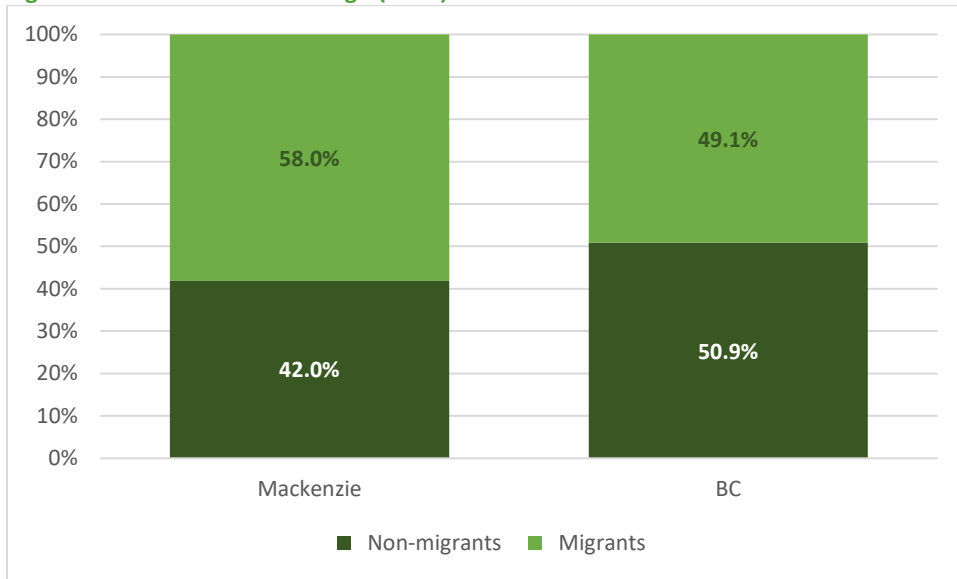
Figure 8.1 shows that 47% of Mackenzie’s 2016 residents had lived at a different address five years earlier, only a slightly higher rate than the 43% of the provincial population who were movers. Of the movers in Mackenzie, 58% had moved to Mackenzie from other communities, while 42% had moved residences within Mackenzie (Figure 8.2). In comparison, provincially, movers are somewhat more likely to stay within the same community when they move to another residence (51%). A breakdown of mobility by age group was not available at the Census Subdivision level.

Figure 8.1 Mobility Status Five Years Ago (2016)



Source: Statistics Canada. 2016. Census Program.

Figure 8.2 Movers Five Years Ago (2016)



Source: Statistics Canada. 2016. Census Program.

9.0 Education

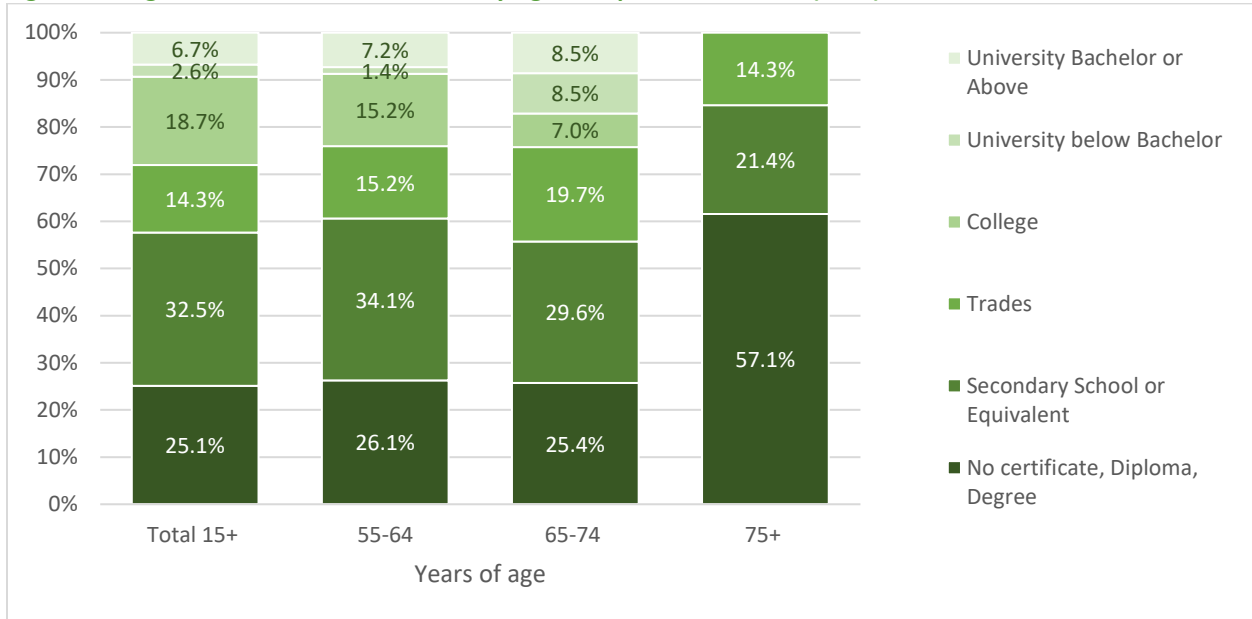
Education is linked to community well-being in many ways, including employment, community capacity, income, and health.⁷ In the context of seniors, the educational attainment of the senior population indicates the type of capacity that is available to the community through the (potential) roles of seniors, as well as the types of capacity gaps that are present or expected in the workforce through retirement. Statistics Canada conceptualizes educational attainment according to a hierarchy that progresses, in ascending order, from elementary school to secondary school, college, and university. For instance, if a person has a trade certificate and a bachelor's degree, the latter is considered their highest educational attainment. A look at educational attainment in Mackenzie in 2016, as presented in Figure 9.1, shows which types of education are prevalent in the various age groups.

It is evident that a majority of older seniors aged 75 and over have not completed high school, something that would have been a common occurrence in resource sector communities at the time when they entered the labour force. This generation has likely learned 'on-the-job' and gone through numerous positions with an abundance of hands-on experience. This combination of education and life experience can have implications about older seniors' inclination to use modern communication technologies and their comfort levels with formal paperwork and processes.

Younger seniors in the range of 65 to 74 years feature the most diverse educational attainment. They focused their education mostly on completing secondary education and trades. Notable in the context of common trades shortages throughout northern communities nowadays, this is the age group where trades certificates are most prevalent in Mackenzie. Much of that trades capacity has likely been lost, or is about to be lost, to retirement; but it also indicates an important capacity for the voluntary sector as well as ample opportunity to remain a little longer in, or temporarily re-enter, the workforce to fill trades capacity shortages. With one-quarter of that age group not having graduated from high school, their high school completion rate is in line with pre-seniors and the working age population overall. Also notably, the pre-seniors aged 55 to 64 have the highest rate of university graduates at Bachelor level and above. The level of post-secondary degrees in this age group, combined with decades of life and employment experience, has implications for the capacity they can lend to the voluntary sector as well as the professional capacity and experience gap that will open up in the workforce on their retirement.

Among pre-seniors and the working-age population overall, college education has become more prevalent. Non-graduation rates of around one-quarter and secondary education completion around one-third have remained stable, while both university degrees and trades certificates have seen a decline.

Figure 9.1 Highest Educational Attainment by Age Group, Mackenzie, BC (2016)



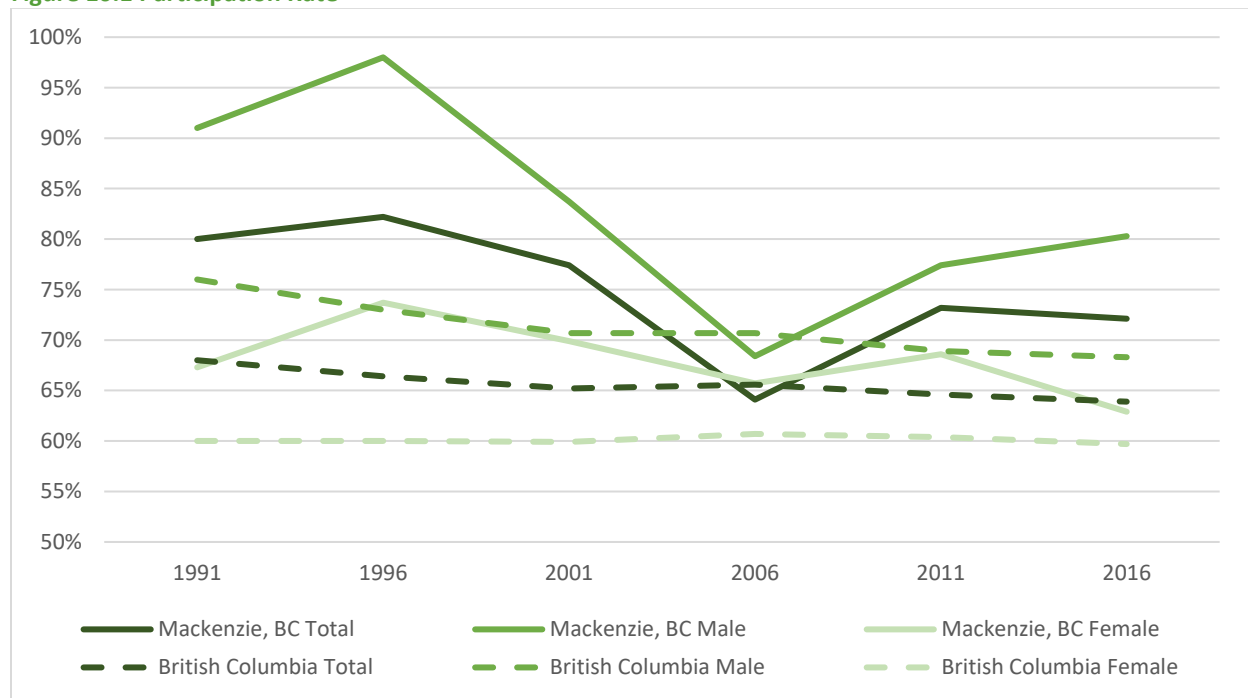
Source: Statistics Canada. 2016. Census Program.

10.0 Labour Force

The strength and diversity of the local economy is reflected in the labour market. It should be noted that the most current census data is from 2016. The data presented does not reflect developments in Mackenzie due to fibre shortage and consequent mill closures in recent months.

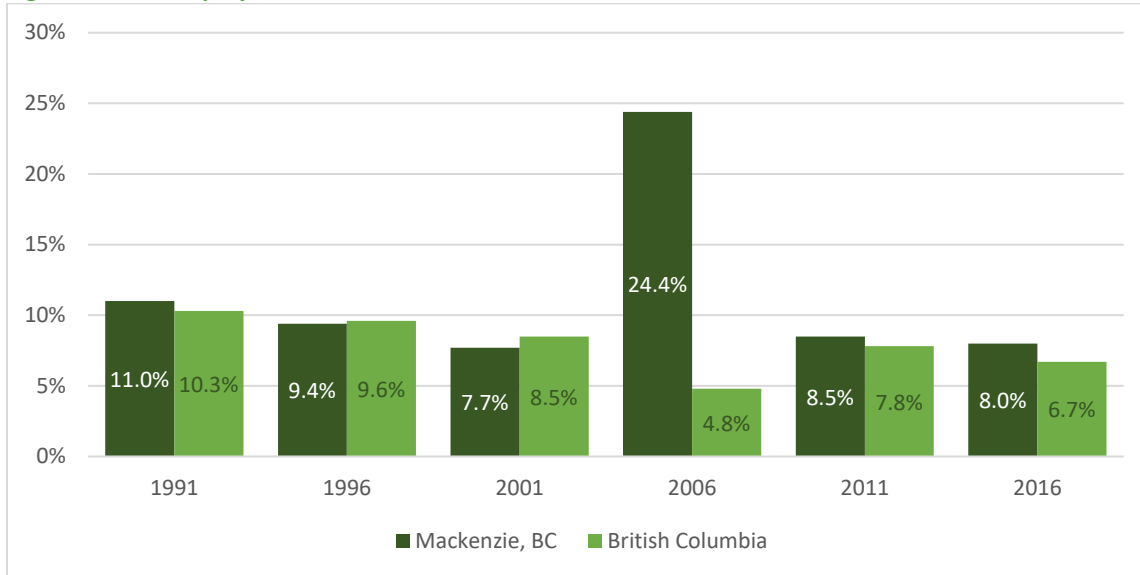
The participation rate expresses the total labour force, employed and unemployed, as a part of the total working age population. Figure 10.1 shows that Mackenzie has seen much greater fluctuation in its participation rate compared to the province as a whole, a common reflection of vulnerability to economic cycles in single-industry resource communities. Mackenzie has a generally higher participation rate than the province overall, especially among women. The sharp decline in the participation rate in the 2000s corresponds with the increase seen in unemployment at the same time caused by a downturn in the forestry sector. Figure 10.2 shows that Mackenzie's unemployment is generally close to that of the province. However, the above mentioned sudden increase in the unemployment in 2006, when almost one-quarter of the local labour force was unemployed due to mill closures, further underlines Mackenzie's vulnerability to regional and global economic developments.

Figure 10.1 Participation Rate



Source: Statistics Canada. 1991-2016. Census Program.

Figure 10.2 Unemployment Rate

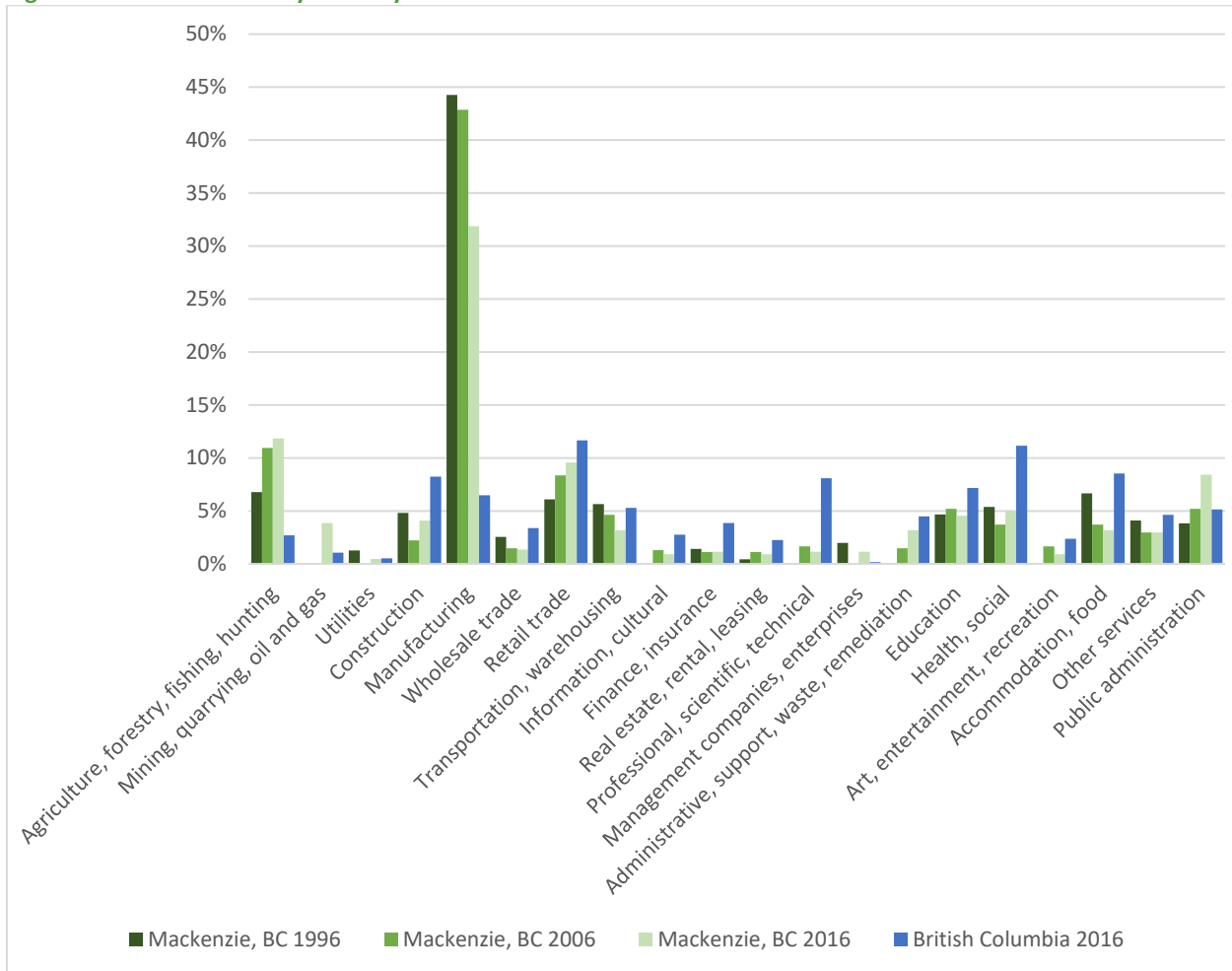


Source: Statistics Canada. 1991-2016. Census Program.

A look at the labour force by industry holds information on the diversity of local employment opportunities and allows some conclusions about the state of the local service sector and its developments over time. Figure 10.3 reveals the dominant role of manufacturing in Mackenzie, a role that has seen a decrease over the past 20+ years but still clearly depicts Mackenzie's dependence on one sector. The graph furthermore shows an increasing role of agriculture, forestry, fishing, and hunting; an increase in retail and in public administration; as well as a new role for mining, quarrying, oil, and gas over the last 20+ years. Construction, wholesale, transportation and warehousing, education, health, and accommodation sectors have seen declines over the same time period. The comparison with BC in 2016 emphasizes the difference between the diverse labour force of the province and the dependence on a single industry in Mackenzie.

A breakdown of the labour force by industry and age groups was not available for Mackenzie. While seniors are likely retired and not represented in this labour force data, the data points from 2006 and 1996 provide an indication of the industries seniors were most likely involved in when they actively participated in the labour market in Mackenzie.

Figure 10.3 Labour Force by Industry



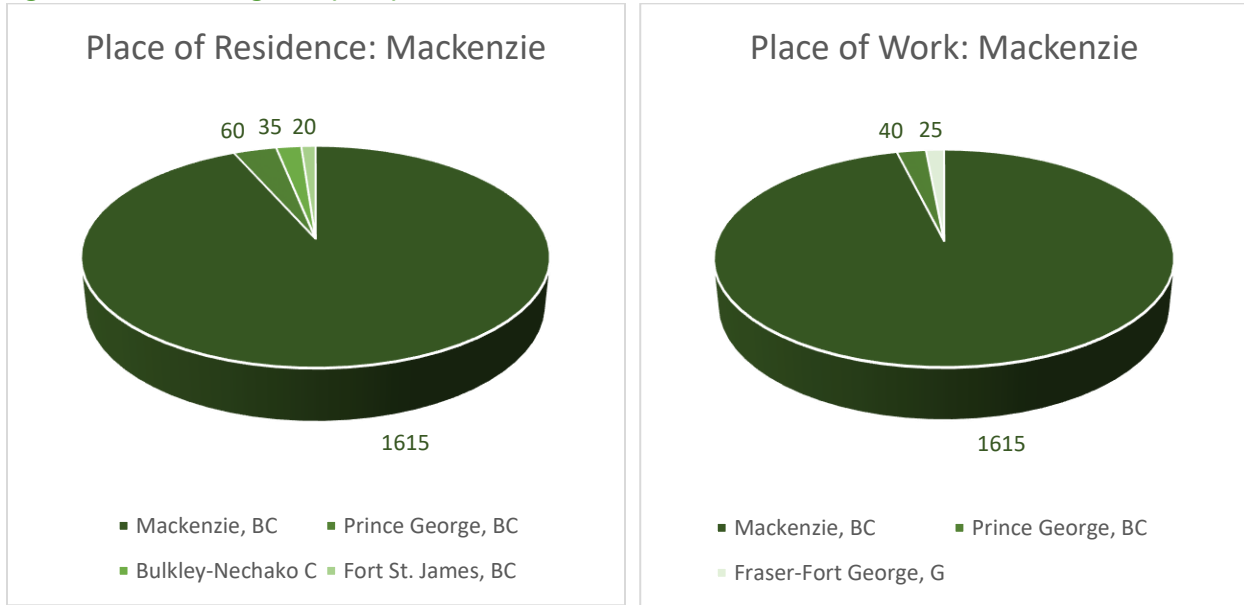
Source: Statistics Canada. 1996, 2006, and 2016. Census Program.

Note: 1996 Industry classification categories differed from later Census data. For the purpose of this graph, 1996 data was adapted to the most currently applied North American Industry Classification System.

Figure 10.4 shows where Mackenzie’s 2016 workforce commutes for employment.ⁱⁱⁱ Well over 90% of the workforce residing in Mackenzie work in Mackenzie, while small percentages find work in Prince George, Bulkley-Nechako Electoral Area C, and Fort St. James. Similarly, over 95% of people working in Mackenzie reside in Mackenzie, while fewer than 5% commute to Mackenzie from Prince George and Fraser Fort George Electoral Area G combined.

ⁱⁱⁱ Place-of-work data captures the employed workforce who had a usual place of work, excluding those who have no fixed workplace, work outside of Canada, or work at home.

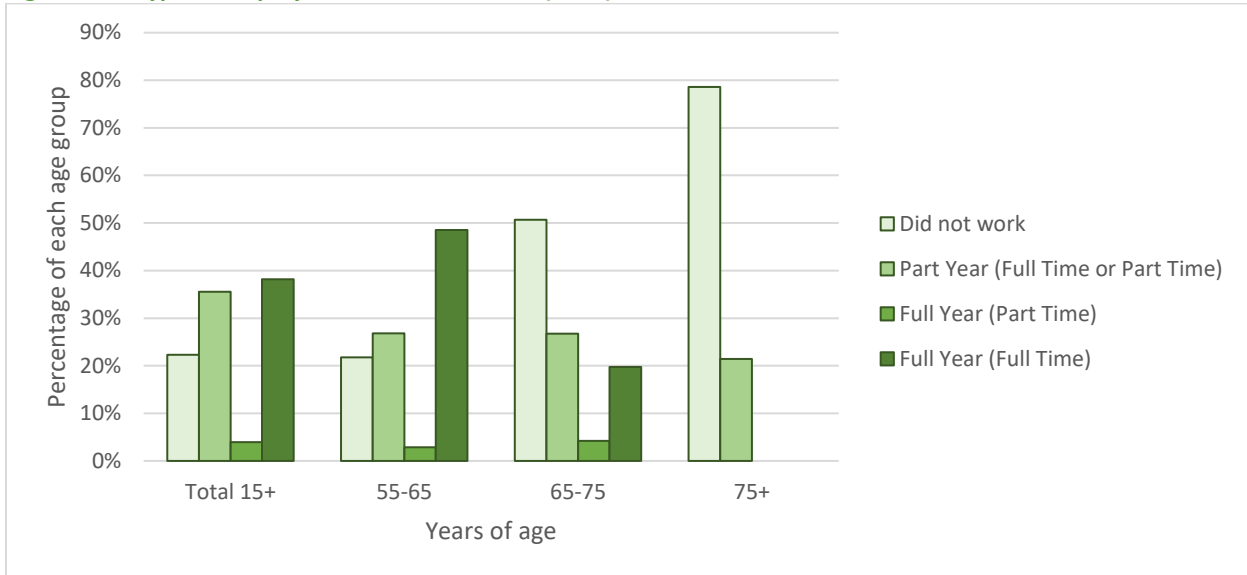
Figure 10.4 Commuting Flow (2016)



Source: Statistics Canada. 2016. Census Program, Data products.

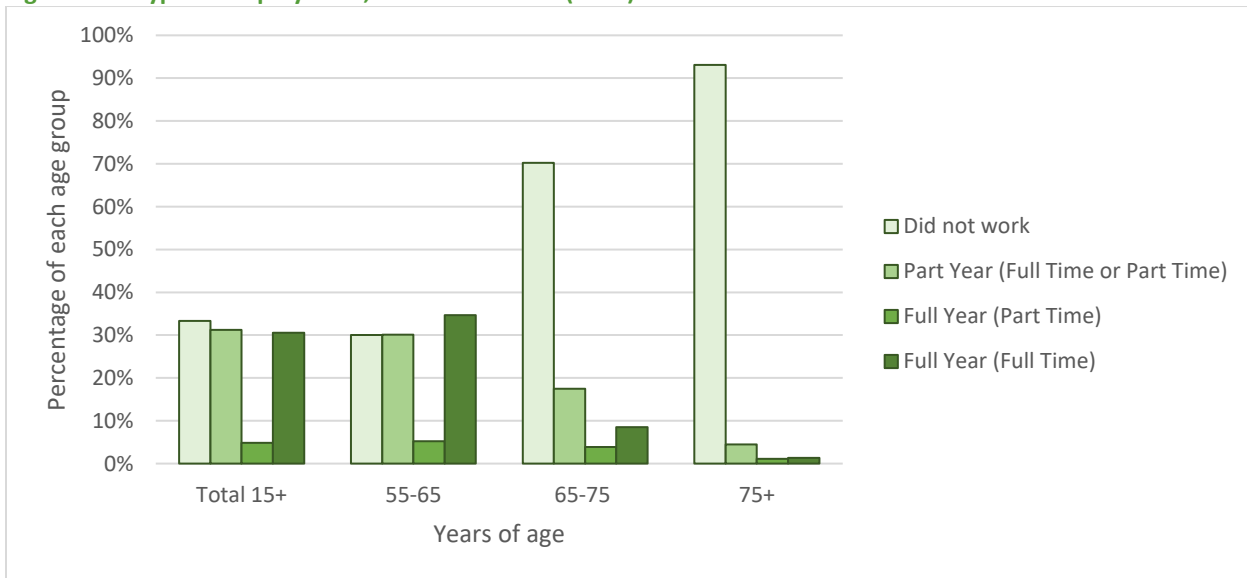
One employment statistic that is available for various age groups in Mackenzie is the type of employment, including part-time or full-time, and part year or full year. Figure 10.5 identifies that just under 50% of pre-seniors are working full-time year-round, while one-quarter pursue seasonal full-time work, and one in five do not work. Among seniors aged 65 to 74, seasonal employment continues to be pursued by one-quarter of the age group; the rate of those not working increases to around 50%, while full-time year-round employment decreases to 20%. Older seniors aged 75 and over are more likely to be fully retired (close to 80% do not work); however, 20% continue to work seasonal positions. The comparison to BC (Figure 10.6) confirms the higher overall labour force participation rates noted above for Mackenzie. It also reveals that seniors in Mackenzie stay in the labour force significantly longer than BC seniors overall, where 70% of the 65 to 74 age group do not work, and over 90% of older seniors have completely left the labour force.

Figure 10.5 Type of Employment, Mackenzie, BC (2016)



Source: Statistics Canada. 2016. Census Program.

Figure 10.6 Type of Employment, British Columbia (2016)



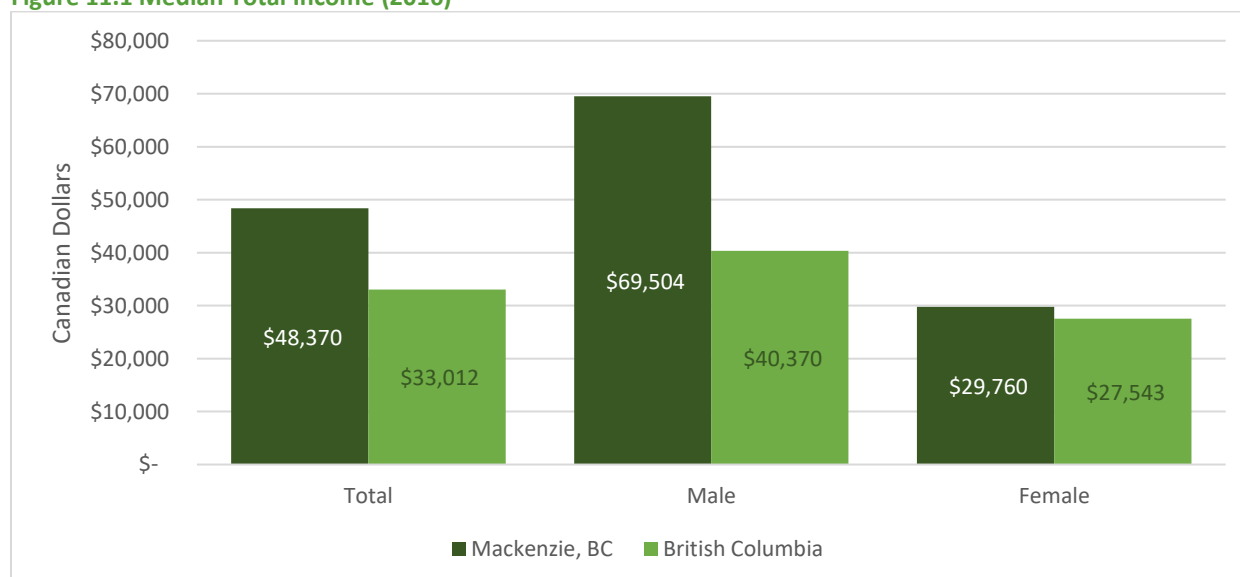
Source: Statistics Canada. 2016. Census Program.

11.0 Income

Income data reveals not only the wealth of a community, but also how that wealth is distributed among the population. Median income is the measure most often used because it is less likely than average income to be skewed by extremes. Median income refers to the midway point in the income distribution of a population. That is, exactly half of the reported incomes are below and the other half are above the median income.

Figure 11.1 shows median income for Mackenzie and British Columbia in 2016. The median income, especially male median income, in Mackenzie is well above income province-wide. While male median income in Mackenzie is more than 70% greater than provincial male median income, female median income in Mackenzie is only marginally above provincial female income. Consequently, the gender gap in median income in Mackenzie is significantly greater than province-wide.

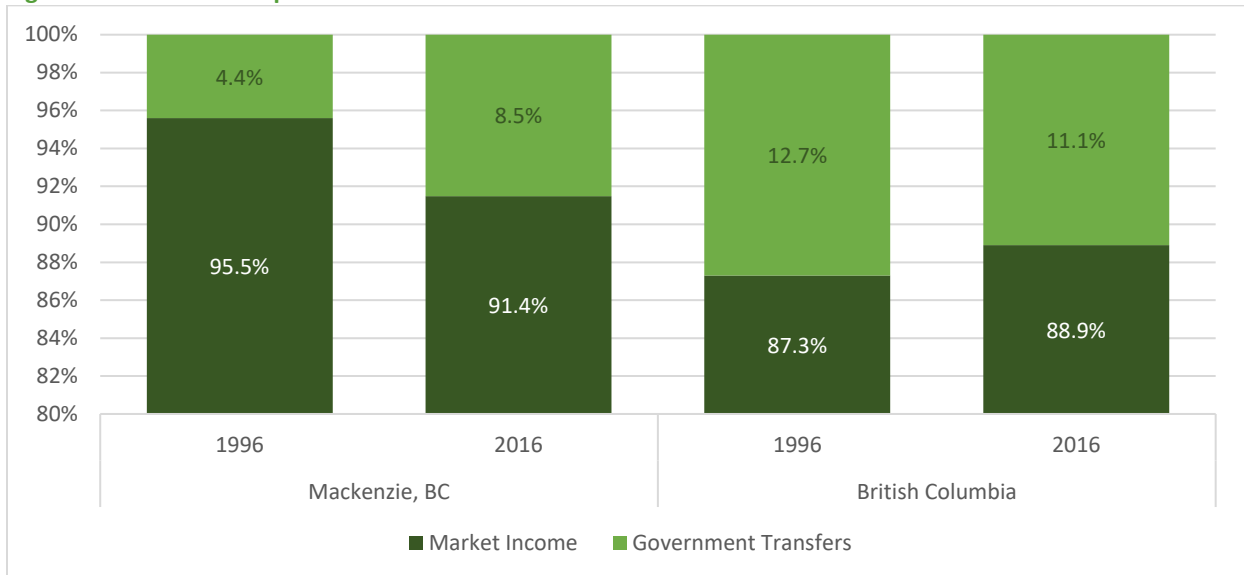
Figure 11.1 Median Total Income (2016)



Source: Statistics Canada. 2016. Census Program.

Median income was not available by age group for Mackenzie, thereby not allowing conclusions about income levels for seniors. However, there are other income indicators to provide some information about seniors' income situation. One income related measure of the local economy is the percentage of income that comes from government transfers. Government transfers refer to transfers from all levels of government, including, but not limited to, retirement income, employment insurance, various tax credits, and other benefits. As Figure 11.2 shows, Mackenzie's dependence on government transfers has increased from under 5% in 1996 to 8.5% in 2016. Compared to BC (11% dependence on transfers in 2016), Mackenzie's dependence is relatively low. This can be explained, for example, by its younger population and higher labour force participation rates. However, it should be noted that Mackenzie's government transfer dependence has been growing over the past 20 years, while BC's dependence has been decreasing. With a large part of the workforce reaching retirement age in the next 10 years, the trend in Mackenzie is expected to continue. Government transfer income often means fixed incomes and, therefore, translates to increased financial vulnerability.

Figure 11.2 Income Composition



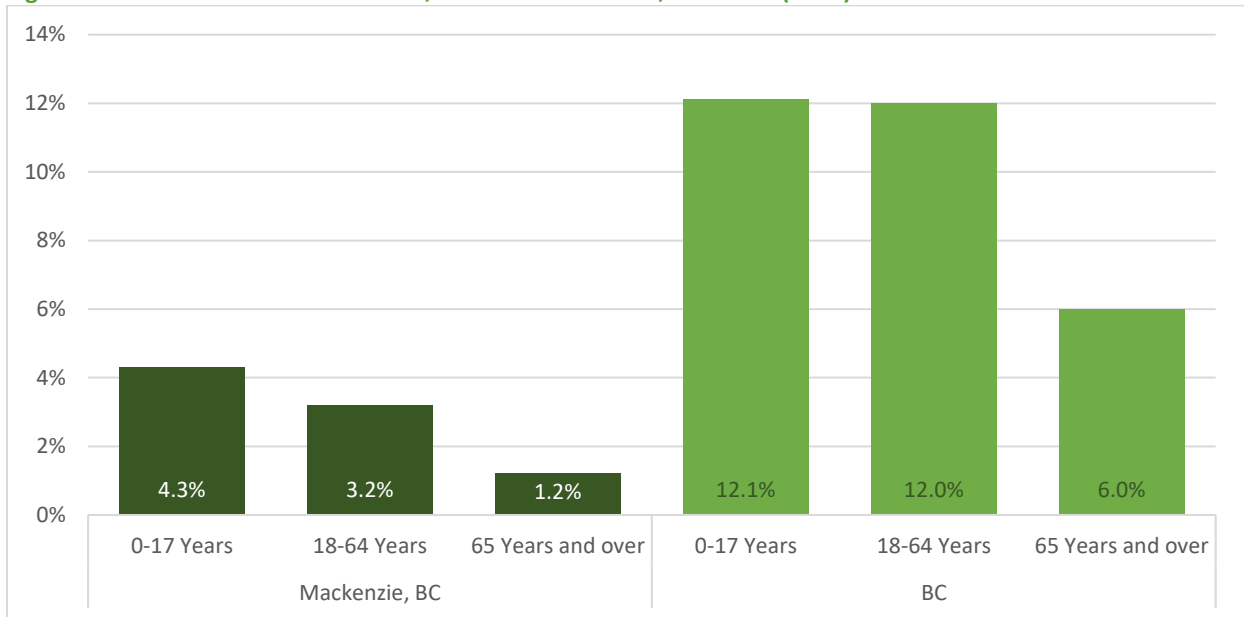
Source: Statistics Canada. 1996 and 2016. Census Program.

The prevalence of low income gives an indication of the economic situation of the population. Low income cut-off, after-tax (LICO-AT) is defined as the thresholds “below which economic families or persons not in economic families would likely have devoted a larger share of their after-tax income than average to the necessities of food, shelter and clothing. More specifically, the thresholds represented income levels at which these families or persons were expected to spend 20 percentage points or more of their after-tax income than average on food, shelter and clothing.”⁸

The prevalence of low income measured by this threshold is much lower in Mackenzie than in British Columbia (Figure 11.3). Particularly seniors, 1.2% of whom live in low income in Mackenzie, are currently less vulnerable than the provincial senior population with 6% living in low income situations. Children and youth are the most vulnerable age group with 4.3% living with low incomes in Mackenzie in 2016.

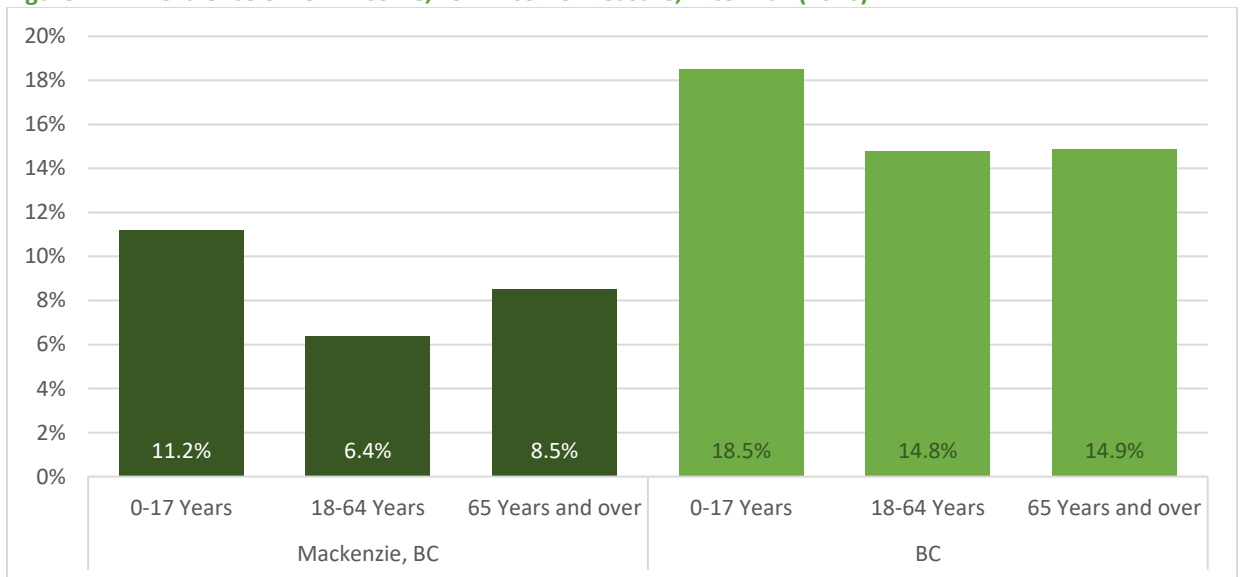
Another way to express low income is the low income measure, after-tax (LIM-AT). The LIM-AT “refers to a fixed percentage (50%) of median-adjusted after-tax income of private households” adjusted for household size.⁹ Figure 11.4 depicts low income in Mackenzie and BC as measured by LIM-AT in 2016. This measure shows higher percentages of the population living in low income; however, Mackenzie seniors, as well as other age groups, are still well below provincial low income in 2016.

Figure 11.3 Prevalence of Low Income, Low Income Cut-Off, After-Tax (2016)



Source: Statistics Canada. 2016. Census Program.

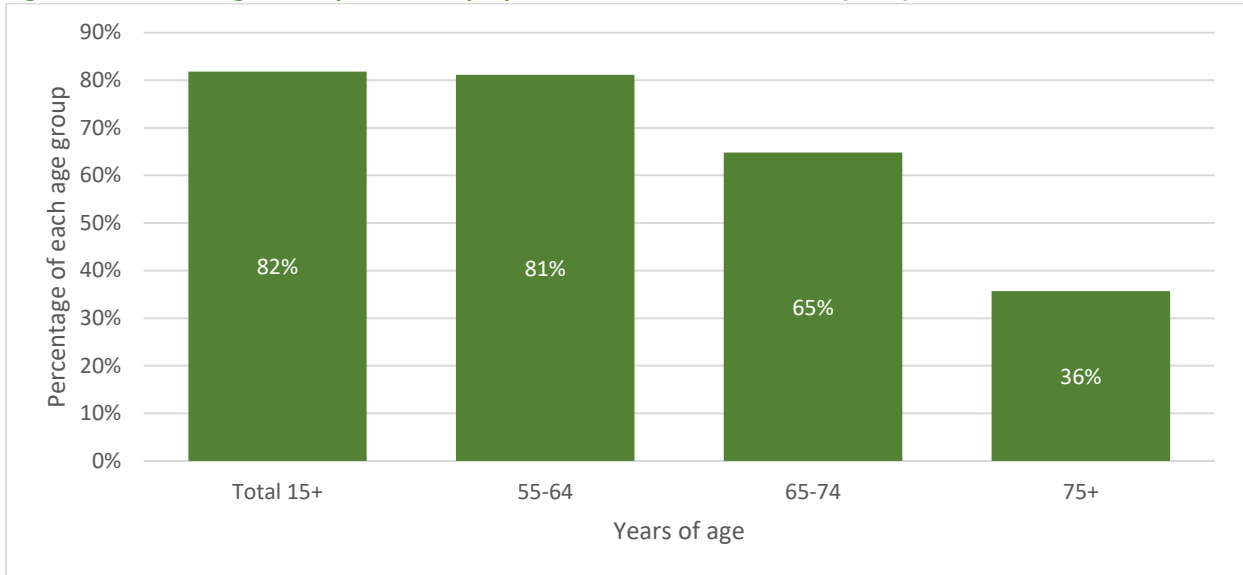
Figure 11.4 Prevalence of Low Income, Low Income Measure, After-Tax (2016)



Source: Statistics Canada. 2016. Census Program.

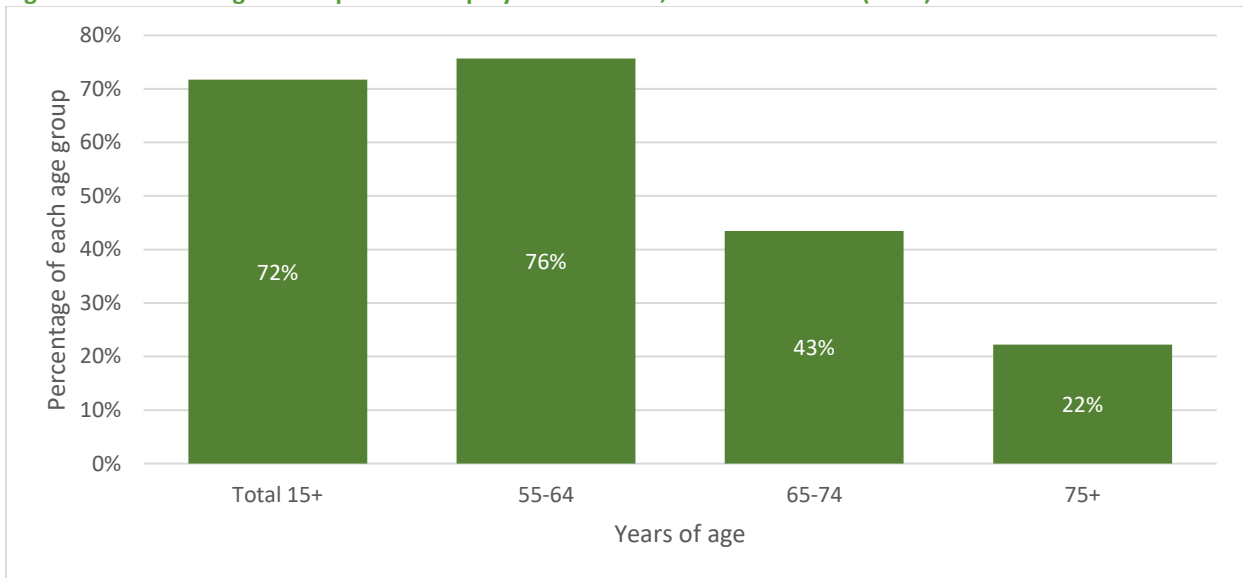
Other income statistics available for seniors include the percentage of people with employment income. According to Figure 11.5, two-thirds of seniors aged 65 to 74 and one-third of older seniors aged 75 years and older report employment income in 2016. Whether this is because seniors in Mackenzie are financially vulnerable, are difficult to replace in the labour force and urged to work longer, or decide to stay in the workforce longer for the social connection and role in the community that work provides them, to name but a few possible reasons, the rate of seniors who continue to participate in the labour market past retirement age is considerably higher in Mackenzie than in BC overall (Figure 11.6).

Figure 11.5 Percentage of People with Employment Income, Mackenzie, BC (2016)



Source: Statistics Canada. 2016. Census Program.

Figure 11.6 Percentage of People with Employment Income, British Columbia (2016)

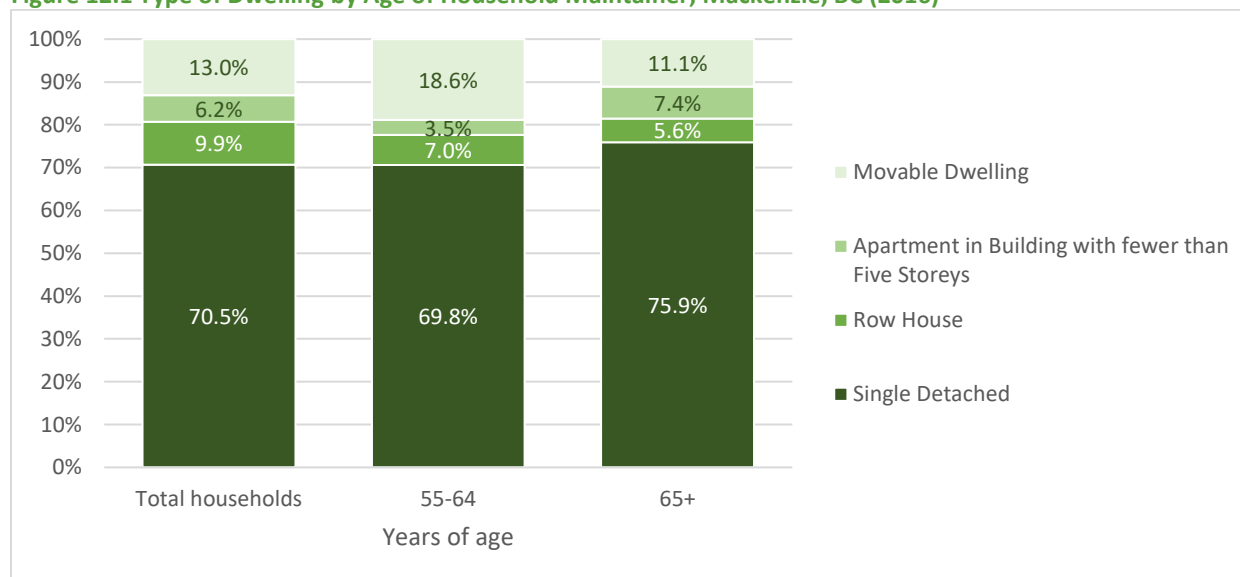


Source: Statistics Canada. 2016. Census Program.

12.0 Housing

Housing data describes the tenure, characteristics, and conditions of the housing stock in a community, as well as the dynamics of the local housing market. Figure 12.1 shows what types of dwellings can be found in Mackenzie and which are the predominant types of seniors' dwellings. The data shows that single-detached dwellings make up over 70% of Mackenzie's housing stock. The second most common type are movable dwellings (making up 13% of the housing stock in 2016). Among pre-seniors and seniors, single detached dwellings become even more common with increasing age, while there is also a slight increase in the likelihood of living in an apartment building for seniors aged 65 and over. The strong prevalence of single detached dwellings means that there are few options for seniors to find housing that does not require outdoor property maintenance during all seasons.

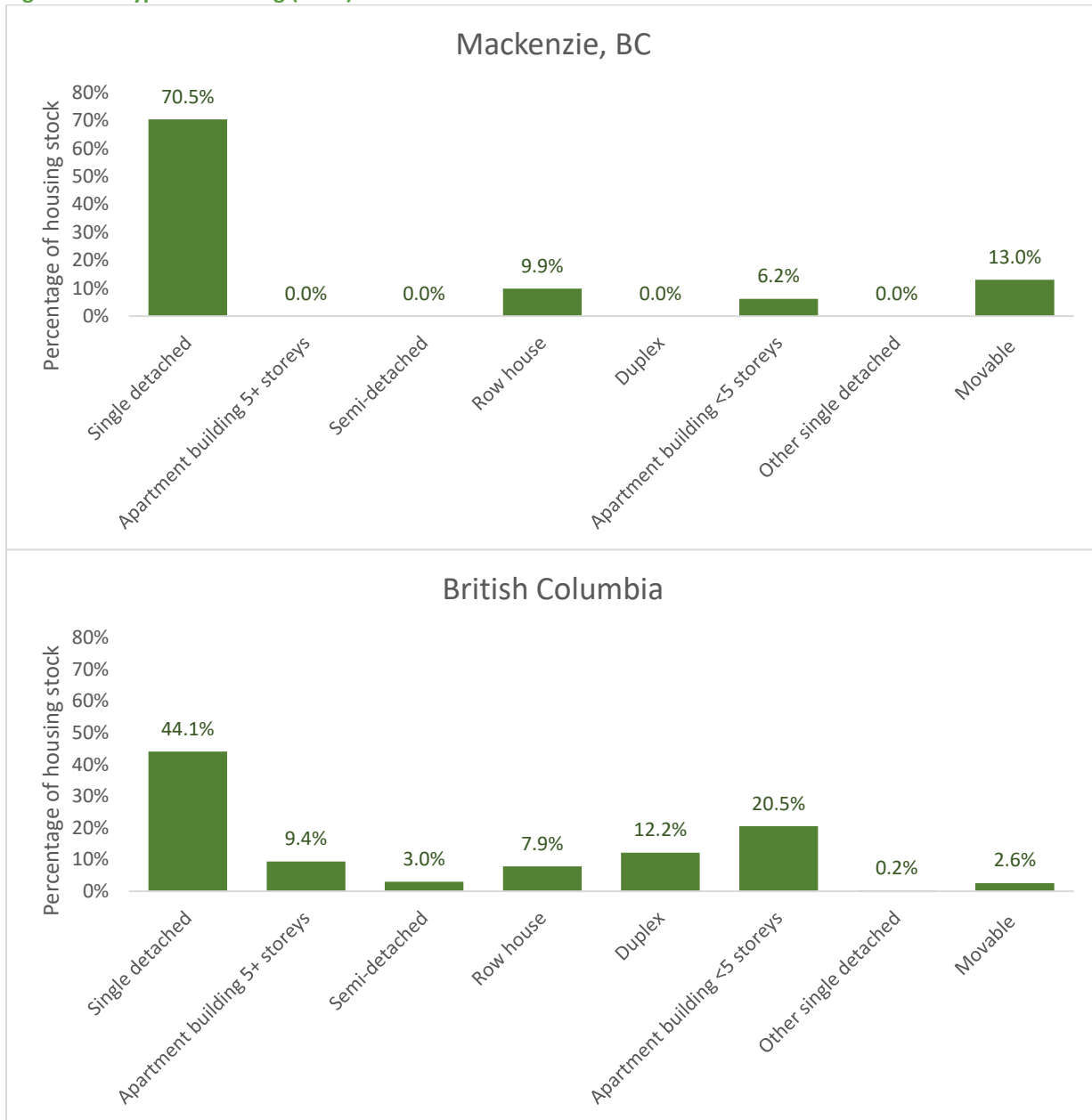
Figure 12.1 Type of Dwelling by Age of Household Maintainer, Mackenzie, BC (2016)



Source: Statistics Canada. 2016. Census Program.

A comparison with provincial housing stock (Figure 12.2) shows that housing province-wide is more diverse. While single detached dwellings still make up the largest segment, they constitute less than one-half of the provincial housing stock, followed by apartment buildings with fewer than five storeys, making up over 20%. At less than 3%, movable dwellings are the least common type of dwelling in BC overall.

Figure 12.2 Type of Dwelling (2016)



Source: Statistics Canada. 2016. Census Program.

In Mackenzie, 83% of households with a primary maintainer aged 65 and older own their home. As well, 69% of those senior home owners are mortgage free. Tables 12.1 and 12.2 show tenure information for pre-seniors and seniors. According to Census data, there are no seniors in subsidized housing in Mackenzie in 2016. Confidentiality standards of Census data and rounding may have led to the omission of a small number of seniors here.

Table 12.1 Tenure (#), Mackenzie, BC (2016)

	55-64 Years	65-74 Years	75+ Years
Total	435	255	40
Owner	395	215	30
With Mortgage	195	70	10
Without Mortgage	200	145	25
Renter	40	15	10
Subsidized Housing	0	0	0
Not Subsidized	30	15	0

Source: Statistics Canada. 2016. Census Program.

Table 12.2 Tenure (%), Mackenzie, BC (2016)

	55-64 Years	65-74 Years	75+ Years
Total	100.0%	100.0%	100.0%
Owner	90.8%	84.3%	75.0%
With Mortgage	49.4%	32.6%	33.3%
Without Mortgage	50.6%	67.4%	83.3%
Renter	9.2%	5.9%	25.0%
Subsidized Housing	0.0%	0.0%	0.0%
Not Subsidized	75.0%	100.0%	0.0%

Source: Statistics Canada. 2016. Census Program.

Note: Rounding errors are due to small population size.

A look at housing indicators for pre-seniors and seniors reveals an increased likelihood for older seniors to live in dwellings in need of major repairs (Tables 12.3 and 12.4). A total of eight percent of households with primary maintainers aged 65 and over face housing affordability issues. A larger percentage of older seniors aged 75 and over in Mackenzie are spending 30% or more of their income on shelter costs, possibly indicating greater chance of financial vulnerability and difficulty finding affordable housing with increasing age.

Table 12.3 Housing Indicators (#), Mackenzie, BC (2016)

	55-64 Years	65-74 Years	75+ Years
Total	435	255	40
Major Repairs	35	10	10
Not Suitable	0	0	0
Spending 30% or more of Household Income on Shelter Costs	25	15	10

Source: Statistics Canada. 2016. Census Program.

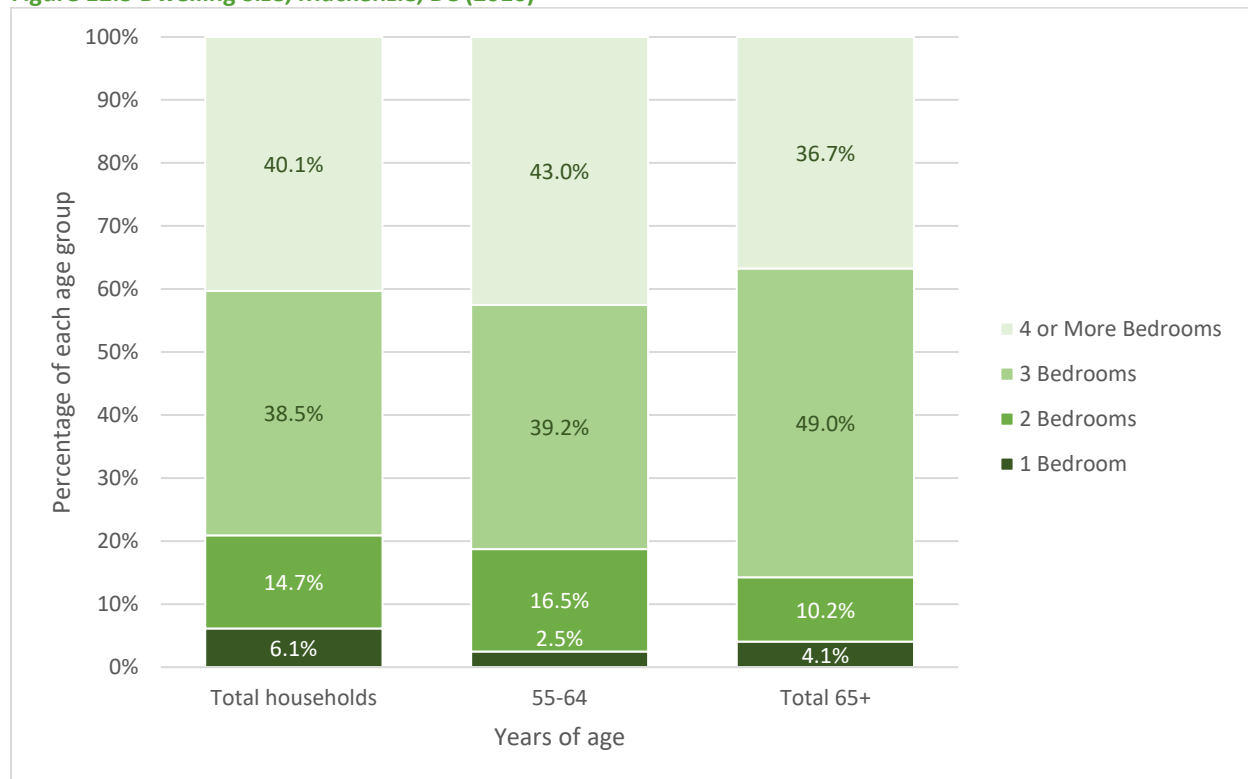
Table 12.4 Housing Indicators (%), Mackenzie, BC (2016)

	55-64 Years	65-74 Years	75+ Years
Total	100.0%	100.0%	100.0%
Major Repairs	8.0%	3.9%	25.0%
Not Suitable	0.0%	0.0%	0.0%
Spending 30% or more of Household Income on Shelter Costs	5.7%	5.9%	25.0%

Source: Statistics Canada. 2016. Census Program.

As senior households are most likely one- and two-person households, and in the context of increasing difficulty with maintaining property as seniors age, the size of dwellings in Mackenzie is of interest. Half of all households with primary maintainers aged 65 and over live in three-bedroom homes; over one-third live in homes with four or more bedrooms. This means that a total of 86% of seniors in Mackenzie live in, and have to maintain, three or more bedroom homes. As Figure 12.3 demonstrates, four bedrooms is the most common dwelling size (40% of dwellings) in Mackenzie, followed by three bedrooms (39%). This means that most seniors, like all residents of Mackenzie, have very limited options for downsizing within their community.

Figure 12.3 Dwelling Size, Mackenzie, BC (2016)



Source: Statistics Canada. 2016. Census Program.

In the context of seniors, retirement and old-age housing, including assisted living options, is a crucial consideration that can determine whether a community can meet seniors' urgent and basic needs, and offer an acceptable and desirable quality of life. The topic of senior-friendly housing includes a range of considerations, including options to age in one's own home made possible through structural adaptations and the availability of maintenance services and other assistance; attractive and convenient housing that meets seniors' wishes, for example, to downsize and minimize their maintenance burden, relieve their budget, or provide convenient closeness to amenities and social networks; designated seniors housing that accommodates urgent needs due to mobility limitations or health issues; and the range of assisted living and care facilities many seniors may eventually depend on.

There are programs not specific to Mackenzie that have potential to support Mackenzie seniors in aging in their own homes, for example BC Housing's HAFI program.¹⁰ However, qualifying criteria can limit seniors' access to the program.

When it comes to designated seniors housing that is built according to modern accessibility standards and designed to meet seniors' needs, Mackenzie has one development offering eight affordable one-bedroom units available to seniors and adults with disabilities. This is a BC Housing development, managed by Autumn Lodge Society.¹¹ Assisted living and care facilities for seniors are not listed with the Northern Health Authority responsible for the region; however, the Health section of this profile outlines some in-home care options. Conversations with community leaders reveal a shortage of non-profit organizations who would be able to operate more seniors housing projects.¹²

13.0 Transportation

Transportation infrastructure and services are part of a community's amenities and quality of life. For seniors, transportation is of particular interest for several reasons, including the increased likelihood of mobility challenges in old age, an increasing need to access health services within the community as well as in larger centres outside of their home community, the wish to be able to access amenities and leisure facilities, and the desire to travel in retirement.

As mentioned in the introduction, Mackenzie is located on Highway 39, 29 kilometres north of Mackenzie Junction on Highway 97 North. The closest major airport is located in Prince George, just under 200 kilometres from Mackenzie. Other service centres are even farther away. This means the highway is the main connection, and cars are the main mode of transportation for Mackenzie residents. For those unable to afford a personal vehicle or unable to drive a car, public transportation options are crucial to maintaining their quality of life.

According to the District of Mackenzie, BC Bus North offers two roundtrips per week with a direct connection to Prince George to the south, and to Dawson Creek and Fort St. John to the northeast.¹³ Pine Pass Transport is another bus service offering a weekly roundtrip on Saturdays to a number of major shopping locations in Prince George.¹⁴ Internet searches further identify a taxi service, Mackenzie Taxi, in the community. The taxi fleet does not feature wheelchair accessible vehicles but includes one van.¹⁵ For health-related services, the Northern Health Connections bus service is available for medical travel directly to Prince George and Fort St. John. Seniors can access this service for non-medical travel as well.¹⁶ Kimta Transportation Society is a community organization in the process of raising funds for a 22 passenger community bus.¹⁷ Planning details pertaining to operation and maintenance of a bus, as well as a bus schedule and possible routes around the community are still being worked out.

The business Mackenzie Hose and Fittings offers a truck rental service through Visa Rentals and Leasing. These rentals are, however, geared towards industrial traffic.¹⁸ The closest car rental is available in Prince George.

For air service, the Mackenzie Airport offers small charter flights¹⁹, an option that is typically attractive for industry-related travel, but less likely to serve seniors in their regular transportation needs and expectations.

Conversations with community members and leaders reveal that informal ride sharing is a common means of traveling outside the community for Mackenzie residents.²⁰

14. Health Services

A variety of health services are needed in any community. With increasing remoteness, some emergency services gain in importance, while more specialized care is less likely to be accessible within the community, and the availability or absence of regular medical services translates to significant convenience or inconvenience for local residents. For seniors in particular, the need for a suite of health services and supports commonly increases over time.

The Northern Health Authority is responsible for health services in the region and provides overviews of available services.²¹ General medical services are offered at the Mackenzie and District Hospital and Health Centre. Services offered at the Health Centre include the following services:

- Five acute care beds
- Four long term care beds
- Emergency services available 24/7
- Family medical clinic
- Lab services
- Diagnostic imaging

The Health Centre also provides community health services including:

- Public health services
- Life skills
- Mental health and addictions programs
- Social worker
- Dietician
- Home care nursing
- Home support 7 days a week
- Adult day program
- Respite services

Through private practices, Mackenzie also features acupuncture, Alcoholics Anonymous, counselling services, private dietician services, Narcotics Anonymous, physiotherapy, reflexology, and tapping.²² In the fall of 2020, a new dentistry practice is expected to open in Mackenzie.²³

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The Community Development Institute at the University of Northern British Columbia

The Community Development Institute (CDI) at UNBC was established in 2004 with a broad mandate in the areas of community, regional, and economic development. Since its inception, the CDI has worked with communities across the northern and central regions of British Columbia to develop and implement strategies for economic diversification and community resilience.

Dedicated to understanding and realizing the potential of BC's non-metropolitan communities in a changing global economy, the CDI works to prepare students and practitioners for leadership roles in community and economic development, and to create a body of knowledge, information, and research that will enhance our understanding and our ability to deal with the impacts of ongoing transformation. The Community Development Institute is committed to working with all communities – Aboriginal and non-Aboriginal – to help them further their aspirations in community and regional development.



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