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Aboriginal People and Community Well-Being Off-Reserve

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Introduction

In the past 15 years, quality-of-life indicators have become widely used among a variety of organizations as a mechanism to facilitate the development and assessment of policies and programs. The objective of quality-of-life indicators is to evaluate how a nation, community, or an individual measures against a given set of outcomes. A variety of studies have documented gaps in life chances between Aboriginal¹ and non-Aboriginal people in Canada (e.g., Cooke, Beavon, and McHardy 2004; Siggner and Costa 2005; White and Maxim 2003). However, there are no studies available that compare Aboriginal and non-Aboriginal quality of life in off-reserve communities in different areas of the country. This study compares Aboriginal and non-Aboriginal peoples' quality of life by calculating Community Well-Being (CWB) Indexes for off-reserve communities throughout Canada, and it includes all groups of Aboriginal peoples.

The paper begins with a review of some issues associated with measures of quality of life, then summarizes existing research on disparities between the socio-economic conditions of Aboriginal and non-Aboriginal people in Canada. The methodology section describes the calculation of the CWB Index—the quality-of-life indicator employed in this analysis—and describes the ways areas were defined for comparative purposes. The analysis section addresses differences in CWB for Aboriginal and non-Aboriginal populations, regional differences, and changes between 2001 and 2006. Findings are summarized by way of conclusion.

Literature Review

Measuring Community Well-Being

The existence of a wide range of interpretations of what constitutes a quality-of-life indicator, both in the academic literature and in policy studies, is reflective of Bunge's (1975) early suggestion that the notion of quality-of-life indicators was problematic since it required the merging of two ambiguous concepts: indicator and quality of life. According to Bunge, indicators are ambiguous by definition since they involve measuring one parameter in order to understand another, whereas quality of life is ambiguous because it cannot be measured directly. Despite this ambiguity, quality-of-life indicators have been widely used

as a mechanism to facilitate the development and assessment of policy programs. Wingert (2007: 126) compared CWB scores based on census data with First Nations' subjective evaluations of their communities. She found that, generally, communities with higher scores had more positive assessments of "their communities, themselves, and their lives." Her research shows that while quality-of-life indicators may contain some ambiguity, there is also evidence that these measures correspond to the subjective perceptions of residents.

There are trade-offs in using disaggregated and composite measures of quality of life. Disaggregated indexes (e.g., based on education, health, or income) are simpler to understand. In addition, they can support a deeper understanding of the different domains of life (Diener and Suh 1997). The benefit of a composite index is that many aspects of overall quality of life can be communicated through a single index facilitating the evaluation of policy outcomes both temporally and geographically (Diener and Suh 1997).

Interest in composite indicators that measure development, well-being, or quality of life arose out of dissatisfaction with the use of the gross domestic product (GDP) per capita as a measure of social progress or overall development among states (Hagerty et al. 2001). Instead, composite indicators aim to take into account a broader set of variables upon recognition that high GDP per capita does not always translate into overall well-being when including health or social factors, and that considerable economic inequality can exist in countries with high GDP per capita. The use of broader indexes of quality of life offers greater scope with which to compare regions and nations than can be provided by any single indicator. The choice of composite versus single indicators can thus be understood as a trade-off between simplicity/ease of understanding and depth/specificity of understanding. In this paper we employ a composite index, the CWB Index. However, we also evaluate the contribution of individual components to the composite results.

Researchers have argued that indicators reflect the particular set of values and desires shared by groups or individuals who designed or selected particular indicators. As a result, the design and choice of indicators is a contested process. Historically, most examinations of Aboriginal quality of life have used objective indicators (economic and social) to compare Aboriginal quality of life to non-Aboriginal quality of life (Cooke, Beavon, and McHardy 2004; Barton et al. 2005). Although this approach may highlight social inequalities to bring about political attention and policy change, it has also been criticized for helping to perpetuate the negative stereotype that Aboriginal people are deficient. When indicators of socio-economic status are used to describe differences between Indigenous and non-Indigenous populations, Indigenous peoples automatically become identified with poor socio-economic outcomes (Durie 2006). Instead, culturally specific indicators emphasize the value of cultural difference and take this into account. In addition, Salee, Newhouse, and Levesque (2006:11) argue that the use of Western indicators to understand Aboriginal peoples is rooted in Western individualism;

in their words, "the state's current focus on measurable dimensions of Aboriginal quality of life is in fact largely predicated on its neo-liberal commitment to individual equality and universalistic values, which translates into complex, uneasily decipherable, and, at some level, hardly admissible motivations." Some scholars have suggested that measures of socio-economic status should be supplemented by indicators that are designed by and for Aboriginal peoples (Cardinal 2006; Durie 2006; Stamatopoulou 2007).

While the project of developing measures of quality of life that access Aboriginal culturally specific values and objectives is worthwhile, these data are not readily available in a form that is comparable at a community or regional scale. Moreover, the existence of a large number of different Aboriginal cultures in Canada would make such a project unwieldy at the national scale. As a result, we use indexes that draw on data available from the census. While we acknowledge that these measures are likely to emphasize poor socio-economic outcomes, they allow us to document levels of disparity in different areas and regions, and provide a useful tool for identifying areas where policy interventions are especially required. The project of bringing visibility to disparities between Indigenous and non-Indigenous peoples is one that is emphasized by the United Nations Permanent Forum on Indigenous Issues (Stamapoulou 2007:viii).

Aboriginal and Non-Aboriginal Socio-economic Characteristics

The disparities between Aboriginal and non-Aboriginal people in Canada are well-known and resistant to change (e.g., Beavon and White 2007; Cooke 2009; Guimond and Cooke 2008; Waldram, Herring, and Young 2006). The Human Development Index (HDI), which measures income, health, and knowledge, has been used to compare Registered Indian² conditions with those of non-Aboriginal people and to compare Registered Indian conditions on- and off-reserve (Cooke 2007; Cooke, Beavon, and McHardy 2004). These studies demonstrate persistent gaps between Registered Indians and non-Aboriginal people. LaPointe, Senécal, and Guimond (2009) examined community well-being for areas with significant Métis populations. They found disparities between Métis and non-Aboriginal communities, but these disparities were lower than those between First Nation and Inuit communities, and non-Aboriginal communities. Senécal and colleagues (2007) used the HDI and the CWB Index to compare Inuit community quality-oflife indicators to First Nations communities and to Canadian communities. They found that Inuit communities had higher scores than First Nations communities, but lower scores than other Canadian communities. Despite improvements in Inuit community quality of life over time (1991 to 2001), there continued to be a gap between quality-of-life scores for Inuit and other Canadian communities.

About one-fifth of the Aboriginal population in Canada lives in rural non-reserve areas, and that remained relatively constant between 1996 and 2006 (see **Table 6.1** on page 132). Slightly over half of Aboriginal people live in urban areas, an increase of 6.4 percentage points between 1996 and 2006. Many friendship

Place of Residence	1996	2006		
Total (number of individuals)	1,101,960	1,172,790		
On-Reserve (%)	32.8	26.3		
Rural, Non-Reserve (%)	20.4	20.5		
Urban (%)	46.8	53.2		

Table 6.1: Total Aboriginal Identity Population by Place of Residence

centres are located in smaller towns and cities where population characteristics are different from those of larger centres, and where Aboriginal people comprise a much larger proportion of the urban population. Despite the fact that only about half of the Aboriginal population lives in cities, most of the research on the socio-economic characteristics of Aboriginal people in Canada living off-reserve focuses on large cities.

The extent of the disparity between Aboriginal and non-Aboriginal people varies between cities, and it is clear that some Aboriginal people are successful. However, a comparison of socio-economic indicators for Aboriginal and non-Aboriginal people in Canada's largest cities suggests urban Aboriginal people are, in aggregate, considerably less well off than non-Aboriginal people (Peters, forthcoming; Siggner and Costa 2005). The unemployment rate among urban Aboriginal people is more than double that of the non-Aboriginal population in most cities. Aboriginal people are under-represented in managerial, supervisory, and professional occupations. Median incomes are substantially lower for Aboriginal than for non-Aboriginal people. Youth and children comprise a higher proportion of the urban Aboriginal than the non-Aboriginal population. The proportion of parents or spouses (including common-law partners) who are lone parents is much higher among urban Aboriginal people than among non-Aboriginal people, and Aboriginal people are more likely to live in dwelling units that need major repairs. Aboriginal people are much less likely than non-Aboriginal people to have higher levels of education, although educational outcomes have been improving for Aboriginal people in recent decades.

The poverty of the Aboriginal population is a persistent theme in work on Aboriginal urbanization (Peters 2005). Several decades of research on urban Aboriginal people indicate that they represent some of the most poorly housed segments in urban areas, and the 2006 census showed that this continued to be the case (NAHA 2009). In addition to these statistical descriptions, increased vulnerability to homelessness, addictions, gang membership, violence, and incarceration also mark the lives of many urban Aboriginal peoples (Cullhane 2003; Grekul and Laboucane-Benson 2008; Hanselmann 2001; LaPrairie 2002).

While it is important to document disparities between Aboriginal and non-Aboriginal people and explore change over time, it is also necessary to provide a context for Aboriginal socio-economic marginalization. Interviews by Silver and colleagues (2006:11-15) with 26 urban Aboriginal community leaders

identified a number of factors affecting Aboriginal people's economic situation in urban areas, including the failure of both residential and non-residential schools to provide them with the skills required in urban employment, the experience of racism (often on a daily basis), and the resulting destruction of self-esteem and identity. The urbanization of Aboriginal people in Canada occurred at a time when urban economies increasingly required education and skill levels that relatively few Aboriginal people received during their schooling. Challenges facing urban Aboriginal peoples also need to be situated within the larger context of colonization, which dispossessed them of their lands and languages, sent many children to residential schools, and impoverished reserves and rural Métis communities (Royal Commission on Aboriginal Peoples 1996).

While there is a considerable amount of material that compares Aboriginal and non-Aboriginal conditions in large cities, there is a paucity of material that explores this issue in small cities and rural areas off-reserve. This paper attempts to compare community well-being elements for Aboriginal people living off-reserve nationally, as well as in different regions of the country.

Methodology

Community Well-Being Index

The CWB Index was developed by researchers at Indian and Northern Affairs Canada and the University of Western Ontario to measure the well-being of First Nations communities (McHardy and O'Sullivan 2004). From a policy perspective, the goal of the index is to facilitate comparisons among First Nations communities and between First Nations communities and non-First Nations communities. The CWB Index combines measures of education, labour force participation and employment, income, and housing. Measures were chosen following from the work of Armstrong (2001). Each dimension, however, is measured by more than one sub-indicator.

Education is measured by a proxy for functional literacy (LIT) (proportion of the population 20 or older with at least grade 12) allotted a weight of two-thirds and a higher education measure (HE) (the proportion of the population 25 and older with a university degree) allotted a weight of one-third.³ Labour force is measured by two indicators for labour-force activity and paid work in the community. Labour-force activity is measured by labour-force participation (LFP), rescaled so that the upper limit is not 1.0, or 100% labour force participation, an impossible target, but two standard deviations above the mean observed Census Subdivision (CSD)⁴ labour-force participation rate in 2001. Paid work (EMP) is measured by the employed labour force as a percent of the total labour force. The income measure (INC) is per capita income,⁵ representing the total income earned in a CSD divided by the total population, including those who are not income earners and those under age 15. Housing quality indicators measure crowding and housing conditions. While McHardy and O'Sullivan (2004) used

the proportion of the population whose residence contained no more than one person per room in their analysis, we use the Canadian Mortgage and Housing Corporation's official definition of suitability (SUIT), which is a more sensitive measure of the household's space requirements (in terms of number of bedrooms) based on the number and characteristics (age, sex, and census family status) of household members. The second housing indicator is the adequacy measure—the proportion of the CSD population living in residences that are not in need of major repairs (ADEQ). The index is calculated as:

CWB =
$$\frac{(2/3 \text{ LIT} + 1/3 \text{ H}) + ((\text{LFP} + \text{EMP})/2) + ((\text{SUIT} + \text{ADEQ})/2) + (\text{INC})}{4} \times 100$$

Values were calculated for the four individual components (education, labour-force participation and employment, income, and housing), as well as the composite CWB Index for Aboriginal and non-Aboriginal people living in each area. Categories ranging from very low to very high were created by calculating standard deviations around the average (see **Table 6.2**, below). The very low category was greater than 1 standard deviation below the average. The low category included values 1 to 0.51 standard deviations below the average. The average category included values .5 below to .5 standard deviations above the average. The high category included values .51 to 1 standard deviation above the average. The very high category included values greater than one standard deviation above the average.

Disparity values were also calculated. This is the ratio of the CWB Index for Aboriginal and non-Aboriginal populations. It indicates the percentage of non-Aboriginal scores attained by Aboriginal peoples. Because it compared Aboriginal and non-Aboriginal conditions for residents living in the same areas, the disparity index provides a clearer way of assessing whether or not low levels of community well-being for Aboriginal people are due to their disproportionate representation found in depressed areas of the country. Values for the disparity index were categorized using the scale described in **Table 6.3** on the following page.

Table 6.2: Component Score Category Ranges					
Category	Education	Housing			

Category	Education	Housing	Labour Market	Income	CWB Composite
Very Low	< 33.8	< 75.2	< 72.8	< 56.3	< 60.9
Low	33.8 – 41.3	75.2 – 80.3	72.8 – 76.0	56.3 – 63.2	60.9 – 65.9
Average	41.4 – 56.5	80.4 – 90.6	76.1 – 82.6	63.3 – 77.0	66.0 – 75.9
High	56.6 – 64.2	90.7 – 95.9	82.7 – 86.0	71.1 – 84.1	76.0 – 81.1
Very High	> 64.2	> 95.9	> 86.0	> 84.1	> 81.1

Table 6.3: Disparity Categories

Category Value	
Very High	Aboriginal score less than 80% of non-Aboriginal score
High	Aboriginal score between 80% and 89.9% of non-Aboriginal score
Moderate	Aboriginal score between 90% and 94.9% of non-Aboriginal score
Little or No	Aboriginal score 95% or more of non-Aboriginal score

Geographic Areas

This analysis derives from 2006 census data provided for 304 friendship centre catchment areas. This includes 116 existing friendship centre areas and 188 "gap" non-reserve areas. The gap areas represent areas where a friendship centre is potentially needed based on the presence of significant Aboriginal populations. These catchment areas were developed by National Association of Friendship Centres (NAFC) using an approach of customized aggregations of census geography (for details, please see Chapter 2).

Analysis

Community Well-Being and Disparity Indexes in All Areas

A detailed analysis of individual components and the distribution of scores among different areas are found in **Appendix A**. **Table 6.4** (below) describes the range of values for the CWB Index components and the composite index. The lowest values of the components and the composite are considerably lower for Aboriginal than for non-Aboriginal residents. The range of values is greater for Aboriginal people in the components of housing, labour force, and income, and for the composite value. For Aboriginal people, the greatest difference between highest and lowest values was in income (63.8 points), although the differences in highest and lowest values for education and housing are close. For non-Aboriginal people, the greatest difference between highest and lowest values was in education. Overall, Table 6.4 shows that there is a greater range in quality-of-life indicators for Aboriginal than for non-Aboriginal people.

Table 6.4: Range of CWB Component and Composite Values, Aboriginal and **Non-Aboriginal People**

	Aboriginal Values		Aboriginal Values Non-Aboriginal		ginal Values
Component	Range	Difference	Range	Difference	
Labour	53.5 – 93.1	39.6	63.1 – 95.8	32.7	
Income	28.8 – 92.6	63.8	60.0 - 100.0	39.1	
Education	2.2 – 65.0	62.8	19.6 – 97.8	78.2	
Housing	38.6 – 100.0	61.4	54.2 – 98.9	44.7	
CWB	35.8 – 79.5	43.7	63.3 – 94.1	30.8	

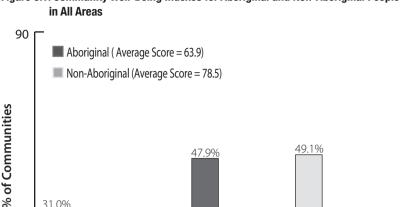
Table 6.5 (below) shows the average values for each of the four components and the composite index (CWB Index) for Aboriginal and non-Aboriginal people, and it compares the proportion of areas with low or very low values and high or very high values, for Aboriginal and non-Aboriginal people. In terms of the individual components (education, labour participation and employment, income, and housing), there were no average values for the Aboriginal population that were higher than the average scores for the non-Aboriginal population. The average of three of the components (income, education, and housing) scored low for Aboriginal people, while the average labour-force component scored average. In contrast, the averages for all of the components for non-Aboriginal people scored high or very high. The CWB Index for Aboriginal people was 63.9, which was ranked low, compared to a CWB Index for non-Aboriginal people of 78.5 (very high). The largest difference between Aboriginal and non-Aboriginal people was in the income component, followed by education, then housing.

In a large proportion of areas, the Aboriginal population received very low or low values in both the individual components of the CWB Index and in the index itself. The percentage of areas in which Aboriginal people had low or very values ranged from 64.7 percent for income, to 36.6 percent for housing. In half of the areas, Aboriginal people had low or very low scores on the composite CWB Index. In contrast, there were relatively few areas in which non-Aboriginal people scored low or very low on the individual components, and the CWB composite was low or very low for non-Aboriginal people in less than 1% of areas. At the other end of the scale, Aboriginal people had high or very high values in very few areas, and their composite scores were high or very high in only 2.6% of areas. In contrast, non-Aboriginal people had high or very high composite scores in almost three-quarters of areas studied.

Figure 6.1 on page 137 provides a graphical illustration of the distribution of areas with different CWB scores for Aboriginal and non-Aboriginal people. It shows that Aboriginal people in most communities have very low, low, or average scores on the composite CWB Index, while non-Aboriginal people in most areas have average or higher scores. **Figure 6.1** on the following page helps to underscore the disparities between these two populations.

Table 6.5: Comparison of CWB Index Component Values

	Averag	Average values		% Areas with Very Low or Low Values		% Areas with High or Very High Values	
Component	Aboriginal	Non- Aboriginal	Aboriginal	Non- Aboriginal	Aboriginal	Non- Aboriginal	
Labour	76.9 (avg.)	82.0 (high)	42.3	13.4	17.8	47.1	
Income	59.4 (low)	81.4 (high)	64.7	0.7	1.0	69.4	
Education	39.5 (low)	58.8 (high)	47.5	1.4	4.3	52.9	
Housing	79.7 (low)	91.7 (v. high)	36.6	2.8	7.3	81.1	
CWB	63.9 (low)	78.5 (v. high)	49.5	0.3	2.6	73.2	



25.8%

2.6%

High

24.1%

0.0%

Very High

31.0%

0

0.0%

Very Low

185%

0.3%

Low

Figure 6.1: Community Well-Being Indexes for Aboriginal and Non-Aboriginal People

The disparity index (the proportion that Aboriginal indexes represented of non-Aboriginal people.

Average

Component Score

non-Aboriginal indexes) provides another perspective on differences in Aboriginal and non-Aboriginal quality of life (see Table 6.6, below). An examination of the composite CWB Index shows that in 42.7% of areas, the disparity index between Aboriginal and non-Aboriginal people was very high, and in over 44.4% of areas it was high. In other words, in more than four-fifths of areas there were high or very high disparities in community well-being between Aboriginal and

Table 6.6: Percentage of Areas by Level of Aboriginal and Non-Aboriginal Disparity

Disparity Index	Labour Force	Income	Education	Housing	CWB Composite
Very High	5.9	95.2	65.3	19.0	42.7
High	20.7	3.5	25.3	29.7	44.4
Moderate	11.7	1.0	4.5	28.3	9.0
Little or No	61.7	0.3	4.9	23.1	3.8
Total	100.0	100.0	100.0	100.0	100.0

Disparities are highest in the income component, with 95.2% of areas with very high disparities between Aboriginal and non-Aboriginal people, and an additional 3.5% of areas where disparities are high. In education there are very high disparities between Aboriginal and non-Aboriginal people in 65.3% of areas, and high disparities in an additional 25.3% of areas. Disparities are lowest in the labour-force component, where 61.7% of areas have little or no disparity between the two populations. The CWB composite index shows that there are very high or high disparities between Aboriginal and non-Aboriginal people in 87.1% of areas. Because the disparity index compares Aboriginal and non-Aboriginal residents in each area, it shows whether or not Aboriginal disparities are primarily the result of Aboriginal residence in depressed areas. The high disparities between these two populations demonstrate that there are inequities in quality of life, as measured by these indexes, for Aboriginal and non-Aboriginal people living in prosperous as well as distressed areas.

Table 6.7 on the following page lists the 32 areas with the highest disparities between Aboriginal and non-Aboriginal people. Remember that the disparity index represents the percentage the Aboriginal CWB Index was of the non-Aboriginal CWB Index for that area.⁶ The area with the highest disparity score was the La Loche catchment area in Saskatchewan, with a CWB disparity index of 0.408. In other words, in that community, the Aboriginal community well-being was less than half of the community well-being for the non-Aboriginal population. Most areas with CWB disparity indexes of below 0.700 have a majority of Aboriginal residents, and they are concentrated in the North and in the Prairies. Many of these are very small communities: only six areas had populations greater than 10,000, and two of these six had populations just slightly over 10,000. Only two areas in Manitoba, Steinbach and De Salaberry, had Aboriginal community wellbeing scores that were slightly higher for the Aboriginal than the non-Aboriginal population. These were two areas of about 25,000 people where only about 2,000 residents in each area were Aboriginal.

Table 6.8 on page 140 summarizes Aboriginal CWB indexes for areas with different proportions of the population that are Aboriginal people, lone-parent families, and youth. Note that the very high category is missing because there were no areas where Aboriginal people scored very high in the CWB Index. The strongest pattern found was that areas with very low and low Aboriginal CWB indexes tended to have high relative concentrations of Aboriginal populations, while areas with average and high CWB indexes had proportionately fewer Aboriginal people. Not surprisingly, in areas with very low and low Aboriginal CWB indexes, a relatively larger proportion of the population is comprised of lone-parent families and youth. While the differences by Aboriginal CWB category in share of the population that was lone parent and youth is not as striking as the differences by share of Aboriginal population, it nevertheless suggests that efforts to improve services should be targeted to these areas, which have a larger proportion of marginalized populations.

Area	Location	% Aboriginal	CWB Disparity Index
La Loche	Saskatchewan	95.61	0.408
Arviat	Northern Canada	93.41	0.462
Division No. 21 Unorganized	Manitoba	94.03	0.499
Cape Dorset	Northern Canada	91.50	0.499
Igloolik	Northern Canada	93.51	0.502
Baker Lake	Northern Canada	90.70	0.529
Fort Rae	Northwest Territories	93.63	0.550
Pond Inlet	Northern Canada	92.75	0.557
Kugluktuk	Northern Canada	92.28	0.566
La Ronge	Saskatchewan	75.71	0.578
Air Ronge	Saskatchewan	75.66	0.578
Fort McPherson	Northern Canada	91.10	0.579
Buffalo Narrows	Saskatchewan	94.49	0.586
Lynn Lake	Manitoba	56.91	0.603
Cardston	Alberta	44.75	0.609
Rankin Inlet	Northwest Territories	83.48	0.617
Division No. 18 Unorganized	Saskatchewan	88.17	0.618
Pangnirtung	Northern Canada	93.60	0.618
Cambridge Bay	Northern Canada	82.37	0.632
Alonsa	Manitoba	55.10	0.626
Ile-á-la-Crosse	Saskatchewan	95.09	0.643
Port Hardy	British Columbia	22.89	0.652
Wetaskiwin County No. 10	Alberta	11.36	0.666
Senneterre	Quebec	16.17	0.662
Camrose	Alberta	12.64	0.667
Moosonee	Ontario	83.92	0.677
Iqaluit	Northern Canada	60.45	0.680
Lesser Slave River No. 124	Alberta	17.12	0.680
Baie-Comeau	Quebec	9.60	0.688
Mountain (North)	Manitoba	26.03	0.690
Lethbridge	Alberta	8.84	0.692
Val-d'Or	Quebec	5.72	0.697

Category	Aboriginal Share of Population	Lone-Parent Family Share of All Households	Youth (13–24 Years) Share of Population		
Very Low	17.7	16.2	23.3		
Low	10.2	15.5	22.3		
Average	2.6	15.4	21.5		
High	1.5	14.0	21.8		

Table 6.8: Relationships between Aboriginal CWB Index Score and Other Factors

To summarize, the analysis demonstrates that Aboriginal residents receive lower scores than non-Aboriginal people on both the individual CWB components and the composite index. Aboriginal people receive low or very low CWB scores in half of the areas in this study. Disparities between Aboriginal and non-Aboriginal people were high or very high in 87.1% of areas. Areas where a relatively high proportion of the population was Aboriginal were more likely to have low CWB scores. These results demonstrate the pervasiveness of socio-economic disparities between Aboriginal and non-Aboriginal peoples across Canada.

Regional Differences

CWB and disparity indexes vary across the country (see **Table 6.9**, below). CWB indexes range between average and very low for Aboriginal people in all regions, and average to very high for non-Aboriginal people in all regions. CWB indexes for Aboriginal people are lowest in Northern Canada and in Saskatchewan, and highest in Atlantic Canada and Ontario. CWB indexes are very high for non-Aboriginal people in Northern Canada, and high for all regions except Atlantic Canada and Quebec. The disparity indexes show that poor CWB indexes for Aboriginal people are not only the result of living in distressed regions. In Manitoba, Saskatchewan, and Northern Canada non-Aboriginal people score much better than Aboriginal people, who score low and very low. As a result, the disparities between Aboriginal and non-Aboriginal people in these areas are very high.

Table 6.9: Regional Differences in CWB and Disparity Indexes

Region	Average Aboriginal CWB Index	Average Non-Aboriginal CWB Index	Average Disparity Index
Atlantic	66.8 (average)	73.4 (average)	0.9101 (moderate)
Quebec	65.0 (low)	75.1 (average)	0.8628 (high)
Ontario	69.0 (average)	78.0 (high)	0.8846 (high)
Manitoba	61.2 (low)	77.1 (high)	0.7951 (very high)
Saskatchewan	56.4 (very low)	79.9 (high)	0.7059 (very high)
Alberta	64.2 (low)	79.7 (high)	0.8055 (high)
British Columbia	65.1 (low)	78.0 (high)	0.8346 (high)
Northern Canada	53.7 (very low)	88.1 (very high)	0.6072 (very high)

Turning to the individual components of the CWB for Aboriginal residents, Table 6.10 (below) demonstrates regional variations. In Saskatchewan and Northern Canada, all components had very low scores except for education, which scored low in Saskatchewan. Manitoba and Alberta had average scores for the labour-force component, but scored low or very low on all of the others. British Columbia scored low on income, but average on all of the other components, while Ontario scored average on all of the components. In Atlantic Canada and Quebec, income and labour force scored low or very low, and education and housing scored average. The results are reflected in the composite CWB Index scores (see Table 6.9). The very low composite scores of Saskatchewan and Northern Canada are created by poor socio-economic characteristics in many dimensions in these regions. In other regions, combinations of components create higher composite CWB scores.

CWB and disparity indexes also vary by population size (see **Table 6.11** on page 142). While the areas identified in this study do not correspond directly to cities, towns, villages, or rural areas, areas with larger populations are more urban, while those with low population densities correspond to more rural and isolated situations. While all areas with populations of 10,000 or more have average CWB indexes for Aboriginal populations, CWB indexes rise as population size increases, suggesting that Aboriginal people experience better socioeconomic situations in larger cities. In contrast, in areas with populations of less than 10,000, Aboriginal CWB indexes are very low. For non-Aboriginal people, the average CWB Index is highest in areas with populations of 500,000 or more and in areas with populations of less than 10,000, but these values are high in all other areas as well.

Disparities between Aboriginal and non-Aboriginal people are highest for areas with very low population densities (**Table 6.11**). This measure probably underestimates disparities in areas with fewer than 10,000 people because the small number of non-Aboriginal people in 15 areas with small populations meant that data for them were suppressed. Still, disparities are very high in areas with low population density. This underscores the high disparities found in small communities (**Table 6.7**) and in Northern areas (**Table 6.9**).

Table 6.10: Regional Differences in Aboriginal CWB Components

Table 0.10. Regional Differences in Aboriginal OWD Components					
Region	Labour Force	Income	Education	Housing	
Atlantic	74.2 (low)	60.1 (low)	46.5 (average)	86.6 (average)	
Quebec	72.5 (very low)	60.4 (low)	41.5 (average)	86.0 (average)	
Ontario	78.5 (average)	63.4 (average)	46.7 (average)	86.5 (average)	
Manitoba	78.1 (average)	53.9 (very low)	37.5 (low)	75.5 (low)	
Saskatchewan	71.7 (very low)	49.6 (very low)	36.0 (low)	68.2 (very low)	
Alberta	80.8 (average)	61.1 (low)	37.2 (low)	77.8 (low)	
British Columbia	77.5 (average)	57.7 (low)	43.2 (average)	82.1 (average)	
Northern Canada	72.4 (very low)	55.8 (very low)	21.3 (very low)	65.2 (very low)	

•		. ,	
Population	Average Aboriginal CWB Index	Average Non-Aboriginal CWB Index	Average Disparity Index
500,000 or more	71.2 (average)	81.6 (very high)	0.873 (high)
100,000 – 499,999	69.4 (average)	79.0 (high)	0.879 (high)
50,000 – 99,999	67.2 (average)	77.4 (high)	0.869 (high)
10,000 – 49,999	63.7 (average)	76.1 (high)	0.838 (high)
Less than 10,000	55.3 (very low)	81.0 (high)	0.700 (very high)

Table 6.11: Population Size and CWB and Disparity Indexes

While the comparisons for different regions display a pattern of lower Aboriginal CWB values in sparsely populated and Northern communities, it is important to note that researchers in Northern communities argue that indexes based on census data may not provide a full or accurate picture of these economies. A reliance on the main indicators of employment, income, and education fails to include non-market activities, income-in-kind, or the knowledge required to engage in harvesting activities (Usher, Duhaime, and Searles 2003). As a result, these indexes may underestimate the quality of life in these communities. Attempts to assign values to country food, for example, demonstrate that it adds considerable income-in-kind to households and communities where subsistence harvesting is a major activity (Usher 1976). In some Northern communities, then, the low Aboriginal CWB values may reflect an emphasis on activities not well measured by census statistics; in contrast, the non-Aboriginal residents in many of these communities may be administrators of government programs or professionals. The result is high disparities between Aboriginal and non-Aboriginal populations in these areas, as measured by this particular index. Measuring the importance of subsistence economies in community well-being is beyond the scope of this paper. This is an important issue, though, and the role of subsistence in Aboriginal community well-being could possibly be addressed using data from the Aboriginal Peoples Survey, which measures activities associated with these economies.

Changes between 2001 and 2006

Table 6.12 on the following page describes changes in the CWB Index scores between 2001 and 2006, for Aboriginal and non-Aboriginal people, in friendship centre catchment areas. The analysis is limited to these areas because there are literally thousands of small changes in the boundaries of areas without friendship centres, and as a result the areas are not comparable. While the composite score was higher for non-Aboriginal than Aboriginal people in both years, neither population group showed any significant change. For Aboriginal people the score for education increased between 2001 and 2006, but this was offset by a decrease in the scores of all of the other components. For non-Aboriginal people, the education score increased, the housing score remained the same, and the scores for labour force and income decreased, offsetting the education increase. The

Non-Aboriginal Fobulations						
CWB	Aboriginal Indexes			es Non-Aboriginal Indexes		
Component	2001	2006	Ratio 2006/2001	2001	2006	Ratio 2006/2001
Education	34.1	41.3	1.21	51.5	59.6	1.16
Housing	81.6	79.8	0.98	91.9	92.0	1.00
Labour Force	78.5	77.6	0.99	86.6	83.0	0.96
Income	63.3	59.4	0.94	83.3	82.5	0.99
Composite Score	64.4	64.4	1.00	78.2	79.2	1.01

Table 6.12: Comparison of 2001 and 2006 CWB Indexes for Aboriginal and Non-Aboriginal Populations

result is that the ratio of the composite CWB scores for 2001 and 2006 is close to 1.00 for both population groups.

Table 6.13 (below) shows that all regional changes of Aboriginal CWB values and disparities between Aboriginal and non-Aboriginal residents between 2001 and 2006 are also very small.

Finally, there is no distinct pattern of change in Aboriginal CWB scores and Aboriginal and non-Aboriginal disparities by size of area population (Table 6.14 on page 144). It is especially difficult to interpret small changes in values between 2001 and 2006 because of what we know about changes in the composition of Aboriginal populations themselves. Guimond (2003) showed that changes in the size of the Aboriginal population in recent decades incorporate a substantial proportion of the population that changed self-identification patterns from non-Aboriginal to Aboriginal in response to census questionnaires. Siggner and Hagey (2003) attribute at least part of this shift to more positive attitudes toward Aboriginal people in Canadian society. The implication for this paper is that it is extremely difficult to attribute relatively small shifts in Aboriginal CWB indexes and Aboriginal and non-Aboriginal disparities to changes in socio-economic well-being, since the shifts may be a reflection of the characteristics of individuals who changed how they self-identified in response to census questionnaires.

Table 6.13: Comparison of 2001 and 2006 CWB and Disparity Indexes by Region

Region	Ratio of 2006/2001 CWB Score	Ratio of 2006/2001 Disparity Index	
Atlantic	1.025	1.017	
Quebec	0.979	0.959	
Ontario	0.999	0.985	
Manitoba	0.996	0.978	
Saskatchewan	0.973	0.987	
Alberta	1.008	0.989	
British Columbia	1.010	0.997	
Northern Canada	0.995	0.997	

rable 6.14. Comparison of 2001 and 2000 OWD and Disparity indexes by 1 optilation 612c						
Population Range	Ratio of 2006/2001 CWB Score	Ratio of 2006/2001 Disparity Index				
500,000 or more	1.020	1.010				
100,000 – 499,999	1.005	0.998				
50,000 - 99,999	0.993	0.985				
10,000 – 49,999	1.003	0.986				
Less than 10,000	0.985	0.980				

Table 6.14: Comparison of 2001 and 2006 CWB and Disparity Indexes by Population Size

The comparison of 2001 and 2006 CWB and disparity indexes reiterates earlier research that noted the persistence of inequities between Aboriginal and non-Aboriginal populations in Canada. Even when conditions improve for Aboriginal people, a gap remains because conditions also improve for non-Aboriginal people. White, Beavon, and Spence (2007) described the gap in well-being indicators as "Canada's continuing challenge."

Differences between Areas With and Without Friendship Centres

Table 6.15 (below) describes the CWB indexes for Aboriginal residents in areas with and without friendship centres. Details about the individual components of these indexes are found in Appendix B. The average CWB score for areas serviced by friendship centres (64.4) is almost identical to the average for areas without easy access to a friendship centre (63.6). The distribution of areas with very low to very high scores is also very similar. About half of the areas have average CWB scores and very few have high or very high scores in both areas with friendship centres and those with no easy access to a friendship centre. It may be useful for the NAFC to explore the 60 gap areas with very low CWB indexes for Aboriginal people to determine where they are and what their population characteristics are to determine the feasibility of adding centres in these locations. These results are presented graphically in **Figure 6.2** on the following page, which shows that the distribution of communities is very similar for areas with and without a friendship centre.

Table 6.15: CWB Indexes for Aboriginal Residents in Areas With and Without Friendship Centres

Thomasin position				
Component Score	Existing Friendship Centres		Gap Areas	
	N	%	N	%
Very Low	34	29.6	60	31.9
Low	24	20.9	32	17.0
Average	55	47.8	90	47.9
High	2	1.7	6	3.2
Very High	0	0.0	0	0.0
Total	115	100.0	188	100.0
Average Score	64.4	_	63.6	_

Figure 6.2: Comparison of CWB Indexes for Aboriginal Residents in Areas With and Without Friendship Centres

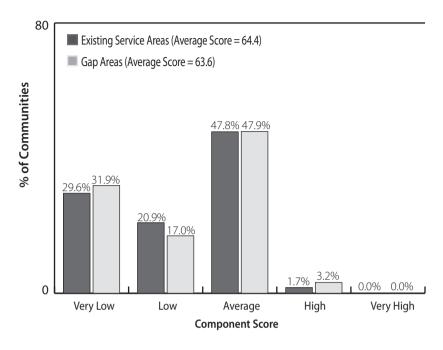


Table 6.16 (below) summarizes the distribution of communities with different levels of Aboriginal/non-Aboriginal disparity. While the distributions are very similar, friendship centres are located in a slightly higher proportion of areas with very high disparities, suggesting that they are located in areas with very high needs. Again, it may be useful for the NAFC to examine high disparity areas where there are no centres to determine needs for the location of additional services.

Table 6.16: Aboriginal/Non-Aboriginal CWB Disparities in Areas With and Without Friendship Centres

Trondon p condition				
Component Score	Existing Friendship Centres		Gap Areas	
	N	%	N	%
Very High	59	51.8	64	36.8
High	46	40.4	82	47.1
Moderate	8	7.0	18	10.3
Little or No	1	0.9	10	5.7
Total	114	_	174	_
Missing	2	_	14	_

Conclusion

Quality-of-life indicators evaluate how a nation, community, or an individual measures against a given set of outcomes. The CWB Index was developed by researchers at Indian and Northern Affairs Canada and the University of Western Ontario to measure the well-being of First Nations communities. It is based on measures of education, labour-force participation and employment, income, and housing. Since it was first calibrated, the CWB Index has been used to explore differences among First Nations reserves, between First Nations reserves and other Canadian communities, and between Métis and Inuit communities and other Canadian communities. The research in this paper makes a contribution by exploring CWB indexes for all Aboriginal populations living off-reserve and by comparing this index in different regions with different population densities. The CWB Index is also used to calculate a disparity index, which is a ratio of the CWB Index for Aboriginal and non-Aboriginal populations. The disparity ratio helps to illustrate whether Aboriginal disparities are mainly the result of living in distressed communities.

Gaps in socio-economic well-being between Aboriginal and non-Aboriginal people in Canada are well known and resistant to change. The analyses in this chapter demonstrate that Aboriginal residents have lower scores than others on both the individual CWB components and the composite index. Aboriginal people have low or very low CWB scores in half of the areas in this study. Disparities between Aboriginal and non-Aboriginal people were high or very high in 87.1% of areas. Areas where a relatively high proportion of the population was Aboriginal were more likely to have low CWB scores, but even in areas that are more densely populated there are large disparities between Aboriginal and non-Aboriginal people. Differences between Aboriginal and non-Aboriginal CWB components and aggregate indexes did not change significantly between 2001 and 2006. These results demonstrate the pervasiveness of socio-economic disparities between Aboriginal and non-Aboriginal peoples across Canada and the continuing need to find ways of promoting development for Aboriginal people.

While the CWB and disparity indexes are a first step in demonstrating pervasive inequalities between Aboriginal and non-Aboriginal people in Canada, they do not cover all dimensions of well-being. One gap is their inability to address aspects of subsistence economies. A second gap is that they concentrate on socioeconomic characteristics that define Aboriginal peoples as lacking, and may not highlight some characteristics used to define well-being, including cultural resilience, language, preservation of ceremonies, family relationships, and values. Nevertheless, the pervasive disparities are troubling.

Future research that is beyond the scope of this paper could use the CWB in an analysis of determinants of well-being. It may be useful to employ the CWB as a dependent variable and explore characteristics of areas associated with different levels of well-being. While this type of analysis is beyond the scope of this paper, it represents a natural next step in the research.

Appendix A: Details of CWB Components Comparing Aboriginal and Non-Aboriginal Populations in All Areas

Table A1: Labour Force Component

Component Score	Aboriginal		Non-Aboriginal	
	N	%	N	%
Very Low	75	24.8	12	4.1
Low	53	17.5	27	9.3
Average	121	39.9	115	39.5
High	27	8.9	76	26.1
Very High	27	8.9	61	21.0
Total	303	100.0	291	100.0
Average Score	76.9	_	82.0	_

Table A2: Income Component

Component Score	Aboriginal		Non-Aboriginal	
	N	%	N	%
Very Low	103	34.0	0	0.0
Low	93	30.7	2	0.7
Average	104	34.3	87	29.9
High	3	1.0	123	42.3
Very High	0	0.0	79	27.1
Total	303	100.0	291	100.0
Average Score	59.4	_	81.4	_
Missing	1	_	13	_

Table A3: Education Component

Component Score	Aboriginal		Non-Aboriginal	
Component Score	N	%	N	%
Very Low	84	27.7	0	0.0
Low	60	19.8	4	1.4
Average	146	48.2	131	45.0
High	12	4.0	74	25.4
Very High	1	0.3	80	27.5
Total	303	100.0	289	99.3
Average Score	39.5	_	58.8	_
Missing	1	_	15	_

Table A4: Housing Component

Component Score	Aboriginal		Non-Aboriginal	
	N	%	N	%
Very Low	78	25.7	4	1.4
Low	33	10.9	4	1.4
Average	170	56.1	47	16.2
High	20	6.6	234	80.4
Very High	2	0.7	2	0.7
Total	303	100.0	291	100.0
Average Score	79.7	_	91.7	_
Missing	1	_	13	_

Table A5: CWB All Components

Component Score	Aboriginal		Non-Aboriginal	
	N	%	N	0/0
Very Low	94	31.0	0	0.0
Low	56	18.5	1	0.3
Average	145	47.9	75	25.8
High	8	2.6	143	49.1
Very High	0	0.0	70	24.1
Total	303	100.0	289	99.3
Average Score	63.9	_	78.5	_
Missing	1	_	15	_

Appendix B: Details of CWB Components for Aboriginal Populations in Areas With and Without Friendship Centres

Table B1: Labour Force Component

Component Score	Existing FCs		Gap Areas	
	N	%	N	%
Very Low	17	14.8	58	30.9
Low	21	18.3	32	17.0
Average	61	53.0	60	31.9
High	10	8.7	17	9.0
Very High	6	5.2	21	11.2
Total	115	100.0	188	100.0
Average Score	77.5	_	76.5	_

Table B2: Income Component

Component Score	Existing FCs		Gap Areas	
	N	%	N	%
Very Low	37	32.2	66	35.1
Low	42	36.5	51	27.1
Average	34	29.6	70	37.2
High	2	1.7	1	0.5
Very High	0	0.0	0	0.0
Total	115	100.0	188	100.0
Average Score	59.4	_	59.4	_

Table B3: Education Component

Component Score	Existing FCs		Gap Areas	
	N	%	N	%
Very Low	29	25.2	55	29.3
Low	27	23.5	33	17.6
Average	53	46.1	93	49.5
High	5	4.3	7	3.7
Very High	1	0.9	0	0.0
Total	115	100.0	188	100.0
Average Score	40.7	_	38.8	_

Table B4: Housing Component

Component Score	Existing FCs		Gap Areas	
	N	%	N	%
Very Low	26	22.6	52	27.7
Low	20	17.4	13	6.9
Average	65	56.5	105	55.9
High	3	2.6	17	9.0
Very High	1	0.9	1	0.5
Total	115	100.0	188	100.0
Average Score	79.8	_	79.6	_

Table B5: CWB All Components

Component Score	Existing FCs		Gap Areas	
	N	%	N	%
Very Low	34	29.6	60	31.9
Low	24	20.9	32	17.0
Average	55	47.8	90	47.9
High	2	1.7	6	3.2
Very High	0	0.0	0	0.0
Total	115	100.0	188	100.0
Average Score	64.4	_	63.6	_

Endnotes

- 1 I employ the term "Aboriginal" to refer to all of the original inhabitants of Canada and their descendants, including First Nations, Métis, and Inuit people.
- 2 Registered Indians are Aboriginal people in Canada who are registered under the *Indian Act*.
- 3 Previously, education was measured by a proxy for functional literacy (LIT) (proportion of the population 15 or older with at least grade nine education) allotted a weight of two-thirds and a high school completion measure (HS) (the proportion of the population 20 and older with a high school degree or higher) allotted a weight of one-third. This index changed because of changes to data collection in the 2006 census.
- 4 A Census Subdivision (CSD) is a "municipality or an area that is deemed to be equivalent to a community for statistical reporting purposes" (McHardy and O'Sullivan 2004:3).
- 5 Following the method used by McHardy and O'Sullivan (2004), per capita income was transformed into the log of income to account for the diminishing marginal utility of income.
- 6 Note that areas where the Aboriginal CWB score was less than 80% of the non-Aboriginal score were classified as areas with very high disparities.

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