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# MOVING HOUSE: URBAN ABORIGINAL HOUSING IN CANADA

(Spine Title: Moving House: Urban Aboriginal Housing in Canada)

(Thesis Format: Monograph)

by

Laura Murphy

Graduate Program in Sociology



A thesis submitted in partial fulfillment of the requirements for the degree of Master of Arts

The School of Graduate and Postdoctoral Studies The University of Western Ontario London, Ontario, Canada

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# THE UNIVERSITY OF WESTERN ONTARIO SCHOOL OF GRADUATE AND POSTDOCTORAL STUDIES

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# Moving House: Urban Aboriginal Housing in Canada

is accepted in partial fulfillment of the requirements for the degree of Master of Arts

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## ABSTRACT

Existing research shows that Aboriginal people in Canada have higher rates of mobility than the rest of the population. Mobility, along with rentalship have been linked to housing insecurity. Using the 2006 Canadian Census Data, descriptive statistics and regression analyses were run to investigate the differences in urban housing insecurity between Aboriginal and non-Aboriginal people in Canada. To look at urban housing insecurity, rentalship was used as a proxy as those who rent in Canada are more vulnerable to housing instability than those who own. Urban Aboriginal people were found to be more susceptible to housing insecurity than Non-Aboriginal people. Overall, Status Aboriginals were the most vulnerable to housing insecurity, followed by Non-Status Aboriginals, Métis, and then with Non-Aboriginal people being the least vulnerable to housing insecurity. These findings are important as they show that certain groups experience housing insecurity differently, which should be considered to develop appropriate interventions.

**Keywords:** Aboriginal, urban, housing insecurity, renter, mobility, social capital, low income, Canada

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# **CHAPTER 1: INTRODUCTION**

Inequality continues to persist in Canada, despite a wide range of economic opportunities and a wealth of social programs. One of the most marginalized groups in this regard is Aboriginal peoples<sup>1</sup>. It is well-documented in the research literature that Indigenous people face low income and high poverty rates in Canadian Census Metropolitan Areas (Peters 2010; Hanselmann 2001; Siggner and Costa 2005; Native Women's Association of Canada 2007; Wilson and Macdonald 2010). However, until now much of the research done concerning Aboriginal people has revolved around the rural, or reserve community experience. Besides a lack of urban research, studies that exist on Aboriginal urban housing and homelessness have been largely descriptive.

The homeless are no longer exclusively vagabonds, single men, travelers, or seasonal workers (Levinson and Ross 2007). The Canadian homeless population is extremely diverse, and has even spread into the middle class suburbs of major cities, such as Vancouver (Hanselmann 2001). To properly begin to understand the contemporary process of homelessness, it may be productive to examine one such group which has experienced high overrepresentation—Indigenous people. To do so, the relatively recent increase in the urban Aboriginal population must be considered. In fact, substantial urban Aboriginal populations did not exist prior to the 1950's. Today, there are numerous Indigenous urban populations. How has this demographic change

<sup>&</sup>lt;sup>1</sup> Defined by Norris as Status Indians, Non-Status Indians (ancestry, no status), Métis and Inuit (2000:169).

come about so quickly? Moreover, why have high rates of housing issues developed in tandem with this rapid change?

While this research was initially geared toward studying homelessness, it was apparent early on in the research process that an explicit examination of this issue was impossible due to data limitations (as outlined in chapter two). Instead, this research will concentrate on housing instability, as a precursor to homelessness. According to the Canadian Mortgage and Housing Corporation, acceptable housing is affordable<sup>2</sup>, adequate<sup>3</sup>, and suitable<sup>4</sup> (CMHC 2009b, 1; Layton 2008, 4). Without these components, housing security is threatened, and an individual may become more vulnerable to homelessness.

Past research has shown that those who rent are more vulnerable to housing issues than those who own their own homes. By example, the Wellesley Institute (2010) reports that In Canada, those who rent experience higher housing insecurity in part as a result of lower levels of household wealth; renters are less likely to have the financial stability required for homeownership. As well, those who rent have more housing affordability issues than those who own which is exacerbated by the increasing income gap between those who own and those who rent (CMHC 2009a:2-3). Further, between 1991 and 2001, the cost of housing increased far more dramatically for renters than for owners (CMHC

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<sup>&</sup>lt;sup>2</sup> Costs less than 30% of household income.

<sup>&</sup>lt;sup>3</sup> No major repairs are needed.

<sup>&</sup>lt;sup>4</sup> There are enough bedrooms to properly house the occupants.

2009a: 5). Thus, there is substantial evidence that those who own are more likely to have acceptable housing in terms of affordability, suitability, and adequacy, when compared to those to rent. (CMHC 2009b:2). Since housing experiences differ between homeowners and renters, an examination of the trends in homeownership and rentalship between different groups is necessary. This thesis will examine the differing rates of rentalship versus homeownership across Aboriginal and Non-Aboriginal populations in Canada.

Those who are mobile have been shown to experience increased housing vulnerability, which if associated with housing security, may compound the disadvantages of rentalship. For example, children who experience high mobility often have lower levels of educational attainment (Beavon, Wingert, and White 2009). In addition, in areas where there are high rates of migration, community networks are often compromised. These relationships may be particularly important among members who are susceptible to housing insecurity due to insufficient resources. Given that social bonds may be drawn upon to supplement resource shortfalls, the absence of 'bonding social capital' can be very detrimental to already vulnerable populations (White, Spence and Maxim 2009); therefore, mobility<sup>5</sup> and its relationship with rentalship will also be examined in this thesis.

<sup>&</sup>lt;sup>5</sup> Particularly 'churn migration' of Aboriginal people, where mobility occurs from rural to urban communities, as well as from urban to rural communities at a steady rate. This will be further explained in chapter two.

This research is a first step in understanding urban Aboriginal people, as well as persistent housing issues. The results of this study will identify pathways that lead to housing vulnerability and insecurity for urban Indigenous, people thus providing indications for best practice policy making.

Chapter two provides a review of key urban issues, relevant to urban Aboriginal people. Further, this chapter will also discuss contemporary understandings of homelessness and housing issues. Overall, urban Aboriginal people are highly overrepresented in categories of low income and high rates of poverty. This section addresses the marginalization of the urban Indigenous, and its relevance to housing instability. This chapter also outlines the main research questions and the hypotheses that guided this research.

Chapter three outlines the methods implemented in this study. Descriptives are used to establish the context of urban life for Aboriginal and Non-Aboriginal people. Following this, several regression models are constructed to compare the housing experiences of urban Aboriginals and Non-Aboriginals. Additionally, regression models are also used to examine differences within the urban Aboriginal community.

Chapter four summarizes the findings of the present research and chapter five discusses these findings in light of the research questions and hypotheses. The concluding chapter provides an overview of this study, discusses its shortcomings, and indicates possibilities for future research in this area.

#### **CHAPTER 2: LITERATURE REVIEW**

#### 2.1. INTRODUCTION

Canadian Aboriginal peoples face a legacy of exclusion, which has manifested into multiple complex social problems (family breakdown, substance abuse, poverty, et cetera). In 2001, Canada as a whole ranked eighth on the United Nations Human Development Index. However, when the Canadian Aboriginal population<sup>6</sup> is examined in isolation, its rank on this scale drops dramatically to thirty-second place (Cooke et al. 2007)<sup>7</sup>. Given this disparity between the Canadian population as a whole and the Canadian Aboriginal population, it should come as no surprise that Aboriginal people are overrepresented in impoverished groups (Native Women's Association of Canada 2007). However, trying to determine how these problems come together and impact Aboriginal people in an urban context is a vital first step towards increasing community empowerment, independence, and, ultimately, reducing the risk of housing insecurity.

Homelessness is not an immediate process, it is the product of increasing housing insecurity. Housing insecurity is created through social inequalities and barriers that lead to, or exasperate, precarious housing. As already mentioned, the Canadian Mortgage and Housing Corporation articulates affordability, suitability, and adequacy as factors shielding from housing insecurity. Currently,

<sup>&</sup>lt;sup>6</sup> North American Indian, Inuit, or Métis.

<sup>&</sup>lt;sup>7</sup> For the 2006 Census, researchers focused on using a Community Well-being Index over the United Nation's Human Development Index to gauge Aboriginal well-being in Canada more specifically.

neither homelessness nor housing insecurity can be properly measured. However, those who rent are more vulnerable to issues of affordability, suitability, and adequacy than homeowners. Individuals who rent have higher levels of housing insecurity as they have lower incomes, face a smaller gap between housing cost and income, thus livable wages are an issue. When a sizable proportion of household income is required to cover rent, little may be left over. In addition to housing, other immediate needs need to be met, such as food, water, and clothing. After attending to those expenditures, little income may be left over. Due to affordability issues, families may not be able to invest in household repairs, nor better housing. As well, landlords that manage low rent properties may not be held to the same standards expected from those renting more expensive properties. In addition, when affordability is an issue, under housing, where there are far more individuals living in a residence than there is room for, occurs more frequently. Those with lower income are not only vulnerable to these issues, but lower income neighborhoods<sup>8</sup> are increasingly vulnerable to crime, may have access to fewer amenities, and generally are less desirable to live in. As such, rentalship will serve as a proxy to housing insecurity in this study.

This chapter will review relevant academic literature on the Indigenous people of Canada. The histories of Aboriginal people in Canada will be explored through key tenants of the Indian Act and the creation of reserves, barriers that prevented movement to Canadian cities, as well as rural to urban migration. After reviewing a general background of Indigenous people, the urban Aboriginal

<sup>&</sup>lt;sup>8</sup> Which consist of rental properties primarily.

experience in Canada will be considered. This will be done through a very brief examination of the history of urban Aboriginal people, the phenomenon of 'ethnic drift'<sup>9</sup>, how the urban Aboriginal population has changed, what four main ethnic groups make up the urban Aboriginal population, and a review of demographic trends. After an introduction to urban life for Aboriginals, urban homelessness will be discussed by defining it as a phenomenon, outlining its history, and discussing why it is a pressing social problem that needs to be studied. Following this will be a brief summary of how researchers have specifically measured housing and homelessness, through a discussion of the difficulties in measurement, and then by reviewing housing as a construct itself. This chapter will conclude with a discussion of the current study, and will include the research questions and hypotheses that guided the research.

#### 2.2. BACKGROUND

#### 2.2.1. The Indian Act and Production of Life on Reserve

Aboriginal identity in Canada is very complicated and highly nuanced. Traditionally, being Aboriginal has been closely aligned with federal policies, such as the Indian Act. Initially, subsection 91(24) of the Constitution Act (1876), defined what it meant to be an 'Indian' and subsequently what privileges, such as land rights, would be granted to those who fell under this legislative category. Later on that year, the first Indian Act (1876) was compiled to further the task of

<sup>9</sup> Also referred to as 'ethnic mobility'

assimilation through status membership, articulation of regional governments, and land management of reserves<sup>10</sup> (Hurley 2009:1).

Reserves were relegated to isolated and less desirable areas (Nagler 1972; Widdowson 2006) as they were not meant to be economic centers, but rather, were formed to contain Indigenous people while settlers 'civilized' the nation (Quesnel 2010). Specifically, policies of enfranchisement<sup>11</sup>, stemming from the Indian Act (Cannon 2007; Voyageur 2000:88), were grounded in the goal of removing status and fully assimilating Aboriginal people into society. Rural reserves were established to "warehouse First Nations while they prepared for enfranchisement and settlers built the country" (Quesnel 2010:4).

Enfranchisement alluded to "entry into life off of the reserve" (Quesnel 2010:6), where Indigenous people, once fully assimilated, would leave the reserve and mainstream into settler communities (Quesnel 2010:11).

Subsequently, these policies, while initially promoted as voluntary, were not always so. The policy of enfranchisement was patriarchal, as enfranchisement could only be granted directly to men (Voyageur 2000). If an Aboriginal man "met certain criteria, Indian men who were literate, free of debt and of good moral character could (along with their "dependents"), give up legal status and become non-Indians" (Cannon 2007:38). Alternatively, individuals could be "voluntarily franchised if they lived away from their

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<sup>&</sup>lt;sup>10</sup> Sanctioned areas where Indigenous people were relegated to, often through a "treaty" process.

<sup>&</sup>lt;sup>11</sup> By enfranchising, a person abandoned their Indigenous identity to live within the mainstream, Non-Indigenous majority. Enfranchisement applied both to men who gave up their status by choice, and to Aboriginal women whose status was automatically revoked upon marriage to Non-Aboriginal men.

communities" (Cannon 2007). Beginning in the 1950s, involuntary enfranchisement was imposed upon women who married Non-Aboriginal men, whereby women were forced to leave their communities non-voluntarily (Cannon 2007:39; Voyageur 2000). While this policy formally ended in 1985, the practice seems to persist (Cannon 2007) in that while an individual may be reinstated with federal status, and awarded some rights, it is up to his or her own band to decide membership. In addition, First Nations "often marry non-Indians in the process of migrating to cities... sometimes influenced by the depletion of resources and the lack of economic opportunities on reserves in Canada" (Cannon 2007: 39-40). In this way, the ability for an individual to make a living influences their immediate location. As an Aboriginal person's identity is closely aligned with location, particularly to the reserve, having to go elsewhere to support oneself also has an impact on identity.

It is undeniable that in the past, prescribed assimilation policies and practices originating from the Indian Act severely damaged Aboriginal individuals, as well as entire Canadian communities (Cannon 2007; Fiske and George 2007; Clatworthy 2007). However, these policies and practices also affected identity (Cornet 2007). Understandings of identity regarding urban Aboriginal people have largely evolved from European interpretations of the social world (Lawrence 2004) by way of the Indian Act (1876). Specifically, 'authentic' Aboriginal identities have been embedded within a lifestyle of living in rural reserve communities—a construct created when most who identified as Aboriginal did not live in urban environments (Peters 1996:49). Therefore, the ascribed 'authentic'

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Aboriginal person persists as historic and non-urban. Consequently "Aboriginal people are confronted again and again with explicit or implicit messages that cities are not where they belong as people with vibrant and living cultures" (Peters 1996:60). These issues have real consequences not only for individual and cultural identities, but also for the appropriation of urban spaces. If Indigenous people are left out of the urban social consciousness, what is to prevent relegation to unsafe, forgotten, and marginalized spaces within cities?<sup>12</sup>

The persistence of the reserve under the Indian Act has had real consequences toward Indigenous identity. While Aboriginal status is still defined through the federal Indian Act, legal status remains linked to location through the reserve. So, if Aboriginal identity has been centered around location, and that location has been the reserve, how does this influence the construction of contemporary identities in cities?

## 2.2.2. Early Aboriginal Urbanization

While Canadian cities were first established on sites used by Indigenous people as meeting places or areas of settlement (Newhouse and Peters 2003:6), histories of Aboriginal people living in urban centers are limited. However, it is known that Aboriginal people were actively prevented from living in cities prior to 1950 (Newhouse and Peters 2003:6). Despite this, Indigenous peoples have always been engaged in the cities to some extent, although it was not until after the 1950s that urban Indigenous populations really increased (Peters 2000).

<sup>&</sup>lt;sup>12</sup> Which is in vast contrast to many of their Non-Aboriginal, mainstream and 'urban' peers.

Coincidentally, this was around the same time rapid Canadian urbanization took place (Bourne 1991). However, not much has been documented regarding Aboriginal people living in cities from the 1950s until the early 1990s. This gap in the literature limits our ability to track the development of urban Aboriginal homelessness in the latter half of the century.

However, more generally, it was in the early 1950s that the Canadian public first became widely aware of the poor quality of life on many reserves (Peters 2000). This concern generated a public inquiry that recommended, among other things, improving Aboriginal quality of life through urbanization (Peters 2000). This recommendation is particularly interesting as community sites and reserves were intentionally placed out of the reach of urban centers (Newhouse and Peters 2003:6). Further, up to the late 1950s, a combination of practices had succeeded in keeping significant numbers of Indigenous peoples out of cities (Newhouse and Peters 2003:6).

#### 2.2.3. Rural to Urban Migration

Migration from rural to urban centers is a well documented social phenomenon (Anderson 1966; Rogers 1982; Audas and McDonald 2003; Bollman and Clemenson 2008). In Canada, it seems that a rise in the general population presupposed migration from rural to urban communities—particularly since the beginning of the twentieth century (Anderson 1966). Since 1941, population growth in Canada has occurred more markedly in Canadian census urban populations (Bollman and Clemenson 2008).

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In Aboriginal populations, as already mentioned, little is known about urban populations and growth prior to 1950. However, according to the literature, "The largest increase in the urban Aboriginal population has occurred since the 1950s" (Peters 1996:237)<sup>13</sup>. This trend seems to emulate Non-Aboriginal Canadian rural to urban migration.

Economic activity has long been attributed as one of the factors of rural to urban migration (Cooke and Belanger 2006). Aboriginal people with Status, who have strong histories and community ties to their reserve may not want to leave. However, due to distance from urban centers and lack of economic opportunity, many have little choice. The chosen locations of many rural Aboriginal reserves in isolated and marginal locations (Nagler 1972; Widdowson 2006) in and of itself has been largely detrimental to local and individual economic prosperity <sup>14</sup>.

As cities are sites of economic exchanges, the closer the proximity of two groups who wish to exchange goods or services, the more transactions are likely to take place. This 'ease of accessibility' (Filion and Bunting 1991:7) privileges those who live in, or in close proximity to, urban centers. At the same time, distance also punishes those outside of these communities—an experience

<sup>&</sup>lt;sup>13</sup> While in the early 1960's some research was done on the significance of Aboriginal migration from rural to urban communities (Peters 2000), attention sharply declined. However, with the 1991 census indicating an abundance of urban Aboriginal people in cities across Canada, interest piqued again and grew with the release of the 1996 Royal Commission on Aboriginal People's report.

<sup>&</sup>lt;sup>14</sup> There have been recommendations for voluntary relocation of 'non-viable', or non economically viable, reserve communities to urban centers (Quesnel 2010). By example, the community of Kashechewan was known as an isolated and "non-viable" community burdened with economic problems and issues of poor infrastructure (Indian and Northern Affairs Canada 2006). Despite recommendations made by the Federal government (Indian and Northern Affairs Canada 2006) to relocate, the community opted to stay rooted (Indian and Northern Affairs Canada 2007; Quesnel 2010:7).

affecting many who live in smaller communities, such as rural reserves. One of the drives behind Indigenous rural to urban migration is the desire to move to city centers as there is often little to no opportunity to replicate desirable urban based economic activities in the lesser developed and sparsely populated rural areas. This has been specifically articulated as a search for "educational and employment opportunities" (Cooke and Belanger 2006).

### 2.3. THE URBAN ABORIGINAL EXPERIENCE

As mentioned above, although the current emphasis on Aboriginal research still remains on the reserve experience, there is a growing literature on urban Aboriginal life (Newhouse and Peters 2003). All the same, Indigenous populations are still largely left out of urban analyses of cities—despite the significantly disproportionate barriers many Aboriginal people face (Cardinal 2006:218).

# 2.3.1. Churn Migration

Canada has experienced a high rate of rural to urban migration over the last century. While large proportions of Canadians had already migrated to cities in mass droves (McVey 1979), Aboriginal rural to urban migration was delayed<sup>15</sup>. Currently, high rates of Aboriginal people are moving from the reserves to the cities. At the same time, high rates of Aboriginal people are also moving from the cities back to the reserves (Beavon, Wingert, and White 2009; Norris and

<sup>&</sup>lt;sup>15</sup> Primarily due to reserve restrictions.

Clatworthy 2003; Clatworthy 1996; Skelton 2002). This phenomenon has been attributed to a particular pattern of mobility known as 'Churn Migration' (Guimond 2003). While Indigenous people have higher rates of migration than the Non-Indigenous population, this is due to movement not only from rural to urban communities, but also from urban to rural communities. Altogether, roughly equal proportions of Aboriginal people tend to constantly move back and forth between city and reserve (Guimond 2003; Beavon, Wingert, and White 2009; Norris and Clatworthy 2003; Clatworthy 1996; White and Maxim 2003). As half of Indigenous populations live on reserve and the remaining half live off reserve, (Statistics Canada 2003) this cyclical pattern of churn migration accounts for how reserve and urban Indigenous populations remain balanced.

In addition to Aboriginal people in Canada migrating back and forth between reserve and urban areas in a 'churn' pattern (Norris, Cooke and Clatworthy 2003), Aboriginals also migrate within urban environments at elevated rates as compared to the rest of the Canadian population (Norris and Clatworthy 2003). While at any given time, roughly 50% of Aboriginal people live in urban environments<sup>16</sup> (Peters 2000), at least half of total moves of Indigenous peoples were to relocate within their current city (Norris and Clatworthy 2003). Consequently, this trend creates enumeration issues due to constant migration.

As well, within neighborhoods or communities where churn migration is frequent, "the probability of forming associations, clubs, parent-teacher groups,

<sup>&</sup>lt;sup>16</sup> In 1996, 3.8% of Canada's population identified as Aboriginal. In 2001, 4.4% of Canada's population identified as Aboriginal (around 1.3 million people) (Statistics Canada 2003, 5).

sports clubs, and so on, is diminished" (White and Maxim 2003:7). High churn migration compromises social capital by disrupting community networks. Community level interactions allow for the development of relationships among members—relationships that provide support and assistance where needed. These social bonds and the nature of reciprocal relationships often create a sense of community, where members become attached to one another. Without access to such networks, social cohesion is compromised, and social problems become intensified. Short of local community support, individuals may be in search of social capital elsewhere, which then contributes to migration (White and Maxim 2003).

Churn migration is important when considering potential limits on the accumulation of social capital, which may create further difficulties in gaining access to resources and privileges (Beavon, Wingert, and White 2009; White, Spence, and Maxim 2009). Additionally, social capital could potentially shield from homelessness, as according to White, Spence, and Maxim (2009), social capital (measured in networks) seems to be an important influence in social and economic outcomes. However, the literature on rates of churn migration and its relationship to social capital is sparse (Beavon, Wingert, and White 2009).

# 2.3.2. Population Growth and Ethnic Drift

Over the past few years, the Aboriginal population in Canada has increased rapidly. Between 1996 and 2006 the Aboriginal population increased

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45%, while the Non-Aboriginal population increased 8% (Environics Institute 2010:24). This substantial Aboriginal population growth may be attributed to higher fertility rates (Statistics Canada 2006b). From 1996 to 2001, the fertility rate for Aboriginal women was 2.6<sup>17</sup> as compared to 1.5 among women in the general population<sup>18</sup> (Statistics Canada 2006b). Further, according to the 2006 Canadian Census, the median age of Aboriginal people was 27 years old<sup>19</sup> (Statistics Canada 2008b). Not only was the fertility rate higher for Aboriginal people, but there were more women in the Aboriginal population at the age for having children. However, the rapid increase in the Aboriginal population cannot be explained by natural processes alone.

One other possibility to explain the high population growth for Aboriginal people may be that of ethnic drift (Guimond 2003; Environics Institute 2010:24). Amendments made to the Indian Act in Bill C-31 have made it possible for those who had status revoked previously (due to female out-marriage) to reinstate Status<sup>20</sup> (Clatworthy 2003; White et al. 2007). Currently, individuals may now choose to ethnically identify with a First Nations group, or category, rather than solely relying upon bloodline (Guimond 2003). Many who formerly had their

<sup>&</sup>lt;sup>17</sup> On average Aboriginal women were be expected to have 2.6 children over their lifetime.

<sup>&</sup>lt;sup>18</sup> On average Non-Aboriginal women were be expected to have 1.5 children over their lifetime.

<sup>&</sup>lt;sup>19</sup> Whereas the median age of the general population was 40.

<sup>&</sup>lt;sup>20</sup> The 1985 amendment to the Indian Act eliminated the idea of enfranchisement as used here; as well as eliminating the Act's discriminatory section, the government gave individual bands the right to decide their own conditions for membership.

statuses revoked are now either personally identifying their Aboriginal status, or are seeking out legal reinstatement of status.

What has been found is that the influx of individuals reclaiming Indigenous status have influenced the measurement of demographic traits. Overall this group is overwhelmingly urban, demonstrates lower fertility, higher educational attainment levels, and higher income than those with preexisting Aboriginal identities (Guimond 2003). Thus, these changes in identity may account for the closing gaps between Aboriginal and Non-Aboriginal people, although high disparities between both groups persist (Environics Institute 2010; Peters 2010).

The phenomenon of ethnic drift, along with physical mobility<sup>21</sup>, can make it a challenge to research Aboriginal populations (Cairns 2001:125). It can be difficult to define the 'core Aboriginal population' due to "reinstatements, inheritance rules, and shifts in self-reporting" (Kerr, Guimond, and Norris 2003) over time.

### 2.3.3. The Four Primary Ethnic Urban Aboriginal Groups<sup>22</sup>

Overall, close to half of Aboriginal people in Canada live in urban areas (Environics Institute 2010). Specifically, 74% of all Métis people are urban dwellers, along with 66% of all Non-Status First Nations, 38% of all Status First Nations, and less than 30% of the Inuit population. (Environics Institute 2010:25).

<sup>&</sup>lt;sup>21</sup> Existent statistics on mobilities, especially from rural to urban are limited due to unenumerated reserve populations (Peters 2010).

<sup>&</sup>lt;sup>22</sup> Métis people, Non-Status First Nations, status First Nations, and Inuit.



Figure 2.1.: Proportion of Target Groups Who Live in Urban Environments<sup>23</sup>.

Despite improvements in employment rates, urban Aboriginal employment (at 65.8%) is considerably lower than Non-Aboriginal employment (81.6%) (Environics Institute 2010:25). This is significant as a sizable proportion of all urban Aboriginal people are at, or are close to, working age as half are under 24 years old (Environics Institute 2010:25).

<sup>&</sup>lt;sup>23</sup> Figure derived from data provided by the Environics Institute (2010:25)





As well, of all urban Aboriginal people who have full time positions, the average income is \$34,940, while Non-Aboriginal people make \$41,401 (Environics Institute 2010:25). This means that in full time positions, urban Aboriginal people make 84¢ on the dollar of what urban Non-Aboriginal people make.

Within these overlying trends, it is important to keep in mind that urban Aboriginal peoples are not a homogenous group. There is certainly diversity among the variety of Indigenous groups within each city (Environics Institute 2010). Generally most studies find that there is a hierarchy of inequality with the Métis faring the best followed by Non-Status individuals, Status individuals, and

<sup>&</sup>lt;sup>24</sup> Figure derived from data provided by the Environics Institute (2010:25)

the Inuit (Wilson and Macdonald 2010:9; Maxim and White 2001; Maxim, White, Beavon, and Whitehead 2001).

## 2.3.4. Demographic Trends

Until the early 1990s, there was limited data available on socioeconomic conditions for urban Aboriginal people across Canada (Peters 2000). The 1991 Aboriginal People's Survey, crafted as a post censal survey to supplement census data, showed that the urban Aboriginal population as compared to the wider Canadian population was younger, had a greater proportion of women, higher unemployment, lower incomes, and were more likely to live in precarious housing (Peters 2000:240; Beavis et al. 1997; Hanselmann 2001). When comparing the levels of poverty between Non-Aboriginal and Aboriginal people, patterns emerge of economic marginalization experienced by Aboriginal people. For example, urban Indigenous people are overrepresented in many circumstances, including unemployment rates, low income jobs, impoverished families, lone parent families, and in housing repair needs (Peters 2010:163). Additionally, urban Aboriginal people are underrepresented in managerial careers, and postsecondary educational attainment (Peters 2010:163). All of these differences between Non-Aboriginal and Aboriginal people together speak to the marginalization of Indigenous people through unequal dispersal of resources.

All urban individuals share the same physical spaces, yet have differing opportunities. When one group is deprived of opportunities and resources granted to another group, a comparison can be made (Davies 1969). These differences are often referred to as relative deprivation, where one group seems unable to access resources other groups are seemingly entitled to. The inequalities underlying this phenomenon may not be apparent, and instead responsibility may be placed upon the individuals or the group in their inability to harness such privileges. Consequently, urban Aboriginal people may compare their state of economic marginalization alongside the visible economic privileging of urban Non-Aboriginal people. By example, research that has measured wellbeing of Aboriginal people, through community level research, has drawn upon income levels, educational attainment, housing quality and labour force participation (White and Maxim 2003). This research indicates that on all of these measures, Aboriginal communities lag comparable to Non-Aboriginal communities and seriously lag behind the prosperity of the cities (Maxim et al. 2001; Maxim and White 2003).

While well-being has not yet been evaluated for Aboriginal people within cities, uninformed stereotypes of the urban Aboriginal experience persist and are more easily replicated without any information to counter it. One example is the notion of Aboriginal people as "increasingly concentrated in inner-city neighborhoods" (Peters 2010:156). Existing literature of US inner-city ghettos and overrepresentation of the underclass in specific locales engages the nuances of urban poverty (Peters 2000:169). These enclaves do not exist in a similar way in Canada as locations with low cost housing attract more impoverished individuals in general, across ethnicities, thus creating dispersions

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rather than concentrations (Walks and Bourne 2006). Typically, low cost housing in Canada is dispersed throughout city neighborhoods. While there are some lower socioeconomic status neighborhoods in Canada, such as Jane and Finch in Toronto, concentrations of single ethnic groups are far below the scale of ghettos in the United States (Maxim, White, and Keane 2003; Walks and Bourne 2006). In Canada, affordable housing is the key determinant of neighborhood selection (Walks and Bourne 2006; Maxim, Keane, and White 2003). As well, as there is a mix of socioeconomic status neighborhoods in Canadian cities, housing does not create segregation by visible minority group (Walks and Bourne 2006).

#### 2.4. URBAN HOMELESSNESS

# 2.4.1. What is Homelessness?

Defining homelessness is very difficult as it "is a relative term" (Beavis et al. 1997:6). The first national homeless study was done in 1987, which was also the same year the United Nations declared to be the International Year of Shelter for the Homeless (Layton 2008). From that study, homelessness in Canada was defined as not having a roof over one's head (Layton 2008). This resulted in the articulation of the 'street person'—a stereotypical construction, essentializing the experience of homelessness. While this definition tends to not only ignore the hidden homeless, it masks the realities of being overtly homeless. It is well known that many homeless individuals constantly move on and off of the streets and it is extremely rare for a homeless person to remain on the streets for the full tenure of their homelessness (National Coalition for the Homeless 2005).

Dissatisfied with this construct, some researchers have chosen instead to use the United Nations' definition of homelessness which takes into account those who are without homes, whether from being on the street or losing a home to a crisis. Although this definition considers shelters that do not meet U.N. standards of "adequate protection from the elements, access to safe water and sanitation, secure tenure and personal safety, affordability, and accessibility to employment, education, and heath care," it has also been criticized for being too broad (Layton 2008).

An unsuitable definition of homelessness in Canada is problematic. Researchers either use the existing definition, and fail to capture homelessness in its entirety, or researchers choose another definition they feel is better suited to their study. A consequence of differing definitions of homelessness used within existing research is that it becomes difficult to draw comparisons across studies (Walks 1991).

## 2.4.2. History

There is very little literature available on the history of homelessness in Canada. As Canada began as a colony of England, laws and rules were shaped by those of the United Kingdom. Specifically, the Vagrancy Act of 1824, which targeted and criminalized beggars, seems key to Canada's treatment of homeless people. In 1889, select individuals, or Indian agents, were awarded privileges as justices of the peace toward the enforcement of the Vagrancy Act, which was intended for application to Aboriginal people exclusively (Leslie, Maguire, and Moore 1978:90-95). The offense of begging in Canada was only repealed in 1972 when, "the government and oppositions [acknowledged] that the inclusion of vagrancy in the criminal law was no longer appropriate" (Baker 2009:239; Wente 2000).

Therefore, homelessness has traditionally been widely interpreted as a "marginal issue" (Layton 2000:5), seen as widely irrelevant, and largely ignored. One of the possible reasons for this is that homelessness has long been ascribed to debates of 'morality' and 'deservedness' (Layton 2000; Layton 2008; Levinson and Ross 2007). These stereotypical notions divide up the homeless into those who chose a life of living on the streets, and those who are deserving of assistance (Layton 2000; Levinson and Ross 2007). Typically those who are branded as being more deserving adhere to dominant norms, and became homeless in more obvious, or simplified ways, such as middle class individuals who may have lost their homes due to a natural disaster. These notions of morality may be attributed back to the aforementioned Canadian Vagrancy Laws, which targeted street beggars. As homelessness has been long linked to morality, it has also been largely an issue of denial of vulnerability, often stemming from inequality. However, with recent trends indicating homelessness

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occurring in the suburbs of Vancouver (Hanselmann 2001), the increasing pervasiveness of this social problem may finally disrupt moral stereotypes.

What should also be noted about the moral perspective is that it produces the experience of homelessness as an individual issue. Consequently, many researchers have focused on the individual as the source of homelessness (Lavton 2008; Levinson and Ross 2007). However, as homelessness now transcends ethnicity, race, age, and other variables, other researchers have looked to social structure a trigger for homelessness—such as a focus on housing affordability (Walks 2006). This dichotomous split within homeless research makes it difficult to thoroughly and comprehensively understand the nuances of homelessness. If homelessness was solely a structural issue, then all individuals of a vulnerable group, such as urban Aboriginal people, would all be homeless. Further, if homelessness was completely an individual issue, then what individual would 'choose' homelessness? Both perspectives have their limitations and are impossible to compare to one another. Additionally, the moral standpoint curbs research on overarching trends of homelessness, both across and between certain groups, such as the Non-Aboriginal and Aboriginal homeless.

# 2.4.3. An Important Contemporary Issue

As already mentioned, urban Aboriginals have lower employment rates than urban Non-Aboriginals (Environics Institute 2010:25). Additionally, fully employed urban Aboriginals make \$7011 less on average per annum than Non-Aboriginals (Environics Institute 2010:25; Maxim and White 2001). These trends demonstrate that while many urban Aboriginal people already struggle, the current economic recession<sup>25</sup> must be increasing the difficulties this group already faces.

Recently<sup>26</sup>, rental costs have increased beyond income increases particularly amongst low income renters in Canadian cities (Yalnizyan 2007; Canadian Mortgage and Housing Corporation 2001). These trends indicate that of those already disenfranchised low income renters, many are in precarious housing situations due to rental rates rising beyond the capacity of their incomes. Complicating this scenario further, is the current global recession<sup>27</sup>, where job losses have been attributed primarily to blue collar industries in "trades and transport (including construction), manufacturing and natural resources"<sup>28</sup> (Pilieci 2009). Not only are these traditionally male-dominated jobs, they are also jobs that do not require extensive educational qualifications. This makes it difficult for those laid off to find replacement jobs, especially with their career field being downsized. Women have also experienced increases in unemployment, but not to the extent as men have as blue collar industries were affected the most (Pilieci

<sup>&</sup>lt;sup>25</sup> From the year 2008-2010.

<sup>&</sup>lt;sup>26</sup> Within the past 15 years.

<sup>&</sup>lt;sup>27</sup> Since 2008.

<sup>&</sup>lt;sup>28</sup> Page number was not provided as this was a newspaper article.
2009; Coombes 2009). Clearly, the recent recession<sup>29</sup> has created increasingly difficult situations for many lower income individuals—especially for those with already precarious employment (Pilieci 2009).

Additionally, it is unknown whether the experience of homelessness is similar or differs amongst individuals in different groups. It is unknown, for example, what the variations are between the urban Aboriginal and Non-Aboriginal homeless. If the experience of homelessness were to be different between groups, then one overarching definition of homelessness for all may be unsuitable.

### 2.5. MEASURING HOUSING AND HOMELESSNESS

### 2.5.1. Counting Difficulties

Until now, the existing comprehensive research done on Canadian homelessness has been lacking. Information on particular homeless subgroups, such as Aboriginal people, does not exist. Consequently many community and not-for-profit organizations are trying to fill in the gaps of the existent homeless research (Sider 2005).

Of those who are service providers and conduct their own research, it seems that the data collected is heavily descriptive. This data may serve as a means to justify the services and programs offered, and that, mixed with the dayto-day running of the operation, may utilize all available resources. One such

<sup>&</sup>lt;sup>29</sup> Since 2008.

example would be the 'homeless count' (Layton 2008). While these counts are wildly unreliable, due to difficulty enumerating the whole population, lack of resources, flawed and discriminatory methodologies based on an uncertain concept, they are still administered in cities across Canada (Layton 2008; Glasser and Bridgman 1999). With this research, homeless counts often represent differing definitions of homelessness—definitions that go beyond simply being 'without a roof over one's head.' However, this often leaves a critical analysis of the factors and contributors involved in Aboriginal homelessness by the wayside. As well, it makes it extremely hard to compare and cross-reference previous and current studies to develop a clear picture of what homelessness looks like.

Additionally, the phrase 'homelessness' has such a stigma that many people will not identify themselves as homeless. Currently, the Canadian definition of homeless is "those without a roof over their heads" (Layton 2008). Many who are homeless may live in their vehicles, in precarious housing, or in some sort of outdoor shelter, and will not identify as homeless as they consider themselves as having a roof over their head. As well, not only are homeless people nomadic, but they also typically move back and forth between being housed and living in the rough (National Coalition for the Homeless 2005). The transient lifestyle of many homeless people poses an issue in research and follow-up. Without a clear and complete picture of homelessness in Canada, it is very difficult to articulate the experience of homeless sub-populations, such as the urban Aboriginal homeless, as quality data just does not exist.

### 2.5.2. Housing as a Construct

Alternatively, one area of interest in conceptualizing housing and housing issues has been regarding 'core housing need' (Layton 2008). Core housing need, according to Layton, is "a term developed by the CMHC [Canadian Mortgage Housing Corporation] to count the households unable to afford a suitable, adequate, median-rent unit in their community and that have one or more of the following concerns: affordability... suitability... adequacy" (Layton 2008:204). Core housing need is a more inclusive way of imagining homelessness as this concept considers not only those overtly homelessness, but also the hidden homeless populations—a group largely forgotten by research and policy makers (Layton 2008). A 30 percent cut off, in that 30% is an appropriate proportion of income to be paying toward housing, (Layton 2000:134) is considered to be the appropriate measure in determining core housing need. However, this number has evolved over time from around 20% in 1940 by Canadian housing policy expert Jeremy Carver, to 25% by the Canadian Mortgage Housing Corporation in the 1960's (Layton 2000:134). Somehow, this number has arbitrarily crept up to 30%, the number which is now most quoted (Layton 2000). One of the consequences of this creep, is that it is "reducing the

magnitude of the problem each time the adjustment was made" (Layton 2000:134). To properly gauge need, a 50% cut off has been put into use for policy makers as salaries "of the lowest-income Canadians generally fell for over the past twenty-five years" (Layton 2000:134). It has been deduced that close to one million people in Canada currently face this 50% cut off, and with this trend continuing, it has recently been estimated that close to three million Canadians have either directly experienced homelessness, or have come close (Salvation Army 2010).

## 2.6. THE CURRENT STUDY

This thesis will examine the differing rates of rentalship and homeownership for Aboriginal and non-Aboriginal peoples. This study will attempt to determine if there are key demographic variables that explain these differential rates and will also look at whether the mobility of the comparator groups impacts rentalship levels. The key research questions are:

1. Are there significant differences between urban Aboriginal and urban Non-Aboriginal rates of rentalship and homeownership in Canada?

2. Are there intra-Aboriginal group differences in urban rentalship and urban homeownership?

3. What are there factors that influence urban intra-Aboriginal group differences?

4. Does mobility impact urban rentalship and homeownership levels?

5. Are increasing rentalship levels indicative of increased housing instability within cities?

From the above research questions, the following research hypotheses were developed for this study:

- The experience of housing is different between urban Non-Aboriginal and urban Aboriginal people. These housing differences manifest as differences between rentalship and homeownership, which is reflective of different levels of housing insecurity.
- 2) It is expected that the urban Aboriginal population is not monolithic and measurable differences in rentalship versus homeownership will be evident. This indicates variation in housing insecurity.
- 3) Differences between urban Aboriginal and urban Non-Aboriginal, as well as within Aboriginal populations, will be influenced by income, employment status, family type, and age. It is further hypothesized that mobility will be an important explanatory variable.

In answering the above research questions, and addressing the hypotheses, descriptives are employed to compare and contrast differences between Non-Aboriginal and Aboriginal housing, as well as intra-Aboriginal differences. Following this, two regression models are constructed to predict rentalship. The first regression model will be composed of control variables, and

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the second will include mobility, to evaluate whether mobility has an impact on rentalship.

## 2.7. SUMMARY

Regarding urban Aboriginal homelessness specifically, it is well known that Aboriginal people are overrepresented within homeless populations (Layton 2008; Native Women's Association of Canada 2007). However, accurate data on urban homelessness, let alone Aboriginal homelessness, is limited.

While the literature on urban homelessness in Canada is slowly growing, it remains limited regarding the experiences of particular groups. What is more readily available is a generalized literature on Canadian homelessness. Consequently, the generalized sources on homelessness are often merely supplemented with a small descriptive section on Aboriginal homelessness (Layton 2008; Laird 2007; Walks 1991; Scott 2007; Wente 2000). Of what information on homelessness is available, the vast majority is either primarily descriptive, or speaks to an outcome of homelessness, such as complicated illness (Layton 2008). Further, the available literature is specific to overt or street homelessness, and rarely considers hidden homelessness (Baskin 2007: 32-33).

Clearly there are many barriers to researching the homeless, and particularly the urban Aboriginal homeless. However, this paper will demonstrate possibilities for understanding urban housing issues through the examination of housing insecurity. Specifically, chapter three discusses how through the measurement of rentalship, housing insecurity can be investigated. Chapters four

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and five demonstrate, though assessing housing insecurity, alternative routes of measurement that can be used to gauge patterns of housing issues. Finally, chapter six articulates how the method of research employed in this study can inform understandings of housing issues, and further inform policy makers.

### **CHAPTER 3: METHODOLOGY**

### 3.1. DESIGN

Looking to the research questions created for this study, the primary task of this research is to look at how housing differs between Aboriginal and Non-Aboriginal people in Canada. To do so, rates of rentalship, as well as the processes that underlie rentalship, will be explored for Aboriginal and Non-Aboriginal people. In chapter two, it was shown that Aboriginal people face social barriers at a rate unmatched by Non-Aboriginal people. Specifically, Aboriginal people are overrepresented within such categories as lower income, lower educational attainment, and lower levels of employment. Thus, such indicators will be examined for Aboriginal as well as Non-Aboriginal people in Canada, to determine whether differences between the two groups exist, and how those differences impact housing.

As already highlighted in the literature review, mobility<sup>30 31</sup> is higher for Aboriginal populations compared to Non-Aboriginal populations in Canada. While it has been assumed that Aboriginal people are mobile to attain more affordable housing (Saskatchewan Indian Institute of Technologies 2004), it has become apparent that Aboriginal people are mobile for other reasons, which may not be completely driven by housing. Therefore, a further explanation of the impact mobility may have on housing is necessary and will be addressed in this study.

<sup>&</sup>lt;sup>30</sup> Mobility was assessed as one of four outcomes: no move, a move within the same Census Metropolitan Area (CMA), a move to a different CMA within the same province, and a move to a different CMA within a different province. The time frame was mobility over the year before the Census, 2005.

<sup>&</sup>lt;sup>31</sup> Mobility is measured in this research as at least one move within the past year,

### 3.1.1. Homelessness Proxy

Homelessness is an extremely difficult phenomenon to measure. The current gaps and ambiguities in the existing literature on homelessness, both in the academic as well as in the popular realm, speak to this. As there is currently no conclusive method for measuring homelessness in Canada directly, this study will look to measuring housing instability, using rentalship as a proxy.

# 3.2. THE DATA

The data set utilized in this research was acquired from the 2006 Census Public Use Microdata File (PUMF) on Individuals. From May 1 until May 15, 2006, 13,576,855 Canadian households were sampled. The 2006 Census data was collected immediately through the completion of the online questionnaire<sup>32</sup>, or by completion on paper which was mailed in, scanned, and then verified. Altogether, 80% of households were administered a short form, and 20% were administered a long form. Of those who completed the long form, the sample was separated into two frames for the microdata files. The first frame was for the individual file (which was utilized in this study) and the second frame was for the hierarchal file (which was not used). Subsequently, records were systematically selected from the individuals file to create the 2006 Census Public Use Microdata File (PUMF) on Individuals. Altogether, 2.7% of the Canadian population, or 844,476 respondents, are included in the individual file. The sample was weighted to represent the entire population. As well, the sample used in this

<sup>&</sup>lt;sup>32</sup> An option which was available for the first time in Canadian census history.

study is restricted to those individuals who lived in Census Metropolitan Areas. In addition, the regression analyses further restrict the sample to those individuals aged 20 years or older. Finally, significance for all relationships was set by the 0.05 alpha level.

# 3.3. THE DEPENDENT VARIABLE—HOUSING

The PUMF file operationalized the housing variable into two categories: those who own, and those who rent. Beyond these two groups, there was no data available on other types of housing, which may be indicative of hidden homelessness<sup>33</sup>. For example, there was no variable on where individuals lived or who paid the cost of housing (if they paid at all).

The variable, housing, is thus a dichotomous variable distinguishing between homeownership and rentalship. Ownership was used as the reference category, due to the generally higher proportion of people in the entire sample who owned. As well, those who own generally have greater housing stability than those who rent. For that reason, ownership was the better reference category, when looking at the outcome of those who rent.

# 3.4. THE INDEPENDENT VARIABLE-MOBILITY

The independent variable used in this study is urban mobility. It will be assessed in relation to urban Aboriginal housing. In the data-set there were two

<sup>&</sup>lt;sup>33</sup> Arguably, if someone does not pay into a mortgage or pay rent, either by themselves, as a couple, or is a dependent, they may be part of the hidden homeless.

mobility variables. One variable measured mobility within the past five years, and the other measured mobility within the last year. The variable used in this research was mobility within the last year, as this variable would better demonstrate the differences in urban mobility between Aboriginal and Non-Aboriginal Canadians. As mentioned in chapter two, Aboriginal people in Canada have higher rates of mobility than Non-Aboriginal people. While many people may have reasons to move within a time frame of five years, less would be inclined to move within the time span of one year. Therefore, the differences in mobilities between Aboriginal and Non-Aboriginal people would be more defined within the span of one year.

There were four categories of mobility employed: no mobility, a move to the same Census Metropolitan Area (CMA), a move to a different CMA in the same province, and a move to a different CMA in a different province. In addition, 'no mobility' was used as the reference group as this variable had the highest frequency. Additionally, 'no mobility' as a group was the best reference group as the present research explores whether mobility has an impact on housing: comparing each type of mobility to no mobility at all was the most intuitive for interpretation.

To fully asses the influence mobility has on rentalship, several control variables were used.

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## 3.5. THE CONTROL VARIABLES

While little has been done to study urban Aboriginal housing patterns, and the effect of mobility, the control variables were created based upon research completed by Beavon, Wingert, and White (2009) and by Haan and Murphy (2010). Beavon, Wingert, and White (2009) measured the effect of Aboriginal mobility on Aboriginal education<sup>34</sup>, whereas Haan and Murphy (2010) looked at homeownership and rentalship patterns for Canadian immigrants.

#### 3.5.1. Gender

The PUMF file operationalized gender into a dichotomous variable, males and females. In this study, females were the reference category<sup>35</sup>.

### 3.5.2. Family Type

Family type has been used with housing research (Haan and Murphy 2010) as well as work done on Aboriginal mobility (Beavon, Wingert, and White 2009). Altogether, four family types are included as categories in this variable: married or common law households<sup>36</sup>, multiple family households<sup>37</sup>, single person households<sup>38</sup>, and non-relative households with two or more people. Coupled households, due to their large frequency, were used as the reference

<sup>&</sup>lt;sup>34</sup> Through the number of moves compared to high school attainment levels.

<sup>&</sup>lt;sup>35</sup> While there was a slightly larger frequency of women, the reference group was arbitrary, due to the category being dichotomous.

<sup>&</sup>lt;sup>36</sup> With or without children.

<sup>&</sup>lt;sup>37</sup> With or without children.

<sup>&</sup>lt;sup>38</sup> With or without children.

group. As well, married or common law households may be more stable than single person households due to possible double income<sup>39</sup>. Therefore, married or common law households are a suitable reference category.

### 3.5.3. Household Income

The household income variable was constructed with six dummy categories, which has been done in other studies on housing (Haan and Murphy 2010) and Aboriginal mobility (Beavon, Wingert, and White 2009). The six categories were: 0-\$19999, \$20000-\$39999, \$40000-\$59999, \$60000-\$79999, \$80000-\$99999, and \$100000 and above. Since the \$20000-\$39999 category had the highest frequency, it was used as the reference group. Household income was used to gauge more accurately the complete economic resources of a family, or group, living under one roof<sup>40</sup>.

# 3.5.4. Education

In keeping with the methodology used by Beavon, Wingert, and White (2009) as well as Haan and Murphy (2010), the variable measuring the highest level of education was coded into five categories. These five categories include: less than a high school education, a high school graduate, experience within a trade, some post secondary education, and a university graduate. The reference group used was less than high school, due to the high frequency of respondents

<sup>&</sup>lt;sup>39</sup> The frequencies within multiple family households were too small to consider it as a reference group.

<sup>&</sup>lt;sup>40</sup> This variable may have been used as continuous, but was constructed as discrete in the data set.

across all groups belonging to this category. As well, when evaluating educational attainment, the reference category made for an intuitive comparison with the remaining higher levels of education.

### 3.5.5. Employment Status

Altogether three categories were used to represent employment, which were: full time employment, part time employment, and those not working<sup>41</sup>. Due to the large frequency, employment was used as the reference group. As well, those employed could be considered to be more financially stable than those not working or those working part time.

## 3.5.6. Age

All respondents over the age of twenty were included. Thus, the age variable consisted of five dummy categories: age 20-29, age 30-39, age 40-49, age 50-59, and age 60 plus. Dummy variables were also constructed for age in Haan and Murphy's research (2010). The variable, 20-29, was used as the reference group as those who are younger are more likely to rent.

### 3.6. DATA ANALYSIS

The data analyses involved a mix of descriptive statistics and regressive analysis. Firstly, descriptive statistics were constructed to summarize the characteristics of the sample. These characteristics include the proportion of

<sup>&</sup>lt;sup>41</sup> Due to limitations of the data, it was unclear whether those not working were doing so by choice (i.e. were retired), by injury (or some other limitation), or were unemployed.

respondents who lived in CMAs, the sex of the respondents, age, family type, education, mobility, household income, labour force participation, rates of ownership, and rates of rentalship.

Regarding the regression analyses, two simple regression models were performed. The first was a logistic regression of housing with all the control variables: sex, family type, household income, education, labour status, and age. The second model was also a logistic regression, which included all variables in the previous model, with the addition of the independent variable: mobility. This was done in order to evaluate whether including the independent variable, mobility, created a better model to estimate rentalship. All descriptives and regression models were weighted to the population.

## 3.6.1. Inter and Intra-Group Differences

This research looked at the differences between those who owned and those who rented between Aboriginal and Non-Aboriginal people, as well as within the urban Aboriginal population. As well, this study also examined the relationship between mobility and housing, and how this differed between Aboriginal and Non-Aboriginal Canadians, and between Aboriginal groups. Therefore, descriptive and regressive procedures were run for four target populations: Non-Aboriginal people, Status Aboriginals, Non-Status Aboriginals, and Métis<sup>42</sup>.

<sup>&</sup>lt;sup>42</sup> There were far too few urban Inuit to run data for and to get significant results.

### 3.7. MISSING DATA

When the 2006 Census Public Use Microdata File (for Individuals) was converted into STATA, the statistical program employed, the conversion automatically used case-wise deletion; respondents with missing data in any of the survey items were removed from the analyses. Thus, the analyses in this study makes the assumption that the data are missing at random.

# 3.8. CONVERSION OF RESULTS FROM LOGITS TO ODDS

To convert the regression results into a more usable and intelligible form, logits were converted to odds ratios. This method has been used by numerous researchers, such as Beavon, Wingert, and White (2009) as well as by Haan and Murphy (2010).

#### CHAPTER 4: RESULTS

### **4.1. INTRODUCTION**

As there is currently very little data available on the housing situation of urban Aboriginal people, descriptive statistics are presented first to establish overarching housing characteristics. Descriptive statistics for each of the four target groups, Non-Aboriginal, Status, Non-Status, and Métis were constructed. Frequencies and population percentages were first tabulated for each of the four groups on homeownership and rentalship rates. Subsequently, descriptives were tabulated only for those within the four target groups that rented.

Following this, two logistic models were estimated for each of the four target groups<sup>43</sup>. The first model included only the control variables (gender, age, family type, household income, highest level of education, and employment status) and the second model included all the control variables as well as the independent variable (mobility). This was done to determine whether the inclusion of the independent variable created a better model to predict rentalship. Additionally, each model was run for all four target groups to see whether this inclusion was consistent across and between each group.

To evaluate these two models, for each of the four target groups, the Wald statistic was first used for each grouped variable<sup>44</sup>. For those grouped variables that were statistically significant ( $\alpha = 0.05$ ), odds ratios were used to interpret the

<sup>&</sup>lt;sup>43</sup> Non-Aboriginal, Status, Non-Status, and Métis

<sup>&</sup>lt;sup>44</sup> Gender, age, family type, household income, highest level of education attained, and employment status.

regression coefficients of each individual category within the group<sup>45 46</sup>. This was done to determine the differential likelihoods in each scenario.

After this, three post-hoc tests were used to determine whether the addition of the independent variable, mobility, to the regression model when estimating rentalship was beneficial (or conversely, whether the model was a better fit when the mobility variable is excluded). These tests were the Log-Likelihood Ratio Test, McFadden's R-Squared, and the Hosmer-Lemeshow test. Each will be fully explained in the latter section of this chapter.

## 4.2. DESCRIPTIVE STATISTICS

Descriptive statistics, including percentages and frequencies for all target groups for the dependent variable and independent variables (with controls) were tabulated. The material is presented in separate sections below<sup>47</sup>.

### 4.2.1. Target Groups by Dependent Variable

### Non-Aboriginal People

This sample was composed of Canadians sampled in the 2006 Census, who did not identify as Aboriginal in any way. Further, only those who lived in a CMA at the time of the Census were selected.

<sup>&</sup>lt;sup>45</sup> By example, if 'Employment Status' was significant for the target group of interest, odds ratios were then assessed for 'Full Time,' 'Part Time,' and 'Not Working'

<sup>&</sup>lt;sup>46</sup> As well, each individual variable within the group variable were assessed for statistical significance  $(\alpha = 0.05)$ .

<sup>&</sup>lt;sup>47</sup> Summarized in Tables 4.1. and 4.2., to follow.

The descriptive results reveal that the majority of urban Non-Aboriginal people sampled owned the dwelling in which they lived in (73%), and the remaining respondents indicated that they were renters (27%).

#### Status Aboriginals

This sample was composed of those who ethnically identified as Aboriginal people in the 2006 Census, as well as those who indicated that they had Status. Further, only those who lived in a CMA at the time of the Census were included.

The majority of urban Status individuals sampled rented their homes (66%), while a minority owned their housing (34%).

# Non-Status Aboriginals

This sample was composed of those who ethnically identified as Aboriginal people in the 2006 Census, but at the time did not have Status. Further, only those who lived in a CMA at the time of the Census were selected.

Close to half of urban Non-Status individuals sampled rented their homes (49%), while the remaining half were homeowners (51%).

#### Métis

This sample was composed of those who ethnically identified as Métis in the 2006 Census. Again, only those who lived in a CMA at the time of the Census were selected. Overall, nearly three fifths of urban Métis individuals sampled owned their homes (57%), while the remaining individuals rented their homes (43%).

		Non-A	boriginal	Status		Non-Status		Métis	
	-	%	Freq.	%	Freq.	%	Freq.	%	Freq.
Housing	Renter	27.49%	151326	66.18%	2427	48.70%	918	42.83%	2010
Status	Owner	72.51%	399171	33.82%	1240	51.30%	967	57.17%	2683

Table 4.1. Descriptive Statistics	of the Sample	Populations,	featuring the	Dependent
Variable (rentalship)				

# 4.2.2. Target Groups and Mobility<sup>48</sup>

## **Non-Aboriginal People**

Non-Aboriginal people had the lowest rates of mobility,<sup>49</sup> with 19% moving within their current CMA in the last twelve months before the census. Of the remainder, very few moved to a different CMA within the same province (4%), and even fewer left the province to move to a different CMA (2%).

## Status-Aboriginal People

A sizable proportion of the Status-Aboriginal population moved within their reported CMA (28%), whereas 6% of individuals moved to a different CMA within the same province and a small number left the province to move to a different CMA (2%).

<sup>&</sup>lt;sup>48</sup> Summarized in table 4.2.

<sup>&</sup>lt;sup>49</sup> Whether the respondent had moved at least once within the past year.

### **Non-Status Aboriginals**

As with Status individuals, a considerable number of Non-Status individuals moved within their existent CMA (26%). Of the remainder, few moved to a different CMA within the same province (4%) and even fewer left the province to move to a different CMA (2%).

### Métis

Similar to Status and Non-Status Aboriginal peoples, a sizable number of Métis moved within their current CMA (27%). A few moved to a different CMA within the same province (5%) and even fewer left the province to move to a different CMA (3%).

### 4.2.3. Target Groups and the Control Variables

### **Non-Aboriginal People**

The Non-Aboriginal population included in the sample consisted of 48% men and 52% women.

Additionally, 22% of individuals were less than 20 years old<sup>50</sup>, 21% were aged 20 to 29 years old, 17% were in the 30 to 39 year old bracket, 14% were 40 to 49 years old, 10% were aged 50 to 59, and 15% were 60 years old, or older, at the time of the Census.

<sup>&</sup>lt;sup>50</sup> This category was not included in the regression analysis as it was assumed that it was unlikely that all individuals from the ages of 0 to 19 owned or rented their own homes, and that they would be captured in units with an older member of their family or living arrangement.

While close to half of the respondents (48%) indicated they were in a domestic relationship, whether married or common law, 41% identified as single. The remainder lived in dwellings with at least one other non-relative (9%) or in a multiple family household (3%).

Regarding overall household income per annum, 22% had an income between 0-\$19999, 30% were in the \$20000-\$39999 income bracket, 22% were in the \$40000-\$59999 income bracket, 13% had a household income of \$60000-\$79999, 7% had between \$80000-\$99999, with the remaining 7% having a household income exceeding \$100000.

Measuring the highest level of education attained at the time of the Census, 23% of respondents had less than a high school education, 26% had a high school diploma, 10% had additional education specific to a trade, 20% had some post-secondary education, and 20% were university graduates.

Looking at employment status, the majority of respondents had full time work (52%), 14% had part time jobs, and 33% of respondents were not working<sup>51</sup>.

#### Status-Aboriginal People

This sample population consisted of 45% men and 55% women.

Additionally, 42% of individuals were less than 20 years old (almost twice as many as those in the Non-Aboriginal groups), 19% were aged 20 to 29 years old, 15% were in the 30 to 39 year old bracket, 13% were 40 to 49 years old, 8%

<sup>&</sup>lt;sup>51</sup> Due to either not being in the workforce, or being unemployed.

were aged 50 to 59, and 5% were 60 years old or older at the time of the Census. This population has a higher proportion of young people than the Non-Aboriginal population.

Exactly half of the respondents (50%) indicated they were single, while 37% indicated they were a couple either married or living common law. The remainder lived in dwellings with at least one other non-relative (7%) or in a multiple family household (7%).

Regarding overall household income per annum, 29% had an income between 0-\$19999, 37% were in the \$20000-\$39999 income bracket, 17% were in the \$40000-\$59999 income bracket, 10% had a household income of \$60000-\$79999, 4% had between \$80000-\$99999, while the remaining 3% had a household income exceeding \$100000.

Measuring the highest level of education attained at the time of the Census, 43% of respondents had an education less than a high school diploma (as compared to only 23% of Non-Aboriginal people who fell into this category), 22% had a high school diploma, 11% had additional education specific to a trade, 18% had some post-secondary education, and 6% were university graduates.

Looking at employment status, a small majority of respondents had full time work (48%), 13% had part time jobs, and 39% of respondents were not working.

### **Non-Status Aboriginal People**

This sample population was half men (50%) and half women (50%).

Additionally, 40% of individuals were less than 20 years old (almost twice as many as those in the Non-Aboriginal groups, similar to Status individuals), 18% were aged 20 to 29 years old, 14% were in the 30 to 39 year old bracket, 15% were 40 to 49 years old, 8% were aged 50 to 59, and 7% were 60 years old and above at the time of the Census. This population was a lot younger than the Non-Aboriginal group, similar to Status individuals.

Close to half of the respondents (47%) indicated they were single, while 41% indicated they were a couple either by marriage or by living common law. The remainder lived in dwellings with at least one other non-relative (8%) or in a multiple family household (5%).

Regarding overall household income per annum, 27% had an income between 0-\$19999, 34% were in the \$20000-\$39999 income bracket, 21% were in the \$40000-\$59999 income bracket, 11% had a household income of \$60000-\$79999, 5% had between \$80000-\$99999, while the remaining 4% had a household income exceeding \$100000.

Measuring the highest level of education attained at the time of the Census, 42% of respondents had an education less than a high school graduate (as compared to only 23% of Non-Aboriginal people who fell into this category), 23% had a high school diploma, 10% had additional education specific to a trade, 18% had some post-secondary education, and 6% were university graduates.

Looking at employment status, a small majority of respondents had full time work (45%), 19% had part time jobs, and 37% of respondents were not working.

### Métis People

This sample population was composed of 47% men 53% women.

Additionally, 35% of individuals were less than 20 years old, 22% were aged 20 to 29 years old, 14% were in the 30 to 39 year old bracket, 14% were 40 to 49 years old, 9% were aged 50 to 59, and 6% were 60 years old (and older) at the time of the Census. This population was a lot younger than the Non-Aboriginal group, similar to Status and Non-Status individuals.

Close to half of the respondents (47%) indicated they were single, while 39% indicated they were a couple either by marriage or by living common law. The remainder lived in dwellings with at least one other non-relative (9%) or in a multiple family household (5%).

Regarding overall household income per annum, 24% had an income between 0-\$19999, 31% were in the \$20000-\$39999 income bracket, 21% were in the \$40000-\$59999 income bracket, 14% had a household income of \$60000-\$79999, 6% had between \$80000-\$99999, while the remaining 4% had household incomes exceeding \$100000.

Measuring the highest level of education attained at the time of the Census, 37% of respondents had an education less than a high school graduate, 26% had a high school diploma, 13% had additional education specific to a trade, 19% had some post-secondary education, and 6% were university graduates.

Looking at employment status, the majority of respondents had full time work (54%), 17% had part time jobs, and 29% of respondents were not working.

		Non-Aboriginal		Status		Non-Status		Mét	is
		%	Freq.	%	Freq.	%	Freq	%	Freq.
Gender	Male	47.84%	72395	44.71%	1085	50.00%	459	46.97%	944
	Female	52.16%	78931	55.29%	1342	50.00%	459	53.03%	1066
Age	Less than 20	22.29%	33734	41.53%	1008	39.65%	362	34.46%	698
	20 to 29	20.95%	31710	18.83%	457	17.63%	161	22.38%	448
1112	30 to 39	17.02%	25750	14.59%	354	13.91%	127	14.14%	283
S	40 to 49	14.43%	21840	13.06%	317	14.46%	132	13.54%	271
L-stable	50 to 59	10.29%	15569	7.62%	185	8.11%	74	9.39%	188
	60+	15.02%	22723	4.37%	106	6.24%	57	6.09%	122
Family	Couple	48 09%	72771	36 88%	895	41.29%	379	39.10%	786
Туре	Multiple	2.67%	4046	6.72%	163	3.70%	34	4.78%	96
	Single	40 57%	61399	49 86%	1210	46 73%	429	46 82%	941
	Two or More Unrelated	8.66%	13110	6.55%	159	8.28%	76	9.30%	187
Household	\$0-\$19999	21.52%	32561	28.88%	701	26.39%	242	23.48%	472
псоте	\$2000-\$39999	30.23%	45740	36.71%	891	33.59%	308	30.85%	620
	\$40000-\$59999	22.00%	33290	16.85%	409	20.50%	188	21.14%	425
	\$60000-\$79999	12.73%	19268	9.93%	241	10.91%	100	13.93%	280
	\$80000-\$99999	6.56%	9926	4.20%	102	4.69%	43	6.27%	126
	\$100000+	6.84%	10348	3.34%	81	3.93%	36	4.33%	87
1000	Less than High School				L				
Highest	Diploma	23.40%	29374	42.89%	694	42.45%	270	36.87%	549
Level	High School Graduate	26.17%	32841	22.25%	360	22.96%	146	25.85%	382
of	Trade	9.86%	12381	10.82%	175	10.06%	64	12.63%	188
Education	Some Postsecondary	20.44%	25657	17.74%	287	18.24%	116	18.54%	276
Attained	University Degree	20.12%	25254	6.30%	102	6.29%	40	6.31%	94
Employ-	Full Time	52.27%	65847	48.11%	787	44.90%	286	53.38%	798
ment	Part Time	14.46%	18211	13.08%	214	18.37%	117	17.39%	260
Status	Not Working	33.27%	41907	38.81%	635	36.73%	234	29.23%	437
Mobility	None at all	75.28%	108895	63.10%	1479	67.66%	590	65.34%	1282
	Within CMA	19.12%	27661	28.33%	664	26.49%	231	26.71%	524
	Different CMA, same Province	4.01%	5804	6.14%	144	3.56%	31	4.54%	89
-	Different CMA and Province	1.58%	2292	2.43%	57	2.29%	20	3.41%	67

Table 4.2. Descriptive Statistics of the Sample Populations, featuring the Independent Variable (mobility) as well as the Control Variables (sex, age, family type, household income, education, employment status).

The above table reveals several trends. First, Non-Aboriginal people have more of an aging population, are more likely to live as couple, have higher household incomes, have higher rates of completed education (especially at the university level), have higher rates of full time employment<sup>52</sup>, and have lower rates of mobility.

Comparisons between Aboriginal groups, also reveal noticeable trends. Non-Status and Métis people had a slightly older population as compared to Status individuals. Additionally, all three groups had a greater proportion of single individuals than those in a relationship, with Status individuals having the highest proportion of single individuals. As well, Status individuals had over twice as many individuals living in a multi-family household than Non-Aboriginal people. Regarding income, Métis people had the highest household income, followed by Non-Status, and then Status individuals with the least household income. Across all three Indigenous groups, education completion rates were lower than Non-Aboriginal rates. Particularly, rates of individuals with less than a high school diploma were much higher for Aboriginal people, and rates of those with a high school diploma were much lower as compared to Non-Aboriginal people. It should also be noted that university degree rates for Non-Aboriginal people were around three times higher than those of Aboriginal people. Looking at employment, Métis people had the highest rates of full time employment and the lowest rates of non-employment, amongst all three Aboriginal groups<sup>53</sup>.

<sup>&</sup>lt;sup>52</sup> However, Métis people had a slightly higher rate of full time employment

<sup>&</sup>lt;sup>53</sup> As well as among Non-Aboriginal people.

Overall, between all three Aboriginal groups, Métis people fared the best across each category, especially in relation to household income, levels of educational attainment, and employment status. Status individuals overall had the highest rates of single-hood, lowest household income, lowest rates of education, highest rates of not-working, and highest rates of mobility. Non-Status individuals fell in between Métis and Status rates, particularly in population age. The Non-Status population also fell between Métis and Status individuals in terms of household income, and were in between Métis and Status people in university degrees and in non-employment. However, Non-Status people had the highest rates of coupling in relationship status, marginally higher rates of not graduating high school, the highest rates of part time employment, the lowest rates of full time employment, and the lowest rates of mobility compared to other Aboriginal sub-groups.

# 4.3. REGRESSION STATISTICS

To see whether the addition of the independent variable (mobility) to the control variables improved the model of rentalship, two logistic regressions were run for each target group. For example, a regression model was run for Non-Aboriginal people with control variables only, then a second regression model was run for Non-Aboriginal people with the control variables and included the mobility variable. The same was done for Status people, Non-Status people, and Métis. To assess whether the inclusion of the independent variable, mobility, gave a better estimate of the dependent variable, rentalship, odds ratios were assessed within each grouped variable<sup>54</sup> <sup>55</sup>. Odds ratios are often used to interpret regression coefficients where the ratio reflects the amount of change in the odds of the dependent variable with a one unit change of the independent variable<sup>56</sup> <sup>57</sup>.

In addition, each group variable was then interpreted into an odds ratio and assessed for statistical significance ( $\alpha = 0.05$ ). Of each group variable that was statistically significant, the individual variables within were then tested for statistical significance ( $\alpha = 0.05$ ). So, for example, the group variable, employment status, was tested for statistical significance<sup>58</sup>. If it was significant, then the individual variables, full time, part time, and not working, were then also tested for statistical significance<sup>59</sup>. These statistics were calculated for both

<sup>57</sup> Or the amount of change in the odds of the dependent variable with a one unit change of the control variable at hand.

<sup>&</sup>lt;sup>54</sup> Gender, age, family type, household income, highest level of education attained, and employment status.

<sup>&</sup>lt;sup>55</sup> For example, if examining the grouped variable, 'Family Type', the odds ratios specifically for 'Couple,' 'Multiple-Family Household,' 'Single,' and 'Two or more Unrelated People' living in a household were looked at.

<sup>&</sup>lt;sup>56</sup> The unstandardized regression coefficient, **B**, is interpreted as the magnitude of the change in the dependent variable—the natural log of the odds or  $\ln(*/(1-*))$ —given a one unit change in the independent variable. This interpretation is, however, not intuitive. Thus, it is common practice to interpret the regression coefficients of a logistic regression model with the magnitude of change in the odds of the dependent variable given a one unit change in the independent variable (Hosmer and Lemeshow 2000). Mathematically, this is achieved by taking the antilog of  $\ln(*/(1-*))$ .

<sup>&</sup>lt;sup>58</sup> Using the Wald statistic.

<sup>&</sup>lt;sup>59</sup> Through examination of the significance of each individual **B** within the group variable.

regression models (without and with the mobility variable) for all four target populations<sup>60</sup>.

After this, three post-hoc tests were used to determine whether the addition of mobility improved the overall fit of the model when estimating rentalship. These tests were the Log-Likelihood Ratio Test<sup>61</sup>, McFadden's R-Squared<sup>62</sup>, and the Hosmer-Lemeshow test<sup>63</sup>.

## 4.3.1. Target Populations, Regression Model 1 (Controls) 64 65

#### Non-Aboriginal People

For Non-Aboriginal people, gender as a group variable was statistically significant<sup>66</sup> in the first model with males 1.02 times more likely to rent than females.

As well, age as a group variable was significant in the first model for Non-

Aboriginal people with those aged thirty to thirty-nine 0.57 times less likely to rent

than those aged twenty to twenty-nine, those aged forty to forty-nine 0.57 times

less likely to rent than those aged twenty to twenty-nine, those aged fifty to fifty-

nine years old 0.45 times less likely to rent than those aged twenty to twenty-

<sup>63</sup> To assess the overall fit of the model: whether the model with mobility had improved overall fit.

<sup>64</sup> Control variables only.

<sup>65</sup> Interpretation of coefficients as odds ratios.

<sup>66</sup> Statistical significance of each group variable, as well as the significance of individual variables within each group, is indicated by an asterisk (\*) in Table 4.3. below ( $\alpha = 0.05$ ).

<sup>60</sup> Non-Aboriginal, Status, Non-Status, and Métis.

<sup>&</sup>lt;sup>61</sup> To see whether it was worthwhile to include mobility in the model estimating rentalship.

<sup>&</sup>lt;sup>62</sup> To see by what extent the model improved with the inclusion of mobility. This test looked at how much variance on the dependent was explained by the model.

nine, and those aged sixty and over 0.34 times less likely to rent than those aged twenty to twenty-nine.

Family type was significant also, where those in multiple family households were 1.07 times more likely to rent than those who were living with a partner, those in single family households were 2.14 times more likely to rent than those living with a partner, and the individuals who lived in households with two or more non-relatives were 5.01 times as likely to rent than those who were living with a partner.

Household income per annum was also significant. With household income, those who had a household income per annum between 0-\$19999 were 1.67 times more likely to rent than those with an income between \$20000-\$39999. As well, those with an income between \$40000-\$59999 were 0.51 times less likely to rent than those with an income between \$20000-\$39999. In addition, those with a household income between \$60000-\$79999 were 0.28 times less likely to rent than those with an income between \$20000-\$39999. Also, those with an income between \$20000-\$39999. Also, those with an income between \$20000-\$39999. Finally, those with a household income above \$100000 were 0.07 times less likely to rent than those with an income between \$20000-\$39999.

Education was also significant. Specifically, high school graduates were 0.90 times less likely to rent than those without a high school diploma. Those who had education in a trade were 0.95 times less likely to rent than those without a high school diploma. Those with some postsecondary coursework behind them were 0.86 times less likely to rent than those without a high school diploma. Finally, university graduates were 1.07 times more likely to rent than those without a high school diploma.

As well, employment status was also significant. Those who had part time jobs were 0.70 times less likely to rent than those with full time jobs. As well, those not working, were 0.82 times less likely to rent than those with full time jobs.

Table 4.3. Regression Results for Non-Aboriginal People with Model 1, Control Variables Only (sex, age, family type, household income, education, employment status). Note: a = 0.05 and statistical significance is indicated on each variable (group and individual) by an asterisk (\*).

Ethnic Group	Variable	Wald	Wald Sig	Categories	Odds Ratio	SE	z	Sig.
Non- Aboriginal n: 451552	Gender*	4.98	0.03	Male*	1.018	0.008	2.23	0.026
				Female				
	Age*	9144.76	0.00	20 – 29				
				30 - 39*	0.866	0.010	-12.00	0.000
				40 - 49*	0.565	0.007	-47.38	0.000
				50 - 59*	0.453	0.006	-60.23	0.000
				60+ *	0.344	0.004	-82.37	0.000
	Family	13247.41	0.00	Couple				
	Type*		Privite da la	Multiple*	1.071	0.025	2.97	0.000
				Single*	2.142	0.019	83.70	0.003
				Two or more People*	5.092	0.091	90.58	0.000
	Household	47846.26	0.00	\$0-\$19000*	1.689	0.023	38.51	0.000
	Income*			\$20000-\$39999				
				\$40000-\$59999*	0.511	0.006	-59.12	0.000
				\$60000-\$79999*	0.276	0.003	-101.89	0.000
				\$80000-\$99999*	0.165	0.002	-120.15	0.000
				\$100000+ *	0.071	0.001	-181.98	0.000
	Education*	419.13	0.00	Less than High School			1111	
				High School Graduate*	0.898	0.010	-9.41	0.000
				Trade*	0.951	0.014	-3.30	0.001
				Postsecondary*	0.858	0.011	-12.48	0.000
				University Degree*	1.066	0.014	5.07	0.000
	Employment	978.85	0.00	Full Time				
	Status*			Part Time*	0.695	0.008	-30.35	0.000
				Not Working*	0.822	0.009	-17.53	0.000

### Status Aboriginal People

Gender was not statistically significant for Status Aboriginal people in the first model, and neither was education<sup>67</sup> <sup>68</sup>.

However, age was significant in the first model with those aged thirty to thirty-nine 0.75 times less likely to rent than those aged twenty to twenty-nine. As well, those aged forty to forty-nine were 0.44 times less likely to rent than those aged twenty to twenty-nine. Additionally, those in the fifty to fifty-nine year old bracket were 0.63 times less likely to rent than those aged twenty to twenty-nine, and those sixty or older were 0.25 times less likely to rent than those aged twenty to twenty-nine.

Family type was also significant where those in multiple family households were 1.90 times more inclined to rent than those who were living with a partner, those in single family households were 1.81 times as likely to rent than those who were living with a partner, and the individuals who lived in households with two or more non-relatives were 3.91 times as likely to rent than those who were living with a partner.

Household income per annum was also statistically significant. Those who had a household income per annum between 0-\$19999 were 1.21 times more likely to rent than those with an income between \$20000-\$39999<sup>69</sup>. As well, those

<sup>&</sup>lt;sup>67</sup> Statistical significance of each group variable, as well as the significance of individual variables within each group, is indicated by an asterisk (\*) in Table 4.4. below ( $\alpha = 0.05$ ).

<sup>&</sup>lt;sup>68</sup> However, the individual variable, high school graduate, was statistically significant and those with a high school education were 0.74 times less likely to rent than those with less than a high school diploma.

<sup>&</sup>lt;sup>69</sup> It should be noted that the coefficient for individuals with Status with an annual household income between 0-\$19999 was not significant.

with an income between \$40000-\$59999 were 0.37 times less likely to rent than those with an income between \$20000-\$39999. In addition, those with a household income between \$60000-\$79999 were 0.23 times less likely to rent than those with an income between \$20000-\$39999. Also, those with an income between \$80000-\$99999 were 0.13 times less likely to rent than those with an income between \$20000-\$39999. Finally, those with a household income above \$100000 were 0.05 times less likely to rent than those with a household income between \$20000-\$39999.

Finally, employment status was also significant. Those who had part time jobs were 0.52 times less likely to rent than those with full time jobs. As well, those not working were 0.96 times less likely to rent than those with full time jobs<sup>70</sup>.

<sup>&</sup>lt;sup>70</sup> However, this coefficient was not statistically significant.

Table 4.4. Regression Results for Status Aboriginal People with Model 1, Control Variables Only (sex, age, family type, household income, education, employment status). Note: a = 0.05 and statistical significance is indicated on each variable (group and individual) by an asterisk (\*).

Ethnic Group	Variable	Wald	Wald Sig	Categories	Odds Ratio	SE	z	Sig.
Aboriginal,	Gender	3.20	0.07	Male	0.831	0.086	-1.79	0.073
Status				Female				
n.: 2551	Age*	53.37	0.00	20 - 29				
				30 - 39*	0.750	0.104	-2.07	0.039
		a nama a sur		40 - 49*	0.662	0.092	-2.98	0.003
				50 - 59*	0.630	0.112	-2.60	0.009
				60+ *	0.246	0.048	-7.14	0.000
	Family	51.04	0.00	Couple				
and another the transmission of the second	Type*			Multiple*	1.897	0.398	3.05	0.002
				Single*	1.807	0.218	4.91	0.000
				Two or more People*	3.906	1.019	5.22	0.000
	Household	330.42	0.00	\$0-\$19999	1.213	0.213	1.10	0.272
	Income*			\$20000-\$39999				
				\$40000-\$59999*	0.370	0.056	-6.57	0.000
				\$60000-\$79999*	0.231	0.038	-8.96	0.000
				\$80000-\$99999*	0.134	0.026	-10.26	0.000
				\$100000+ *	0.048	0.009	-16.28	0.000
	Education	7.26	0.12	Less than High School				
				High School Graduate*	0.734	0.097	-2.34	0.019
				Trade	1.042	0.188	0.23	0.820
				Postsecondary	0.931	0.136	-0.49	0.625
				University Degree	0.778	0.155	-1.26	0.207
	Employment	21.94	0.00	Full Time			101	
	Status*			Part Time*	0.518	0.076	-4.46	0.000
				Not Working	0.956	0.126	-0.34	0.732
## Non-Status Aboriginal People

For Non-Status Aboriginals, the variables gender, education, and employment status, were not statistically significant in the first regression model. However, the remaining variables were<sup>71</sup>.

Age was significant in the first model with those aged thirty to thirty-nine<sup>72</sup> 0.98 times less likely to rent than those aged twenty to twenty-nine. As well, those aged forty to forty-nine<sup>73</sup> were 0.71 times less likely to rent than those aged twenty to twenty-nine. Additionally, those in the fifty to fifty-nine year old bracket were 0.53 times less likely to rent than those aged twenty to twenty-nine, and those aged sixty or older, were 0.35 times less likely to rent than those aged twenty to twenty-nine.

Family type was also significant, where those in multiple family households<sup>74</sup> were 0.93 times less inclined to rent than those who were living with a partner, those in single family households<sup>75</sup> were 1.33 times as likely to rent than those who were living with a partner, and individuals who lived in households with two or more non-relatives were 4.63 times as likely to rent than those who were living with a partner.

Household income per annum was also significant. Those who had a household income per annum between 0-\$19999 were 2.15 times as likely to

<sup>&</sup>lt;sup>71</sup> Statistical significance of each group variable, as well as the significance of individual variables within each group, is indicated by an asterisk (\*) in Table 4.5. below ( $\alpha = 0.05$ ).

<sup>&</sup>lt;sup>72</sup> The coefficient for those aged 30-39 was not statistically significant.

<sup>&</sup>lt;sup>73</sup> The coefficient for those aged 40-49 did not show statistical significance.

<sup>&</sup>lt;sup>74</sup> The coefficient for those living in multiple family households was not statistically significant.

<sup>&</sup>lt;sup>75</sup> The coefficient for those living in single family households was not statistically significant.

rent than those with an income between \$20000-\$39999. As well, those with an income between \$40000-\$59999 were 0.37 times less likely to rent than those with an income between \$20000-\$39999. In addition, those with a household income between \$60000-\$79999 were 0.17 times less likely to rent than those with an income between \$20000-\$39999. Also, those with an income between \$20000-\$39999. Also, those with an income between \$80000-\$99999 were 0.09 times less likely to rent than those with an income between \$20000-\$39999. Finally, those with a household income above \$100000, were 0.05 times less likely to rent than those with an income between \$20000-\$39999.

Table 4.5. Regression Results for Non-Status Aboriginal People with Model 1, Control Variables Only (sex, age, family type, household income, education, employment status). Note:  $\alpha = 0.05$  and statistical significance is indicated on each variable (group and individual) by an asterisk (\*).

Ethnic Group	Variable	Wald	Wald Sig.	Categories	Odds Ratio	SE	z	Sig.
Aboriginal,	Gender	0.44	0.51	Male	0.910	0.128	-0.67	0.505
Non-Status				Female				
n.: 1308	Age*	22.93	0.00	20 - 29				
				30 - 39	0.982	0.196	-0.09	0.929
ag kin sijero	THE REPORT OF THE PARTY OF THE			40 - 49	0.781	0.154	~1.25	0.210
				50 - 59*	0.526	0.123	-2.74	0.006
				60+ *	0.349	0.089	-4.13	0.000
	Family	29.06	0.00	Couple		1000		
	Type*			Multiple	0.932	0.353	-0.18	0.853
- 1980 ( Control of Co				Single	1.330	0.219	1.73	0.083
				Two + People*	4.632	1.338	5.31	0.000
	Household	200.94	0.00	\$0-\$19999*	2.145	0.537	3.05	0.002
	Income*			\$20000-\$39999				
				\$40000-\$59999*	0.369	0.076	-4.87	0.000
		Direction constraints	an a construction of a state.	\$60000-\$79999*	0.168	0.036	-8.38	0.000
Printle Instanti Billio Barbadi Farbian				\$80000-\$99999*	0.085	0.023	-9.02	0.000
				\$100000+ *	0.053	0.014	-11.06	0.000
	Education	2.03	0.73	Less than High School				
				High School Graduate	0.860	0.157	-0.83	0.406
				Trade	0.973	0.238	-0.11	0.910
				Postsecondary	0.775	0.158	-1.25	0.211
				University Degree	0.792	0.214	-0.86	0.388
	Employment	1.35	0.51	Full Time				
	Status			Part Time	0.798	0.155	-1.16	0.246
				Not Working	0.904	0.169	-0.54	0.592

#### Métis People

In the first model for Métis people all variables were significant, with the exception of gender<sup>76</sup>.

<sup>&</sup>lt;sup>76</sup> Statistical significance of each group variable, as well as the significance of individual variables within each group, is indicated by an asterisk (\*) in Table 4.6. below ( $\alpha = 0.05$ ).

Age was significant in the first model with those aged thirty to thirty-nine 0.85 times less likely to rent than those aged twenty to twenty-nine<sup>77</sup>. As well, those aged forty to forty-nine were 0.62 times less likely to rent than those aged twenty to twenty-nine. Additionally, those in the fifty to fifty-nine year old bracket were 0.54 times less likely to rent than those aged twenty to twenty-nine, and those sixty and older were 0.36 times less likely to rent than those aged twenty to twenty the twenty the twenty twenty the twenty the twenty twenty the twenty the twenty the twenty the twenty the twenty twenty the twenty twenty the twenty twenty the twe

Family type was also statistically significant, where those in multiple family households were 3.11 times as likely to rent than those who were living with a partner, those in single family households were 2.01 times as likely to rent than those who were living with a partner, and the individuals who lived in households with two or more non-relatives, were 4.69 times as likely to rent than those who were living with a partner.

Household income was also statistically significant. Those with a household income per annum between 0-\$19999 were 2.30 times as likely to rent than those with an income between \$20000-\$39999. As well, those with an income between \$40000-\$59999 were 0.51 times less likely to rent than those with an income between \$20000-\$39999. In addition, those with a household income between \$60000-\$79999 were 0.33 times less likely to rent than those with an income between \$20000-\$39999. Also, those with an income between \$20000-\$39999. Also, those with an income between \$20000-\$39999. Finally, those with a household income above \$100000

<sup>&</sup>lt;sup>77</sup> However, this individual coefficient on its own was not statistically significant.

were 0.06 times less likely to rent than those with an income between \$20000-\$39999.

As well, education was statistically significant. Specifically, high school graduates were 0.65 times less likely to rent than those without a high school diploma. Those who had education in a trade<sup>78</sup> were 0.82 times less likely to rent than those without a high school diploma. Those with some postsecondary experience were 0.64 times less likely to rent than those without a high school diploma. Finally, university graduates were 0.45 times less likely to rent than those without a high school diploma.

Additionally, employment status was significant. Those who had part time jobs were 0.68 times less likely to rent than those with full time jobs. As well, those not working were 0.79 times less likely to rent than those with full time jobs.

<sup>&</sup>lt;sup>78</sup> This individual variable was not statistically significant.

Table 4.6. Regression Results for Métis People with Model 1, Control Variables Only (sex, age, family type, household income, education, employment status). Note: a = 0.05 and statistical significance is indicated on each variable (group and individual) by an asterisk (\*).

Ethnic Group	Variable	Wald	Waid Sig	Categories	Odds Ratio	SE	z	Sig.
Métis	Gender	1.96	0.16	Male	0.890	0.074	-1.40	0.162
n.: 3529				Female				
	Age*	56.95	0.00	20 - 29			-	
				30 - 39	0.853	0.100	-1.36	0.173
				40 - 49*	0.620	0.073	-4.06	0.000
				50 - 59*	0.543	0.072	-4.58	0.000
				60+ *	0.359	0.057	-6.50	0.000
	Family	135.50	0.00	Couple				
	Type*			Multiple*	3.107	0.606	5.82	0.000
				Single*	2.055	0.203	7.30	0.000
				Two or more People*	4.685	0.824	8.78	0.000
	Household	412.83	0.00	\$0-\$19999*	2.297	0.367	5.20	0.000
	income*			\$20000-\$39999				
				\$40000-\$59999*	0.506	0.062	-5.55	0.000
				\$60000-\$79999*	0.327	0.042	-8.75	0.000
		and and and and a second		\$80000-\$99999*	0.204	0.031	-10.51	0.000
				\$100000+ *	0.063	0.010	-16.98	0.000
	Education*	31.34	0.00	Less than High School				
				High School Graduate*	0.652	0.072	-3.90	0.000
				Trade	0.823	0.114	-1.40	0.161
				Postsecondary*	0.636	0.078	-3.71	0.000
				University Degree*	0.449	0.076	-4.73	0.000
	Employment	11.44	0.00	Full Time				
	Status*			Part Time*	0.684	0.080	-3.23	0.001
				Not Working*	0.793	0.090	-2.03	0.042

# 4.3.2. Target Populations, Regression Model 2 (With Independent Variable)<sup>79</sup> Non-Aboriginal People

The independent variable, mobility within the last year, was statistically significant<sup>80</sup> in the second model for Non-Aboriginals. Those individuals who moved within their CMA were 2.40 times as likely to rent than those that did not move at all. Those who moved to a different CMA within the province were 2.01 times as likely to rent than those that did not move at all. Finally, those who moved to a different CMA in a different province were 3.69 times as likely to rent than those who did not move at all.

Gender was also significant in the second model, with males 1.02 times as likely to rent than females.

As well, age was significant with those aged thirty to thirty-nine 0.91 times less likely to rent than those aged twenty to twenty-nine. Also, those aged forty to forty-nine were 0.64 times less likely to rent than those aged twenty to twentynine. Additionally, those in the fifty to fifty-nine year old bracket were 0.53 times less likely to rent than those aged twenty to twenty-nine, and those sixty and older were 0.41 times less likely to rent than those aged twenty to twenty-nine.

Family type was also significant where those in multiple family households were 1.06 times more likely to rent than those who were living with a partner, those in single family households were 2.20 times as likely to rent than those who were living with a partner, and the individuals who lived in households with

<sup>&</sup>lt;sup>79</sup> Interpretation of coefficients as odds ratios

<sup>&</sup>lt;sup>80</sup> Statistical significance of each group variable, as well as the significance of individual variables within each group, is indicated by an asterisk (\*) in Table 4.7. below ( $\alpha = 0.05$ ).

two or more non-relatives were 4.63 times as likely to rent than those who were living with a partner.

Household income per annum was also significant. With household income, those who had a household income per annum between 0-\$19999 were 1.61 times more likely to rent than those with an income between \$20000-\$39999. As well, those with an income between \$40000-\$59999 were 0.53 times less likely to rent than those with an income between \$20000-\$39999. In addition, those with a household income between \$60000-\$79999 were 0.61 times less likely to rent than those with an income between \$20000-\$39999. Also, those with an income between \$20000-\$39999. Also, those with an income between \$20000-\$39999. Finally, those with a household income between \$20000-\$39999. Finally, those with a household income between \$20000-\$39999. Were 0.18 times less likely to rent than those between \$20000-\$39999. Finally, those with a household income between \$20000-\$39999. Finally, those with a household income above \$100000 were 0.08 times less likely to rent than those with an income between \$20000-\$39999.

As well, education was statistically significant. Specifically, high school graduates were 0.89 times less likely to rent than those without a high school diploma. Those who had education in a trade were 0.93 times less likely to rent than those without a high school diploma. As well, individuals with postsecondary education experience were 0.84 times less likely to rent than those without a high school diploma. Finally, university graduates<sup>81</sup> were 0.99 times less likely to rent than those without a high school diploma.

<sup>&</sup>lt;sup>81</sup> However the individual coefficient for Non-Aboriginal people with university degrees was not significant.

Employment status was also significant. Those who had part time jobs were 0.73 times less likely to rent than those with full time jobs. As well, those not working were 0.85 times less likely to rent than those with full time jobs.

Table 4.7. Regression Results for Non-Aboriginal People with Model 2, Independent Variable (mobility) with Control Variables (sex, age, family type, household income, education, employment status). Note: a = 0.05 and statistical significance is indicated on each variable (group and individual) by an asterisk (\*).

Ethnic Group	Variable	Wald	Wald Sig	. Categories	Odds Ratio	SE	z	Sig.
Non-Aborigina	Mobility*	7547.53	0.000	No Mobility				
n.: 445255				Same CMA, Same Province*	2.401	0.030	70.59	0.000
				Different CMA, Same Province*	2.006	0.047	29.55	0.000
				Different CMA, Different Province*	3.691	0.160	30.16	0.000
	Gender*	33.48	0.000	Male*	1.022	0.008	2.64	0.008
				Female		- 0		
	Age*	4865.09	0.000	20 - 29				
				30 - 39*	0.912	0.011	-7.36	0.000
				40 - 49*	0.640	0.008	-35.74	0.000
				50 - 59*	0.532	0.007	-46.88	0.000
				60+ *	0.412	0.005	-66.66	0.000
	Family	14598.63	0.000	Couple				
	Type*			Multiple*	1.057	0.025	2.34	0.019
				Single*	2.204	0.020	85.35	0.000
				Two or more People*	4.627	0.086	82.71	0.000
	Household	55602.15	0.000	\$0-\$19999*	1.614	0.023	34.33	0.000
	Income*			\$20000-\$39999				
				\$40000-\$59999*	0.526	0.006	-55.65	0.000
				\$60000-\$79999*	0.288	0.004	-96.44	0.000
				\$80000-\$99999*	0.176	0.003	-113.7 4	0.000
				\$100000+ *	0.077	0.001	-173.1 4	0.000
	Education*	239.64	0.000	Less than High School			- 1	
				High School Graduate*	0.889	0.010	-10.16	0.000
				Trade*	0.934	0.014	-4.47	0.000
				Postsecondary*	0.835	0.010	-14.48	0.000
				University Degree	0.991	0.013	-0.69	0.488
	Employment	226.95	0.000	Full Time				
	Status*			Part Time*	0.730	0.009	-25.62	0.000
				Not Working*	0.853	0.010	-13.90	0.000

#### Status Aboriginal

While the gender and education<sup>82</sup> variables were not statistically significant in the second model for Status individuals, the remaining variables were<sup>83</sup>.

The independent variable, mobility within the last year, was significant in the second model for Status Aboriginals. The individuals who moved within their CMA were 2.45 times as likely to rent as those that did not move at all. Those who moved to a different CMA within the province were 2.66 times as likely to rent as those that did not move at all. Finally, those who moved to a different CMA in a different province were 3.07 times as likely to rent than those who did not move at all.

As well, age was significant in the second model with those aged thirty to thirty-nine 0.74 times less likely to rent than those aged twenty to twenty-nine. As well, those aged forty to forty-nine were 0.72 times less likely to rent than those aged twenty to twenty-nine. Additionally, those in the fifty to fifty-nine year old bracket were 0.69 times less likely to rent than those aged twenty to twenty-nine, and those aged sixty and older were 0.31 times less likely to rent than those aged twenty to twenty-nine.

Family type was significant whereby those in multiple family households were 2.01 times as likely to rent as those who were living with a partner, those in

<sup>&</sup>lt;sup>82</sup> However, the individual variable, high school graduate, was statistically significant and those with a high school education were 0.74 times less likely to rent than those with less than a high school diploma.

<sup>&</sup>lt;sup>83</sup> Statistical significance of each group variable, as well as the significance of individual variables within each group, is indicated by an asterisk (\*) in Table 4.8. below ( $\alpha = 0.05$ ).

single family households were 1.84 times as likely to rent than those who were living with a partner, and the individuals who lived in households with two or more non-relatives were 3.48 times as likely to rent than those who were living with a partner.

Household income per annum was also significant. With household income, those who had a household income per annum between 0-\$19999<sup>84</sup> were 1.19 times as likely to rent than those with an income between \$20000-\$39999. As well, those with an income between \$40000-\$59999 were 0.39 times less likely to rent than those with an income between \$20000-\$39999. In addition, those with a household income between \$60000-\$79999 were 0.24 times less likely to rent than those with an income between \$20000-\$39999. Also, those with an income between \$20000-\$39999. Also, those with an income between \$20000-\$39999. Finally, those with a household income above \$100000 were 0.05 times less likely to rent than those with an income between \$20000-\$39999.

As well, employment status was significant. Those who had part time jobs were 0.56 times less likely to rent than those with full time jobs. Those not working<sup>85</sup> were 1.02 times as likely to rent than those with full time jobs.

<sup>&</sup>lt;sup>84</sup> However, the coefficient for those with a household income between 0-\$19999 was not statistically significant.

<sup>&</sup>lt;sup>85</sup> This coefficient was not statistically significant.

Table 4.8. Regression Results for Status Aboriginal People with Model 2, Independent Variable (mobility) with Control Variables (sex, age, family type, household income, education, employment status).

Ethnic Group	Variable	Wald	Wald Sig.	Categories	Odds Ratio	SE	z	Sig.
Aboriginal,	Mobility*	52.77	0.000	Na Mobility				
Status				Same CMA, Same Province*	2.453	0.343	6.43	0.000
n.: 2513				Different CMA, Same Province*	2.656	0.743	3.49	0.000
				Different CMA, Different Province*	3.068	1.665	2.06	0.039
	Gender	1.93	0.165	Male	0.864	0.091	-1.39	0.165
				Female		11		
1.4000	Age*	36.97	0.000	20 - 29				
				30 - 39*	0.738	0.107	-2.11	0.035
				40 - 49*	0.720	0.102	-2.32	0.020
				50 - 59*	0.685	0.127	-2.04	0.041
				60+ *	0.305	0.060	-6.00	0.000
	Family	46.84	0.000	Couple				
	Type*			Multiple*	2.008	0.445	3.15	0.002
				Single*	1.837	0.225	4.96	0.000
				Two or more People*	3.479	0.943	4.60	0.000
	Household	304.43	0.000	\$0-\$19999	1.190	0.214	0.97	0.332
	Income*			<b>\$200</b> 00- <b>\$</b> 39999	11-			
				\$40000-\$59999*	0.393	0.061	-6.06	0.000
				\$60000-\$79999*	0.244	0.041	-8.42	0.000
				\$80000-\$99999*	0.144	0.029	-9.69	0.000
				\$100000+ *	0.050	0.010	-15.64	0.000
	Education	8.27	0.082	Less than High School				
				High School Graduate*	0.739	0.100	-2.23	0.026
				Trade	1.139	0.208	0.71	0.478
				Postsecondary	1.139	0.208	0.71	0.478
				University Degree	0.767	0.155	-1.31	0.191
	Employment	18.02	0.000	Full Time				
	Status*			Part Time*	0.557	0.085	-3.85	0.000
				Not Working	1.016	0.137	0.12	0.905

Note: a = 0.05 and statistical significance is indicated on each variable (group and individual) by an asterisk (\*).

## Non-Status Aboriginals

For the second model, the variables gender, education, as well as employment status were not statistically significant for Non-Status individuals<sup>86</sup>. However the remaining variables were, including the independent variable mobility.

Mobility within the last year, was significant in the second model for Non-Status Aboriginals. The individuals who moved within their CMA were 2.25 times as likely to rent than those that did not move at all. Those who moved to a different CMA within the province<sup>87</sup> were 1.38 times as likely to rent than those that did not move at all. Finally, those who moved to a different CMA in a different province were 6.23 times as likely to rent than those who did not move at all.

As well, age was significant in the second model<sup>88</sup> with those aged thirty to thirty-nine 1.10 times more likely to rent than those aged twenty to twenty-nine. As well, those aged forty to forty-nine were 0.88 times less likely to rent than those aged twenty to twenty-nine. Additionally, those in the fifty to fifty-nine year old bracket were 0.65 times less likely to rent than those aged twenty to twenty-nine, and those aged sixty and older were 0.42 times less likely to rent than those aged twenty to twenty-nine.

<sup>&</sup>lt;sup>86</sup> Statistical significance of each group variable, as well as the significance of individual variables within each group, is indicated by an asterisk (\*) in Table 4.9. below ( $\alpha = 0.05$ ).

<sup>&</sup>lt;sup>87</sup> This individual variable was not statistically significant.

<sup>&</sup>lt;sup>88</sup> However, the only individual coefficient that was statistically significant was those aged 60 years old and above.

Family type was also significant where those in multiple family households were 0.94 times less likely to rent than those who were living with a partner, those in single family households were 1.36 times as likely to rent than those who were living with a partner, and the individuals who lived in households with two or more non-relatives were 4.46 times as likely to rent than those who were living with a partner.

Household income per annum was significant also. Those who had a household income per annum between 0-\$19999 were 2.18 times as likely to rent than those with an income between \$20000-\$39999. As well, those with an income between \$40000-\$59999 were 0.40 times less likely to rent than those with an income between \$20000-\$39999. In addition, those with a household income between \$60000-\$79999 were 0.18 times less likely to rent than those with an income between \$20000-\$39999. Also, those with an income between \$20000-\$39999. Also, those with an income between \$20000-\$39999. Finally, those with a household income above \$100000 were 0.06 times less likely to rent than those with an income between \$20000-\$39999.

Table 4.9. Regression Results for Non-Status Aboriginal People with Model 2, IndependentVariable (mobility) with Control Variables (sex, age, family type, household income,education, employment status).

Ethnic Group	Variable	Wald	Wald Sig.	Categories	Odds Ratio	SE	z	Sig.
Aboriginal,	Mobility*	29.12	0.000	No Mobility				
Non-Status				Same CMA, Same Province*	2.246	0.414	4.39	0.000
n.: 1297				Different CMA, Same Province	1.375	0.568	0.77	0.441
				Different CMA, Different Province*	6.231	3.325	3.43	0.001
	Gender	0.39	0.531	Male	0.914	0.132	-0.63	0.531
				Female				
	Age*	15.51	0.004	20 - 29				
				30 - 39	1.103	0.224	0.48	0.628
				40 - 49	0.884	0.180	-0.61	0.543
				50 - 59	0.645	0.153	-1.84	0.065
				60+ *	0.423	0.110	-3.31	0.001
	Family	25.54	0.000	Couple				
	Type*			Multiple	0.940	0.381	-0.15	0.879
				Single	1.356	0.223	1.85	0.065
				Two + People*	4.459	1.354	4.92	0.000
	Household	196.08	0.000	\$0-\$19999*	2.177	0.539	3.14	0.002
	Income*			\$20000-\$39999				
				\$40000-\$59999*	0.395	0.083	-4.44	0.000
				\$60000-\$79999*	0.175	0.037	-8.14	0.000
				\$80000-\$99999*	0.086	0.024	-8.70	0.000
				\$100000+ *	0.058	0.016	-10.68	0.000
	Education	2.63	0.622	Less than High School				
				High School Graduate	0.873	0.161	-0.73	0.464
r.				Trade	0.968	0.244	-0.13	0.896
				Postsecondary	0.763	0.156	-1.32	0.186
				University Degree	0.711	0.200	-1.21	0.225
	Employment	0.54	0.765	Full Time				
	Status			Part Time	0.867	0.172	-0.72	0.471
				Not Working	0.923	0.174	-0.42	0.671

Note: a = 0.05 and statistical significance is indicated on each variable (group and individual) by an asterisk (\*).

## Métis People

With the exception of gender, all variables for Métis people with the second model were statistically significant<sup>89</sup>.

The independent variable, mobility within the last year, was significant in the second model for Métis respondents. Those individuals who moved within their CMA were 2.20 times as likely to rent than those that did not move at all. Those who moved to a different CMA within the province were 2.65 times as likely to rent than those that did not move at all. Finally, those who moved to a different CMA in a different province were 5.73 times as likely to rent than those who did not move at all.

As well, age was significant in the second model with those aged thirty to thirty-nine<sup>90</sup> 0.92 times less likely to rent than those aged twenty to twenty-nine. As well, those aged forty to forty-nine were 0.73 times less likely to rent than those aged twenty to twenty-nine. Additionally, those in the fifty to fifty-nine year old bracket were 0.64 times less likely to rent than those aged twenty to twenty-nine, and those aged sixty and older were 0.42 times less likely to rent than those aged twenty to twenty-nine.

Family type was significant where those in multiple family households were 2.97 times as likely to rent than those who were living with a partner, those in single family households were 2.08 times as likely to rent than those who were living with a partner, and the individuals who lived in households with two or more

<sup>&</sup>lt;sup>89</sup> Statistical significance of each group variable, as well as the significance of individual variables within each group, is indicated lated by an asterisk (\*) in Table 4.10. below ( $\alpha = 0.05$ ).

<sup>&</sup>lt;sup>90</sup> This coefficient was not statistically significant on its own.

non-relatives were 4.09 times as likely to rent than those who were living with a partner.

Household income per annum was also significant. Those who had a household income per annum between 0-\$19999 were 2.23 times as likely to rent as those with an income between \$20000-\$39999. As well, those with an income between \$40000-\$59999 were 0.51 times less likely to rent than those with an income between \$20000-\$39999. In addition, those with a household income between \$60000-\$79999 were 0.35 times less likely to rent than those with an income between \$20000-\$39999. Also, those with an income between \$20000-\$39999. Also, those with an income between \$20000-\$39999. Finally, those with a household income above \$100000 were 0.07 times less likely to rent than those with an income between \$20000-\$39999.

Education was also statistically significant. Specifically, high school graduates were 35% (odds ratio 0.65 times) less likely to rent than those without a high school diploma. Those who had education in a trade<sup>91</sup> were 0.84 times less likely to rent than those without a high school diploma. Those with some postsecondary coursework behind them were 0.65 times less likely to rent than those then them were 0.65 times less likely to rent than those them were 0.43 times less likely to rent than those without a high school diploma.

Finally, employment status was also found to be significant. Those who had part time jobs were 0.71 times less likely to rent than those with full time

<sup>&</sup>lt;sup>91</sup> The coefficient for those with an education in the trades was not statistically significant.

jobs. As well, those not working<sup>92</sup> were 0.87 times less likely to rent than those with full time jobs.

<sup>&</sup>lt;sup>92</sup> This coefficient was not statistically significant.

Table 4.10. Regression Results for Métis People with Model 2, Independent Variable (mobility) with Control Variables (sex, age, family type, household income, education, employment status).

Ethnic Group	Variable	Wald	Wald Sig.	Categories	Odds Ratio	SE	z	Sig.
Métis	Mobility*	91.37	0.000	No Mobility				
n.: 3503				Same CMA, Same Province*	2.202	0.245	7.10	0.000
				Different CMA, Same Province*	2.648	0.611	4.22	0.000
				Different CMA, Different Province*	5.728	1.652	6.05	0.000
10.000 (0.000 (0.000 (0.000)) (0.000)	Gender	1.55	0.214	Male	0.899	0.077	-1.24	0.214
				Female				
	Age*	35.11	0.000	20 - 29				
				30 - 39	0.922	0.110	-0.68	0.494
The hearing of the second			- one of the define to a second se	40 - 49*	0.729	0.088	-2.62	0.009
				50 - 59*	0.642	0.087	-3.29	0.001
				60+ *	0.420	0.068	-5.35	0.000
	Family	118.64	0.000	Couple				
	Type*			Multiple*	2.970	0.603	5.37	0.000
				Single*	2.083	0.209	7.30	0.000
				Two or more People*	4.086	0.727	7.91	0.000
	Household	363.09	0.000	\$0-\$19999*	2.226	0.358	4.98	0.000
	Income*			<b>\$</b> 20000- <b>\$</b> 39999				
				\$40000-\$59999*	0.514	0.063	-5.40	0.000
			1	\$60000-\$79999*	0.348	0.046	-8.05	0.000
N.C. Andrews (Martine Station 1), AND REPORT (MARTINE)			s - energy (second second s	\$80000-\$99999*	0.219	0.034	-9.93	0.000
				\$100000+ *	0.072	0.012	-15.92	0.000
	Education*	31.01	0.001	Less than High School				
				High School Graduate*	0.653	0.073	-3.81	0.000
				Trade	0.837	0.119	-1.25	0.210
				Postsecondary*	0.650	0.080	-3.48	0.001
				University Degree*	0.429	0.076	-4.78	0.000
	Employment	8.67	0.013	Full Time				
	Status*			Part Time*	0.705	0.084	-2.94	0.003
				Not Working	0.871	0.101	-1.19	0.233

Note: a = 0.05 and statistical significance is indicated on each variable (group and individual) by an asterisk (\*).

# 4.4. GOODNESS OF FIT, AND POST-HOC TESTS OF MODELS 1 and 2

# 4.4.1. Log Likelihood Ratio Test

Once each model has been fit, the significance of the *p* variables in the model should be assessed. To do so, the log likelihood ratio test for overall significance is used, as logistic regression was employed.

As all four tests for each group were statistically significant (according to the Chi-Squared tabulations exceeding the critical number) the addition of the independent variable improved the overall model on rentalship. However, this test cannot determine by how much the model improved. For that, the McFadden R-squared statistic is used.

> \* 7.81473, 3 Criti. Chi-Squared

Group	Log Likelihood Full Model: 1	Log Likelihood Full Model: 2	Chi-Squared, df
Non-Aboriginal	-7630000	-7372000	516000, 3
Status	-46412	-44443	3940, 3
Non-Status	-24884	-24120	1527, 3
Métis	-67530	-65447	4166, 3

Table 4.11. Lo	aistic likelihood	results for a	Il four target	groups <sup>93</sup> .
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<sup>&</sup>lt;sup>93</sup> Chi-Squared was calculated as the difference between both models per group, multiplied by -2.

#### 4.4.2. McFadden R-Squared Statistic

The McFadden R-squared test<sup>94</sup> evaluates the goodness of fit of each model by demonstrating the amount of variance of the dependent variable that is explained by the model.

According to Table 4.12., for Non-Aboriginal people the amount of variance explained<sup>95</sup> is 23% by the first model, and 24% by the second model. For Status Aboriginal people, 25% of variance is explained by the first model, and 27% of variance is explained by the second model. For Non-Status individuals, 26% of variance is explained by the first model, and 27% of variance is explained by the first model, and 27% of variance is explained by the first model, and 27% of variance is explained by the first model. For Non-Status individuals, 26% of variance is explained by the first model, and 27% of variance is explained by the first model, and 27% of variance is explained by the first model, and 27% of variance is explained by the second model. Finally, for Métis people, the amount of variance the first model explains is 24%, while the second model explains 26%.

So, while only by a few percent, the use of the second model (which included the independent variable, mobility) increased the amount of explained variance on the dependent variable for all four groups. It is uncertain whether this result is meaningful, as there are no other studies to compare this to.

<sup>&</sup>lt;sup>94</sup> In terms of model fit, several R-squared analogues have been proposed in the literature for logistic regression models (Hosmer and Lemeshow 2000; Menard 2002). Tabachnick and Fiddell (2007) explain that these analogues are not identical to the R-squared linear regression interpretation of variance, but they do approximate it. Menard (2000; 2002) argues that the most appropriate R-squared analogue is McFadden's R-squared. According to Menard (2000; 2002), McFadden's R-squared is the closest

R-squared analogue to ordinary least squares R-squared as it reflects the proportional reduction in the quantity being minimized (-2 log likelihood) or maximized (log likelihood). In addition, McFadden's R-squared is independent of the of the sample size and the log likelihood or -2 log likelihood, as it only depends on the quantity being maximized or minimized. As well, McFadden's R-squared is not sensitive to the proportion of cases that have the outcome variable in question (i.e., male, or female), and the measure varies between 0 and 1 unlike some other R-squared analogues.

<sup>&</sup>lt;sup>95</sup> The amount of variance explained on the dependent variable.

Group	Model 1	Model 2	Improvement
Non-Aboriginal	0.228	0.238	1.00%
Status	0.247	0.269	2.20%
Non-Status	0.257	0.274	1.70%
Métis	0.240	0.258	1.80%

Table 4.12. McFadden's R-squared statistic for each model of each Target Group.

# 4.4.3. Hosmer-Lemeshow Goodness of Fit<sup>96</sup>

This test statistic was used to assess the goodness of fit of each model for

each group. To do this, the test evaluates how well predicted cases fit to the

actual observed cases. Specifically, the Hosmer-Lemeshow test places the

respondents into order by their probability on the outcome variable ("1"

rentalship), and then divides the respondents into 10 groups according to

probabilities<sup>97</sup>. This test is evaluated according to the chi-squared statistics as

observed and expected frequencies are observed and a non-significant

probability is desired<sup>98</sup>.

One thing to keep in mind is that this test is not very useful in the case

where groups of a large size are evaluated (such as the Non-Aboriginal group).

<sup>&</sup>lt;sup>96</sup> This test was run without the use of population weights, due to limitations in STATA. However, the unweighted regression models were almost identical to the weighted regression models, with differences noted typically in the thousandth of a decimal point for the coefficients as well as the z-score and

p-values.

<sup>&</sup>lt;sup>97</sup> This test works by dividing subjects into 10 groups, by using estimated probabilities of the outcome variable. This can be done by splitting the whole into probabilities of 0.1 or less in one group, and probabilities at 0.9 or higher into another group. The next stage would be to take subjects with one of two outcomes (male or female) to form a 2x10 matrix composed of observed frequencies. If the logistic regression is a good fit, then most of the respondents with an outcome of 1 are in the higher probabilities of risk, and those with an outcome of 0 are in the lower probabilities of risk. However, if the regression is not a good fit, respondents will be evenly divided among the probabilities of risk for both outcomes.

<sup>&</sup>lt;sup>98</sup> The Hosmer-Lemeshow Goodness of Fit is interpreted using the test statistic where a good model of fit shows a non-significant Chi-Squared (Tabachnick and Fidell 2007).

We see this as the *p* values for model one and two were 0.000. However the probabilities were not significant for the remaining three groups for both models.

Group	Model 1 (HS, Df, p-value)	Model 2 (HS, Df, p-value)
Non-Aboriginal	130.64, 8, 0.000	130.44, 8, 0.000
Status	13.22, 8, 0.105	12.68, 8, 0.123
Non-Status	4.78, 8, 0.781	3.43, 8, 0.905
Métis	6.01, 8, 0.646	10.29, 8, 0.245

Table 4.13. Hosmer-Lemeshow test results for each Target Group.

## CHAPTER 5: DISCUSSION

This chapter will review and interpret the results presented in the previous chapter. Firstly, all descriptive statistics for all variables will be discussed. Specifically, housing outcomes (as rentalship or homeownership) will be addressed, as well as all six control variables (gender, age, family type, household income, education, and employment status) and the independent variable (mobility). Following this, the main trends presented in the regression models will be assessed. Finally, the post-hoc tests run to see which model was more worthwhile for each target group will be evaluated.

Throughout this chapter, a focus will be placed on the similarities and differences between the four target groups, especially contrasting Aboriginal versus Non-Aboriginal groups and intra-Aboriginal differences for both the descriptive and regression results. The aim is to see how the data may inform the process of rentalship. This is important, as homelessness is a serious social problem. Assessing the key inequalities and pathways toward housing insecurity, through the proxy of rentalship, is a necessary first step toward understanding the process of homelessness.

# 5.1. THE DEPENDENT VARIABLE: DESCRIPTIVE STATISTICS

Looking at the descriptive statistics, there was a marked difference between Aboriginal and Non-Aboriginal urban people when it came down to who owned versus who rented their domicile. The Census indicates that 73% of Non-Aboriginal urban dwellers owned their homes, with the remaining 27% renting. However, urban Aboriginal people had very different experiences. Only 34% of Status Aboriginals owned their homes. Of Non-Status individuals, close to half owned (51%) and half rented (49%). Finally, within the Métis ethnic group, a slight majority owned their homes (57%) and the remaining 43% rented. We see that renting is more common among urban Aboriginal people than Non-Aboriginal people and that home ownership rates are much lower. Previous studies have found a similar trend (Balakrishnan and Wu 1992). As housing tenure is closely related to neighbourhood quality, residential stability, public safety, and many other positive outcomes (Flippen 2001; Green and White 1997; Krivo and Kaufman 2004; Massey and Denton 1993; Myers, Megbolugbe, and Lee 1998; Oliver and Shapiro 1995), this gap in homeownership between Non-Aboriginal people and Aboriginal people, at face value, is of concern, and may affect the life chances and social capital of urban Aboriginal people.

As noted in the results section, Aboriginal people have increased mobility as compared to Non-Aboriginal people, this may partially account for the gap in homeownership between Aboriginal and Non-Aboriginal people. Due to the high transaction costs of buying a home, highly mobile individuals are less likely to engage in homeownership (Oswald 1996). The impact of mobility on housing will be discussed in the following section.

## 5.2. THE INDEPENDENT VARIABLE: DESCRIPTIVE STATISTICS

Regarding mobility, it was already mentioned in the first chapter that Aboriginal people in Canada migrate between the reserve and nearby cities in a 'churn' pattern (Norris, Cooke and Clatworthy 2003; Guimond 2003). Additionally, Aboriginal people also migrate within urban environments at an increased rate as compared to Non-Aboriginal people (Norris and Clatworthy 2003). This pattern has been addressed by others concerning educational attainment (Aman 2009), where it was found that increased mobility results in a decrease in high school attainment. White et al. (2009: 6), argue that this is the result of decreased levels of social capital given that networks and supports are undeveloped as families move from place to place.

Looking at the descriptives for mobility, interesting trends emerge among the four target populations regarding change of residence. During 2005<sup>99</sup>, 19% of the Non-Aboriginal population moved within their existing Census Metropolitan Area (CMA)<sup>100</sup>. This compares to 28% for the Status Aboriginal population, 26% of the Non-Status Aboriginal population, and 27% of Métis people who moved within their own existent CMAs. Of those who moved to a different CMA within the same province that year, the relationships were fairly similar with 4% of Non-Aboriginal people, 6% of Status Aboriginal people, 5% of Non-Status Aboriginals, and 5% of Métis making the move to another CMA. Finally, of those who moved to a different CMA in a different province, the descriptives were similar for all four

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 <sup>&</sup>lt;sup>99</sup> As mobility within the last year was the variable used, 2005 was the pre-Census year.
<sup>100</sup> CMA is an accepted short form.

groups, with 2% of Non-Aboriginal, Status Aboriginal, and Non-Status Aboriginal people making this move, as compared with 3% of Métis people. This is not surprising given the financial costs and personal disruption increase with inter-city and inter-province migration.

These descriptive statistics indicate that the most important difference for mobility is the intra-urban movement, (that is within one's CMA). Within neighborhoods or communities where (churn) migration is high, social cohesion is diminished, which increases social problems, restricts social capital development, and increases difficulty in accessing resources and privileges (Beavon, Wingert, and White 2009; White, Spence, and Maxim 2009), especially if the individual, or the family, moves to an area socially disconnected from where they were before. Looking at the migration descriptives, while the margins may seem moderate, the reasons behind the move are critical. More affluent populations that are upwardly mobile economically may move to a similar or perhaps 'improved' neighborhood, while populations facing hardships of different kinds may be forced to move. Unfortunately, these motivations and reasonings could not be evaluated within this project due to the limitations of the data used.

# **5.3. THE CONTROL VARIABLES: DESCRIPTIVE STATISTICS**

Overall, most groups had a relatively even split between males and females. However, the category of age was very interesting (Table 4.2.). Between the three Aboriginal groups, the descriptives were quite close. However, there was a noticeable difference in age between Non-Aboriginal people and Status, Non-Status and Métis people. This difference was most pronounced between the youngest and oldest members of these populations<sup>101</sup>. Specifically, for Status, Non-Status and Métis people, close to 60% of each group were less than 29 years old<sup>102</sup>. Comparatively, 43% of Non-Aboriginal people were less than 29 years old. This means that within Aboriginal urban populations, an additional 15% of individuals were youth. These youth were either uninvolved in the workforce, or just starting off in their careers. According to Hou (2010:7), across a nation, "The homeownership rate rises quickly with the age of household maintainers in the period before the age of 40..." However, as many Aboriginal people have yet to enter the workforce, there is a lag in income, and by extension, homeownership. These differences in the age cohort of less than 20 years old between urban Aboriginal and Non-Aboriginal people, and consequently, potential participation in the job market, may partially account for the increased homeownership rates of Non-Aboriginal people and the low homeownership rates of Aboriginal people. As well, this will have real consequences for the Aboriginal youth who will soon move out on their own—especially if higher rates of (churn) mobility continue. As well, labour force participation rates are lower for Aboriginal people than Non-Aboriginal people (White, Maxim, and Gyimah 2003).

<sup>&</sup>lt;sup>101</sup> The remaining age brackets, 30-39, 40-49, and 50-59, were fairly close in percentages across all four groups.

<sup>&</sup>lt;sup>102</sup> Only individuals aged 20 years old or older were included in my regression, as it was assumed that they would be captured in units with an older member of their family or living arrangement.

Thus, it seems likely that a majority of Aboriginal people will continue to rent, and remain vulnerable to housing instability.

Along with a large discrepancy within the youngest age cohort, Non-Aboriginal people had almost three times as many individuals aged over sixty than that of Status, Non-Status, and Métis people. Therefore low homeownership rates in younger Aboriginal cohorts will not substantially increase as they age. Consequently, it will be likely that there will be no improvement in homeownership rates as urban Aboriginal populations age. As well, the sheer proportion of Non-Aboriginal people aged 60 and older may also stretch the gap of homeownership between Non-Aboriginal people and Aboriginal people<sup>103</sup>.

Looking at family type, overall, close to half of Non-Aboriginal people were married or in common law relationships (48%), closely followed by 41% who were single. Comparatively, it seemed the opposite for Aboriginal people. Overall, half of Status (50%), and close to half of Non-Status (47%) and Métis (47%) were single. This trend was followed by married or common law relationships: 37% of Status, 41% of Non-Status, and 39% of Métis people. As well, while 3% of Non-Aboriginal people lived in multiple-family households, over twice as many Status people lived in the same setting (7%), followed by 5% of Métis and 4% of Non-Status people.<sup>104</sup>

<sup>&</sup>lt;sup>103</sup> If a small amount of those aged 60 and older own homes, that proportion is theoretically almost tripled in Non-Aboriginal populations as compared to Aboriginal populations.

<sup>&</sup>lt;sup>104</sup> The proportion of individuals who lived with two or more non-relatives was close across all four groups.

Clearly Non-Aboriginal people were more involved in married or common law relationships than Aboriginal people were. This is important for homeownership and rentalship, as the burden of the higher financial cost of homeownership is shared between a couple, given pooling of resources (Mulder 2006). Consequently, it is more likely that a couple will engage in homeownership and a single person will engage in rentalship (Mulder 2006). As Aboriginal people are more frequently single than in a married or common law household, homeownership rates will be less than those of Non-Aboriginal people<sup>105</sup>.

Examination of annual household income indicates that Non-Aboriginal people had higher income as compared to the three Aboriginal groups. Further, an income hierarchy emerged with the three Aboriginal sub-groups: Métis, having the highest income rates, followed by those of Non-Status, and concluding with Status individuals with the lowest income rates. This trend has already been well documented (Hanselmann 2001; Maxim and White 2001). Additionally, this hierarchy for income is also observed in homeownership where Métis have the highest rates of urban Aboriginal homeownership, followed by Non-Status and, again, Status individuals having the lowest rates of homeownership. These trends in household income are important as income differences affect housing outcomes. Individuals with higher incomes are more likely to be able to afford to own a home, rather than renting, and have an opportunity to create capital. As such, this variation in income may contribute to the hierarchy of ownership levels

<sup>&</sup>lt;sup>105</sup> The remaining two household categories were close to even across all groups.

previously reported for Non-Aboriginal, followed by Métis, followed by Non-Status, and finishing with the lowest rates of homeownership with Status people.

Similar to household income, Non-Aboriginal people have higher educational attainment compared to Aboriginal people. This difference is particularly pronounced at both ends of the educational spectrum; individuals with less than a high school diploma, as well as individuals who are university graduates. At the time of the Census, 19% of Non-Aboriginal respondents had an education less than a high school diploma, compared to approximately 30% for all three Aboriginal Groups. Further, 17% of Non-Aboriginal people were university graduates<sup>106</sup> as compared to 4% of Status, 4% of Non-Status, and 5% of Métis respondents who were also university graduates<sup>107</sup>. Human capital theorists argue that the higher educational attainment rates of Non-Aboriginal people would lead to careers with higher income, allowing for an increase in homeownership as compared to Aboriginal people (Coleman 1988). As well, higher educational attainment may produce expectations in line with homeownership (Flippen 2001).

Finally, considering employment status, Non-Aboriginal respondents had higher employment rates. Altogether, 52% of Non-Aboriginal people had full time work as compared to 45% Non-Status, 45% of Status, and 52% of Métis

<sup>&</sup>lt;sup>106</sup> Had a bachelor degree, certificate or diploma above a bachelor, a professional degree such as medicine, a Master's degree, or Doctorate.

<sup>&</sup>lt;sup>107</sup> Those with an education in a trade, and some postsecondary education were proportionately similar across all four target groups. This has been attributed to government programs created to upgrade Aboriginal skills (White et al. 2009).

individuals. As well, 14% of Non-Aboriginal people had part time jobs, as did 13% of Status individuals, 19% of Non-Status, and 17% of Métis individuals. Finally, 33% of Non-Aboriginal respondents were not working<sup>108</sup> at the time of the census, as well as 39% of Status, 37% of Non-Status respondents, and 29% of Métis respondents. Overall, Status and Non-Status Aboriginals, had slightly lower full time employment and slightly higher rates of non-employment than Non-Aboriginal people and Métis. Interestingly enough, Métis individuals had full time employment to Non-Aboriginal people. These trends, when paired with rentalship rates, seem to show that that those with higher rates of full time employment (such as for Non-Aboriginal and Métis people) also had lower rates of rentalship.

As it can be assumed that those with full time jobs have higher incomes than those working part time, Non-Aboriginal people and Métis individuals with higher full time employment than Status and Non-Status individuals may be more set up for homeownership than rentalship. However, the slight proportionate differences are not as marked as might be anticipated. Previous research indicates that Non-Aboriginal peoples have systematically much higher labour force participation rates than all three Aboriginal peoples sub groups (White, Maxim and Gyimah 2003). Due to the limitations of the study, it is unclear what the full time and part time jobs consisted of, and subsequently the compensation awarded across, between, and within groups. However, other studies have

<sup>&</sup>lt;sup>108</sup> Due to either not being in the workforce, or being unemployed.

uncovered some of the underlying differences and inequalities undetermined here. The National Aboriginal Housing Association (2008) argues that employment income for Aboriginal people is considerably lower, even in full time jobs. Additionally, de Silva found that besides the issue of lower income, "Aboriginal people have a lower labour force participation rate, a higher rate of unemployment, and not surprisingly, lower average wage rates than other workers" (65:1999). These trends seem to negatively affect the capacity of Aboriginal individuals to acquire quality housing. Further, these trends seem to continue to provide barriers toward Aboriginal individuals who may strive to make the transition from rentalship to homeownership.

Additionally, the context behind why an individual was not in the workforce at the time of the census was unclear. The reasons behind this may be that the individual did not need to work, were unemployed, or they could not work. It would be assumed that if an individual did not need to work, they were most likely retired, and in a more privileged position as compared to those who were unemployed or could not work<sup>109</sup>. Those in a more privileged position could be more likely to own, and those in a more precarious position may be more likely to rent. Unfortunately the reality behind each of the above scenarios is unclear due to limitations of the data.

<sup>&</sup>lt;sup>109</sup> Possibly due to an accident or disability.

#### **5.4. REGRESSION ANALYSIS**

This logistic regression analysis examined determinants of Aboriginal (Status, Non-Status, and Métis) and Non-Aboriginal rentalship, by at first, using six constant variables. Second, the independent variable, mobility, was added to the model.

## 5.4.1. Interpreting Odds Ratios

With both models, the following effects were found:

a) With Gender: Non-Aboriginal men were more likely to rent than Non-Aboriginal women, and Aboriginal men were less likely to rent than Aboriginal women<sup>110</sup>.

It was not surprising that Aboriginal men were less likely to rent than women, as the literature indicates that women typically have increased barriers to homeownership than men, such as lower incomes (Sedo and Kossoudji 2004). However, it is surprising that Non-Aboriginal men were more likely than Non-Aboriginal women to rent. This trend should be further investigated.

<sup>&</sup>lt;sup>110</sup> This was found consistently for both models, although the variable gender was only significant for Non-Aboriginal men.

b) For Age: Overall, both Non-Aboriginal and Aboriginal people became increasingly less likely to rent the more they aged.<sup>111</sup> However the low rates of homeownership in younger cohorts of Aboriginal people will not catch up to those of Non-Aboriginal people as the Aboriginal population ages.

This finding was expected, as it is anticipated that the older an individual is, the more time they have spent working in the labor force. Consequently, long term employment is usually indicative of an improved career, and a higher level of income. As an individual is increasingly earning more income, a greater proportion of earnings may be invested after immediate needs are met<sup>112</sup>. As individuals who buy homes have higher incomes, they have an increased opportunity to own their home the older they become.

Data indicates (and research supports) that Aboriginal people have less income than Non-Aboriginal people. In addition, there are far fewer Aboriginal individuals who live to old age than those in the Non-Aboriginal population. Consequently, there are far lower rates of homeownership in younger Aboriginal populations, and these rates, while improving as the population ages, will not improve enough to close the Non-Aboriginal to Aboriginal gap.

<sup>&</sup>lt;sup>111</sup> With the one exception of Non-Status individuals aged 30-39, who were 1.10 times more likely to rent than those aged 20-29.

<sup>&</sup>lt;sup>112</sup> Such as food, clothing, et cetera.
# c) For Family Type: Those living as a couple were most likely to be homeowners.

This trend is expected, as buying a home is a process most likely to occur between couples that share a strong social bond. As well, single individuals across all four categories were more likely to rent. These two patterns are important, because as demonstrated through descriptive statistics, there are more single people in Aboriginal populations than those who were married or living common law. As well, there are more individuals who were married or living common law than single people in Non-Aboriginal populations. These imbalances influence the odds ratios and set the context for lower homeownership rates among Aboriginal people as compared to Non-Aboriginal people.

It should also be noted that those living with non-family members had the highest odds of rentalship across all four target groups. It is difficult to ascertain why people choose this option, but it could be explained as an income maximization strategy where sharing expenses allows unrelated persons to maintain their domicile.

The rentalship relationship for the last category of family type was far more difficult to understand. While the group variable for family type was significant, the only category that was significant within the group was, two or more non-family members living together. Of those who lived in two or more nonfamily membered households, they were more likely to rent. As the remaining categories were not statistically significant, they will not be discussed here.

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# d) With Household Income: As Household Income increased, likelihood of renting decreased.

Across all target groups, those in the \$0-\$19999 income bracket were more likely to rent. In the next bracket<sup>113</sup>, \$40000-\$59999, and for all subsequent levels of income, all individuals in all groups were progressively less likely to rent.

Of course, this trend was expected. Those with increased income would be expected to become a homeowner. However, Aboriginal people had fewer proportions of higher income makers as compared to Non-Aboriginal people.

e) With Education: Education as a grouped variable was only significant for Non-Aboriginal people and Métis<sup>114</sup>. For Métis people, individuals were less likely to rent, the higher the level of educational attainment. The interpretations for Non-Aboriginal people were less obvious.

The overall category of education was not statistically significant for Non-Status and Status Aboriginal people, therefore the interpretation of this result will not be discussed.

For Métis people, as already indicated, with an increase in education attainment came a decrease in the likelihood of renting<sup>115</sup>. This is intuitive as when an individual has higher educational attainment, they are more likely to

<sup>115</sup> With the exception of those with a trade, as this category was not statistically significant.

<sup>&</sup>lt;sup>113</sup> The \$20000-39999 category was the reference group.

<sup>&</sup>lt;sup>114</sup> This may be due to the reference category being 'less than high school.' Many Aboriginal people have low educational attainment, including high school completion. The 'less than high school' category may be quite large, leaving few individuals in the other categories. This may have blocked statistical significance in the other educational groups, especially those of 'higher attainment' due to low frequencies.

obtain higher paying jobs, thus would be more likely to have the income necessary to own a home.

Non-Aboriginal education did not seem to follow a certain pattern. In the first model, those with a high school degree, education in a trade, or with some postsecondary education, were less likely to rent. The individuals who were the least likely to rent were those with a background in a trade, followed by high school graduates, and concluding with those with some postsecondary education. It is unclear why this pattern emerged as it did. In addition, those with a university degree were more likely to rent. It may be that those with a university degree are disproportionately starting off their careers and are working to build up wealth. Unfortunately, it is uncertain at what stage each individual was at in their career, due to the limitations of the data.

For Non-Aboriginals in the second model, those with a high school degree, education in a trade, or with some postsecondary, were less likely to rent<sup>116</sup>. The individuals who were the least likely to rent were those with a background in a trade, followed by high school graduates, and concluding with those with some postsecondary education. This was the same pattern as with model one, and again, it is unclear why this pattern occurred.

<sup>&</sup>lt;sup>116</sup> The category of those with a university degree was not statistically significant.

f) For Employment Status: Overall, those who worked part time or did not work at all were less likely to rent<sup>117</sup>.

These findings were surprising and should be examined further. It was expected that those working full time would be less likely to rent than the other employment categories. It could be that the composition of the couples category influences the analysis. However, it was indeterminable whether those who were married or common law (who are less likely to rent) were two part time workers, one full time and one part time worker, or some other configuration. It may be that a couple's joint income affects the results for the employment variable.

It should also be noted that due to the limitations of the 2006 Census Public Use File, the circumstances of those who did not work at all were unaccounted for. It could be inferred that those who did not work at all did not need to, therefore had already accumulated enough wealth to satisfy their needs, and to allow for homeownership over rentalship.

### g) Looking at Mobility: Those who were mobile were more likely to rent.

As hypothesized, mobility increased the likelihood of renting. Further, patterns that related to where people moved emerged. For those with Status, and those who were Métis, the farther they moved from their original home, the more likely they were to rent.

For Non-Aboriginal people the likelihood of renting was the highest with those who moved to a different CMA in a different province, followed by those

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<sup>&</sup>lt;sup>117</sup> However, the one exception was Status people who did not work, who were more likely to rent.

who moved within the same CMA, and lastly with those who moved to a different CMA within the same province. This may be an artifact of family opportunities and income. Moving house, especially a distance, often means following an improved economic opportunity. However, people may often ensure they are happy with the move before investing in ownership. The further you move away, the more uncertainty occurs. This makes sense for those who had the greatest likelihood of renting, those who moved to a different CMA within a different province. The lowest likelihood of renting amongst the three categories was moving to a different CMA within the same province. This is slightly anomalous, but it may be assumed that a move to a different city within the same province would be done for a compelling reason<sup>118</sup>. Further, moving within the same province and having to learn the new laws and standards. Thus, it would have been expected that more individuals would be comfortable buying their homes, rather than renting, if moving to a different CMA within their province.

The category in between the highest and lowest likelihoods of renting was moving within the same CMA. This trend was not anticipated. However, depending upon socioeconomic status, individuals move for different reasons. Those with low income who move within the same CMA may do so to leave a residence or area which was within an undesirable scenario (was noisy, full of vandalism). As well, they may have moved to escape a missed rental payment, or an unreasonable landlord, in order to find an improvement. Those with

<sup>&</sup>lt;sup>118</sup> Otherwise, making a commute might be reasonable.

growing wealth would be expected to move into an 'improved' or more upscale situation as this would be more desirable, and affordably possible.

For those of Non-Status, the highest likelihood of renting for a level of mobility was moving to a different CMA within a different province. This would of course be expected, as moving so far would have to be for an improved opportunity, but with the increased level of uncertainty in a new province, rentalship would be far more likely than ownership, especially right after that move. As well, moving can be costly, so renting could be a better alternative when trying to conserve funds<sup>119</sup>.

The trends with Status and Métis people are intuitive; the further a person moves from their original residence, the more uncertainly is involved as the surroundings and new context may be increasingly unfamiliar. Therefore, the chances of rentalship should also increase the further the move is.

### 5.4.2. Goodness of Fit

Looking at the first post-hoc test presented, the Log-Likelihood Ratio Test (Table 4.11.), as the results show significance for all target populations, it seems that the addition of mobility, the independent variable, added significantly to the predictive model. So, in this first step, it looks like adding a variable to capture movement relevant to housing was worthwhile. However, it is uncertain how much the independent variable improved each model.

<sup>&</sup>lt;sup>119</sup> For Non-Status and mobility, the category different CMA, same province was not statistically significant.

According to McFadden's R-Squared statistic (Table 4.12.), the amount of variance explained on the dependent variable increased with the addition of mobility. As this is the first research of this kind to be done, the improvement of variation explained cannot be gauged, only reported. Overall, the most variance on the dependent variable was explained for Non-Status, followed by Status, Métis, and Non-Aboriginal people. The addition of mobility improved the variance explained most for Status, followed by Métis, Non-Status, and Non-Aboriginal people.

To see whether the overall fit of the model was adequate, the Hosmer-Lemeshow was run (Table 4.13.). For both model 1 and 2, Status, Non-Status, and the Métis target groups were not significant, thus all regression models were sufficient. For Non-Aboriginal people, both models 1 and 2 tested significant. However, the large sample size of the Non-Aboriginal target group made it nearly impossible to achieve a non-significant goodness of fit test, which leaves this a bit inconclusive.

From the results of these three tests, it looks like mobility was a compelling variable to add to the rentalship model. As there are no other studies to compare this to, it is difficult to draw any further conclusions.

#### **CHAPTER 6: CONCLUSION**

This chapter will draw from the results and discussion chapters of this thesis. First, the original research questions and hypotheses will be re-addressed, and then followed by a discussion of the policy implications of this study. The chapter will conclude by highlighting key weaknesses within this research, as well as identifying future possibilities of research in this area.

# 6.1. SUMMARY OF RESEARCH QUESTIONS AND HYPOTHESES

Despite its rise as a growing social issue, little is known about the actual process of homelessness, other than individuals in precarious housing and job situations are the most vulnerable to housing insecurity<sup>120</sup>. This may be attributed to the impossibility of studying homelessness directly, largely due to issues of enumeration<sup>121</sup>.

Despite the limitations, the study of homelessness is important, and an area worthy of pursuit. Homeless people are a severely marginalized and vulnerable group (Burt, Aron, and Lee 2001; Rossi 1989; Shinn and Gillespie 1994) that surely experience a high level of housing insecurity before ending up on the streets. To begin to address housing insecurity, which also cannot be directly measured, rentalship was used as a proxy. Rentalship is not only directly measurable, but those who rent experience more housing insecurity than those who own in Canada.

<sup>120</sup> While there are some smaller qualitative studies, their results are not generalizable.

<sup>&</sup>lt;sup>121</sup> Many homeless people live outside of the mainstream, and are therefore difficult to contact and/or follow-up with. Additionally, the stigma of homelessness is powerful and may deter individuals who live in the rough, or outdoors, from identifying as homeless.

Chapter two listed five key research questions to be investigated. They were:

1. Are there significant differences between urban Aboriginal and urban Non-Aboriginal rates of rentalship and homeownership in Canada?

2. Are there intra-Aboriginal group differences in urban rentalship and urban homeownership?

3. What are the factors that influence urban intra-Aboriginal group differences?

4. Does mobility impact urban rentalship and homeownership levels?

5. Are increasing rentalship levels indicative of increased housing instability within cities?

These questions have already been answered within the previous chapters, and will be addressed in relation to the research hypotheses.

The following hypotheses were derived from the above research questions:

 The experience of housing is different between urban Non-Aboriginal and urban Aboriginal people. These housing differences manifest as differences between rentalship and homeownership, which is reflective of different levels of housing insecurity.

- It is expected that the urban Aboriginal population is not monolithic and measurable differences in rentalship versus homeownership will be evident. This indicates variation in housing insecurity.
- 3) Differences between urban Aboriginal and urban Non-Aboriginal, as well as within Aboriginal populations, will be influenced by income, employment status, family type, and age. It is further hypothesized that mobility will be an important explanatory variable.

The hypotheses will be re-examined below:

1) The experience of housing is different between urban Non-Aboriginal and urban Aboriginal people. These housing differences manifest as differences between rentalship and homeownership, which is reflective of different levels of housing insecurity.

This hypothesis was confirmed by the research. Overall, urban Aboriginal people rented at a rate far surpassing Non-Aboriginal people (Table 4.1.). It may be surmised that the differences in rentalship between Aboriginal and Non-Aboriginal people is indicative of housing insecurity, but this cannot be proven.

As renters have lower income, and have not invested in owning, urban Aboriginal people are less able to tap into accumulated wealth through their homes. Therefore, it can be inferred that urban Aboriginal people are more vulnerable to housing insecurity than Non-Aboriginal people. With this in mind, a housing/homelessness continuum may exist, beginning with homeowners, followed by renters, and ending with those who are homeless. This continuum can be used to further understand experiences of certain groups, such as Aboriginal people and Non-Aboriginal people in Canada. . Understanding what these differences are, and how they develop, is a critical step toward getting to the core of housing insecurity, as well as homelessness in Canada.

2) It is expected that the urban Aboriginal population is not monolithic and measurable differences in rentalship versus homeownership will be evident. This indicates variation in housing insecurity.

This research began with the assumption that different experiences among different Aboriginal sub-populations would be found. This presumption was based on the wide array of other studies that indicated there were existent intra-group inequalities involved with income, education, and health between Inuit, Status, Non-Status, and Métis people (Maxim, White, and Beavon 2003; Beavon, Wingert, and White 2009; Richmond, Ross, and Bernier 2007). This hypothesis was also confirmed by the research. Looking at rentalship rates, Status Aboriginal people rented the most, followed by Non-Status, with Métis having the lowest rentalship rates<sup>122</sup>. If the proxy of rentalship is indicative of greater susceptibility to housing instability, then these intra-group differences

<sup>&</sup>lt;sup>122</sup> A majority of Status individuals rented, along with half of Non-Status, and a slight majority of Métis. Comparatively, about ¼ of Non-Aboriginal people rented.

indicate that Status individuals are the most vulnerable to housing insecurity, followed by Non-Status, and the Métis, who are the least vulnerable within the Aboriginal urban community.

As each Aboriginal group demonstrates differing vulnerabilities of housing instability, initiatives to address housing instability should be developed accordingly.

3) Differences between urban Aboriginal and urban Non-Aboriginal, as well as within Aboriginal populations, will be influenced by income, employment status, family type, and age. It is further hypothesized that mobility will be an important explanatory variable.

This hypothesis was also validated by the research. Overall, urban Non-Aboriginal people had higher levels of income, full time employment, married or common law households, and were more stabile in frequencies of age. All of these indicators are better suited toward being a homeowner. Those who own homes in Canada have more housing security, therefore Non-Aboriginal people in Canada are more secure in their housing.

Comparatively, urban Aboriginal people as a whole had lower income, lower full time employment, fewer married or common law households, and were a much younger population. These markers are more indicative of being a renter, thus Aboriginal people experience more housing insecurity.

Intra-Aboriginal group differences, demonstrated through the markers of income, employment status, family type, and age, showed that of the entire urban Aboriginal population, Métis people fared the best, and had markers that were the most similar to the Non-Aboriginal population. Following Métis people were Non-Status Aboriginals, with Status individuals demonstrating the lowest incomes, lowest levels of full time employment, highest levels of single households, and the youngest ages: all of which were the least desirable for ownership.

In addition to the aforementioned markers, urban Aboriginal people are also far more mobile, than Non-Aboriginal people. An important outcome of mobility is that those who are mobile are more likely to rent. As those who rent are more susceptible to housing insecurity, the process of mobility compounds existing housing vulnerabilities.

In an attempt to identify characteristics that may partially explain the intra-Aboriginal hierarchy of housing vulnerability discussed above, mobility was assessed. It was hypothesized that as mobility increased, so would rentalship. The findings were supportive of this hypothesis and mobility appears to impact rates of rentalship. While the proportions were close between the three subgroups for all three types of mobility, Status individuals had a slightly higher rate of mobility within the same CMA. Status individuals also had the highest rates of mobility between CMAs in the same province, followed by Métis, and concluding with Non-Status having the lowest rates<sup>123</sup>. Looking at moving to another CMA in a different province, Métis people had the highest rates, followed

<sup>&</sup>lt;sup>123</sup> Non-Status rates of mobility to another CMA within the province were even lower than that for Non-Aboriginal people.

by Status, with Non-Status having the lowest rates. However, the rates of moving to a different CMA, within or outside the person's former province, were very low.

Overall, the further individuals moved from their original residence, the more likely they were to rent. Recalling the precariousness of rentalship as compared to ownership, Aboriginal people who are more mobile, are increasingly vulnerable to housing insecurity the further they move from their place of origin. So for Status individuals who moved to another CMA within their current province, and for Métis people who moved to another CMA in another province, insecurity was more of a threat.

#### 6.2. POLICY IMPLICATIONS OF RESEARCH

#### 6.2.1. Importance of Housing Stability

Human capital is highly indicative of career and other life opportunities. Specifically, labor force participation is often a reflection of human capital, which is important as human capital often guides housing routes and strategies.

Moving house and home is often associated with improving one's housing situation. The common expectation is that an individual starts off renting, moves to buy a 'starter' home<sup>124</sup>, moves to buy another improved home, and then eventually ends up in an ideal home. Those with lower incomes may not be making vertical moves to an 'improved neighborhood' or better domicile. Rather, they may move to be closer to their workplace due to issues of transportation,

<sup>&</sup>lt;sup>124</sup> The first home you can afford to purchase.

although at the same time moving further from amenities and resources<sup>125</sup>. As such, another move may be made in search of a better location closer to schools, hospitals, grocery stores, and other services. Other reasons for moving for those with low income may include escaping a difficult landlord, eviction due to non-rent payment, or to obtain perceived or real savings. Those who rent and are low income may find more desirable housing out of reach, thus continue to live in neighborhoods where they are vulnerable to crime, exploitation, and limited access to resources. The continuation of mobility for those with low income may seem futile, as it can be an expensive process (where money as well as social capital is spent) that often may not result in the attainment of adequate housing.

Particular to opportunities within public policy, those with lower incomes should still have an opportunity to live in safe, affordable, and appropriate housing. Adequate housing has a positive effect on stabilizing families. For example, having a home means having a permanent address. Without a permanent address, it is extremely difficult to apply for a job. As well, having a home usually means having access to landline communication; this is another asset when applying for jobs. Further, having a home increases security and minimizes outside chaos. Dealing with inadequate or unsatisfactory housing is very stressful, and is often associated with a more survivalist existence. Consequently, several local Aboriginal organizations in London such as At^losha Native Family Healing Services and Nokee Kwe that specialize in child and

<sup>&</sup>lt;sup>125</sup> Those with lower income jobs may work in industrial sectors, due to a lower educational requirement. Industrial zones are often situated in areas where amenities and resources are scarce.

family services, recognize housing as key when stabilizing families and focus a lot of their resources on this basic need. In addition to this, counseling services are offered, especially through At^losha, which help to develop necessary human, social, and cultural capital. Such resources are helpful for finding a career and maintaining proper housing. These organizations are important, and need to continue. The funding of organizations that can assist, like those above, allow programs and services to be developed that can positively reduce housing insecurity and stabilize families. An organization specializing in housing alone would complement the existing programs very well.

When a family or individual is provided with housing security and stability over the long term, the cycle of homelessness can be interrupted. Therefore, a proper housing stock needs to be set in place <sup>126</sup>. Either through public investment or incentive to private developers (or a combination of both means), affordable housing stock needs to be increased. While a housing stock would immediately increase the availability of affordable housing units, it would also suppress rising rental costs. If a significant number of housing units in one area are renting at a fair price, other landlords in the area will have to match those prices to find renters. As well, a housing stock of stable and appropriate housing would reduce mobility. If housing is already affordable, adequate, and suitable, tenants would not have a compelling reason to move. To make a housing stock feasible, programs need to be set up and maintained with the purpose of cataloguing suitable and affordable homes within a registry available to those

<sup>&</sup>lt;sup>126</sup> Enough residential units to meet the demand of those experiencing housing instability.

who need it. These initiatives are particularly important as in recent years, subsidized housing in Canada has dramatically diminished (Layton 2008).

Beyond the registry, supportive services should be set in place and maintained so that individuals remain adequately housed. Counseling programs need to be set up to ensure easy access to housing information and important resources, to assure housing longevity. As well, culturally appropriate services need to be set in place so that needs are met within a supportive and suitable environment. Not only will this increase the likelihood that patrons will return, but services are most effective when appropriate.

As well, proper public transportation should be developed and maintained in areas with rental housing. Those who rent are less likely to own a vehicle, thus will have public transport needs, and will require reasonable access to amenities and transit that is affordable.

#### 6.2.2. Infrastructure and Mobility

Mobility exacerbates housing issues. In addition to the problems that create the need to move (poor housing for example), social capital is compromised through each move, as networks are cut and have to be reestablished in the new neighborhood. Intra-urban churn is particularly important regarding this phenomenon, and detrimental to developing the kind of reciprocal ties that make social capital an asset. Reciprocal and established networks within a particular group are often referred to as 'bonding social capital' (White, Spence, and Maxim 2009:250). The homogeneity within a particular group often creates strong social ties, feelings of belonging, and minimizes alienation. Further, having access to a pool of resources provided by group members reduces the probability of failing to meet one's needs<sup>127</sup>.

Churn on and off reserve may speak to why Status individuals seem to fare the worst of the three Aboriginal groups. Status individuals leave their "reserves" where they have cultural and familial supports to come to the city. This move surely reduces social capital and social bonding. As well, increased churn mobility within CMAs also hampers the development of new ties. This intra-urban churn influences all Aboriginal groups, but may impact Status individuals more given that Non-Status and Métis people are more settled in urban environments.

While mobility may be detrimental to stable housing, housing programmers and planners should develop affordable housing that allows for mobility of individuals within the city and adjoining neighborhoods. Although quality housing is important in and of itself, long term benefits will not be realized if critical services and amenities are not in place. As noted above, public transportation availability is necessary in stabilizing people and diminishing the need to move. In this way, appropriate infrastructure improves quality of life in concert with adequate housing. It is then necessary that public transport be accessible, available, and affordable. This means from a public policy perspective, subsidization may be necessary. As well, local infrastructure has to be usable. Services such as grocery stores, pharmacies, clinics, et cetera, need

<sup>&</sup>lt;sup>127</sup> The two other types of social capital, 'bridging social capital' (collaboration between different groups, similar in social status), and linking social capital (collaboration between different groups, who differ in social status) (White, Spence, and Maxim 2009:250) are not discussed in this study.

to be within geographical reach for low income families. Convenience, despite transport limitations, is crucial. For stable housing to be successful, it needs to be livable. If housing is successfully connected with the neighborhood and surrounding area, and services and resources are accessible, moving house and home will no longer be necessary. Thus, social capital will develop, needs will be met, and an overall sense of stability and well-being will predominate.

#### 6.3. WEAKNESSES AND FUTURE RESEARCH

Every study has some limitations, and this research is no exception. Clearly the biggest flaw in this project was that homelessness could not be directly measured. While a defensible proxy was used, it is clear that the study of homelessness requires real data generated from current and/or past homeless persons, to be done properly. The gathering of such data, though difficult, would be very helpful in policy development. Grounding efforts and resources in tangible trends would greatly assist in creating effective programs and resources for this important and costly social problem.

While the Aboriginal People's Survey (APS), administered by Statistics Canada includes an Aboriginal specific data-set to measure and capture the experiences of all urban Aboriginals, it falls short in completely capturing the experiences of those who move back and forth between the city and the reserve<sup>128</sup>. As urban Aboriginal populations are continuously increasing, the urban Aboriginal experience needs to be properly understood. This is particularly

<sup>&</sup>lt;sup>128</sup> Enumeration on reserve is a constant problem in the APS.

important regarding Status individuals, who on reserve, are part of federal jurisdiction. When Status members leave their reserve communities, and move to urban centers, they are meant to be under provincial jurisdiction. However, the federal government has stayed focused on the rural reserve experience, and provincial governments have been hesitant to engage in any sort of urban policy for Status people (Hanselmann 2001), let alone other urban Aboriginals.

Speaking directly to the data file used in this research, the 2006 Census Public Use File<sup>129</sup>, there were many shortcomings. For example, the attainment levels of parental education is a powerful explanator of educational levels and human capital amongst the following generations. This variable was unavailable either in the PUMF file, or in the Census microdata file. This data would have been a much better predictor of housing than the variable that was used. Of the education variable that was accessible, the time frame of which the respondents had completed their highest level of educational attainment should have been clear. This became important as it was unknown why certain target groups had university educated individuals who were more likely to rent. This would have been easily explained if those captured had just completed university and were in the midst of launching a career and paying off student loans.

Looking to the variable employment status, the underlying context behind an individual who did not work was missing. They may have not worked due to disability or unemployment. However, they also may not have worked because they were comfortably retired. Both experiences are completely different, and

<sup>129</sup> Also referred to in its shorthand as 'PUMF.'

should not have been all put together. A clearer picture of employment, and reasons for not being employed, would have been provided in the variables offered in the 2006 Census Microdata File. Not having access to such variables was a shortcoming in my research.

The mobility variable only captured moves within or between CMAs in the PUMF file. This is problematic as those categories would not have captured Status individuals moving from rural reserve to a city, or from a city back to reserve. This was a limitation of this study, as mobility back and forth from reserve to city could have been evaluated using the 2006 Census Microdata File, available in any of Statistics Canada's Research Data Centers<sup>130</sup>.

In addition to this, the specific motivation behind why an individual moved in the first place was also absent. This information would have been very telling for policy makers, trying to ascertain why individuals move, and possibly being able to intervene in cases where moves were not to acquire additional wealth, or relocation into a 'better' neighborhood—which costs the mover dearly in social networking and capital.

One more issue regarding the mobility variable was that it only captured one move, and missed out on recording whether an individual moved more than once within the previous year to the Census. As mobility creates vulnerability toward housing insecurity, more than one move within one year would exasperate this susceptibility.

<sup>&</sup>lt;sup>130</sup> For brevity's sake, the PUMF file was used as vetting data from a RDC is very time consuming.

Thinking about the generation of future research, it would be worthwhile to pursue the phenomenon of mobility. Specifically, looking to what motivates individuals to move, and how these motivations unfold according to inter and intra-group variability, would be very telling and useful in trying to ascertain social capital.

As well, it would be useful to compare the social capital of those already settled and permanently installed into a neighborhood, with the social capital of those who have just moved in. In this way, not only would critical gaps in social capital be identified, but these gaps may speak to the experience of building that capital back up; for example how long does it take, what is the process like, and what opportunities are there for policy makers to facilitate this process? The context of this trend is very important, and might be accessed through a qualitative study.

In addition, it may be productive to link data sets together to thoroughly contextualize the experience of insecure housing. As the Aboriginal People's Survey and Census Individual File are both spinoffs of the national census, both may be linked to the census through individual markers<sup>131</sup>. Measuring housing instability through the aid of all three data sets would allow for a more in-depth picture of this issue.

<sup>&</sup>lt;sup>131</sup> Respondents are assigned an arbitrary identification number in the Census, and in other follow-up studies where individuals are re-interviewed (such as for the Aboriginal People's Survey, or the Census Individual File). However, this micro-level data is only available through Statistics Canada's Research Data Centres.

For those policies and programs that already do exist to lessen the burden of homelessness, depletion in capital<sup>132</sup>, and other processes, it would also be worthwhile to do a study that examines those existing programs and evaluate their relative impact.

## 6.4. CONCLUSION

The findings of this thesis demonstrate the importance of considering the differences between and within groups when addressing urban housing instability of vulnerable groups in Canada. Non-Aboriginal trends of urban rentalship and ownership are vastly different from urban Aboriginal experiences. As well, there are notable differences between urban Status, Non-Status, and Métis Aboriginals. These differences are important as those who rent are more susceptible to housing insecurity, and each of the four target populations have their own specific vulnerabilities. Thus, one overarching program or policy decision set in place to address housing insecurity for all groups would be unsuitable.

Further, there has been little acknowledgment of the importance mobility has on urban Aboriginal housing instability. This is surprising given the high rates of mobility urban Aboriginal experience as compared to the general Canadian population. The relationship between mobility and urban housing instability for urban Aboriginal people has, until now, been largely unexplored. It is to be hoped that identifying factors relative to housing instability will lead to the development

<sup>&</sup>lt;sup>132</sup> Specifically, human, social, and cultural capital.

and success of appropriate interventions for urban Aboriginal people. With the rise of the homeless population in Canada, clearly existing programs and approaches toward dealing with housing insecurity are ineffective. Homelessness and housing insecurity are complicated issues that cannot be easily remedied. Consequently, studies on these issues need to depart from reporting descriptives, and move toward a focus on the underlying causes of this social program.

I have demonstrated in this research, through the proxy of rentalship, that there are possibilities for the study of housing insecurity. Further, I have expanded upon the existing literature that speaks to Aboriginal inequality by delving into the area of urban housing inequality; an area that has not yet been addressed in the literature, and warrants further study. My research showed that, Aboriginal people are more susceptible to housing insecurity than the general population. Specifically, Status Aboriginal people are the most vulnerable to urban housing insecurity, followed by Non-Status Aboriginal people, followed by Status, followed by Métis, with Non-Aboriginals having the lowest levels of urban housing instability. It is clear that urban housing instability affects Aboriginal people to a greater extent than the general population and this should be considered by researchers, urban planners, and policy makers.

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